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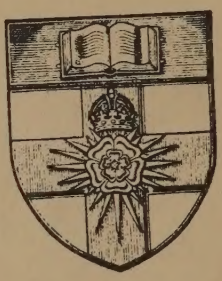

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REPORTS

FROM

COMMISSIONERS, INSPECTORS,

AND OTHERS:

THIRTY-FIVE VOLUMES.

—*(19.)*—

GRESHAM UNIVERSITY.

Session

12 *March* 1894——25 *August* 1894.

VOL. XXXIV.

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1894.

REPORTS

FROM

COMMISSIONERS, INSPECTORS

AND OTHERS,

RELATIVE TO SCHOOLS

AND

EDUCATION IN PRUSSIA.

1854.

PRESENTED TO THE UNIVERSITY.

Session

1854.

VOL. XXXIV.

REPORTS

FROM

COMMISSIONERS, INSPECTORS,

AND OTHERS:

1894.

THIRTY-FIVE VOLUMES:—CONTENTS OF THE

NINETEENTH VOLUME.

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GRESHAM UNIVERSITY COMMISSION:

[c. 7425.] Minutes of Evidence taken by the Royal Commissioners appointed to consider the Draft Charter for the proposed Gresham University in London; with Tables of Witnesses and of Institutions represented. p. 1

[c. 7425–I.] Appendix and Analytical Index. 1229

GRESHAM UNIVERSITY COMMISSION.

MINUTES OF EVIDENCE

TAKEN BY THE

ROYAL COMMISSIONERS

APPOINTED TO CONSIDER THE

DRAFT CHARTER FOR THE PROPOSED GRESHAM UNIVERSITY IN LONDON;

TOGETHER WITH

TABLES OF WITNESSES AND OF INSTITUTIONS REPRESENTED.

Presented to both Houses of Parliament by Command of Her Majesty.
1894.

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1894.

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TABLE OF CONTENTS.

Page

1. TABLE OF WITNESSES - - - - - - - - - - 3

2. TABLE OF INSTITUTIONS REPRESENTED BY WITNESSES - - - - 5

3. MINUTES OF EVIDENCE - - - - - - - - - 7

TABLE OF WITNESSES.

Names.	Days.	Questions.	Pages.
Adams, Prof. W. G.	48, 49	19,897, 20,242	896, 913
Allchin, Dr. W. H.	15	7574	292
Anderson, J. Macvicar	56	22,449	1024
Angus, Rev., Principal	9	5063	190
Anson, Sir W., Bart.	50	20,467	926
Armstrong, H. E.	61	24,148	1115
Ayrton, W.	41	17,644	771
Baines, J. A.	49	20,284	916
Barnett, P. A.	38	16,663	715
Barnett, Rev. S. A.	35	15,397	660
Beare, Professor T. Hudson	31	14,337	597
Beet, Rev. J. Agar	9	5140	193
Bowen, Right Hon. Sir C. S. C.	59	23,360	1067
Boyd, Stanley	22	11,068	447
Bristowe, Dr. J. S.	8	4600	175
Brown, Professor	59	23,250	1072
Bruce, Lord Charles	53	21,474	975
Bryant, Mrs.	7	3835	150
Bryce, Right Hon. James, M.P.	39	16,773	719
Busk, E. H.	2, 51	505, 20,778	24, 941
Capper, D. S.	50	20,685	938
Carter, R. Brudenell	38	16,518	709
Cates, A.	56	22,521	1028
Cave, Rev. Principal	9	4802	181
Clark, Sir Andrew, Bart.	14	6998	267
Clark, E. C.	62	24,283	1124
Clarke, Ernest	60	23,698	1094
Cleveland, Dr. W. F.	8	4440	170
Coleridge, Right Hon. Lord	55	22,124	1005
Collins, Churton	55	22,414	1021
Collins, Dr. W. J.	3	1032	45
Colvin, Sidney	45	18,967	845
Coupland, Dr.	22	11,068	473
Couvreur, Auguste	13	6827	260
Cozens-Hardy, H. H., Q.C.	57	22,892	1049
Crackanthorpe, M. H., Q.C.	27	12,853	521
Crosby, Dr., T. B.	17	8444, 8519	331, 335
Cunynghame, H.	40	17,243	750
Davey, Sir Horace, Q.C.	43	18,211	800
Dicey, Albert V., Q.C.	40	17,118	742
Dickins, F. V.	5, 6	2329, 2890	92
Dickenson, Dr. W. H.	22	11,760	468
Donnelly, General	57	22,764	1041
Dyer, W. T. Thisleton	32	14,554	607
Dykes, Rev. Principal	17	8811, 8923	345, 349
Elwyn, Rev. Canon	35	15,517	664
Emerson, W.	56	22,742	1040
Emmott, G. H.	20	10,330	408
Erichsen, Eric	23	11,860	473
Fitch, J. G.	6	2932	117
Fleming, J. A.	33	15,078	636
Flower, Sir W. H.	30	13,025	581
Foster, G. Carey	4	1823	72
Foster, Michael	32	14,722	619
Fry, Right Hon. Sir Edward	12	6476	243
Gault, J.	31	14,146	588
Giffard, H. A., Q.C.	34	15,281	652
Gilbert, Alfred, R.A.	63	24,570	1137
Groot, C. H. de	61	23,805	1100
Grove, Sir G.	53	21,474	975
Halliburton, Dr. W. D.	48	19,897	896
Heath, H. F.	7	3644	144
Heath, Dr. R. S.	28	13,094	537

Names.	Days.	Questions.	Pages.
Henrici, O.	12	6633	252
Hill, John	60	23,763	1098
Holland, T. E.	43	18,314	811
Howse, H. G.	11	6307	235
Hulke, J. W.	11	5884	222
Hunt, Rev. B.	54	21,848	991
Hunt, Holman	58	23,073	1059
Huxley, Right Hon. T. H.	29	13,491	553
Ingram, J. K.	48	19,554	886
Jenks, Professor	62	24,427	1130
Jennings, H. R.	25	12,314	496
Kennedy, A. B. W.	33	14,931	629
Kennedy, The Hon. Sir W. R.	54	22,072	999
Lister, Sir Joseph, Bart.	18	9521	373
Liveing, Dr. Edward	18	9170	357
London, Bishop of	16	8016	309
Longbourne, J. V.	39, 40	16,975, 17,117	731, 739
Lubbock, Sir John, Bart.	25	12,314	496
Mackenzie, A. C.	53	21,669	984
Macnamara, N. C.	8	4006	156
Magnus, Sir P.	41	17,445	760
Mahaffy, Rev. G. P.	64	24,673	1143
Max Müller, F.	29	13,698	566
Milman, A.	19	10,211	403
Monk, J. E.	35	15,397	660
Moore, Dr. Norman	18	9304	363
Moreton, Lord	60	23,489	1084
Mure, R. J.	25	12,314	496
Norris, G. M.	26	12,739	517
Oakeley, H. E.	44	18,471	819
Page, H. W.	22	11,816	471
Paget, Sir James, Bart.	19	9735	385
Payne, F.	22	11,845	472
Pearson, Karl	10	5364	201
Pell, Albert	60	23,537	1087
Pennington, R.	36	15,706	671
Plunkett, Lieut.-Col.	35	15,613	668
Pollen, J.	46	19,209	866
Pollock, Hon. Sir C. E.	52	21,380	969
Pollock, Sir Frederick, Bart.	37	16,154	692
Pryce, Rev. Principal, Vaughan	9	5181	195
Pye-Smith, Dr. P. H.	30	13,774	570
Ramsay, W.	21, 67	10,971, 25,000	443, 1191
Reynolds, Rev. Principal, H. R.	17	8811	345
Rigby, Sir John, Q.C., M.P.	58	23,168	1067
Roberts, R. D.	24, 25	11,956 12,461	478, 503
Robinson, H.	47	19,264	869
Rogers, J. C.	61	24,086	1110
Rollit, Sir A. K.	36	15,942	683
Roscoe, Sir H.	42	17,808	780
Rücker, A. W.	1	342	19
Russell, W. J.	7, 52	3311, 21,125	135, 959
Savage, D.	26	12,619	152
Schafer, E. A.	22	11,563	461
Sharpe, Rev. T. W.	44	18,471	819
Shore, Dr. T. W.	22	11,786	469
Slater, J.	56	22,724	1039
Smith, J. L. Clifford	15	7490	288
Smith, T. Roger	33	14,824	625
Smith, Vincent	49	20,443	924
Spencer, W. G.	22	11,850	472
Stirling, W.	3	1473	61
Stoney, G. Johnstone	45	18,844	835
Stuart, J., M.P.	24	11,956	478
Taylor, Dr. F.	22	11,831	471
Thomson, J. M.	50	20,634	936
Thompson, S. P.	57	22,978	1054
Thorpe, T. E.	1	1	7
Threlfall, T.	53	21,669	984
Thring, Lord	15	7490	288
Turpin, H.	54	21,848	991
Unwin, W. C.	41	17,644	771
Upton, J. R.	38	16,352	703

Names.	Days.	Questions.	Pages.
Wace, Rev. H.	16, 17, 31, 68	8294, 8811, 8933, 14,146, 25,446	324, 345, 350 588, 1212
Wallace, R.	55	22,219	1013
Waller, Dr. A. D.	42	18,042	793
Watney, H. J.	17	8502, 8645	334, 339
Webb, H. J.	61	23,894	1103
Webster, Sir Richard, Q.C., M.P.	47	19,451	877
Weldon, W. F. R.	4	2068	84
West, Sir Raymond	46	19,050	851
Westlake, J., Q.C.	34	15,211	644
White, Edmund	49	20,357	921
Whitehouse, Rev. O. C.	9	5263	198
Whittington, Rev. Prebendary	26	12,619	512
Windle, Dr. C. B. A.	28	13,353	547
Young, Sir George, Bart.	21, 65, 66	10,666, 24,793, 24,869	422, 1149 1168

TABLE OF INSTITUTIONS REPRESENTED BY WITNESSES

University of London, Senate	Sir James Paget, Bart. A. Milman, Esq.
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MINUTES OF EVIDENCE

TAKEN BEFORE THE

ROYAL COMMISSION

APPOINTED TO CONSIDER

THE PROPOSED CHARTER OF THE GRESHAM UNIVERSITY.

First Day.

Saturday, 28th May 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, M.A., LL.D.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

T. E. THORPE, Esq., Ph.D., F.R.S., examined.

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

1. (*Chairman.*) I think you are connected with the South Kensington School of Science?—Yes. I am Professor of Chemistry in the Royal College of Science.

2. Have you read the proposed Charter of the Gresham University?—I have.

3. I must first of all ask you whether you are interested in the question of the foundation of a teaching university for London?—I am.

4. You are a warm advocate of the scheme?—I am a warm advocate of it.

5. And you have been for some time?—I have.

6. Do you think that, roughly speaking, this proposed Charter is calculated to meet the requirements of the public in that direction?—I do not think the Charter as it stands is calculated to meet those requirements.

7. Would your objections really go to the root of the whole matter—to the general principle that is involved in it—or only to matters of detail?—My objections are fundamental.

8. I suppose you mean you do not approve of the union of the authorities of the University College and King's College as a starting point?—Not if carried out in the way that is suggested.

9. Perhaps you can tell us what your views would be as to the teaching University?—Speaking broadly, I should like to see established in London a university which in effect would be a teaching university, in which the existing London University should have added to it a strong professorial body.

10. Your objection then being strongly against the whole of the scheme which is immediately before us, I suppose you would not care very much to object to matters of detail?—No, I think not.

11. I should be very glad to hear you at any length you please with regard to your reasons for objecting to the plan that is before us. I understand you would prefer some plan in which the University of London took a leading part, so altered as to have teaching powers?—Substantially that.

12. Supposing this were found impossible—that they were not willing or not able to undertake this, or to agree among themselves in any scheme which would undertake this—then would you be prepared to consider as an alternative the scheme that is put before us?—Certainly. I think that it is better than absolutely nothing.

13. Then your objection to this scheme as a whole comes simply and solely from your preference for something in which the University of London would take a lead?—It comes primarily from the fact that I think the scheme before us is a partial and inadequate solution of the question. I think also this scheme would bring about a very serious practical injustice to the University of London as it exists.

14. Supposing the University of London to be out of the question altogether, is there any other scheme which you would prefer to the one that is before us?—I do not see how you could possibly have an adequate solution of the question, if the London University is left out of it.

15. Are there any questions as to the details—the Constitution of the Council, the Faculties, or the Boards of Studies, or anything else in this Charter—

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

which you would wish to give an opinion upon?—No, think not

16. You have no practical recommendation to make I suppose?—No.

17. (*Lord Reay.*) You would be in favour of the creation of a Faculty of Science?—Certainly.

18. And you would also be in favour of a Board of Studies?—Yes.

19. Appointed by the Faculty of Science?—Certainly.

20. Would you also be in favour of an examination which should test the proficiency of students to attend the higher teaching which would obviously be given in such a Faculty of Science?—A primary examination or a final examination, do you mean?

21. An entrance examination?—No, I do not know that I should. I am not quite clear that I should recommend anything in the nature of a matriculation examination, if that is what you mean.

22 That is what I mean. Then how would you regulate the admission of students to the lectures of the professors? What guarantees would you require for the previous knowledge obtained by students, qualifying them to derive benefit from the lectures?—No other guarantees than we have at the Royal College of Science where we profess to give, for example, the highest instruction in chemistry.

23. There is no guarantee for the attainment of any previous general culture?—No, none whatever.

24. Therefore they are admitted to the teaching of specific subjects without any testing of their previous education?—Not any direct testing, but as a matter of fact at the Royal College of Science we require the intending student to lodge with the Registrar a statement—and a pretty detailed statement, too—of his previous course of instruction, the training he has had, the schools he has been at, the subjects he has taken up, and any honours or degrees he has acquired; and, if it is obvious on the face of that statement that the boy is not fitted to come, we do not admit him. But that is the only test we impose.

25. You discourage the attendance of those whom you do not think well qualified?—Certainly.

26. How do you think the professors of a teaching University for London should be appointed?—Ultimately, I suppose they should be appointed by a body in which the professors should have a very considerable say. Of course if you ask me how in the outset such professors should be appointed, that is to say, supposing you are creating the University that I contemplate, that is another question. But eventually I think the professors ought to be appointed in the University practically by the University. The University should be not, of course, exclusively, but very largely, in the hands of the professorial body.

27. Largely but not entirely?—Yes, largely but not entirely.

28. You would admit an outside element?—Certainly, it is very desirable to have that.

29. What amount of influence are you prepared to give to what is called in Scotch universities the extra-mural element?—I would encourage that. I would recognise the work done by extra-mural teaching. I should very much like to see a body of teachers connected with the University like the *privat-docenten* in a German University.

30. With regard to the leading difference between the German system and the French system, of which you are perhaps aware, in the German Universities they exhaust the various curricula of scientific teaching; they go as far as you can go. In France they have special institutions for the higher teaching. Would you be in favour of the new London University absorbing the whole of the teaching, and also research, or would you be in favour of making a division and having special institutions as they do in France?—I have no practical knowledge of the French system. I am, however, a German student, that is, I have been educated at two German Universities, and I have some little knowledge of their procedure. I should like to see much that there is in the German system in this new University. There are many things in the German system which, I think, might be very advantageously incorporated in the new University system.

31. Would you like to secure to the professors and students manifold opportunities for research?—Certainly.

32. (*Professor Sidgwick.*) Leaving, as I think we may, on one side the relation of the new teaching University to the present Examining Board, I should like to ask you how far you think the Royal College of Science should form a part of the new teaching University, and what in your view would be best on the one hand for the interests of the University, and on the other hand for the interests of the Department?—The fusion of the Royal College of Science into any such scheme as may be contemplated would have very considerable difficulties.

33. Would you first state the advantages to the two sides, and the drawbacks afterwards. I will first ask you if you do see any advantages?—Certainly in the interests of education generally I do see some advantages. It would be no doubt a very considerable advantage, especially to the higher instruction, that the prospective graduate or student of the University should have the opportunity of working in such laboratories as we have, and as we hope to have, in association with the Royal College of Science; and he would also have the opportunity of familiarising himself with the scientific collections which we have in connexion with the Royal College of Science, which are very large and important.

34. If I understand you, you think it is not practically possible to have equally well-equipped laboratories and museums for the new University. You think that to have two institutions in London, as well equipped for the higher teaching and research as the Royal College of Science, is now. You think that to re-duplicate the apparatus is not, perhaps, desirable, and is not, at any rate, practicable. Is that your view?—There would be nothing impracticable about it. It would be a mere question of cost.

35. The cost would be very great?—The cost would be very great, and as regards the museum I should think it would be practically impossible for the University ever to hope to have such a collection as we have.

36. That is an advantage from the point of view of the University, that it would obtain access to a museum and apparatus which it cannot hope to gain otherwise?—That is one great advantage.

37. Is there any other advantage from that point of view?—No, I do not know that there is any other special advantage. There need not be the slightest doubt that any teacher of university rank would teach his science, chemistry, for example, quite as effectively as I do.

38. I may refer, perhaps, to a book written by Professor Pearson, in which he says that the Royal College of Science, South Kensington, is a useful institution, but with non-academic aims. I want to ask you this: assuming the Department to have certain aims, which I will not call non-academic, but which are not *primâ facie* academic, do you think that with a view to the realisation of those aims it would gain from being connected with the University in any way?—I do not quite understand the phrase "non-academic aims" as applied to our place, because if you test us by our results, we can show that we do quite as much as any existing London college in realising those academic aims, at least as regards science. For example, our men frequently present themselves to the only test of an academic kind which is open to them, namely, the examinations of the existing University of London. A considerable proportion of our men not only pass these examinations but pass them with distinction.

39. If you will allow me, I will change the form of the question. As engaged in working in the Department, do you see any advantages, from the point of view of your own work, in the association with the new University, or are the advantages that you see only in the interests of the new University?—Looking at it entirely from my own point of view, I do not know that as a teacher of chemistry I should be in any way bettered, and I cannot see that my students, except indirectly, would be very much bettered, by the association of the Royal College of Science with the University.

40. The work would go on as before, neither better nor worse?—Precisely.

41. There would be no difference?—There would be no difference.

42. I believe that the work on which you are engaged consists of two parts, teaching, and an elaborate organi-

sation for conducting examinations in the country?—Yes, it does.

43. How far do you conceive that those two parts are closely connected? Do you think that if the teaching organisation came in the examining system would have to come in too, or could the teachers come in and become a part of the University, and the examination system still be conducted by the Government Department as before?—The two systems are quite distinct. We are not examiners by virtue of being professors, nor are we professors by virtue of being examiners. Our two functions are quite distinct. We are as a matter of fact only appointed from year to year as examiners. We are invited, in fact, each year to undertake the work of examination, and it is quite within our power as professors to say that it is inconvenient to us to accept that particular invitation. If I understand your question rightly, I do not see, therefore, that my work as a professor of the Royal College of Science would necessarily be interfered with if I came into the University, nor do I see that my work as an examiner in connexion with the Science and Art Department would be in any way affected by it.

44. There would be no reason why the College as a teaching body should not come in, and the whole of the examination system remain in the Department as it did before?—There might be difficulties. Of course, a considerable fraction of our students is brought to us through the instrumentality of this system of examination. In fact, I may say that the very best students we have are men who have been selected for us by this examination system. All the State-aided students, for example, who are sent up from various centres, are chosen simply on their standing in these various departmental examinations. These men constitute very nearly half of the men we have to teach. Therefore, assuming we came in, the University might possibly very considerably affect that class of students—that is, affect our getting that class of students.

45. I think we have now come to the drawbacks and difficulties, and perhaps it would save time if I asked you to turn to the unfavourable side of the combination and state to us the difficulties which would have to be overcome if you came into the new University?—It is very difficult in a word, or in two or three words, to say what the difficulties would be. There would, of course, be departmental difficulties. There would be the difficulty of taking over the machinery of a Government Department. But, looking at it simply from the educational side, that is, looking at it purely as a matter of teaching, I do not apprehend that there are any insuperable difficulties. There are difficulties, it is true, but they are not of an insuperable character.

46. I suppose if the teaching body became a part of the University, the Faculty or Board of Study to which they belonged would claim a control over them which might be thought very likely to interfere with the control of the Department. It might be thought that the freedom required for the University would interfere with the control required by the Government. Do you think that would be a drawback?—No doubt our whole system would have to be more or less modified, and that might introduce difficulties. Our present system we owe primarily to Professor Huxley. Defining it in a word, it is that we do one thing at a time, that is to say, our men are not taking a great many classes at once. All the men who enter the place proceed at once to chemistry, and they work almost exclusively at chemistry and mathematics during a considerable fraction of their first year. Then they go on to physics and continue their mathematics. Then in their second year they go on to mechanics, and in the second half of this year to biology or geology. In the third year they specialise on some one branch of science which they wish to take up, and give their whole attention to it. That is a system of instruction which is thought very good in the Department, but which the University authorities might not think desirable, and that might bring them into conflict.

47. There is one thing to which Lord Reay referred. I was not quite sure when you spoke of the absence of any test of what I may call general culture in the case of the students who came to you in the way of national scholarships, whether you thought it desirable for the work your are now doing in the country, not to impose such a test, or whether you meant to go further and thought it desirable that the new University should not impose any tests of the kind as a condition of entering for its degrees and prizes. Of course there might be a considerable difficulty if what was thought desirable for the national scholars was not thought desirable for the others?—As regards our students, I think our experience shows that those whom we chiefly value, and who are selected for us by this system of preliminary examination, are usually lads of considerable capacity and of fairly wide general reading; and if they do ultimately devote themselves to some one branch of science they usually take up also literary subjects. As a rule they are not by any means a narrow or specialised type. I know of my own knowledge that many of my most distinguished students are fairly good linguists. They have also considerable literary ability, and they supplement their incomes by doing a certain amount of journalistic work apart from scientific work. These men have had no matriculation test—no test of mere general attainments—and, speaking generally, and as a past examiner of the University of London and other places, I have not much faith in matriculation examinations. I think they are in many cases great stumbling-blocks, and the advantages which they may have are altogether incommensurate with the difficulties they present.

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

48. Then I understand that, speaking from the University point of view, you would think it desirable to let your students obtain the degrees and compete for the prizes without any further test than that which they now go through?—I think they might do as they do in a German University. It is not wanted there.

49. In the German Universities I thought they imposed a rather severe test of previous study. Is that not so?—Speaking as a Heidelberg and a Bonn student, I never passed through any introductory examination.

50. I thought an exception was made in favour of foreigners?—I am not aware of that.

51. (*Mr. Rendall.*) Surely the normal thing is that students should pass through an examination?—But is not that a mere leaving examination in the schools?

52. Yes, but it means having passed the premier, which is quite equal to the matriculation?—But it is not imposed, I believe by the University.

(*Mr. Rendall.*) I think it is a condition for ordinary German students.

53. (*Sir Lyon Playfair.*) In saying that you fundamentally object to the draft Gresham Charter as being an inadequate solution of the whole question, would you tell us a little as to what you mean by thinking it an inadequate solution?—In the first place I do not think a mere federal University, which of course this Charter contemplates, is the most effective or the most adequate solution of the question. Further, I object to the thing because I imagine it to be a practical wrong to the existing University of London. The effect of it will be that if any competitive institution of the kind here contemplated is set up in London all the collegiate students of the University of London would be gradually absorbed into the new University, and the existing University of London will practically have to depend upon non-academic students, that is to say, upon those who are simply sent through its portals by the correspondence classes and by the coaches and crammers and that style of people. Therefore, the effect would be to greatly lower the value of the London degree and the status of the London graduate, and I fail to see why the London University as it exists should have earned such a fate as that.

54. Do you see anything in the Charter or in the small amount of funds which the Gresham body probably brings into the scheme of the University—a few thousands a year—as at all representing the great expenditure which is now found necessary for the establishment of larger universities abroad?—I beg your pardon, I do not quite follow you.

55. What I mean is this. Take the instance of the Strasborg University in a small town. We know that efficient university buildings with properly equipped laboratories there cost about 700,000*l.*; and that even in that small town 40,000*l.* to 45,000*l.* a year is necessary for its maintenance. Do you see anything in the funds and in the organisation of this Gresham Charter that would meet the creation of a university worthy of London?—No, certainly not. They could not possibly on such a basis of income as is there set out establish anything approaching to the Strasborg University in comprehensiveness or style of equipment.

56. What do you consider from the modern experience are the functions of a university? May I take this

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

in the first place: do you believe that it ought to be the creator of higher knowledge as well as the storehouse of higher knowledge?—Certainly, its function are to create as well as to store.

57. And what is necessary for that purpose?—Well-equipped laboratories and museums, among other things.

58. Which are enormously expensive?—Yes, which are expensive.

59. Have the existing institutions, such as King's College and University College, laboratories of sufficient equipment in the modern ideas of a great university?—No, certainly not.

60. Has the London University at the present moment any such equipment?—No.

61. Do you think that if a university worthy of London is to be created in any way it is desirable to have two competing institutions rather than one which Parliament might be inclined to support liberally?—I think it would be infinitely preferable to have one which would be liberally endowed and supported.

62. Can you conceive the idea of Parliament saying, "We have established a London University, and now "there is about to be established the Gresham Univer- "sity," and that Parliament could be induced to vote money to both institutions acting in one sense as rivals to each other?—No, I think not; I think that, inasmuch as Parliament has conceded the principle of State aid to the existing place, it might legitimately be asked if the reformed institution continued to exercise its present functions to supplement the aid which it gives as far as necessary.

63. For the development of existing institutions if they were under one University also?—Quite so, if they were absorbed into one University.

64. When you said you thought the London University should have a strong teaching professoriat, I suppose you meant by that that the existing professors of such institutions as King's College and University College, and the medical colleges, should have existing recognised rights, but that the new professors appointed should be with the full approval of the University which controls the whole?—I think that, whilst I would give the University the freest possible hand, as a practical matter they might fairly well take the whole collegiate teaching staff of the metropolis at present existing as the foundation of their new professorial staff.

65. Do you think that in well-equipped colleges the professors should recommend the new professors to be appointed, and that the University should have a power of veto if it did not approve?—If the colleges must be retained I think it is desirable.

66. Have the German Universities generally a much larger conception of university life than we have in this country?—I venture to think so, speaking with all due deference.

67. Especially with regard to new subjects of physical and natural science?—That is my impression.

68. And that the amount of money which the State gives in support of these Universities is very much larger than the State thinks it necessary to give in this country?—Certainly.

69. You said you would prefer the existing London University to the proposed separate Gresham University. You do not mean the London University as it at present exists?—No. Of course I think the London University as it at present exists is in some respects an anomaly. It is not a university in our sense of the term.

70. It is an examining board?—Yes, it is an examining board.

71. I suppose it must entirely alter its character and become a teaching University if it is to be the only University for London?—Yes, it must entirely alter its character, that is to say, it must add to its present functions. I do not think it would make any very material alteration in its existing work. It would simply add to its existing duties that of teaching in London.

72. Supposing it adopted the teaching in London, there are precedents for its examining outside London altogether. For instance, Trinity College, Dublin. Trinity College, Dublin, is a teaching University, but it opens its degrees to those who come from places outside, although not many come?—Quite so.

73. Do you think the London University should act in the same way?—Certainly.

74. (*Rev. Canon Browne.*) With regard to the preliminary test I have only one question to ask. You told us you have a record of previous work from the persons who apply for admission, and that you dissuade (I forget your word) those whose previous attainments do not seem sufficient. Have you any power to exclude?—Practically we have power. At present we have only accommodation for about 300 men in the place, and we have more applications than we can accede to. It is easy, therefore, for us simply to take the best, or what appear to be the best men upon such records as they produce.

75. (*Professor Sanderson.*) I understand you contemplate a university, the governing body of which would consist of a Board of Examination such as at present exists, and a Board of Study, which would have control over the appointment of professors and the control of teaching?—Yes.

76. You have also told us that it would be impossible to conceive any incorporation of the Science School at South Kensington with such a body as that?—Of the whole Department, yes.

77. And would it be possible to annex or absorb the professors in such an institution?—Yes, it might be possible. There is no absolute or insuperable difficulty.

78. As, for example, by giving them the title of professor and placing them on the Board of Study?—Quite so.

79. Do you think that such a University would have to regulate the curricula so strictly that that would interfere with the curricula of the Science School?—It might no doubt make a very profound alteration in our present system. It might not be possible, I mean to say, for the University student to accommodate himself to our existing system. He might be required to take up more subjects, and therefore he could not give that exclusive attention to one subject at a time which our system demands.

80 Do the three years of scientific study which you refer to here in your evidence constitute really an academical course which could be compared to three years' scientific study in other universities?—Yes, I think so.

81. Sufficiently complete?—Yes.

82. You stated just now that at University College and King's College there was no sufficient provision for academic teaching. Did you mean that to be a general observation or did you only mean that in some departments the provision was insufficient?—I had rather in my mind what I understood Sir Lyon Playfair was directly referring to, namely, the question of laboratories. I think he laid special stress on laboratory equipment.

83. But is it not the case that in some departments the plant which exists is adequate for any academical purposes?—I think the equipment of the London colleges is not to be compared for a moment with the equipment, for instance, at Strasbourg, which was the instance cited by Sir Lyon Playfair. It is perfectly contemptible as compared with that.

84. (*Mr. Rendall.*) Assuming some such single university as you contemplate, I should be glad to see how a collection can be rendered practicable partly in relation to students and partly in relation to professors. With regard to discipline of students would you entrust the University, that is to say, some board of the University, with arranging the curricula for students?—Yes.

85. And would you empower them to enforce compulsory attendance of students on this curricula?—I am not quite clear what I should do in the matter of compulsion.

86. Does any such power exist in your own college of compelling the attendance of students as indispensable for attaining any sort of stamp—degree stamp or other stamp?—It does, but mainly as a matter of public audit; that is to say, our officers dispense public money, and inasmuch as many of our students are paid, that is are subsidized by the State it naturally follows that attendance is insisted on.

87. Would you shrink from giving the board of faculty the power of enforcing some such attendance as a preliminary to a degree?—They might have it indirectly, but my own practical experience—speaking as a German student—is that the men get on very well without any compulsion. Those who mean to work, work, and those who do not mean to work will not work, and no compulsion of the kind contemplated will make them work.

88. And do they all attain a degree?—No, a very small fraction proceed to a degree.

89. Does non-attendance invalidate a degree?—Not at all.

90. To whom would you think of entrusting the regulation of the curricula—to a single professor or to some joint board or faculty?—To a Board of Studies.

91. Of which the professor naturally would be one?—Certainly.

92. Would you foresee any difficulty in students attending different courses at different institutions, assuming several to be connected with the University?—None but the geographical difficulty—the fact that they might be at an inconveniently wide distance apart. If they were tolerably near together I should not see any difficulty.

93. With regard to professors, I should like to ask a few practical questions. The status of a professor would be that of a member of a faculty. Would there be a difficulty in having two or three University professors in the same subject at different institutions?—In the same faculty do you mean?

94. I mean, for instance, a professor of chemistry at the Royal College of Science and another at University College. Do you think that would create difficulties, leaving alternative courses open to the student and equal professors at the University Boards?—No, I do not think that would necessarily create difficulty, because I should imagine that if such a fusion took place as I contemplate the work of those professors would be systematized and they would all have their special departments of their particular science to concern themselves with. They would not all be teaching the same thing, but each would be teaching his own department of it.

95. You referred to an elective board partly academic and partly of exterior nominees. What about the regulation of a professor's duties? Would you entrust that in any sense to the board?—Certainly, I would entrust that to the board that elected him.

96. And tenure no doubt similarly?—Yes, in the same way.

97. Now only one other point, which is on a different subject. Assuming that the London University should superadd teaching work to the present examining work, do you think it would be possible to have identical examinations for its own taught students and students in other colleges, or should you make a double set of papers?—I should not like to see a double set of papers instituted, but I should think the papers might be so drawn up that a sufficient number of questions, and a sufficient latitude in the type of questions, might be allowed, as to comprehend what might be legitimately taught. Confining myself to chemistry, I think there would be no difficulty in setting a paper on any branch of chemistry which would be sufficiently comprehensive to overtake anything which might be taught whatever the idiosyncrasy of a teacher might be.

98. Would a University professor naturally and always be one of the examiners, or would there be, as at present, examiners appointed outside?—What I think would be best, considering the functions of the University, is this. As it is to be an Imperial University as well as a Metropolitan University, it might be desirable that the external examiners should not be London teachers, but that the University professors, or one of the University professors should always be an examiner. Two or three of them who might be University professors might take the duty in turn, but I should like to see a representative of some distinguished provincial college as an external examiner.

99. At what stage do you think there should be identity of papers? when do you think this most important—at the earlier stages or at the final degree stage, or is it equally important throughout?—In the final degree stage I should be inclined to follow the procedure of the London University system, which would allow of the man getting his final degree on the capacity he has shown for doing original work. I should lay more stress on the character of his published work, and on such indications as he can show of his power of enlarging his particular science rather than on a mere examination of the paper character. Up to that point I think the papers ought to be identical.

100. Leaving the decision there too entirely to external examiners or to both?—To both the examiners. They should have an equal say.

101. (*Sir William Savory.*) You are in favour, I understand, of a teaching university?—I am. *T. E. Thorpe, Esq., Ph.D., F.R.S.* 28 May 1892.

102. And the London University is not a teaching university?—No.

103. It is an examining university?—Yes.

104. Can you tell us in a few words what you would add to the London University to make it a teaching university?—Putting it in a word—a body of professors.

105. By a body of professors do you mean that the governing body should be a body of men teaching in the several schools?—The governing body should be a body partly composed of the teachers and partly of representatives from the outside.

106. But in the institution of the London University there are a great number of teachers at the present time, are there not?—Not a great number.

107. Some?—A few.

108. And more who have been teachers?—Mr. Anstie will correct me if I am wrong, but I think the general complexion of the Senate at present is that there are comparatively few teachers who take an active part in its work.

109. Then your objection would be that the teachers were inadequately represented on the Senate?—I think they are.

110. Supposing, for the sake of argument, that the Senate in London were constituted wholly or chiefly of men who are or have been teachers, would that satisfy you?—I think it would be very much more effective in working the university.

111. That the really radical change wanted is that the Senate or those connected with it should be teachers?—Yes, that would be a radical reform.

112. Do you go further than that in your conception of the teaching university? Do you think the University could directly teach in London?—Certainly.

113. At the institution itself?—Possibly not at the institution itself, because there is not the equipment and there is not the room.

114. Does not the London University at present teach through its colleges?—It has no colleges.

115. Well, the associated institutions—the institutions associated with it?—It has none; it formerly had; but it has abolished any direct touch or recognised association with colleges.

116. Any institutions that send pupils up to the London University are teaching institutions in association with the London University?—Yes, but the University in no sense recognises their existence.

117. It recognises their existence, I suppose, so far as this, that certainly on the medical side it requires a schedule from the students, of education?—As regards the medical degrees no doubt. With regard to the medical curriculum there is something more to be said.

118. You would not ignore that?—No, certainly not.

119. There is a medical side to the London University?—Yes, there is a medical side to the London University question.

120. And in the medical side there are these institutions?—Certainly.

121. How much further would you go in making it a teaching university than it does go at present on the medical side? Do you understand me?—I think I do. My phrase "a professorial body" implies the lengths I should go. If you created a body of professors I suppose you would create duties for them to do, and those duties would be to give set courses of instruction.

122. But supposing the Senate has lost touch with the teaching body. By the reconstitution of the Senate and introducing the teaching more actively into it that difficulty might be got over?—Yes, but it would not get over other difficulties.

123. But by the appointment of Boards of Studies and Faculties?—Yes, no doubt something in that direction has been contemplated by the present University.

124. But what course would be required in your conception of a teaching university?—What I would like to see would be that this re-organised university should directly control the teaching, but that it should not recognise the existence of federal colleges. The idea of the federation of places should not be entertained. The

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

University should practically start *de novo* utilising as far as it could all the existing teaching material.

125. Exactly; but on the medical side there might be this difficulty. They might make it very inconvenient for students if they clashed with existing institutions?—Certainly; we know that.

126. They will have to consider that question?—Certainly.

127. Would you consider it necessary that a man should be actively engaged in teaching, or would it be enough if he had been a teacher within some short time? Would you consider him disqualified for the work of directing studies, because he had recently given up teaching?—No, certainly not.

128. That in point of fact a man of experience would have advantages which a younger man might not possess?—Certainly. I think it is desirable to preserve a conservative element on a Senate as well as a radical one.

129. When you use the words "teaching university" it really comes to that, that it directs studies and prescribes the order of studies?—And also initiates studies.

130. But it does no direct teaching itself, you do not mean that? It does no direct teaching by the appointment of a professor to do a certain thing?—Only indirectly. The Senate as such does no direct teaching of course, but its component parts may teach.

131. Would you insist that your new University should absolutely appoint individual teachers or leave that to colleges and schools?—I wish the properly constituted boards to appoint the teachers.

132. On the medical side would you do that?—I should hope to see it done. I know the difficulties, but nevertheless I should hope to see it done.

133. Taking a large medical school, is your idea of the University that it should nominate the professors to the several chairs of that medical school or leave the college to do that, looking to the college to perform its duties faithfully?—Of course, there is no doubt that the medical element is the thorny side of the whole question. I am not prepared to lay down what I would do with the medical schools, but at the same time I should like to see the University have a strong controlling power upon the appointments in medical schools.

134. Are you aware of the sort of power which the Royal colleges exercise over medical schools?—Yes.

135. Would not that be sufficient? Would you go further than that?—That might be sufficient if the University itself was in touch with the Royal colleges, that is, if the University had direct representation on the Royal colleges.

136. Would the supervision and direction of medical education which the Royal colleges at present exercise satisfy you in that direction as to a teaching university, or would you go further than that and insist that the University should absolutely appoint the individual teachers?—I should prefer that the University should appoint the teachers. At the same time if you ask me as a practical measure what could be done, I think if the University and the Royal colleges could be brought into co-operation one with the other that might be the most satisfactory way, under existing circumstances, of dealing with the problem.

137. Taking your view of the teaching university, do you you see in this proposal for a new University any powers greater than those which the London University might exercise if it were re-organised?—In the existing Charter, do you mean?

138. Yes, in the new University. Can you see, or does it offer to you a probability of doing the work better than the existing London University, if reorganised?—I think the re-organised University I contemplate would do the work better.

139. I should like to ask you whether in your idea of a teaching University you involve the view that teachers should examine their own students?—To some extent.

140. To what extent?—I think for the purpose of degrees it would be convenient that the teacher should be associated with an external examiner, but that he should have a large say in the examination of the men whom he has taught.

141. Do you mean to say that two men should be appointed to examine, one the teacher and another outside examiner, and that they should have equal voice?—I think so. That is the system which is in vogue in the Scotch Universities.

142. An equal voice, one the teacher and another the outside examiner?—Yes.

143. What advantage do you consider that to possess over an examination by independent examiners altogether?—The advantage it possesses is this: that if an absolutely independent and external examiner is brought in, the teacher, as well as the man who is taught, is to some extent the victim of a syllabus; you have to lay down a very carefully prescribed course of instruction which must be very rigidly adhered to if a man is to have the fullest opportunity of distinguishing himself in the examination. To have to follow for it, may be, a considerable time such a syllabus is a very inelastic system, and is detrimental to the highest teaching. Many of the special excellencies of a teacher, and much of his own knowledge—that is, knowledge acquired by his own power of investigation—his own special quality are so lost.

144. Am I to understand you to say that you think a syllabus is necessary in every department of knowledge if an outside examiner examines the student?—Certainly.

145. Are you aware that in most of the subjects no such syllabus is adopted in the medical colleges?—I do not know about that.

146. Anatomy is not examined by syllabus, or physiology, or medicine, or surgery?—I am not sufficiently conversant. Speaking generally, I may say that this very question has had to be carefully threshed out upon our own College council because we ourselves have had imposed upon us external examiners.

147. You admit that there are differences in that respect in different subjects?—Yes, there may be.

148. You would not like to speak on such a subject as anatomy?—No, of course I have no right to speak of it.

149. With regard to chemistry, if a man has a fair education in chemistry, and he went up to an outside examiner, if that examiner were fair and competent would he be likely to be subject to injustice?—Such things have occurred.

150. Yes, but that is hardly the question. Would a student be likely under such circumstances to be subject to injustice? Suppose A. teaches a man chemistry properly and B. examines him—assuming both to be competent—is the student likely to suffer injustice at the hands of B. because A. taught him?—It is not impossible. You might have a doctrinaire—a man of a particular cast or school of thought—and he might be a man of such strong individuality that he could not help the exercise of that individuality or particularism.

151. The doctrinaire might be the teacher?—Yes, but he is counterbalanced by the external element.

152. But imperfectly?—Not necessarily so.

153. (*Mr. Anstie.*) I think you said that one of your objections to the present state of things was that there were comparatively few teachers on the Senate of the London University?—I think so.

154. Your view would be that the element should be largely increased?—Yes, I think it would be to the advantage of the University if it were increased.

155. I understand you also not to contemplate the creation of a new university irrespective of existing institutions, and I understood you rather to say you would recognise those institutions?—Certainly. I would create a new university; that is, I would reorganise the existing University of London.

156. For instance, University College, King's College, and the medical schools?—Not as confederated colleges, that is to say, I would destroy their individuality; I would absorb them. King's College and University College as such would no longer exist.

157. As university colleges?—As university colleges.

158. I understood you to say that you would be prepared to start with the professorial staff as now existing?—Yes, I would utilise what there was.

159. Making that a foundation?—Yes.

160. Then, you as part of the system, require that there should be something like a constant organisation of the associated colleges?—I do not follow you.

161. So that the holder of a chair could be succeeded by another holder of the same chair, and the same subject would be pursued by a consistent course?—Of course the same subject would be so pursued.

162. I understood you to say also that you would desire to have those appointments sanctioned by the University?—All such appointments should be sanctioned by the University.

163. Your view would not be that the University should itself of its own instance merely appoint, but that it should give its sanction to appointments made by other people?—My view is that the University should appoint.

164. So that all you would seek in that respect would be to hold some control by the central authority over the appointments to chairs so as to be able to prevent the appointment of any who were not of adequate intellectual rank?—Quite so.

165. I understand you also to say that you do not see any educational reasons against the professors at South Kensington being professors in the new university?—From the educational point of view, no.

166. I observe that in all schemes which have been submitted almost, the Crown has certain nominees on the governing body?—Yes.

167. Would such a nomination reserved to the Crown go a considerable way to getting rid of what are described as the departmental difficulties?—I do not think so.

168. You do not think it would assist in getting rid of those difficulties?—No, not necessarily.

169. Then what are the difficulties which you think would not be got rid of?—It is difficult to say in a few words, but no doubt the whole scheme of evening class instruction, and the whole machinery for inspection of such instruction, and the whole system of initiating and controlling the schools might be affected by it, or the Department might conceive that it would be affected by it, and therefore they might think it best to leave well alone.

170. In the discharge of your functions do you take all that work in London?—As examiner?

171. No, as teacher. Do you as professor at South Kensington give the evening instruction?—I do not. There is no evening instruction at South Kensington.

172. I thought you mentioned that as one of the difficulties?—I am speaking of the system of instruction which the Department examines on.

173. I am not speaking about that. I understood you to say that there might be certain difficulties which I did not quite understand attending the introduction of professors at South Kensington into the new University. Do I understand you now to say that you do not see any such difficulties?—No. All along I have said, or intended to say, that there are no special or insuperable difficulties from our point of view as professors of science, but there might be difficulties in other respects, for example, as examiners.

174. But that is with regard to the general system of examination?—Yes.

175. I understood you to say that the professors at the College conduct their own examinations?—We have hitherto done so.

176. And the only modification has been by the introduction of an external examiner in conjunction with you?—Yes.

177. Would you be at all satisfied or content to have that examination in your work conducted by persons who knew nothing at all about it?—Certainly not.

(*Chairman.*) You would not approve or you would not object?

178. (*Mr. Anstie.*) You would not approve of having that kind of examination of your work?—Certainly not. A man ought to know something about my work to examine adequately.

179. All these subjects of education are very wide but examination is rather narrow?—That is so.

180. It might fall upon a portion of the field that had not been traversed by the teacher?—Quite so.

181. And in that way you think injustice might be done to a very deserving student?—Quite so. Might I be allowed to amplify what I mean? As I have explained to you, we have an admirable science museum, and we are encouraged to add to it everything which indicates or illustrates the newest developments of science. I have, therefore, from time to time, having these opportunities, given what perhaps in a curriculum might be considered an undue prominence to certain things, because I have very special means of illustrating them. To take an example, we have the machinery to demonstrate the liquefaction of oxygen. I have too the apparatus to illustrate the method of isolation of fluorine. I conceive it, therefore, to be my duty to lay special stress upon matters of this kind, having such facilities to illustrate them. It is very possible that an external examiner, merely looking at the syllabus, would say, "You have given undue prominence to this and that, "and you have done it at the expense of the rest "of the curriculum. You have, therefore, to some "extent narrowed your work." My answer to that is, that inasmuch as I have, to begin with, a number of men who come to me with a considerable knowledge of chemistry, it is to their interest and to their benefit that I should specialise upon those points, since otherwise they would have little or no opportunity of acquiring the fullest information about them.

182. Supposing, in accordance with your views, the Professors of the College of Science form part of the New University you would then in common with other institutions have the power, or share in the power, of testing for the degrees, and conferring the degrees. Is that a power which you would value?—Certainly.

183. With respect to the quality of the examinations, I understood you to draw a distinction between the final and the other examinations. Was I right in thinking you did make that distinction?—As regards paper work do you mean? I was asked a question with regard to the identity of papers all along the examination, and I replied that I should prefer something like the system which exists at the London University—considerable latitude at the final examination.

184. When you speak of the final examination, you refer to the Doctor of Science, I suppose?—Yes, to the Doctor of Science and the Master of Arts; the highest degrees in fact.

185. Then is your view that with respect to the lower examinations—the earlier grade of examinations—it would be desirable to leave the examination to a large extent, in the hands of those who were responsible for the teaching of the student, but that with respect to the final examination you would make it of such a character as would test advanced attainments and a considerable range of ability?—Quite so; but it may be deemed expedient to associate with the teacher a certain amount of external element. In that case I would not give the teacher any preponderating voice.

186. You draw that distinction between the earlier stage and the final?—Yes.

187. What would you consider the final stage? You have spoken of Doctor of Science, which is an exceedingly high degree. What would you say to some other examinations which are considered sometimes to be final; for instance, the degree of Bachelor, beyond which many do not proceed?—Very much on the lines of the University of London as at present, that is to say, I would have the men's position assessed by the teacher and an external examiner.

188. You mean the lines of the proposed scheme of the Senate?—As at the University of London you have two men to determine the position; so here you would have two men to determine the position, one an external and the other the internal man.

189. You adhere to the proposal which the Senate made with respect to those examinations?—Yes.

190. Have you considered at all the question of accepting collegiate examinations or local examinations as substitutes for any part of the usual examinations of the University?—I think that might be done, although at present I am not prepared to say to what extent. Assuming that the University had some say, or that the exact nature of the collegiate work was brought to the knowledge of the University and approved by them, I should think that such examinations might be taken possibly in lieu of the examination imposed by the University.

191. Then, on something like a syllabus being settled and approved by the new authorities, you would be prepared to let the collegiate examinations stand for the earlier stages of degree examinations?—Certainly I would.

192. Having regard to what you have said with respect to collegiate students, do you see any difficulty, as was pointed out by Sir Lyon Playfair, in the conduct of examinations of external students by the same body?—I beg your pardon, I do not follow you.

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

193. Do you see any difficulty in the examination of external students being conducted by the same university authority?—No; I do not apprehend much difficulty of that kind.

194. In that event, of course the central authority would have to be entirely responsible for the syllabus?—Yes.

195. Would that syllabus be likely to be any worse, or to put the private student, as he is sometimes called, at any disadvantage because it had been settled by a body in which the teachers were largely represented?—No.

196. Is the want of that one of the difficulties you see in the working of the present University of London?—It is.

197. For that reason, then, amongst others, so far as regards the external student, you would be in favour of having a large re-enforcement of the teaching element on the Senate of the University of London?—Yes. But may I ask what you mean by an external student?

198. A student not coming from any of the recognised institutions, or perhaps, to follow your line of thought, any of those institutions which were not staffed by a university professoriat appointed in the way you indicate?—I should like to point out that as regards science the private student, as we originally understood him at the University of London, is nowadays practically a myth, that is to say, he, for the most part, goes to some collegiate place for his science. Anybody, for example, taking up chemistry or physics nowadays, having to face the practical examination which is imposed in these subjects, does, as a matter of fact, go to some place which has a fairly well-equipped laboratory. He does not get his practical science in the kind of way he did 20 or 25 years ago when the private student certainly had to be legislated for.

199. They might be more or less in the category of strictly private students but would they in any respect be at a disadvantage by having the governing body of the University constituted largely of a professorial element?—No; on the contrary.

200. Do you find even with respect to the examination of external students difficulties arise from the fact that the examining authority is deficient in the teaching element?—I do not follow you.

201. Do you think a difficulty would exist from the fact that the examining authority (I use the term in the widest sense) was deficient in the teaching element?—I think it would. If the examining authority were deficient in the teaching element, it would make considerable difficulty in the examination.

202. So far as the present University is constituted without that element that difficulty exists not only with the collegiate students, but also with the private students?—Certainly.

203. Therefore the private student would gain by having the University constituted on a different basis?—Certainly.

204. A more professorial basis?—Certainly.

205. You seem not to attach much weight to matriculation as an entrance to an academic career, but I understood you to say that what you do in fact is not to admit all who apply, but to sift the applicants and take those who are the best, being helped in that respect by the fact that you have not room for all?—Yes.

206. Would you be content in a similar way to allow that duty to rest with other bodies of the same kind as yourself, which might be incorporated in the University, say, University College and King's College, and allow them to guarantee to the University the efficiency of their own students?—I think so. An extension of the same principle, I think, would work very well.

207. That, of course, would not preclude the University from requiring something in the nature of an entrance or matriculation examination with respect to students who could not produce that kind of guarantee?—Certainly not.

208. And that might be imposed?—Yes, that might be imposed. If they could not give the requisite guarantee, the University might impose such tests as it thought sufficient.

209. (*Mr. Palmer.*) Sir Lyon Playfair in speaking of the funds of the University referred to the funds of the Gresham body. You did not understand Sir Lyon to refer to any funds of the institution known by the name of "Gresham" outside what is mentioned in the Charter?—No.

210. (*Professor Ramsay.*) I understand that you object in principle to the idea of a federal university?—I do.

211. Do you mean by that that a university ought to take no cognizance of any individual institutions whether colleges or called by any other name?—Not altogether that. Some of what I may call the minor institutions which do not rank as colleges, the University might possibly recognise the existence of, and it might possibly take what it could from them. But that is a very different thing from recognising places of the rank of colleges like King's College and University College. For example, the Birkbeck Institution might in some way or other be recognised by the University, but I do not mean that the University shall recognise as corporate parts King's and University Colleges.

212. Then you object entirely to Part II. of the Draft Charter which provides an elaborate system by which ten medical colleges besides University College and King's Colleges are to be represented on the governing body and actually form the University?—In principle I do.

213. You make no claim with regard to the Royal College of Science to be admitted to the University on the same principle as those other colleges?—No.

214. But your idea is that the University might if it chose recognise existing teachers in any one of those institutions and call them professors?—Yes. Take them over if it thought fit.

215. Was it your idea that they should adopt the whole teaching staff in every one of these colleges and call them all university professors?—Not necessarily. As I said, I would give the supreme authority a free hand; it should take what it thought was good and leave what it thought was bad.

216. But I understood you to say that each college should take its own teachers, and that the University should afterwards approve or disapprove of the choice?—If I said that it is certainly not what I intended. I was under a misunderstanding.

217. You said that the whole university body, however constituted, might withhold its assent to an appointment made in a particular college by that college?—Then I misunderstood the drift of the question.

218. Then you mean that the University when constituted should look about among all these various institutions, ask itself on what subjects it wanted professors, and choose a particular man or particular men as professors on that subject?—That is in effect what I mean.

219. The effect might be that you might choose a professor of chemistry and call him a university professor, but not take the King's College professor?—Yes, that might be so.

220. Supposing these men had this different status, what would be the difference of privilege between the men attending the lectures of the professor of chemistry and the men attending the lectures of the teacher who was not a professor?—As regards the status of the student do you mean?

221. Both student and professor. How would the status of a professor towards students differ from that of teacher the other who was not a recognised professor. What would be the distinction between the professorial teacher and the non-professorial teacher?—I do not think there would be any difference in status, but what I should apprehend as a practical matter would be the effect would be that the professor in the University—the University professor—would take the general course of instruction, and that the other man would take specialised or subordinate parts of the instruction.

222. Then that implies a systematised University. It implies not recognising an indefinite number of teachers having a *pari passu* right, but that the University shall select a certain number to form parts of one organised whole?—That is the effect of what I mean.

223. Then what would become of all those various teachers who would not be recognised as forming parts of the University?—There are not so many of them, but that I think they might all be utilised; you would utilise all the institutions which are of potential university rank.

224. You are not concerned with the success of the colleges as such?—No.

225. You spoke in answer to Sir Lyon Playfair as if one of the first objects of the institution—of this University of London—should be to attract endowments. By that, I suppose, you meant not only to make apparatus sufficient and laboratories sufficient, but also to make the status of the professorial teachers adequate to secure the services of the best men?—Yes.

226. But if the colleges as a preliminary condition are to appoint professors, who are to be recognised as University professors?—I beg your pardon, the colleges to appoint professors?

227. Yes. Do you withdraw that?—Yes. I think I pointed out that I misunderstood what was asked. I mean—that the University should appoint professors, or that the supreme authority, whatever it was for the time being, should in the first place appoint professors; that ultimately there should be a board on which the existing professors should have a very considerable power to appoint their professors.

228. You mean by existing professors those who should be so appointed by the University body?—To begin with, if you had to collect your material from the existing institutions you must have somebody who does the business of the collection. That could not be the professors themselves. There must be some external body.

229. Then in what way would endowments be attracted to the University and not to the colleges? The endowments must be given to the central body?—Certainly.

230. You spoke in answer, I think, to Lord Reay about extra-mural teaching. What exactly do you mean by extra-mural teaching? Do you mean a private coach?—No, not exactly a private coach. What I had in my mind was, as I said, a man rather of the nature of the *privat-docent* of the German University—a man who is a young man and a potential professor, and who, if, say, a chemist, has set up a small laboratory on his own account, and who is actively doing research work, and who associates with him men who are already in many cases graduates of the University to work with him in research. He does not do very much teaching except indirectly, that is to say, he does not necessarily directly prepare for degrees.

231. Is he to be appointed by the University?—He is to be appointed by the University.

232. Is the teaching to be under the control of the University?—In so far as he is appointed he is under the control.

233. He is an officer?—Yes, he is an officer to some extent.

234. That is an entirely different thing from extra-mural teaching. Is not one of the main reasons why this has been thought desirable that the system of conducting examinations purely and solely by examination without any regard for the training of the student has proved unsatisfactory?—I am very sorry to trouble the Commission, but I am getting somewhat fatigued, and I do not follow the question.

235. The object of a teaching university is to substitute for, or to have alongside of, the present system something which would be distinct from a system giving degrees purely and solely by examination?—Certainly.

236. Has it been your experience to examine students in the way that has been mentioned—examinations conducted by yourself in conjunction with an external examiner?—Of course indirectly it has been my experience. As an examiner of the University of London my own students have appeared before me.

237. I understood you to say with regard to that—what certainly I know is felt very much more strongly by teachers of literature than of science—that it is a great advantage to a teacher that he should not be entirely confined in his teaching by having to work with a view to an examination external to himself?—Yes.

238. And that the whole range of his teaching is differentiated by the fact that he can make his course of teaching such as brings out his own powers and suits the circumstances of the student as compared with the man who simply has to consult records of past examination papers to see what kind of question is likely to be set?—Quite so.

239. Have you ever acted in that way by the side of an external examiner?—No, I have not.

240. You mentioned the Scotch Universities as being a case in point, where the examinations are conducted partly by the professor himself and partly by an external examiner. Have you ever had any experience of that system?—Yes, but I have never been the internal man. I have always been the external examiner.

241. Do you think that that system of mixed examining just hits off what is wanted as a balance between the two systems?—Certainly; but more especially for the purposes of graduation.

242. The teacher who has taught a man sets questions which he knows to be fair?—Yes.

243. The external examiner comes in to represent the subject, to see that the questions are sufficiently broad and high, and that there is no injustice done to the subject or the student by his having been brought up in an exceptionally narrow school?—That is my conception of the functions of the two men.

244. Do you see any inconsistency between one and the same body conducting two examinations conducted upon two wholly different principles?—Do I see any difficulty, do you mean?

245. Yes?—No, I do not.

246. You think it would be quite fair to outside students if they were admitted to an examination for which they had received no special teaching, alongside and under the same conditions as other students who have been specially trained by the particular professors who form part of the examining body?—As regards science, such conditions practically do not operate. As regards arts they might operate, no doubt. The man who has got up his classics or humanity subjects privately would be at a disadvantage with the collegiate student and would be certainly at a disadvantage if the academic or collegiate student were examined by his own teacher. As regards science, that objection does not very much operate, because as a matter of practice nowadays all students, certainly in chemistry, physics, and biology, are educated in properly equipped places, or fairly well equipped places.

247. As a matter of fact, is it not the case that the London University gave up the notion of affiliation because it found it was impossible to hold its hands evenly with regard to the two systems?—I believe that was one of the reasons why it did give it up.

248. Do you approve the constitution proposed here by which the whole legislative power of the University is left in the hands of a single body without check or control?—No.

249. When you spoke of the faculties or board of studies having power, do you mean they should have something more than a power of recommendation, which need not necessarily be followed, but that they should be component and constituent parts of the governing body of the whole University?—I imagine that they should be component and constituent parts of the governing body of the whole University.

250. You are aware that by this Charter faculties are constituted who have no power except that of voting?—Yes.

251. Boards of studies are constituted which have no power except that of giving advice?—Yes.

252. Does that meet your view?—No, that is not my view of what the constitution of the University ought to be.

253. (*Sir G. Humphry.*) May I be permitted to summarise a little what has been the general result of your observations? You prefer that the new University should utilise existing institutions?—Yes.

254. On the whole?—Yes.

255. In the first place, the present University of London should be so utilised?—Yes.

256. And it should be constituted the head source of direction and guidance?—Certainly.

257. You do not strongly desire that this University should also be itself an independent teaching university; that is to say, that there should be special professors, special lecturers, special laboratories, immediately associated with that University. You feel that there would be great difficulties about that—that there would be very large funds required, and under present circumstances they would not be attainable?—No, I have not gone quite as far as that. When I spoke of utilising

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

existing appliances I rather meant utilising existing teaching material. I do not think existing appliances are adequate. I do not think the laboratories, as I have already said, are adequate to the needs of a proper University of London, and, probably, if not immediately, they would have to be ultimately, if not swept away, certainly reorganised and rebuilt.

258. There are the two points. Do you desire that there should be any connexion with the present London University a new and separate and independent teaching body, or that the object should be to utilise and improve the teaching in the various colleges which now exist?—If I could see my way to it, what I would like to have would be to give the new body which would be created or superadded to the London University a perfectly free hand. I would like them to create new professorships, if necessary, and new lecture rooms and new laboratories on an adequate scale.

259. You would like that if it could be done?—Yes.

260. But it would require enormous expenditure to put laboratories and museums in connexion with that University on an adequate scale—a scale such as should be superior, we will say, to that of any existing college?—Of course it would require a large sum of money, but I think there is, if it were effectively utilised, already a very considerable nucleus of an income such as would be required. I do not think any very enormous demand would be made.

261. What is the nucleus?—For example, assume for a moment that the so-called constitutent colleges were willing to join in the scheme.

262. If those constituent colleges were willing to give up all their funds, and fuse themselves into one great teaching institution connected with the London University. But that I suppose is scarcely probable?—I do not know why it is intrinsically improbable.

263. It would be a very large affair, and a very large demand. But, however that may be, perhaps, as a future thing, without there being any teaching body immediately associated with the present University of London you would be content that that should be dominant over the various colleges and teaching institutions which at present exist. You would be content at present?—Yes, if it all moved in the direction of one university, and the idea of federation were renounced. I would take that as an instalment.

264. And you would hope that that might lead to an improvement in the laboratories which already exist?—Yes, I hope so.

265. Your view I understand to be that the teachers in the several colleges should be adequately represented on the Senate of the University of London?—Yes, but not as college professors.

266. Furthermore, that professors of those colleges should be appointed, if not entirely, yet partly, by this University of London?—My idea is entirely by the University.

267. You would desire that the University of London should have a share in appointing all the professors of the several colleges?—We do not seem to quite understand one another. I do not recognise the existence of colleges. I assume that the colleges have absorbed themselves—or that they are absorbed—and the separate and corporate existence of those places is gone.

268. You would not propose that your own College of Science should be done away with and absorbed?—Certainly, that was my idea if we are taken in.

269. Then that would not be utilising the present teaching materials?—It might be. Why not?

270. Because if they are destroyed and absorbed the present materials are gone?—Of course, if you eat a piece of bread you destroy it, but at the same time you make use of it.

(*Bishop Barry.*) But it ceases to be a piece of bread.

271. (*Sir G. Humphry.*) I thought your idea was that they would exist?—They do not exist on the Senate by virtue of being professors in their colleges, but they exist on the Senate by virtue of being selected by that organisation to be there.

272. That would be the same kind of thing?—With a difference.

273. I do not quite see the difference. They would be represented——?—May I point out what essential difference there would be. If they were there as members of the constituent colleges they would be, more or less, directly under the control of the governing bodies of those colleges, but if they came selected by the University of London, and directly responsible to the University of London only, the control of the governing bodies of those places would cease.

274. You would have them appointed without in any way being controlled by the several institutions. Is that it?—We are rather at cross purposes. I do not recognise the existence of those colleges except simply as bricks and mortar, and the professors as people to teach inside those rooms.

275. But while they are there they are there?—Yes, while they are there they are there as units.

276. If your successor be appointed entirely by the University there would not be any control in the institution?—No, there would not; and I do not desire that there should be.

277. That is the point I do not quite understand. Then would you desire that the University should require that its students attend the courses given by the professors, or appointed by them?—Of course I should desire that the students should attend the courses, but at the same time I would not exercise any severe compulsion.

278. You would leave it a broad and open thing that they may get their knowledge where they can, provided they have obtained it at some recognised place of teaching. Provided they have obtained their knowledge at any recognised place of teaching in the world you would let them come to the University, and pass their examination if they can?—That is what I should desire. I mean to say I do not see how you can insist upon compulsion, if at the same time you recognise the rights of a private student or the extra-mural schools.

279. You used the words "Imperial University." By using those words you mean that students may have obtained their knowledge wherever they like, in any part of the world, and this University should examine students coming from all parts?—Yes.

280. And in that way it would be imperial. That is a very important point?—That is my idea. As regards the question of compulsory attendance upon the classes, provided you appointed the kind of man whom we hope to see in the University we are aiming at, the thing would settle itself; the student would go to, and be attracted to, those classes by the fame of the teacher, as he is in Germany.

281. That would be the ground, the University would not demand the attendance, but would rely upon the students going to those classes where they are most likely to obtain instruction?—Yes.

282. That is the idea of the Imperial University?—Yes, that is one consequence of my conception of such a university.

283. Then with regard to the examinations being conducted by teachers, is not this the case that the teacher endeavours to ground his students on the great basal subjects of his science; to give them clear, good, general ideas of the great fundamental subjects of his science?—Yes.

284. It is not his business so much, at any rate in an early stage of teaching, to take them deeply into any particular subjects, but to give them a good general knowledge of the subject?—Yes; but then, if I may come back to my own subjects specially, I do not think the kind of teacher that is in my mind, the man of university rank, is concerned very much with those broad general grounds, because a boy to-day gets a good deal of that kind of preliminary training even from his school. He has already in many cases, and in a gradually increasing number of cases, had all that preliminary instruction in science which allows a man of university rank to proceed very much further with him, and, if necessary, to go in special directions.

285. But would not the great business of this university examination be to ascertain that the students who come before it for the purpose of degrees should have a good clear fundamental knowledge of the several subjects?—Yes.

286. Therefore the questions which any teacher would set would be questions which would be answerable by any well-trained student?—Certainly.

287. That is the fundamental principle of education and teaching?—Yes.

288. And that, therefore, there is no necessity for an examiner to examine his own students. On the contrary

it is on the whole rather better that the examination should be conducted by those who are not his teachers in order to ascertain that it has not been carried out into special directions, but that he had obtained a good fundamental knowledge of his subjects?—May I point out to you that there are many grades of examination through which a student has to go before he has finished with the work of examination. In the initial stage of the examination, in the lower grades of the degree, no doubt the kind of thing you have sketched out is the best. But it is an open question whether it is best for the final stage of the degree. It is there that the direct influence of the teacher and instructor comes most into play.

289. Then I might put it in this way; that for the examination of Bachelor or the first degree such an examination as I have stated is the one to be desired, whereas in the examinations for the higher stages such as Doctor of Science, or Master of Science, or whatever it is, there it might be desirable for students to pursue particular specialities?—Up to the grade of bachelor I think the examination should be of the type you have foreshadowed, that is, on broad general principles.

290. And it is a mistake rather to say that teaching should direct examination. It is quite as fair to say that examination should direct teaching. We so constantly see that remark made?—It depends upon how far you carry it. It depends where you draw the line.

291. In the fundamental principles of examination and teaching it is quite as right that examination should direct teaching as that teaching should direct examination?—My answer to that is up to a certain point it is so. Everything depends upon where you draw the line.

292. Up to the point we have been talking of. You have spoken of laboratories in the various colleges, King's and University, as being not at all up to the mark. Would you say that they are up to the mark for the requirements of the teaching of the student to the point we have been considering, that is to say, the stage of this examination, up to the first degree?—The Bachelor of Science?

293. Yes?—Yes, they are.

294. That again is a very important point. If those institutions are adequate to that point, then that is a very important point with reference to the constitution of this future University, that it might look to these colleges as the teachers up to the point we have been discussing?—They show they are adequate, inasmuch as they pass their men into the University of London, for example.

295. But for further and higher education?—They are not quite what they should be.

296. (*Bishop Barry.*) I hardly like to trouble the witness at this advanced stage of the proceedings, but I will endeavour to confine my questions in a very short compass. I understand from Dr. Thorpe that his objection to the Gresham Charter is fundamental. I understand that the great objection is to the federation of colleges?—Yes, that was one of my objections.

297. In other words, the practical exclusion of the private student?—I pointed out that my objections were twofold. I object first to the principle of federation, and next, I object to the effect it would have upon the existing University of London.

298. As far as I can understand, this Charter contemplates returning to what was the original idea of the University of London, namely, that it was to consist of constituent colleges. I think it is to that that you object?—It does not wholly return to the original idea.

299. Pardon me, when the University of London was constituted it had the two constituent colleges, King's College and University College. Then various other colleges were admitted. There was a difficulty in knowing where to draw the line. There was also the difficulty of the examination of those who were not members of the constituent colleges. Finally, the University threw the whole thing aside, and the affiliation of colleges ceased to exist. I understand that the Gresham Charter proposes to return substantially to the old position, and to that you object?—I venture to demur. Of course it all depends upon what you mean by "substantially."

300. I do not know where the difference exists, but it is hardly fair to trouble you with that question now. It seems to me that this is what the charter endeavours to do; at any rate it does intend the University to consist of constituent colleges?—Certainly.

301. You are aware that conferences have taken place between the University of London and the promoters of this charter?—Yes.

302. You are aware that there was a scheme agreed upon?—Yes.

303. Have you studied it?—I have had occasion to as a member of the Senate of the University of London.

304. I do not mean the "revised scheme," but the previous scheme?—I have studied mainly the revised scheme.

305. There was a previous scheme which was agreed upon between the colleges and the University. You have not studied that?—I was not a member of the committee then.

306. You have seen the revised scheme?—Yes.

307. Should you be content with the revised scheme?—No. I think it is a compromise which has all the bad qualities of a compromise and very few of the good ones.

308. You think a "practical wrong was done to the University of London" when, on the rejection of the scheme of their Senate by their Convocation, the Gresham Charter was framed. Will you explain what you mean by this?—What I mean is that the Senate of the London University, whatever their individual opinions might be, found themselves collectively not strong enough to enforce their idea of a university, and, as a matter of fact, in consequence of their failure to carry the matter through, a certain number of the members of the Senate actually seceded from that body.

309. Then the practical wrong was done from inside?—Why?

310. Because the University of London had the opportunity of framing a scheme, their Senate did frame a scheme, their Convocation rejected the scheme, and therefore put them out of Court?—May I explain in general terms why it was so. A certain number of the members of the Senate of the London University were wishful to support the principle for which I contend, namely, that there should be only one University of London. As a matter of fact, they gave up, as some of us thought, too much to the so-called constituent colleges direction of trying to make peace.

311. I can quite understand the cause. I am not concerned with the cause but the effect?—May I point out why Convocation threw it out? It was mainly because Convocation thought that the net effect of the whole thing would be to lower the character of the degree of the London University.

312. I am aware of that, but that is not my point at all. I cannot but think that the phrase "a practical wrong to the University of London" under the actual conditions and circumstances of the case is hardly a fair reflection to cast upon the Gresham Charter, as far as I can see. That is not your opinion, but I fail to see why it should be so?—May I again point out why I think it is? Surely it is a wrong, is it not, to the University of London, if I am right in supposing that the practical effect of the creation of this body would be to take away from the existing University all its best graduates—all its best men. There is no doubt that that would be the practical effect. It would take away the men whom the University most value. That is to say, those men who have been trained in good places would be absorbed by the Gresham University, and therefore the London University would simply have to content itself with the non-academic man, the private student, who gets his knowledge how he can.

313. I quite understand that it might inflict injury on the London University, but the question is whether that would be a wrong under all the circumstances of the case. That is a matter which I will not trouble you upon further. May I ask a question with regard to the professoriate? Take the professoriate at Oxford or Cambridge. There are a number of colleges there; there is an independent professoriate, and the students at the various colleges attend, and used to be obliged in some cases to attend, the professorial lectures. The professoriate is an independent body. Is that the kind of professoriate which you contemplate?—No; the kind of professoriate which I have in my mind is that which exists at the German University. My idea in essence is to import the system of the University of Berlin into London.

T. E. Thorpe, Esq., Ph.D., F.R.S.

28 May 1892.

314. How would this be done? I have, say, three colleges in London, and each has a body of teachers whom we may call collegiate professors. How do you propose that the University should deal with that body?—To begin with, there is the fundamental difference in the two cases, that the German University has no colleges.

315. We are dealing with a case where there are colleges existing?—I have pointed out that I should like to see those colleges swept away.

316. That is an "academic" theory. You cannot suppose that the colleges are going to cease to exist. We must deal with things within the range of practical politics. How do you propose that the professoriate of the University should stand related to the teaching bodies?—If you say that it is absolutely certain that those colleges will exist, it will entirely alter the complexion of my scheme.

317. In other words, your scheme is inconsistent with the continued existence of those colleges?—Yes, it is; very largely.

318. I understood that certain institutions were to have the privilege of insignificance, and if they were lesser institutions, not of the rank of colleges, they might be recognised by the University. I think you mentioned one or two?—I mentioned one particularly—the Birkbeck Institution.

319. Why would you recognise an institution which is comparatively insignificant rather than an institution which is comparatively important?—Because I think that by the recognition of comparative importance you rather delay the settlement of the University question.

320. Then if they are immaterial they may be accepted, but if they are likely to be anything substituted they must cease to exist?—I must demur to that way of putting it. It is one of the functions of a modern university, at all events in England, to carry on what is called university extension work, and university extension work might be very legitimately carried on in institutions like the Birkbeck. To that extent, therefore, the University recognises those places.

321. That is to say, it rather recognises the students than the places?—Yes.

322. You see no difficulty in reconciling what one may call the cosmopolitan character of the University of London with the creation of a teaching university which shall practically co-ordinate the teaching of London?—I see no difficulty.

323. The University formerly gave up affiliation because they found it impossible to carry out the larger idea fairly towards the non-collegiate. That, you think, they were wrong in; that there was no real inconsistency?—I should not say they were altogether wrong at the time. The circumstances of 1892 are not those of 1857, the time when the idea was given up.

324. I ought to put it in another way. Those reasons do not now apply?—No.

325. I do not understand why?—The whole system of secondary education has changed of late years.

326. You drew a distinction between science and art. You thought the private student was much more important in arts than in science?—Yes.

327. Therefore the difficulty, if there were one, would apply rather to the Faculty of Arts than that of Science?—Yes.

328. And you would leave the Faculty of Arts to take care of itself?—I think means might be devised by which the Faculty of Arts should suffer no practical inconvenience.

329. (*Mr. Anstie.*) I should like to put one question on a matter of fact to Dr. Thorpe, as to which, I think, he has answered incorrectly by inadvertence. Were you connected with the London University at the time of their abandonment of the system of affiliation?—No

330. You have no personal knowledge of the reasons why they abandoned it?—No.

331. Are you aware that the reasons have been distinctly stated by two old graduates and senators in the previous Commission, and that their answers are contained in the Blue Book?—No; my answer was based only on general knowledge.

332. (*Professor Sidgwick.*) I should like to ask one question in order to clear up a point of importance on which your replies to Sir George Humphry appeared to me vague. You appeared to admit that a purely external examination was well adapted at an elementary or early stage of the work, but I think you said that it depended upon how far it went. I think it might aid us in understanding your general terms if you would take your own course, which, I understand, extends over three years, and say at what point of that you consider a purely external examination to be preferable, and where you think the examination of the teacher is to be fundamentally important?—In our special case of the Royal College of Science I do not consider the external examiner of any use at all.

333. At no stage?—No.

334. Then, when you say the elementary stage, you mean the stage before your course begins?—Yes.

335. (*Mr. Rendall.*) Would you not rather draw the line between the honours degree and the pass degree than between the B.A. and M.A. stage?—For the purpose of the external examiner, do you mean?

336. (*Professor Sidgwick.*) I understood that you hold the general examination to be only suitable before your three years' course?—I never contemplated examination done by an external man alone.

337. I thought you were led to admit that in an earlier stage?—Not when the man was actually one of my pupils.

338. (*Lord Reay.*) I should like to make one point quite clear. Although you would prefer the absorption of University College and King's College in the new university, if such absorption is considered impossible you do not consider that no terms of affiliation or incorporation could be arrived at between the colleges and the new university?—No, I will not say that, but, at the same time, as I said before, I think it would be a very partial and inadequate solution of the university difficulty.

339. (*Mr. Palmer.*) With regard to the question put to Mr. Rendall, do you think it desirable to draw a distinction between class degrees and honorary degrees?—I think the present system as worked at the London University is good. At the stage at which honours should be taken the man is allowed to choose at once. He is confronted with two papers, and is allowed to take the honours paper, or the pass paper as he pleases. If he flies high, and takes the honours paper, it is still within the province of the examiner to report that he has done sufficiently well to take a pass degree, that is, if he fails in honours. That is a system which works very well. Formerly it almost always followed that by far the larger proportion of men who passed in the first class went in and took honours in some one or other subject, and it was found, therefore, a practical convenience to allow them the option of taking honours at once in the particular subject they would otherwise afterwards select.

(*Mr. Rendall.*) You have London in mind, and I had in mind Oxford, Cambridge, and Victoria, where a distinct line is drawn between honours students taking the honours school and pass students taking the pass school.

340. (*Professor Saunderson.*) In answer to Lord Reay just now you said you conceived it possible that there might be affiliation. I thought you had said before that you thought it was impossible. May we understand that you mean it would be possible for the new university to be brought into relation with the system of teaching which exists at the several colleges, or do you mean that incorporation or affiliation would be possible?—I never intended to imply that it would be impossible.

341. Impossible consistently with the object in view—the improvement of teaching—the establishment of a teaching university?—The point I wished to make clear was this, I thought the idea of a federal university was an imperfect solution of the general question, and I still think so. I also said that if it were shown that the idea of the absorption of the two colleges in my sense was absolutely impossible, then I would take the idea of confederation to be ultimately renounced, however, as an instalment rather than nothing.

The witness withdrew.

Professor A. W. Rücker, F.R.S., examined.

342. (*Chairman.*) Will you state exactly what position you hold at South Kensington?—I am Professor of Physics there.

343. You have turned your attention to the subject of establishing a teaching university for London?—Yes, I have paid some attention to it.

344. You have for some time been anxious that such a university should, if possible, be established?—Certainly.

345. Have you looked at the proposed Charter of the Gresham University?—Yes.

346. Do you approve of the principle of it or not?—No. I wish that the University, if possible, should not be of the federal type.

347. You agree very much with what was said by the last witness?—Yes, on that point, but I should like to define what I mean by federation. The University would be of a federal type if the colleges as such were represented on the governing body.

348. You object to that?—Yes.

349. You do not wish the colleges to be absorbed?—I look upon that as a thing to be desired, but I would provide machinery by which the processes of absorption would be gradual.

350. You think that a university such as you propose should be constructed from the existing University of London?—Yes, from the existing University of London, and from the colleges of London, which I should like to see united with it.

351. And supposing the University of London were unwilling to form a satisfactory scheme to make it a teaching university, have you any other idea as to what might be done?—I do not think that any great good would accrue to learning or to education from the mere union of independent colleges in a federal University. As regards the Royal College of Science, the proposal to carry out such a scheme would determine my attitude. I should wish to have nothing whatever to do with it.

352. A good many of the objections of the last witness seemed to me to be in the interest of the University of London, but there were also objections on the ground of benefit to the public. Do you agree with him as to the injury that would be done to the University of London?—Yes, but I am not on the Senate of the University of London. I have never examined for it. My knowledge on this point is very much less than that of Dr. Thorpe, and, though I generally agree with him, I do not think my opinion is important.

353. With regard to the general public, do you think harm would be done by weakening the University of London?—Yes, I do.

354. And also you object to the system of confederate colleges?—Yes.

355. But supposing other plans failed you would be willing to take this scheme?—I should not wish to take part in any such scheme.

356. You would not object to it?—I do not think that it would be useful.

357. Then it would be hardly worth my while to take you through any of the clauses, or any of the details. In fact you object to the whole plan of the colleges having a voice through their teachers?—Not through their teachers.

358. Or to teachers constituting faculties. In fact the whole system laid down in this Charter is one that you object to?—I object to it if the colleges *qua* colleges retain a permanent right to be represented on the governing body. I think the matter might be simplified if I say what would be conceivable and possible. I desire that ultimately there should be a supreme University Council in London, which should consist of the Professors of the University and of representatives of educational opinion outside the University. That body should have as far as possible control over the teaching. Of course I think it would be impossible at first to sweep away the existing colleges, but I know that in the case of a college for women—Bedford College, on the council of which I am—they would be willing to hand over the management to a body of that sort. Whether the larger colleges would be willing or not I have no knowledge, but I know several of the professors, and I can only say that recently a resolution in favour of a federal university did not get a seconder in a tolerably large meeting. The University should be organised by a Commission, which should ascertain what institutions desired to be connected with it. These should be divided into classes, namely, first by institutions which were willing to hand themselves completely over to the University, if any such existed. Then, secondly, institutions which wished to retain some control over a part of their teaching. The classes which the University recognised, or took over with the consent of a college, should be under the control of the University, in the sense that the persons who taught in them should be appointed and their teaching controlled by the University. Then further than that, I would also allow the University to carry out University extension work. I think, under those circumstances, it would be possible to establish a fairly strong university staff from among professors of institutions which were either completely or partially handed over to the University, and from that point I would begin.

Prof. A. W. Rücker, F.R.S.

28 May 1892.

359. What would be your definition of a teaching university?—A university which itself appoints the teachers and decides what is to be taught.

360. And the same body that conducts the examinations should conduct the teaching so that the two shall harmonise together?—Yes.

361. And you would have, as far as I can make out, all the teaching done by university professors?—I would have the teaching done by university professors, but I would maintain a degree similar to that of the university of London. I would not make it essential that all graduates should pass through the colleges of the University.

362. They must have gone through a course of teaching by the University professors?—No, I do not think that is essential at all.

363. You would open it to everybody?—Yes.

364. You would have a staff of professors who would instruct those who wished to be instructed by them, and whose teaching would be in close connexion with the examinations?—Yes. I think that in the examinations it would be well to have both external examiners and the internal professors acting conjointly, and I would have a system of alternative papers, approved by the central Senate or governing body, so as to make it possible that different views of a subject should be represented by the examination.

365. One set of papers to be taken by those who have been taught by the professors?—No. I would let each take what he liked. In the case of mathematics, for instance, there are sometimes two ways of regarding the subject. I would have two sets of mathematical papers in which the two views should be represented, but I would give all students an opportunity of taking which papers they liked.

366. Do you think the South Kensington School should be brought in in any new scheme?—My answer would be that of my colleague; I see no insuperable difficulty, but I think there would be very great practical difficulties. At present the college forms part of a homogeneous system. Evening classes are held all through the country. Of those who pass the examinations held in May (in which we take part) the best come up to us. If the examining and teaching were separated I think there would be departmental difficulties of a certain magnitude.

367. What sort of number come from London. They extend all through the country, do they not?—That I am afraid I cannot tell you off-hand. I could get you the information, but I cannot tell you off-hand.

368. It is really an Imperial matter that is open to the whole of England?—Except that if we have room we take paying students, who chiefly come from London, or come to London for the purpose.

369. Is there anything else that was not said by the last witness that you would like to state to the Commission?—It is perhaps a small matter to put in at this stage of the proceedings. Personally I would be prepared, in the case of students who have passed through

Prof. A. W. Rücker, F.R.S.

28 May 1892.

a proper course of study under the control of the University, to give them a degree without any examination at all, provided they had published some research or had contributed to knowledge.

370. You would take that into account?—Yes, I would take that into account.

371. And give great discretion, therefore, to the examiner?—That would give great discretion to the examiner. I do not think it would be abused.

372. You do not think an honorary degree would be sufficient?—It would practically come to giving minor honorary degrees on a rather larger scale than usual.

373. (*Lord Reay.*) If the Professors of University and King's Colleges were to be made university professors, and were, therefore, members of the faculties, and took part in the election of members of the Boards of Studies, would there still remain any difficulty in recognising these Colleges as constituent elements of the University?—I think there would, because as long as they were distinct organisations, they would be competing organisations. What I think is most essential at present, in the higher scientific education in London, is that there should be co-ordination. At present, if one of these two colleges puts up an elaborate laboratory, say for electrical engineering, or something of that kind, the other feels bound to do the same simply to retain students who are attending science classes who would otherwise leave. That is a waste of energy. It would be better that the funds which are in such a case partly spent in providing the elementary part of the two equipments should be lumped together so as to provide one establishment on a better and larger scale; so long as the colleges remain independent, I do not think such co-ordination is possible.

374. But if such co-ordination by some superior body or other means were found practicable your objection would be met?—It would be largely met, certainly.

375. You would not object, in cases where parallel classes became necessary by the great number of students, if parallel classes were given in both colleges by an inter-collegiate arrangement?—No. My own view would be that the University should, as far as possible, concentrate for the highest teaching in each subject in some one place. But it would be impossible for all the students to be taught in one place. I would, therefore, have minor centres established wherever might be found necessary under a special professor, or lecturer, or demonstrator, fit to superintend the work up to the standard which was required in that particular part of the town.

376. If, therefore, the colleges were prepared to submit to such a co-ordination, a great deal of your difficulty would disappear?—I quite admit that is so.

377. With regard to the degree in the Science Faculty, you would, of course, have several avenues to that degree?—Yes.

378. You would not have one only?—No, several.

379. Such a system as that now proposed in the ordinances for the Scotch Universities?—I am not acquainted with that in detail, but I would have several.

380. With regard to the entrance examination, do you agree with what was said by Dr. Thorpe?—I do. We certainly find as a matter of practice that the entrance examination is not a matter of great importance.

381. I understood from Dr. Thorpe that as at present organised, the colleges teach up to the degree of Bachelor of Science. Of course, we take that in a general sense. I understand you to say that you would carry on the higher teaching of scientific subjects at one of the colleges, and you would not create a new institution for teaching Bachelors of Science, and up to the degree of Doctor of Science?—I have no definite scheme as to how it was to be done actually. My view of what ought to be aimed at is that there should be one central place where the higher teaching is given in each subject, whether King's College is the centre for one kind of learning, and University College for some other, is entirely a matter of detail which, so long as the object is attained, it is premature to discuss.

382. Are you of opinion that sufficient materials for that higher kind of teaching at this moment, both with regard to teaching and with regard to laboratories and appliances, are not at present to be found in London?—They are not to be mentioned as compared with those in Germany.

383. Then with regard to the functions of what has been called the Imperial side of the University and the metropolitan side of the University, do you see the necessity for the two separate departments, or do you think they might be amalgamated?—I think they might be amalgamated. I should be prepared on the whole, if some such system as that of alternative papers were recognised, to see the two work side by side.

384. Have you given any attention to the relations of the Faculty of Science and the Faculty of Medicine with regard to preliminary scientific teaching in the medical schools?—I have no special knowledge of that.

385. You would consider it desirable to bring that scientific teaching under the control of the Board of Studies of the Faculty of Medicine?—Yes, I should.

386. (*Professor Sidgwick.*) I have grasped your idea. Your first point is that the colleges, as such, shall not have any representation on the governing body of the University. I will assume, as I think you are prepared to assume, that the two colleges do go on with independent organisations. We must take the existing facts?—Yes.

387. You desire that they shall have no representation as colleges on the University governing body. I wish next to ask how far you consider the competition among the colleges, such as actually exists, to be an undesirable thing as regards the more elementary part of the teaching?—I think with regard to the elementary part of the work it is, perhaps, less objectionable, but even there I think there is a certain waste of energy. There might be two sets of evening classes held on precisely the same subject—one in the Strand and another in Gower Street—both of them half full, the students coming largely from the suburbs, and equally able to get to either place. What is really required is that the whole system should be co-ordinated.

388. Would you admit students as now in the London University to the examinations of the University, without any regard to where they have been studying?—Yes, the University should carry on the London system.

389. And you not only anticipate no difficulty in working the two systems, but you do not think the one system would interfere with the other?—I do not think there would be any more difficulty than there is in making any great change. There are difficulties, but there is nothing insuperable.

390. May I ask you with regard to your experience of the Science and Art examinations. There I understand that the teachers in the country are to a certain extent prepared by means of the examinations, only that besides those who have gone through the Royal College of Science, there are a certain number who have only had the examinations?—They must have passed in a relatively high standard, of course.

391. Do you think that experience shows that the work of teachers so trained is satisfactory as compared with that of those who have gone through the other training?—I can hardly say that I have followed the teaching sufficiently to be able to answer that question. But I do see something of the other teachers, because every year we have a summer course, which lasts for three weeks, and the teachers in the country apply for leave to come up to this. We generally take about 200 out of about 600 applications. Those teachers I see for three weeks, and all I can say is that they appear to be a very intelligent set of men. Of course it is the best of them who are anxious to avail themselves of this privilege, and thus I probably see favourable specimens.

392. Then with regard to university extension, would you explain a little further how you would introduce it into the and the introduction of a scheme?—I do not want to mention any particular institution, but taking what I may call an institution of the higher mechanic's institute type, and admitting it to the governing body, is a harmful thing But, on the other hand, to allow the University, if the institution is willing to strengthen its teaching, to carry out the teaching within its walls, is useful, and that I would not prevent the University from doing.

393. A burning question is how far the University should go in granting a degree, assuming that it can be

attained by the same examination to artisans who only attend evening classes?—The University of London asks no questions, and I would ask none.

394. But you would provide perhaps some minor form of recognition for those who were not able to pass the ordinary examinations?—Yes. I would place no restriction upon that.

395. With regard to that examination, as I understand, you agree with Dr. Thorpe that the most desirable form of examination for those is that there should be an external examiner associated?—I am not prepared to say that under all circumstances I regard that as the most desirable. In the case of a small isolated university you might have a teacher of great eminence in his subject. Under those circumstances I should prefer that he was not interfered with, and I would entrust the examining solely to him. My own idea is that teaching and examining should go hand in hand in the case of men who can be entrusted with the responsibility. But when a number of people have to work together where the thing is on a large scale, so that each teacher cannot examine his own pupils, it is advisable to introduce an external element.

396. You would desire that there should be a combination of the kind you mention?—In this case I think it is the only practical solution of the question.

397. Do you think the same organisation would do for the ordinary degree and for the honours? Do you think it is equally safe to allow the teachers to decide whether the student is to have the ordinary degree and to allow them to decide whether he is to have a degree for the higher standard of work?—I do not think there is much difference between the two, my only view being that in the case of honours the system of alternative papers should be used in order to allow students to show their special knowledge.

398. Assuming that that system is maintained by the new University, does it seem to you possible that the provincial colleges should be allowed also to examine their own men by external examiners and also to give the degree, of course the external examiner being appointed by the London University?—I think that question will solve itself in a short time by there being at least two new universities established. It is within my knowledge that a draft Charter is being prepared in Wales for a University in Wales, and I think it is extremely likely that the Midlands will follow suit. Then there is the Victoria University, and if there are two others they will have their own degrees, and there will be no damage done to them if the University of London carried on the examining work of the country. It would be a Metropolitan University, which would thus take a larger share of the national as distinguished from local work. The one exception I would make to the rule that institutions connected with the University should not be represented as such on its Governing Body would be that until they are included in provincial Universities I would give some right of representation on the governing body to provincial colleges.

399. (*Rev. Canon Browne.*) You said that the equipment of laboratories in London could not be mentioned as compared with that in Germany. Do you include in that remark the Royal College of Science?—I am sorry to say I do.

400. (*Professor Sanderson.*) You mentioned two classes of institutions which you would be willing to completely absorb, and others you would partially absorb. Would it be your view that the Supreme University Council should be able to accept the services of other persons who were not in either class of institutions as professors or as teachers?—Yes, it would. I should like, at the first, the University staff to be composed of the existing teachers in London; but I would leave the University Board to organise afterwards as they thought best.

401. (*Mr. Rendall.*) Among the conditions imposed upon students for the degree examinations would you agree to some kind of enforced attendance or residence at particular institutions?—Not at particular institutions, but possibly at classes given by teachers of the University. I would give a degree to those who had not done it; but in the case of the particular degree, to which I have already referred, as given without examination, and as a kind of honorary degree—that ought only to be given to men of whom the University has special knowledge of its own.

402. Then in what way would you realise the idea of a teaching University for London in distinction from the present University of London if you do not insist on attendance?—Because the present University of London has nothing whatever to do, except indirectly, with teaching.

403. The University you contemplate would have nothing to do but with the appointment and control of teachers, unless you insist on some sort of attendance by the students?—I think there are two points of view. It is one thing to provide the water and another thing to make someone drink. I would make the University provide all that is necessary.

404. Why should not a student in Birmingham present himself for a degree from this new University?—I contemplate that he would. I do not look upon this University as established to create a new road to the degree. The degree is from my point of view a secondary matter. What is wanted is to co-ordinate existing institutions, so as to improve their educational efficiency.

405. You would give no special preference or recognition to any institution in London?—I would confine the power of the University to the appointment of professors and teachers in what I may call its teaching area, which would be London. I would not allow, for instance, this University to establish a college in Liverpool and appoint the teachers. Its teaching operations should be confined to London.

406. Then the professors would all be connected with institutions in London or some new institutions?—Yes.

407. And of those teachers, the University professors let us call them, the University would assume the direction?—Yes.

408. Would you allow any form of license or recognition?—I have noted that as a thing that must be done. I would not give the merely licensed teachers any power in the government of the University.

409. Would you name those licensed teachers without as well as within the metropolitan area?—No.

410. What advantage would the license imply, or what particular privilege would it carry, to either teacher or student?—The advantage to the teacher would be that he would be recognised by the University. It would be an advertisement to him. The advantage to the student would be the provision probably of a number of young men who would throw themselves heartily into the work of teaching.

411. It would create no special inducement to attend his lectures?—No, I do not believe in such special inducements.

412. Would not a distinction of that sort be shadowy, a mere license, which would confer nothing, except something like an honour distinction on certain teachers?—Yes, it would perhaps.

413. Would it in any way encourage the colleges, say King's College or University College, to enrol themselves?—I think it would be a distinction very much desired by the younger demonstrators, men who themselves by-and-by may rise to the professorial rank. The way they generally distinguish themselves is by taking up one subject and mastering it. Then it would be a recognition of their merits if the University licensed them.

414. But you would give the University no right in the direction of such licensed teachers?—The University would license them.

415. Would that mean that they would at all prescribe their courses?—Yes. It might license them to give a course of so many lessons on such a subject.

416. What would be the inducement to keep to that course?—The only inducement that the scheme holds out would be that the student who was aiming at what may be called a sub-honorary degree would qualify for it by attendance at thier lectures.

417. Supposing any institution in London, a college or otherwise, allocated a certain portion of its funds for special endowments, as at Cambridge, for instance. Do you think that would be a practical scheme, or induce the colleges to co-operate with the University?—Yes, I think it would. I think that is one of the things that might be done. I should hope that even if the colleges preserved they had their identity for a time, they might gradually be merged in the University, provided that its cons itution were from the first drawn so as to encourage such an arrangement.

418. There the inducement would be that certain of their member became University professors, possibly

Prof. A. W. Rücker, F.R.S.

28 May 1892.

with endowments provided from imperial funds?—And further, if the University took over the control of certain classes the University would be able to spend on them the funds at its disposal.

419. Spend funds on classes held by licensed teachers?—And its own professors.

420. It would be a matter of importance in inducing colleges to co-operate?—My view is that the teachers who in any college were working under the University would acquire for their own departments in that college the right to share in University funds as far as the University itself might decide.

421. You would entrust the University professors with the higher teaching as well as elementary?—Yes.

422. And you give them the whole of the power?—No.

423. Them and nominees?—Yes.

424. (*Mr. Anstie.*) I should like to ask you one or two questions on the subject of alternative papers which you have referred to. I understand you would be prepared to give alternative papers rather a wide scope?—For the honours examination, certainly.

425. Do you limit it to the honours examination?—No.

426. Would your arrangement for alternative papers be made with a view partly to consider the different methods of teaching adopted by different institutions and different professors?—Rather by different professors than different institutions.

427. Can you wholly distinguish the professors from the institutions?—No, not altogether, but I regard a professor having been admitted by the University as being a University Professor.

428. I suppose it would be the case that a tradition would by degrees establish itself, especially under these conditions of high attainments in different institutions, traditional methods, not altogether the same as, but something after the manner of those that exist at Oxford and Cambridge?—In London itself.

429. Possibly even in London?—I cannot quite understand whether you mean between this University and other Universities.

430. No, I mean the different institutions at which chairs would be held?—The appointments to those chairs would be made by the University—the same body—and it would be merely a matter of accident if a succession of professors took precisely the same view of the subject.

431. What is the precise object of the alternative papers in your view?—I have in my mind the case of a professor being able to justify to the University the statement that his subject is capable of being regarded from more than one point of view. The point of view which is adopted by the University, he might say practically excludes one of the alternatives, and other papers could be set no doubt treating the subject generally, but still from this somewhat different point of view. Under those circumstances I would have these alternative papers set under the same conditions as the others and allow anybody to take that which they please.

432. Do you mean that at the same examination, say, for the same degree, conducted at the same time, there should be alternative papers for the various candidates to choose from if they would?—I think so.

433. Would you have that intimated beforehand to them?—Certainly. To take one point of view only the whole of physics is a very wide subject. For a B.Sc. one professor might wish that his students after taking the general substratum which underlies the whole subject, and should then specialise in some particular branch. Another professor might wish that his students should specialise rather in another branch. If you set a paper on which there were 15 questions, some of them being common, it would prevent one of those subjects being given undue prominence, and would give some liberty to the professor to choose in which direction he would carry on his private teaching in a subject so wide that no student can at the time he takes his degree have traversed the whole.

434. You draw a distinction between pass and honours, and say it would be more appliciable in honours?—Yes.

435. Why?—Because the possibility of specialisation becomes greater.

436. It would not be without its use in the pass, would it?—No, not altogether without its use in the pass.

437. Would you have the pass and the honours examination conducted entirely separate so as to have an honours list, and a pass list, or would you have the pass gone through and the honours then taken?—I do not think I have any strong opinion on that subject. I think it is merely a matter of detail.

438. You have no choice?—No.

439. When you speak of a degree being honorary, I am not quite sure whether I followed you. You referred to a degree as given upon certain work done?—Yes.

440. You would not call that an honorary degree, would you?—I rather accepted the word. I forget who suggested it. I regard it as a degree given in recognition, not of excellence in examination, but of additions made to knowledge.

441. There is one general question I should like to put to you. Supposing a university to be established in London which was to the degree you have named dominated by the professorial element, and which demanded the testing of those students who submitted themselves by what they considered the best and most authentic teaching, would you think the residuum which would then be left to be dealt with by a mere examining university would be of much value?—I think it would diminish in value, but it must be remembered that the area from which it would be drawn would be very large.

442. Would you anticipate any good method of examination as likely to be established by such a system, a system in which the whole teaching strength was withdrawn from the examining body?—I do not think I follow you.

443. Would you anticipate very good results by examinations conducted by a body which was deprived of all the professorial element?—I never suggested such a thing.

444. No, I am asking whether you would?—Certainly not.

445. You would think in such a case that the University would be, as I might say, played out?—Certainly.

446. (*Professor Ramsay.*) I understand that your proposal is to have one and the same university for conducting the two operations?—Yes.

447. Teaching and examining?—Yes.

448. You propose to establish for London a university founded on professorial principles more or less?—Yes.

449. And the same governing body, the same arrangements, and the same examinations should be extended to the empire?—Yes, the same examinations.

450. You do not propose two sets of papers or alternative papers to meet the case of children born in London, or not?—I would give everyone the same alternative.

451. It admits all and sundry to the examinations?—Yes.

452. And it gives no privilege to its own students above the students of the world?—That is so.

453. Now the great object that you have, as I understand, is the co-ordination and the systematising of teaching inside London?—Yes.

454. How exactly is that to be done as a practical matter? You have a complete set of arts and science teaching and medical teaching in University College?—Yes.

455. The same thing in King's College?—Yes.

456. On what principle is this University to absorb one wing of King's College and not another, or one wing of University College and not another?—In the first instance, either this Commission or some properly constituted body would have to make the arrangements as to what the initial state of the University should be. They would ask various institutions whether they wished to be connected with it. They would then hold out as possibilities either that they might hand themselves over to the University, or that the University would be prepared to take over a part of their teaching and treat it exactly as it would treat the teachers or the teaching in an institution completely controlled by it. Then it would be a matter of arrangement. If King's College and University College said, "We will not have share

" or lot in the matter at all," then I think the scheme for the establishment of a University on these lines would have broken down, and, personally, I should rather let the matter wait, or, still better, try to induce the Government to extend the teaching powers of the University of London at once.

457. I suppose an essential part would be to strike out some of the weak chairs, or some of the weak laboratories?—Yes.

458. Is the body to go round to University College or any other college and appraise the different strengths and say, "This professor is good enough to take on; "another is not good enough, we will not have him"?—I think, in the first instance, it would be necessary if they took over any department in a college to take it over as a going concern. That is if they took over any single department. I am not sure that the work of co-ordination could be carried on very far at first until vacancies began to occur on the staff. I think the great object we should aim at is an arrangement which shall ultimately lead to satisfactory results.

459. It would be gradually concentrated and put in the way in which it could be best done?—Yes.

460. And it would be the part of the University to give some encouragement to say, "This is our idea"?—Yes, and try to lead the colleges in that direction.

461. What is your proposal with regard to the governing body of this institution?—I have not gone into details, but general principles. The professoriate should be largely represented on it and outside opinion as well. I would not object to the representation of provincial educational opinion that is interested in the teaching.

462. Does that mean appointments made by Government?—Largely by Government, but partly by learned bodies, such as the Royal Society.

463. But you would not have any college or institution in London represented as such?—No, because I think that means the continued existence of the college.

464. When you speak of the professoriate do you mean the whole staff?—I think in each subject the teachers would have to be organised into what we may call a school, and that at the head of it there would be a person whom we may call a chief professor—possibly a regius professor—somebody to have control. At first it would be difficult to select any one of the existing teachers for such a post, but I believe there is among the teachers in London an earnest desire to cooperate. Then some arrangement might be made that on the first vacancy a chief professor would be appointed. But there again I would be prepared to wait if the thing can be attained ultimately.

465. You would be prepared to give a good deal of power to the several faculties?—Yes.

466. You would not be satisfied with that power given in the draft charter, which is simply that of selecting representatives to serve on the council?—No, I think they ought to have more than that. There must be somebody in supreme authority finally, I suppose, but in practice they would do the work. They ought to have an executive as well as an advisory function.

467. You contemplate a university with at least four faculties?—Yes.

468. Is it part of your idea that the faculties should be pretty evenly balanced with regard to one another in the governing body?—Yes.

469. Do you think that on the draft charter there is such a balance as that anyone may see that the true academic opinion will be fairly represented on that body?—I should have thought medicine on the whole had a preponderating influence.

470. Do you think it a misfortune if the preponderating influence were given to medicine?—I think it would be a misfortune if what may be called pure science were not made to preponderate, though I would have the other branches largely represented.

471. By pure science you mean pure knowledge, I suppose?—Yes.

472. You do not exclude letters?—No.

473. Or law?—No, not studied as a science.

474. Do you desire to see theology represented?—As far as my personal sentiments are concerned I have no strong view, but I think it not desirable on the whole.

475. Do you think there should be only one single supreme body from which there is no appeal on university matters?—It could only be an appeal from my point of view, either from an institution in London which thought itself badly treated, or from a servant of the University, one of the professors.

476. But as it appears now there is no appeal from the Council proposed to be established. In the case of Oxford and Cambridge it is complex; it requires the consent of several bodies. In the case of Scotch universities the supreme body whose consent is essential to any alteration of the statute is the Council. The object is this, it enables any institution or any class of men who feel that they are aggrieved by a change of statute with regard to university matters to present their objections. Would you not conceive it a good thing in the case of a university of this kind that there should be some possibility of appealing to a higher power, such as the Privy Council?—I have not given as much attention to that as I have to some other parts of the subject, but I think *primâ facie* it might be a good thing.

477. One could conceive that a single body with absolute powers might be objectionable at some future time?—Yes.

478. In some cases the power of veto of the Convocation has stopped the whole machine. But the very fact of the graduates objecting to the scheme of the Senate shows that there is a strong body which might go entirely against the opinion of the governing body?—Yes.

479. (*Sir G. Humphry.*) Your desire, I think, is that the University of London should be the supreme authority?—The existing University?

480. Modified, of course, but that that should be the basis?—I would give the colleges no direct representation.

481. You think that the University of London really should be the basis?—Yes, I think on the whole you might call it the basis.

482, And that the various other colleges should be connected with it. Now comes the difficulty; what is to be the connexion of the existing colleges with that University? That seems to me to be the great difficulty. Your feeling is that in the first instance they should be represented on the Senate?—Not represented as colleges, but as a matter of policy I would put upon the Senate to begin with some of the members of the governing bodies of the various colleges as distinguished men.

483. And you desire that the professors of those colleges should be appointed by the University?—In future.

484. What compensation would you make to the colleges for loss of power in appointing their own professors?—I think the colleges desire the advancement of learning, and learning would be more advanced by this scheme.

485. They might think not?—Then there is a difference of opinion between us.

486. You would require to confer some advantage. Do you think that there might be some stipend to the professors?—I have already explained that when any department or any entire college was taken over by the University, on that department or on that college the University would be at liberty to spend funds over which it might have control.

487. That is supposing it took the college over?—Or any department of it.

488. Its own autonomy lost altogether?—Supposing the University had decided that the University teaching in electrical engineering should be given at University College, and that University College was willing to put into the hands of the University the appointment of teachers in that department, it would then be competent to the University to provide the apparatus for that particular department, and have complete control over it.

489. And King's College would be left to continue teaching in its own way?—Yes, unless it too cooperated with the University, in which case the highest instruction in some other subject would probably be given there.

490. And with regard to certificates; you would not require certificates from any particular source?—No.

491. Would you require certificates as to courses of study from any particular teacher?—I cannot say that even that would be necessary, but I should have less objection to that.

Prof. A. W. Rücker, F.R.S.

28 May 1892.

492. The University might admit its students, and the degree would depend entirely upon the examination passed?—I have provided another avenue for students who have done original work, for students later in life.

493. That would not be an early degree?—No.

494. You do not want to encourage in young students original work. That is not the point?—It is according to what you mean by young. I think they might do it in the undergraduate age.

495. But not generally?—It requires a man of more than average ability to do it.

496. Before a man can start well he requires to know the general basis of the science in which he is to make research?—Yes, but the time at his disposal is limited. I think it would often be better spent by making him do research work than by making him pass examinations on the subject. In that way he learns how to learn.

497. I do not quite know what you mean by learning how to learn?—My knowledge is only special with regard to one branch of science, but I am sure that in it at all events it is most important to teach a student how to acquire information for himself.

498. The University here has to confer its degrees upon men of some lower standard, and those men require a general knowledge of the rudiments—the elements?—Certainly, up to a certain point.

499. And you would not require certificates of attendance upon any one course of lectures?—I agree with Dr. Thorpe, that in the subjects I know most about attendance has become necessary to success, and you may trust to that.

500. You must trust to the University providing good teachers, but otherwise they might obtain the knowledge anywhere in the country, as private students or anywhere?—Yes, you get over the great objection that the University courses of study are framed chiefly with the object of filling the classes, which is a fatal thing.

501. With regard to the examinations, there would be a considerable number of professors in various parts recognised by the University, and it would be only one of those professors who would be examiner on each subject on any particular occasion. Therefore, the greater number of students must be examined by those who had not been their teacher?—That would be so as regards the elementary part of the work, and I am afraid it will be for a long time.

502. That must be the case?—Yes, and it is a weakness in the system from my point of view.

503. (*Mr. Anstie.*) You speak of the University of London, and other persons speak of the University of London. When you speak of the University of London as doing certain things, do you mean a substituted body of different constitution, with the same name, taking over the functions of the University, and adding others?—I should be sorry to say that during the whole of this evidence I have always used it in that sense, but that is how I use it with regard to the future.

504. (*Lord Reay.*) The Boards of Studies would lay down a certain course of lectures as a guide to students?—Yes, and the students, I find, are always willing to take their professors' advice.

The witness withdrew.

Adjourned to Thursday next at 12 o'clock.

Second Day.

Thursday, 2nd June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir WILLIAM S. SAVORY, Bart., M.B.
The Rev. Canon BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
Professor H. SIDGWICK, Litt.D.
Professor GEORGE G. RAMSAY, M.A.
Principal G. H. RENDALL, M.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

EDWARD HENRY BUSK, Esq., M.A., LL.B., examined.

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

505. You are Chairman of Convocation, and a Fellow of the University of London, and a Fellow of University College, London?—Yes.

506. I do not think you gave evidence before the last Commission?—No.

507. But you know, probably, of the evidence that was given at that time?—Yes.

508. We do not wish to go over the old ground again more than is absolutely necessary. We begin where the last Commission left off, and I think you are prepared to tell us what has been done by the Senate of the University, and more particularly by the Convocation since that time. Perhaps you will do that in a few words, or as shortly as is convenient?—The report of the last Royal Commission was made known in May, 1889, and although one of the members of this Commission will be able to inform your Lordship better than I can what took place upon the Senate, I understand that the Senate took the matter into consideration in June, 1889, and appointed a committee for the purpose of preparing a scheme which would have the effect of carrying out the recommendations of that Royal Commission as expressed in the report so far as they would be acceptable both to the University of London and to the great teaching institutions in London; and ultimately a scheme was drawn up in conjunction with them which was made known to Convocation by the Clerk of Convocation on the 28th March 1891. The scheme then came before Convocation itself. In a circular, dated 28th March 1891, the Clerk of Convocation sent a print of the scheme to every member of Convocation, and with it a memorandum of the Senate in support of the scheme. I thought it might, perhaps, be for the convenience of the Commission that I should bring copies of the proceedings of Convocation for that year. If you will allow me I shall be pleased to hand you copies (*copies of the proceedings were handed to the Commission*).

509. Does this include the scheme?—That includes the scheme and the memorandum of the Senate.

510. (*Bishop Barry.*) May I ask, with the Chairman's permission, whether in this pamphlet is included the previous scheme, which was agreed upon with the Colleges, as well as the revised scheme submitted to Convocation?—No, only the one scheme.

511. (*Chairman.*) Only the one presented to Convocation?—Yes. You will find the scheme of the Senate which was submitted to Convocation on pages 38 to 47, and the memorandum of the Senate in support of the scheme on pages 47 to 53.

512. I will not, of course, trouble you to read the scheme now, but will you give us the heads of it or as much as will be necessary for your purpose afterwards. As most of the members of the Commission have not

read it perhaps it will be better to give us shortly the principles involved in it?—The scheme states the objects of the incorporation, which were the promotion of regular and liberal education throughout all Her Majesty's dominions, and especially in the metropolis and its neighbourhood. The constitution of the proposed new University was to be as follows. The Senate was to be the governing body of the University, and it was to consist of 52 members, the Chancellor and nine fellows appointed by the Crown, making ten out of the 52: the Chairman of Convocation (*ex-officio*) and nine other fellows to be elected by Convocation, making ten representatives of Convocation of the University. Then there were to be six representatives from University College and King's College, three of each; four representatives of the Royal College of Physicians and Surgeons; two representatives of the Council of Legal Education and the Incorporated Law Society; and four representatives to be elected by the principals or chief officers of the provincial constituent colleges. Then there were 12 to be elected by the London Faculties, which your Lordship will see defined in the heading VI. of the scheme, at page 44 of this volume—the four Faculties of Arts, Science, Medicine, and Laws—with a provision that all departments of knowledge in which examinations may be held by the University, and which are not included in any other of the Faculties should be included in the Faculties of Arts. Each Faculty was to consist of the teachers of the London constituent colleges as determined under the foregoing clauses. Those were the faculties which were to elect 12 representatives upon this Senate. Then there were four representatives to be elected by the provincial Faculties acting conjointly.

513. This was submitted to Convocation, was it?—It provided also for Convocation continuing as it does now. I should say that the members of the Senate are appointed now for life, but it was part of this scheme that they should be appointed only for a term of years, and should retire. Then there was a provision made for constituent colleges, and in addition to the Faculties both London and provincial, there was provision made for boards of studies. That is under heading VII. at the foot of page 44, and the powers and duties of the boards of studies are stated near the bottom of page 45. They are "To elect a chairman every year. To consider and report to the Senate upon any matter referred to it by the Senate. To represent to the Senate its opinion on any matter connected with the degrees and examinations and teaching of the subjects of its Faculty. To deliberate, if so requested, in conjunction with the Senate or any committee thereof." Then came a provision with reference to the examination, and I particularly wish to call the attention of the Commission to Sub-heading 3 of Clause 46 of the scheme, which provided as follows:—"Examinations of students, being candidates for Matriculation and the Pass Examinations for the degrees of B.A. and B.Sc., by a college professor or teacher in the subject, or other person appointed by the college, and an examiner to be appointed by the Senate, with power to the Senate to make regulations or byelaws from time to time for dealing with any cases in which the examiners may be unable to agree upon their report." Then, sub-heading 4 is "The conferring of the degree on the foregoing conditions."

514. I understood that the examiner was to be an outside man. It is not so said, but I suppose that was the idea?—A person appointed by the college, and an examiner to be appointed by the Senate.

515. I think you did not mention that there was to be a committee of the Senate for London teaching, and one for provincial teaching?—Your Lordship is perfectly right. I ought to have called the attention of the Commission to the provision for standing committees of the Senate.

516. The idea was to divide the London University into two, to give it two distinct functions; one to give degrees to the whole of England and to deal with the provincial colleges, and the other to be a teaching University for London. There were two sides to it?—That was so, my Lord, the idea being that the same degree should be conferred for different examinations, one examination for those who did not study at the constituent college, and another examination, under that clause which I have been reading to your Lordship, for those who had studied at one of the constituent colleges. There would be different examiners. Then with regard to the standing committees, does your Lordship wish me to read any portion of that?

517. No; it will be enough to state that there were to be standing committees of the Senate, one to regulate the teaching in London, and the other to regulate the teaching in the provinces. That is the case, is it not?—I think that is hardly the case. The standing committees were to be for the Faculties of Arts and Science in connection with the London constituent colleges in those Faculties. Then the composition of that committee is mentioned. Then there was to be a standing committte of the Senate for the Faculties of Art and Science in connection with the Provincial constituent college, so that the constituent colleges themselves were divided into two. As I understand, the standing committee mentioned in Clause 14 of this heading for provincial colleges was to be a different standing committee from that mentioned in Clause 13 for the London constituent colleges. Then there was to be a standing committee of the Senate for the Faculty of Medicine, and one for the Faculty of Laws also.

518. (*Rev. Canon Browne.*) Do you pass over Clause 15?—There shall be a standing committee of the Senate in relation to the examination in Art and Science other than the examination conducted under arrangement with the constituent colleges. So that, as I understand the scheme, there would have been three standing committees for Art and Science, one for Medicine, and one for Laws.

519. (*Mr. Rendall.*) The constituent colleges, I presume, include both London and provincial?—Yes.

520. (*Rev. Canon Browne.*) They are both included in 15?—Yes.

521. (*Chairman.*) What were the standing committees to do? What was to be their relation to the Senate? Were they only to report, or were they really to decide?—By Clause 19, near the top of page 42, the standing committees were to be in all respects subject to the control and direction of the Senate.

522. (*Bishop Barry.*) But, of course, the Senate could delegate power to act summarily?—I take it so, certainly.

523. So that they would not necessarily always have to report?—No.

524. (*Professor Sidgwick.*) They expressly say in Clause 13 that they are to discharge such functions in relation to the said constituent colleges, and the examination of students therefrom in Arts and Science, as the Senate may from time to time delegate to them. That rather implies?—That the Senate would usually delegate.

525. (*Chairman.*) I think you have given us pretty fairly the outlines of this scheme. That was submitted to Convocation, was it not?—Yes, together with the memorandum in explanation of it, which was issued by the Senate, and which appears on the following pages.

526. (*Bishop Barry.*) I think we find somewhere—it is in 23—the conditions on which colleges can be admitted to be constituent?—Yes, I see that is in London, and I presume the same will be the case with the provinces. I see they are both admitted on very much the same conditions. I should wish, as I am representing Convocation on this occasion, to point out that the power of admitting constituent colleges was to be vested in the Senate and in the Senate alone. That is in Clause 23 and 27. That was a departure from the scheme as drawn out by Lord Justice Fry's Committee, which appears in the appendix to the evidence taken by the last Commission.

527. Was that a Committee of Convocation?—Yes, a Committee of 40 members of Convocation, of which Lord Justice Fry was Chairman.

528. (*Chairman.*) In that scheme the Convocation had a voice?—Yes, Convocation did not pronounce for or against that scheme, but referred it back to a further Committee of 25, of which Sir Philip Magnus was the Chairman. I may say that I was a member of both those Committees.

529. Is there anything more about this scheme which you have not put before us?—Although I propose to leave to my friend Dr. Collins to say what is to be said about the Faculty of Medicine, I should wish to call the attention of the Commission to Section 47 at the bottom of page 46:—"The Senate shall have power to enter into arrangements with the Royal Colleges for conducting the examinations in Anatomy, Physiology, Medicine, Surgery, and Midwifery for the Pass M.B. Degree by

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

"a board of examiners, consisting of the examiners "appointed by the University and Examiners to be "appointed by the Royal Colleges who shall join in the "reports to the Senate on such examinations. The "examiners appointed by the University may be called "upon if the Senate so think fit, to make in addition "separate reports." Then this is provided at the end of the section:—"This arrangement for joint examination "shall not lessen or interfere with the duty of the "Senate to be satisfied as to the adequacy of the "examinations in all respects." Then Clause 50 is with regard to Honorary Degrees:—"Power to be given to "the Senate with the consent of the Chancellor and "Vice-Chancellor to confer Honorary Degrees" which the London University has never had power to do; following that scheme and the memorandum of the Senate is the draft of the supplemental charter which was prepared, and, which so far as I can see, embodies the scheme and is not really material in point of substance. The scheme so prepared by the Senate was submitted to the Committee of Convocation consisting of 25 members, to which I have already referred.

530. (*Bishop Barry.*) Might I ask if that scheme had received the approval of any of the outside bodies, such as the Royal Colleges of Medicine and Surgery?—I think that appears in the memorandum of the Senate; not having been on the Senate I am at a little disadvantage in answering these questions. It is at the beginning of the memorandum of the Senate on page 47:—"The Senate have received information that the scheme "adopted by them has been accepted by the Royal "Colleges of Physicians and Surgeons, but that it is "still under the consideration of some of the other "bodies whose consent they desire."

531. That means, I suppose, the Colleges?—Yes. So far as Convocation was concerned, this scheme had been referred to the Special Committee of 25 members, who considered it, and the report of the majority of the Committee appears on page 90 of this pamphlet. That is the report to Convocation from its own special Committee.

532. (*Chairman.*) Was the Committee appointed specially for the purpose of considering the scheme, or was it a committee that existed?—It was not. It was not appointed, indeed, for this purpose at all. The Committee was appointed at a meeting of Convocation held on the 8th December 1885, which was before the appointment of the last Royal Commission, and it was appointed for the purpose of considering the report of the Special Committee, of which Lord Justice Fry was chairman. That report was received by Convocation, and was referred for consideration to a committee of 25 members, which was subsequently appointed at that meeting. The Royal Commission then sat; and the Committee of 25 continued to hold its sittings, although it had not actually been appointed or re-appointed for the purpose of watching the proceedings of the Royal Commission.

533. Did this Committee report favourably?—The majority of the Committee reported favourably. Unfortunately I was unable to find myself in agreement with the majority of the Committee, and I signed a memorandum of the minority, which appears on pages 95 to 99. The principal points which the minority support are, I think, sufficiently set out in that memorandum. If your Lordship wished it I should be glad to call the attention of the Commission to any of them. I might, perhaps, mention in explanation of the commencement of that memorandum that in the year 1886 Convocation had by resolution, adopted a scheme for the modification of the constitution of the University as a basis for negotiation with the Senate; and that is the scheme to which we (the minority of the Committee of 25) refer in our memorandum:—"We, the undersigned "members of the Special Committee, are unable to "concur in the foregoing report and recommendation "to Convocation. We agree with the majority that the "present 'scheme undoubtedly differs in many respects "'from the one adopted by Convocation in the year "'1886 as a basis of negotiation with the Senate;' but "the departures therefrom appear to us to have been "dictated by the pressure of outside bodies, rather "than by a regard for the recommendations of the "Royal Commission. The final result is far less satisfactory, in our opinion, alike to the interests of higher "education, and to the welfare of this University than "would have been the case either under the scheme of "1886 or that of the Commissioners."

534. (*Bishop Barry.*) Have we that scheme of 1886?—It was handed by Lord Justice Fry to the Commission, and is printed in the Blue Book.

535. (*Chairman.*) You were a minority of six among the 25?—That is apparently the case; but if your Lordship will see how many people supported the majority, I think you will find that nothing like all the Committee voted, and that, among those who did vote, there were four members of the Senate voted in the majority.

536. (*Bishop Barry.*) Does that necessarily deteriorate from the value of their opinion?—Well, they were supporting the Senate's scheme. I do not for a moment suppose that it does deteriorate from the value of their opinion—I should not wish to imply that—but they were supporting the Senate's scheme, and they were members of the Senate.

537. (*Chairman.*) Then it was a small meeting, was it? I suppose all those voted who attended the meeting, or did some refrain from voting. All voted except the Chairman.

538. All who were present?—Yes, except the Chairman.

539. You were going through your principal objections in a summary manner. You did not approve of the teachers having so much voice in the examinations. Was not that one thing?—The first heading is "Powers given to constituent colleges," and we point out that by the scheme of the draft charter "Power is given to "the Senate to enter into arrangement with constituent "colleges in arts and science, either jointly or separately, for conducting the Matriculation, and the "Intermediate, and Final B.A., and B. Sc. Examinations "by a college professor and university examiner, an "arrangement, in our opinion, calculated to seriously "vary the character and standard of those degrees, and "opposed alike to the views of Convocation and of the "Commission." The Commission in its report recommended that the final examination should be kept in the hands of the University, that whatever might be done with the Intermediate Examinations the Final Examinations should be retained in the hands of the University.

540. You thought the constituent colleges had too much power given to them?—Yes; that the constituent colleges had too much power given to them and that we should have a very varying standard for the same degree. Students at one college would take the degree in quite a different manner from the students at the other and yet they would be labelled in the same way as if they had passed the same test. With regard to the restricted representation of Convocation I should like to mention to the Commission the way in which Convocation stands now. The actual constitution of Convocation did not appear in any of the proceedings taken before the late Commission. It consists of graduates who have taken the degree of Doctor or Master in any Faculty; also Bachelors of Laws or Medinine of two years' standing, and Bachelors of Arts, Science, or Music of three years' standing, who pay a nominal fee of 5*s.* per annum or a composition fee of 1*l.* for life. The reason why Convocation is so constituted is that in the London University there is no proceeding from one degree to another—no bachelor can proceed to a higher degree in his Faculty without passing an examination; and it was felt that bachelors who were contented not to pass another examination, who by going into some profession or for some other reason were prevented from doing so, ought to come on to Convocation at the time at which, in the older Universities, they would have been able to proceed to a higher degree and so become members of Convocation. With reference to the representation of Convocation on the governing body of the University, I do not think it has ever been made to appear that the representation of Convocation upon the Senate of the present University was fixed by the Charter of 1858, and remains now as it was fixed by that Charter; and that at that time there were not quite 400 members of Convocation, and all of them were, of course, comparatively young men, while at the present moment there are 3,354 members of Convocation who are, of course, not all of them young graduates, but men, many of them, of very great distinction in their profession—a great many judges and distinguished barristers, and medical men particularly of the highest distinction. Upon that point I should wish to refer to the extremely important statement which was put in by Sir James Paget, the Vice-Chancellor of the University, and which appears

at page 112 of the evidence taken before the last Commission, with reference to the standing of graduates in Medicine of this University:—"I mentioned in my "evidence some facts in proof of the high positions "by Doctors of Medicine in the London University. "One was that from among them have been selected "nearly half of the physicians and of the assistant "and obstretric physicians to the principal hospitals "in London. This may at least show that the "studies and examinations necessary for the degree, "did not tend to make them unpractical. The "same may be said of a large number of the leading "provincial physians, and of the many surgeons of "repute who hold the M.B. of the University. And a "yet stronger evidence of the eminence in practice of "the physicians who hold the University degree is the "list of the Fellows of the Royal College of Physicians. "They are carefully selected from the members of "most repute, wherever they may be in practice. The "number elected in the last 20 years, among whom are "graduates of 20 Universities, is 205; and, of these, 64 "have the degrees of the University of London. Again, "it is observed that comparatively few of those who "take the M.B. in London proceed to the M.D.; and "this is regarded as a fault in the examination. The "proportion of those who do take the higher degree is "greater in London than in Cambridge." That was in explanation of the feeling that the representation of Convocation, (now 10 times as numerous as it was when its representation was fixed), upon the Senate, ought, if anything, to have been increased instead of being reduced.

541. You think they have not got sufficient power even now under the present constitution?—I think that if they have sufficient power now, they had a great deal too much given to them in 1858. But I wish to add, notwithstanding this, that three-fourths of the Senate appointed directly by the Crown are very largely members of Convocation. The Crown does graciously take this into consideration, and of recent years it has appointed members of Convocation in almost every instance. But still that is not direct choice.

542. You thought they had not representation enough on the Senate?—No. They had a smaller representation than we have now—a smaller proportional representation. We have a representation of one fourth now, and under the new scheme it was rather less than a fifth.

543. (*Rev. Canon Browne.*) You appoint your own fourth?—Every fourth vacancy is filled up by the nomination by Convocation of three graduates. The names are sent up to the Queen in the order in which the votes occur; the graduate who gets the largest number of votes is placed first, and so on; and up to the present time it has not been known that the Queen has not selected the name with the largest number of votes. Then the next point is the re-constitution of the Senate, and the effect of the re-constitution of the Senate upon the provincial colleges. Then follow some paragraphs upon the medical grievance which, I think, Dr. Collins will be able to explain to the Commission better than I can. The two points which seem to have been prominently brough forward, and which induced me to sign this minority report upon a subject with which I am not specially familiar, were these: that the concessions which were proposed to be made to the medical schools and the medical students, did not seem to us to meet what they wanted. They objected, so far as I could understand, to two things. First, the Preliminary Scientific Examination which our University has always considered necessary in order to give an academic value to the degree, as distinguished from the professional examination which might be passed without any scientific test. That was to be retained by the Senate. The second grievance was that the medical student in London could not obtain a dotcor's degree. As you will have observed from the scheme, we have just been considering, the Senate did not propose any alteration at all in the M.D. or the Preliminary Scientific Examinations, which, as far as I know, are the two with regard to which the medical profession feel the greatest grievance. The only alterations were the Intermediate and Final for the M.B. degree. We felt that the M.B. degree was being tampered with and altered without satisfying the desires of the medical profession and the students. Then the final heading of the report is with reference to the non-collegiate students. There can be, I think, but one opinion on the part of those who are interested in higher education, namely, that it is infinitely better for a person to study in a regular course, and, if possible, in a college with other young persons, going through a direct course of study and in direct contact with professors and students of high standing. It has been a very important part of the work of the London University, that those who unfortunately have not those advantages, either from being located in the country, or from want of means, or business engagements, should not be deprived, if they have the industry, ablity, and energy, of the opportunity of getting a degree. You will see the commencement of this heading V., "One "of the most serious defects in the scheme is the "neglect of the interests of the students unattached to "any of the institutions made or likely to be made "constituent colleges. From recent lists, it appears "that these comprise more than three-fourths of the "candidates who pass the degree examinations in Arts "and Laws." Naturally the other Faculties do not comprise so large a proportion of non-collegiate students, because, say, with regard to science, it is scarcely possible, to pass a scientific examination without having attended a laboratory and done practical work under an instructor.

544. (*Chairman.*) With regard to the non-collegiate students how are they for the most part educated, by private tuition or at schools which are not recognised?—Private tuition, private study, and the minor educational bodies.

545. You have now gone through, I think, the whole of your objections at that time to this proposed scheme, which seem to me to amount to the fact that there was too much connexion between the teachers and the government of the University, roughly speaking, and that Convocation was not sufficiently represented, and the non-collegiate students were not sufficiently taken care of. In fact you thought that there was too close a connexion between the teachers of the constituent colleges and the Senate of the University?—Yes.

546. In fact that they had rather overdone the principle of establishing a connexion between the teaching body and the body who were to have the government of the University?—Yes, and particularly I should wish to add that what we feared was that there would be a very varying standard for the degrees in consequence of that.

547. Then the next thing was, I suppose, that this was brought before Convocation?—Yes, it was brought before Convocation at its meeting on the 12th May 1891, the minutes of which commence at page 72. At that meeting there were 733 members of Convocation present. Of course your Lordship will bear in mind the great difficulty there is in getting a large personal attendance at a meeting of this kind, when you come to think that the great bulk of our graduates are professional men, and when you remember that so many of them are in the provinces. In fact, there is scarcely a town or village without a man from the London University in it—there are clergymen and ministers of Dissenting bodies all over the country—and it is scarcely possible to bring them up to London to vote. However, there was on that occasion an attendance of 733 members.

548. Out of what number?—At that time there would be more than 3,000 members.

549. (*Bishop Barry.*) Then the attendance at the meeting would be about a quarter of the whole?—Yes, I think I can give the Commission the figures more accurately. There were at that time 2,800. It is just about a quarter. On that occasion the voting was 197 in favour of the Charter. There were 197 ayes and 461 noes. There seems to be a little difference in the numbers. When we turn to the division list on page 77 the numbers are not quite the same—the 197 remains the same, but it gives 447 noes. That is a little discrepancy which I cannot explain. But, with reference to the comparatively small attendance, I wish to say that certain members of Convocation, who felt strongly upon the subject, sent round a circular before the meeting of Convocation, which was, of course, not official at all, and it is a fact that in response to that circular there were more than 1,100 members of Convocation who expressed in writing their dissent to the scheme. I have brought copies of the circular. I was not responsible for it, but there it is.

550. Did any express in writing their assent?—It only invited dissent. The card is in these terms: "Pro- "posed reconstitution of the University of London. "Expression of dissent by members of Convocation. I "hereby beg to express my dissent from the proposed "reconstitution of the University of London upon the

E. H. Busk, Esq., M.A., LL.B

2 June 1892.

"lines of the Senate's scheme. Signed—degrees—"address—date." There were 1,100 out of those 2,800, which is a very large number when one considers that a great many of them are abroad even.

551. Does that include those who voted, or not?—I have not seen the list of the 1,100. The power under which Convocation acted is in Clause 21 of the existing Charter of 1863:—"The power of accepting any new "or Supplemental Charter for the University, or consenting to the surrender of this our Charter or of any "new Charter or Supplemental Charter: Provided, "nevertheless, that the consent of the Senate shall be "also requisite for the acceptance of new or Supplemental Charter or the surrender of this our Charter "or of any new Charter or Supplemental Charter."

552. Then, without going into figures outside, you are of opinion that this fairly represented the opinion of the whole of the members of Convocation if they had been able to be present. Did it not?—Does your Lordship mean that this vote did?

553. That this division fairly represented the opinion of Convocation if all the 3,000 members had been able to be present?—That is my opinion, so far as I could form a judgment.

554. You have no reason to think the contrary, at any rate?—No, I have no reason to think the contrary.

555. Have you any reason to think that they would on further consideration change their views?—Not with reference to this scheme. The fact is that, so far as I am able to gather the opinion of Convocation, it would make, as indeed in 1886 it said it was prepared to make, very considerable modifications in its constitution, and very large concessions to the teachers. But there are certain things which (as far as I have been able to gather from having been 28 years a member of Convocation), Convocation would not give up. It would rather see even a second University established than yield in regard to certain fundamental principles. I do not know whether I am going out of my place by suggesting this.

556. (*Bishop Barry.*) I think, if I may say so, that this would be the most important mattter of all, if Mr. Busk is able to give us an opinion on these points. Of course it is only his own opinion, but still that would be very valuable?—It can only be my own opinion, because they are not embodied actually in any definite resolution, but I have been so long on the Convocation that I think I may say that that is the view of the majority of the members. The first fundamental principle which I think Convocation desires to maintain is the independence and high standard of all its examinations.

557. (*Professor Sidgwick.*) May I ask what independence means exactly—independent of what?—Independent of other bodies.

558. Of all teachers?—Yes, so far as the examinations go. Perhaps I might just be allowed to give the other two, and then I propose, with the permission of the Commission, to add a few words on each of those points. The second fundamental principle is the necessity that all candidates should pass the examinations, that is, that there should be no exemption, for instance, exemption owing to having passed an examination at another University: that there should be no honorary degrees—and upon this point I speak with no uncertain sound, because the committee in 1886 recommended to Convocation that there should be honorary degrees, and that part of the scheme of 1886 was rejected by Convocation, while they adopted all the rest; and that there should be no "proceeding" to higher degrees.

559. (*Bishop Barry.*) You mean without examination?—Yes, without examination. I think that is a technical phrase. Then the third principle is that there should be no disabilities of creed, sex, race, class, fortune, or non-collegiate study—that nobody should be disabled from going in on any of those grounds.

560. (*Professor Sidgwick.*) Does disability include inferiority? You mean that there should be no inferior position?—Yes, no preferences and no disabilities.

561. No disabilities or preferences on the ground of reed?—Yes.

562. (*Professor Ramsay.*) When you say there is to be no disability of fortune you do not mean that no fees are to be paid?—No.

563. (*Bishop Barry.*) I suppose the really important point there is non-collegiate study, is it not?—I suppose we may take it that in no new University would there be any other disability.

564. Sex might possibly come in?—I do not think it would.

565. The non-collegiate study is the crux of the whole thing, is it not?—Yes. It is the only disability likely to be urged.

566. (*Chairman.*) These points you have reason to believe Convocation would take their stand upon?—Yes, I think so. That is my own opinion. The independence of the examinations is instanced by the rule which begins the prospectus as regards matriculation at the beginning of the Calendar. It is secured by the rule that the examinations of other bodies are not accepted in lieu of matriculation or any subsequent examination of the University, and by the impartiality of the body which grants the degrees.

567. (*Professor Ramsay.*) What is the reference in the Calendar?—I am not reading from the Calendar, but I will. It is on page 53 of the Calendar for 1890-91. I regret that the Calendar for 1891-92 is out of print, and the Calendar for 1892-93 was burnt at Eyre and Spottiswoode's, where they had a fire some little time ago.

568. But the rule would be the same?—Yes, I know of no alteration. The rule is this:—"Candidates for "any degree in this University must have passed the "Matriculation Examination. No exemption from this "rule is allowed on account of degrees obtained or "examinations passed at any other University."

569. (*Mr. Rendall.*) Does that apply throughout? Does it apply to Medicine?—Yes, throughout.

570. In every case?—Yes.

571. There is no exception?—No, not any.

572. (*Professor Ramsay.*) Do I understand you to say that there is any security to prevent an examiner examining a student whom he has taught?—No, there is no security.

573. Then how is that independence, as you define it, secured?—The degree is conferred by the Senate, not by the examiners. The examiners make a report to the Senate.

574.–But there is no rule to that effect?—No, there is no rule to that effect.

575. (*Chairman.*) You say "independence and high standard"?—The high standard is maintained in this way, and I am rather anxious that this should be brought before the Commission. The high standard is maintained by a series of examinations imposed on all candidates impartially. These examinations diminish in extension and increase in intension as they ascend. The type is the following: first, matriculation, which is common to all Faculties, which comprises Latin, English, mathematics, and mechanics, about which there is no choice; one of several languages which the candidate can offer for; and one of three branches of science treated elementarily, which are also at the option of the candidate. Then, secondly, comes an Intermediate Examination, varying in each Faculty, but requiring, generally speaking, an elementary knowledge of main typical subjects of the Faculty. Then, thirdly, there comes a final examination for a Bachelor's Degree, which requires a more special knowlege of a limited number of the subjects included in the Faculty. I should add that the M.B. Degree involves a fourth examination. Between Matriculation and the Intermediate is inserted the Preliminary Scientific.

576. (*Bishop Barry.*) You do not mean that all these details are *de rigueur*? Perhaps you would not object, for instance, to narrowing the compass of the Matriculation, if it should at any future time be found desirable?—Not at all. I only wanted to explain to the Commission, if I may say so, the pyramidal system which we have at present adopted. We have already in the past had a great many alterations in the Matriculation. It is a subject which is continually coming up, and it has been modified from time to time.

577. (*Chairman.*) You would not do anything which you would consider would lower the degree, as it now is?—No. So far as I can find out I do not think the degrees are too difficult of attainment. My friend Dr. Collins will speak about the medical Faculty, but I do not think there is any very great difficulty in getting other degrees. The M.A. has sometimes been taken at 20.

578. (*Bishop Barry.*) Then we come to the second fundamental principle?—That I think would follow naturally. If degrees are granted without examination, the standard of them will certainly fall. If a man may

take an M.A. or D.Sc., or LL.D. without any examination, then the M.A., or D.Sc., or the LL.D. of the London University may mean nothing so far as the examinations conducted by the University are concerned, but may be a mere compliment, and it is a matter which would affect the degrees of the University in a particular sense, because these Honorary Degrees which are conferred are naturally always the very highest degrees which the University can confer. You could not offer a distinguished man a B.A.

579. (*Chairman.*) Then there is not much more to say about No. 2?—No, I think not.

580. Then with regard to No. 3, I think you say that the only thing likely to be disputed is the point as to non-collegiate studies?—Yes, whether there should be another standard of degree for those who have studied in colleges different from that which is in force for those who have not. If the scheme had been adopted there might be a separate standard for each college—both London and provincial.

581. Would you consider it an undue favour to the constituent colleges if the teachers in those colleges have a very strong voice in determining the examinations. Would that affect your proposition?—In determining the curriculum?

582 Yes, in determining the curriculum?—I should rather limit it to advising upon the curriculum than determining. I would rather give them a consultative power, letting the supreme body of the University be compelled to consider all the recommendations which the teachers might make, if this be thought desirable.

583. With regard to the examinations being actually conducted by the teachers in these colleges, would you object to that?—I think there would be a very strong feeling against it. I bear in mind the speech which our Chancellor made at the conferring of degrees, on the 11th May last, in which he said that he did not think a body should audit its own accounts.

584. What is your view of a teaching University. I think you are in favour of a teaching University for London?—I am.

585. What would be your definition, shortly, of a teaching University?—I should be very much inclined to base it upon the scheme of 1886. The influence which the teaching bodies were to have under that scheme of 1886 would naturally have to be modified by the discussion of the last six years, but it provided for seven members of the Senate, that is the supreme body, being appointed by University College, King's College, the Royal Society, the Royal College of Physicians of London, the Royal College of Surgeons of England, the Council of Legal Education, and the Council of the Incorporated Law Society. If that scheme, or that scheme in any modified form, were carried out, there would be a large representation of teaching bodies upon the Senate itself. Besides that there was to be formed a Council of Education, consisting of representatives of the constituent colleges, and the examiners of the University. The Council of Education was to be divided into boards of studies in the different Faculties.

586. And that would ensure a connection between the teaching bodies and the examiners?—I should think myself that in the year 1892 the scheme of 1886 would require very considerable enlargement.

587. I suppose a teaching University really means a University in which there is a close connection between the teaching body and the bodies who give the degrees?—Yes, but a University under which the teaching bodies would be—that the teaching bodies should be co-ordinated under, the University, as the late Commissioners said in their Report. I should let the University have the supreme power above the colleges.

588. But you would be willing to give the teachers more power than they have now?—Unquestionably.

589. Is there anything more you wish to say? You have given us a sketch of what happened, and you have given us a sketch of Convocation and of the objections to the scheme which was presented. Is there anything more you wish to say to us in that direction, or is there any scheme of your own which you would like to explain, or shall we proceed at once to the examination of the Charter which is really before us, and upon which I believe you wish to make some remarks?—With reference to your Lordship's observation as to a scheme of our own, I have to make a request to the Commission. We had only a few days notice of the appointment for to-day. It is very difficult to act promptly with a large body like Convocation. The committee of Convocation is appointed annually, and the new Committee only came into office on the 10th May. It at once set to work on the subject; a sub-committee has been appointed, and has met, and we are in communication already with a number of different persons, but I hope that the Commission will allow us time before we submit any suggestions which the Commission might be good enough to receive from us of a constructive character. It was quite impossible for us to get them ready for to-day.

590. You will have to appear before us again?—I should like to have the opportunity of appearing before you again.

591. (*Rev. Canon Browne.*) Have you any idea about the amount of time you would require,—a month?—It would have to be a little more than a month if I have to get the approval of Convocation. I do not know whether the Commission would care about that—whether you would care to have a scheme only drawn up by a committee of Convocation, or whether you would wish to have it ratified by a vote of Convocation. If there is to be a vote of Convocation it must take longer.

592. (*Chairman.*) At any rate we will consider that, but we will certainly hear you again?—If it were the pleasure of the Commission to take it from the Committee we should be quite willing, but it would not carry the same weight of course.

(*Bishop Barry.*) I suppose the Committee is pretty well in touch with Convocation generally. It will be a very cumbrous business to call your Convocation together. We shall have advanced I hope, far with our work before that could be done. I think we should like to have it from the Committee.

593. (*Professor Sidgwick.*) I should be inclined to take the other view. I have found from experience that it is of very little value to have views of a Committee, we ought to know what Convocation would do. I feel bound to express that view; it appears to me that we cannot tell whether the scheme of the Committee might not be thrown out by a majority of Convocation of an overwhelming number. I think we had far better wait and see what Convocation will accept?—There is another consideration, of course from that passage in the Charter which I have just read. The consent of the Senate is, of course necessary. It is put in that way that the scheme should come from Convocation, but that the Senate must consent and if we had to go both to Convocation and to the Senate further time would be required.

594. (*Chairman.*) The Commission are quite prepared to hear you again, which is all that we need now decide, and you can send in a statement as to what we shall hear you upon next time,—whether you have a scheme ready prepared, and whether that is the scheme of the Committee, or the scheme of Convocation, or what it is. We shall then be prepared to hear you, or at any rate to consider whether we will hear you. With regard to the present moment I understand that you are not prepared to go into any scheme of any kind?—Not, I think in detail, not further than by referring to the scheme of 1886 with such modifications as I think would now be necessary. We should have to take in a great many more teaching bodies now.

595. (*Bishop Barry.*) How long do you suppose it would require to get a meeting of Convocation? Is there a fixed time necessary?—I am such a new Chairman, having been only elected on the 10th May last, that I am not quite sure, but I believe I have to give 21 days notice. Yes, it is 21 days' notice under Standing Orders.

596. Then, I suppose, one might say three months?—I am afraid it would take three months to get a scheme through Convocation.

597. (*Professor Sidgwick.*) Can we obtain copies of the scheme of 1886?—It is printed in the Blue Book, at page 240. It is Appendix No. 14.

598. (*Chairman.*) In your letter to the Secretary you say that after having handed in the scheme and explained the objections of Convocation to it, you would like to pass on to the draft Charter of the Gresham University and point out the objections which Convocation feel towards that Charter. I think we might now proceed to that?—I added that in the letter, because I understood from the Secretary that it was the desire of the Commission that this should be gone into.

599. Of course; it is on this Charter really that we are sitting; that is the subject before us. Then will you state, briefly if you like, or at greater length if you

E. H. Bush, Esq., M.A., LL.B.

2 June 1892.

wish it, your objections to this Charter?—May I just state, to commence with, the position of Convocation in this matter. To a great extent I am hampered by resolutions, of course, as representing a body like Convocation, and if I go outside the resolutions the Commission must not attach really official weight to what I say.

600. Exactly; it is your private opinion?—Yes. Convocation passed a resolution at its meeting in January 1892:—"That the Albert University Charter," as it then was, "if granted, would neither supply a "teaching University for London as recommended by "the Royal Commissioners, nor tend to promote the "interests of higher education, while it might interfere "with the work of the University of London." A memorial embodying this resolution was sent out to every member of Convocation. This is the prayer of the memorial:—"Your memorialists therefore humbly "pray that your Lordship will be pleased to suspend "the granting of the Albert University Charter until, "in accordance with the recommendation of the Royal "Commissioners in the event which has happened since "their report, the subjects on which they were "appointed to make inquiry have been remitted for "their further consideration, and they have made a "further report to Her Majesty, or until such further "inquiry and consideration have been made on and "given to those subjects as to your Lordship shall "seem meet. And further, that your Lordship will be "pleased to receive a deputation consisting of fellows "and graduates of the University on the subject of the "said Charter," which Lord Salisbury was good enough to do. I wish to add that within considerably less than a week this memorial was returned to the clerk of Convocation, signed by 1,228 graduates—there was no time to wait for further signatures—and the original signatures are in the possession of the Marquis of Salisbury.

601. That is a fundamental objection to the whole thing?—Without re-consideration by a Royal Commission—not that it should not be granted, but that the granting of it should be suspended until, as the late Royal Commission recommended, in the event of the London University not presenting a scheme which would be acceptable, the whole matter should be referred back to them. We requested that the Government would see that was done, or else that it should be referred, as it has been, to a new Royal Commission.

602. Supposing that the University of London found it quite impossible to agree to any scheme, then would you be inclined to consider this scheme, which is founded, in the first instance, on the union of the two colleges, University College and King's College, and the medical colleges, with power to have other colleges affiliated afterwards. Supposing the other idea to fail, would you be inclined to adopt this idea, or sanction it?—I should not, the objections to it seem to me to be so strong and so numerous.

603. The objections to the conception of the whole thing?—To the conception of the whole thing.

604. Then there are no modifications which you think it worth while suggesting?—I take it that there are two demands; there is the demand of the public for greater facilities in learning; and there is the demand of the teacher for greater influence over graduation. So far as I can see, the proposed Gresham University Draft Charter provides for the second, but absolutely does nothing for the first of those demands. There is to be no additional teaching at all necessarily. In the draft Charter, at the end of Clause 3, it is provided that the University may appoint lecturers independently of a college, to give instruction in any subject, whether it be or be not included in a Faculty. If the University were founded, and chose to exercise that discretionary power, what would be the position of the lecturers? That we see from Clause 11. They would be totally beneath the existing teachers of the colleges and the medical schools. Clause 11 provides for the Assemblies of the Faculties:—"The Assembly of "each Faculty shall include all such persons doing "professional work, or giving regular instruction in any "of the subjects included in that Faculty, for any "college of that Faculty in the University as shall be "designated by the governing body of that college." Consequently, all the college professors would be on the Assemblies of the Faculties, but the University lecturers might not be, for we read, "Each Assembly of "a Faculty may elect as members of the said Assembly "lecturers of the University, or persons who are or have "been engaged in teaching any subject included in that "Faculty for or with the sanction of the University or "any college thereof." Therefore, the only additional teaching which is provided is purely discretionary, and the University teachers are to be of a lower rank—a lower grade—than the college professors, because they need not be members of the Assemblies of the Faculties, and need not therefore have that influence in the in the government of the University, which the college professors must necessarily have. I would even venture to take the matter a little further than that. It seems to me that if the Gresham Charter were granted in its present form there would be restrictions on learning which do not exist at the present moment. There is now nothing to prevent a student who wishes to learn, looking all round the teaching institutions in London and taking instruction in one subject at one place, instruction in another subject at another place, and instruction in a third subject at another place, getting what he considers to be the best tuition in each case. But under this Charter it would be necessary for the student to be a student with a regular course at University College or King's College, and if he thought he could acquire a better knowledge of chemistry by going to the Science School at South Kensington, he would not be able to do it as he can now.

605. I suppose that is the object of a teaching University not to let the student collect his knowledge wherever he likes, but to induce him to follow a steady course, and stick to particular teachers, and that their influence should be with him from beginning to end, even including examinations?—I was limiting my remark to teaching; I was not including private study at all. But at present the student in London can take advantage of the unrivalled facilities there are for learning in spreading his studies about many institutions, instead of limiting himself to one.

606. Is there anything that would make this scheme more workable in your idea than it is now?—That almost comes to proposing our scheme, as far as I can understand.

607. I think it would be hardly worth while to take you through it, unless there is anything you wish to say?—I have noted a great many objections to it, but I do not know that it is worth while to occupy the time of the Commission with them. It seemed to me, generally, that the proposed Charter would not consolidate the teaching institutions of London as a whole, because it only brings in two of them, and ten medical schools. It excludes the denominational schools and colleges.

608. (*Bishop Barry.*) Is there not power in the Charter to admit constituent colleges?—I admit that. It does not at present include—that is what I meant to say—the denominational colleges, or the great training colleges, or the ladies' colleges.

609. (*Chairman.*) But we should have power to put in any of these?—Yes.

610. Your objection could easily be remedied?—It does not necessarily provide any new teaching, in the way I have endeavoured to show to the Commission, and, although the students would have to be members of a college, it does not provide for residence, or other collegiate advantages in addition to those which already exist in London. There is no provision for collegiate residence.

611. I suppose if these colleges chose to establish accommodation for boarders there is nothing in the Charter to prevent it?—No. I may mention that at University College, with which I am most familiar, there was a residential hall, which was such a failure that it was closed, and is now converted into a library, and a kind of Toynbee Hall.

612. No other scheme which has ever been before the public makes a residence obligatory?—No, but the point which occurs to my mind is that if there is no residence, the collegiate system is less valuable than where there is residence.

(*Chairman.*) I think that, unless you wish to call attention to any one part of this scheme which you consider worse than another, I will not ask you any more questions upon it.

613. (*Bishop Barry.*) I understand that the scheme bristles with defects, but I should like to know which defects are greatest?—I think I have mentioned those which struck me most. It is common ground that if the number of Universities can be kept low it is very much better. An unnecessary multiplication of Universities is not to be desired, and the general question of higher education in London is not solved by a union of 10

medical schools and two schools of arts and science, such as is here proposed. The University should be over the teaching colleges and not constituted of them. The University of London is already in the field and, so far as I can gauge, would take that place if a scheme were devised which did not trench on the fundamental principles which I have mentioned. As regards the medical Faculty, I should leave that to Dr. Collins.

614. I think I understood from Mr. Busk that there were certain points on which in his opinion the University of London, so far as it is represented by Convocation, would be prepared to lay stress as necessary. There were three points mentioned. Perhaps I may be allowed to ask a question on each of those. The first is as to the independence and high standard of all its examinations. It has been proposed that the examinations should take place, as in the Gresham Charter and in some other schemes, by one examiner who had been engaged in teaching, and one who was appointed by the Senate, and might be called an external examiner, so that there should be two examiners, the one supposed to be in touch with the teaching given, and the other able to judge independently of that teaching. I think that in Mr. Busk's opinion that is an inferior system to the one which is at present pursued?—That is an inferior system in my opinion, because I cannot help looking at the composition of the Senate, which is going to appoint the external examiner, and I there see that the teachers are so predominant that it is again the teacher, who would appoint the examiner.

615. That would be met by a different arrangement which I think you propose in the constitution of the Senate?—Yes.

616. But supposing the Senate to be constituted as you thought good, would you think that system inferior to the one which is at at present in use in the University?—I should.

617. On what ground?—I think that the examinations ought really to be impersonal, and I am afraid that the distinction between the view of the London University and the other view is a vital one. We think that we examine and confer our degrees and our honours upon simply the knowledge which the candidate at that time possesses, without regard to whether he has been taught it or not, or how he has been taught it.

618. I look down the list of examiners in the Calendar and I find that many of them are engaged in teaching in the various colleges, and therefore might have to examine their own students without the guard of an extra examiner from the outside?—No single examiner examines by himself; the examiners examine in pairs with us.

619. But both of them might be engaged, and both of them frequently are engaged in teaching, only not the same students?—The evidence given before the late Commission went to show that the Senate takes very great care.

620. I will take another instance, in the German language Professor Buchheim who is Professor at King's College, and Professor Herman Hager, who is Professor somewhere else, takes the examinations. I am at a loss to see how your system is more independent than that provided in the draft Gresham Charter?—Even supposing occasionally such an arrangement is made, is there not a great difference between a teacher examining people whom he knows to be his own pupils, and a teacher examining a large number of persons whose names he does not know? The names do not appear on the examination papers at all, but simply numbers, and he does not therefore really know unless he might happen to recognise the handwriting of some among the hundreds, whether he is examining his own students or not.

621. I do not suppose he would be partial, but an examiner, like everybody else, has his own idiosyncrasies, and if he has been lecturing, it will make itself appear in his examination?—It will.

622. You say "the independence and high standard of all its examinations." By the high standard I think you meant the uniform standard?—I did.

623. And you object very strongly to what seems to you the varying standard of the examinations conducted according to the Gresham Charter?—Yes.

624. You do not think that the fixing of the syllabus and of the conditions of the examinations by the University, and the power of appointing one examiner in each subject would sufficiently give a uniform standard?—No, I think not.

625. Then in the next place, I see you strongly object to honorary degrees, and any proceeding to higher degrees without examination. Are there any other exemptions provided for in any of these schemes?—The Senate's scheme expressly provides that there should be honorary degrees.

626. I meant other than honorary degrees?—No, I do not think there were any exemptions beyond that possibly varying standard.

627. I suppose the honorary degrees would not be numerous in a year, and would be conferred generally on persons of great distinction, or they would be likely to be so?—I cannot prophesy.

628. But, judging from the experience of older Universities, both in England and Scotland, I think we might conclude that the honorary degrees would not be numerous, and that they would be such as to reflect no discredit on the body. Under those circumstances do you suppose that Convocation would insist strongly on the objections to any honorary degrees at all, as a fundamental matter?—I can only say that Convocation did strike that one matter out of the scheme of 1886, while approving of everything else.

629. The third point is that you think the whole system of constituting a University out of the colleges, and practically, if not excluding the non-collegiate students, at any rate placing them at a disadvantage, is one to which Convocation would be strenuously opposed?—Yes, I think it would.

630. That is I think really, is it not, the most crucial point of objection?—Yes. I think the feeling is that the colleges ought to be under the University.

631. I think I understand that your desire is to maintain the present position of the University of London in examining students from all quarters, and you think that you would add to it the function of teaching for the metropolis itself?—I venture to hope so.

632. And you think you would be able to keep up the two things, and not in any way to find that one would clash with the other?—It seems bold to say so, but I believe it can be arranged.

633. You are aware that that has been the fundamental objection, which has given rise to the desire of having a second University?—Yes.

634. The University of London framed a scheme in which it endeavoured to do these things—to keep up its old rules, and at the same time to include constituent colleges, not merely in London, but in the provinces?—The Senate of the University did so.

635. And to that part of the scheme I do not see that Convocation took any objection?—No.

636. Hence, I think, we may fairly call it the scheme of the University of London to include all these colleges, while maintaining what I may call its cosmopolitan character of examination?—Yes. I do not think the University would make it of vital importance to include provincial colleges.

637. I am inclined to differ from you there; because I have reason to know that a previous scheme had been agreed upon between the Senate and the petitioners in this matter, which differed from the revised scheme in this that it did not contemplate provincial colleges. Are you aware of that?—I have heard of that.

638. Hence, I am inclined to think that the Senate would lay stress upon the inclusion of provincial colleges, and yet at the same time would aim at being a teaching University for London, although its colleges would be scattered all over the country?—I beg your pardon. My friend Dr. Collins tells me there was a resolution of Convocation on this particular point. The resolution is dated 21st January 1890, and is as follows:—"That the proposal of the University for London Commission, that under a new charter for this University various powers and privileges should be conferred on certain institutions in or near London, is incompatible with the fair and just treatment of the provincial colleges, and that the acceptance of this proposal would be detrimental alike to the interests of the provincial colleges and to those of the University itself."

639. The Senate and Convocation, then, do lay great stress upon it?—Yes.

640. And would include provincial colleges, while, at the same time they hoped to discharge the function of a teaching University for London itself?—Yes.

E. H. Bush, Esq., M.A., LL.B.

2 June 1892.

641. How that is to be done, I confess, I do not quite see. Probably those who framed the scheme may have clearer ideas upon the matter. Then I will come now, if you will allow me, to the special objections which are made to the existing Charter. There seems to be hostility to the Charter as a whole, but certain detailed objections were named. One of those was, I think, that the proposal to admit only two colleges and ten medical schools was far from meeting the needs of London. Has your attention been drawn to the conditions on which constituent colleges can be admitted?—Yes.

642. Do they differ from the conditions on which constituent colleges were to be admitted in the Senate's scheme?—I am afraid I have not compared them.

643. I think I am right in saying that substantially they are the same. I mean, therefore, that perhaps you have not sufficiently noticed that the Charter gives a large elasticity for the admission of colleges. I do not see, for instance, why any college which chose to submit to the conditions of the University and to prove its efficiency, should not be included under these conditions. May I ask if that seems so to you, or if you see anything to contradict this?—The power of admission is certainly quite wide, but is discretionary in the council.

644. It is quite clear that it is intended to admit colleges so soon as they shall prove their efficiency to the satisfaction of the governing body. And, if you notice, there is an appeal against the governing body to Her Majesty in Council in the case of injustice done?—Yes.

645. Would not that very much remove one of the detailed objections you have spoken of?—Well it is very difficult to say, but I should have thought that the colleges that were in would not have been perhaps particularly ready to admit other colleges.

646. In other words, there would be a kind of trades union jealousy against new comers?—Yes; if they wished to attract pupils to their own colleges it would not help them.

647. I confess I should be rather sorry to entertain that opinion with regard to such a body as is provided in the Charter. Then I will pass to another point?—Before we do pass that, may I say that I cannot help bearing in mind the recommendation of the late Royal Commission, that a great many other bodies should be included.

648. That would hardly be a fundamental objection. It would merely mean that this Commission should enlarge the scope, which it might very well do, on the same general lines. Now the next point is this. I think there was an objection that there was no necessary provision for any new teaching, or for putting any lecturers that might be appointed, on the Boards of Studies?—Yes.

649. Hence, if for the word "may" the word "shall" were substituted in the provision made, that objection would probably fall to the ground?—I should still think that the University professors ought to be of higher rank than the professors and teachers of the colleges constituting the University. That is the opinion expressed by the Oxford Commissioners in 1852, and the Cambridge Commissioners in the same year.

650. Still the point that there would be no new teaching provided would be met by this?—Yes.

651. And there would be no reason why all these teachers so appointed should not be, either directly or by representation put upon the Boards of Studies. That would be merely a modification of the Charter, and not a fundamental objection to it. I understand that you feel a general hostility to the Charter, but I fail to see the force of the two or three detailed objections presented. I think also you were inclined to come to the conclusion that collegiate membership without residence was of no very great value?—I hardly understand collegiate life without residence.

652. Exactly; I mean such life, for instance, as goes on at University College, where men attend regular study, and are matriculated members of the college. You think that that has no high educational value because they do not reside there, and that it is not worth preserving?—I studied nowhere except at University College, London, and the intercourse was extremely slight. We went home as soon as the classes were over.

653. You do not think such association is of any value?—No.*

654. (*Professor Ramsay.*) You spoke of desiring to see Convocation having greater power than under this scheme submitted by the Senate?—Yes.

655. Do you mean that Convocation should only have a greater representation on the Senate, or do you mean that you wish the constitution to be so modified that Convocation is to have a greater voice in the management of the University than it possesses now?—I was, at that time, only thinking about a greater representation on the Senate.

656. What exactly is the ground on which you desire a greater representation for Convocation in the Senate?—Every member of Convocation is a member of the Corporation of the University. Really, Convocation is the University, so far as the corporation goes. The male adult members are the parliamentary constituency, and every one of them is a member of the constituency. I should have thought the time has now come when the University might manage its own affairs. Convocation contains many influential people, and the necessity for supervision on the part of the Crown has almost, if not quite, gone. In former times the country provided a very large part of the expenses of the University, and it was only right that the Crown and Treasury should have a great voice in the management of the University, for which the country paid. Although I have just been elected to the Senate, I have never attended a meeting yet, but I believe the accounts for the last year show that the country contributed nothing. In both respects it seems to me that the time has now come when the University might manage its own affairs. When I say the country contributed nothing, I mean that we returned all the money grant, but I do not wish the Commission to understand that we are not under many obligations to the Government, because we have our buildings rent free.

657. You wish to see a teaching body added to the University of London?—Yes.

658. Would such a change make it desirable in your view, or not that the supreme governing body should have more experience in teaching than they have now: if they are to appoint teachers, and regulate the work done by teachers?—I should have thought that the governing body had now a very considerable connexion with teaching.

659. Can you tell me how much. How many of the present Senate have had practical experience of teaching?—Upon this list, which is an old one, I think there are eight.

660. Out of?—36.

661. Who have had practical experience of teaching?—Yes, who have had practical experience of teaching.

662. Does that seem to you a sufficient representation of experts in teaching upon the supreme governing body of the University?—I think the proportion might be larger.

663. When you ask for greater powers for Convocation, or greater representation, is it because Convocation is an expert body, understanding the matters of education and examining with which the Senate has to deal?—That is so. To a very great extent Convocation consists of teachers, there are a very large number of the graduates who teach.

664. There are 3,354 graduates who are members of Convocation, I think you said?—Senior graduates.

665. I think you said that by far the greater portion of your graduates come from non-collegiate institutions—Yes. That includes the minor teaching institutions.

666. Therefore, Convocation is a body which to a great extent has had no experience whatever during its own educational days of University requirements and University teaching?—I must be allowed to limit the further answer. My remark about the larger proportion was limited to the Faculties of Arts and Laws; it did not extend to the Faculties of Science and Medicine. I intended to make it clear that in relation to the former Faculties they were in a large proportion. With regard to medicine, candidates must bring certificates.

* MEMORANDUM received from the witness since giving evidence:—In giving this answer I did not wish to detract from the value of a regular and complete course of study at a college, even without collegiate residence. But though this is implied by the phrases "regular study" and "matriculated students" in Question 652, I know, and my answer to Question No. 653 was influenced by the knowledge, that there is no Matriculation at University College, and that it does not require its students to have passed or to pass the Matriculation Examination of the University of London, or to undertake a regular course of study. In the words of the College prospectus "students are admitted without "previous examination to any class or classes they may select."

667. Are you prepared to say that there is a large proportion of the members of Convocation who have been engaged in what we may call higher or University teaching?—I think so. Time has not allowed of my making out an estimate. I began it yesterday, but I have not had time.

668. Engaged in institutions of a University character?—No, institutions rather of a secondary character than a University character.

669. Then if you are going to found a teaching University, is it not contradictory to that idea to increase on the teaching body the representation of that portion of it which has had no experience of University teaching?—I do not think that Convocation has had no experience of University teaching.

670. But in a large sense, as a body, it has not. It is quite a different body from the academic bodies of Oxford and Cambridge, the members of which have each gone through the whole academic system in some one college or other, and everyone of whom is intimately acquainted with the details of University teaching or governing. Convocation as a body is not composed of persons who have had that experience?—Would that be true of the Universities of Oxford and Cambridge that those who have been through the course, such a course as we know of, would have academic knowledge?

671. Oxford and Cambridge graduates have necessarily passed through the whole academic course. May I ask how often Convocation meets a year?—Necessarily, twice, in January and May.

672. What is the ordinary average attendance at those meetings?—About 200, I think.

673. I suppose the 200 are principally the residents in London?—Yes, I suppose they are.

674. Do you consider that the persons chosen at such meetings of Convocation would really be representatives of the opinion of the 3,354 members who form Convocation?—That is not what is proposed. The persons who are sent up to the Senate are voted for by the entire body of Convocation, by voting papers sent through the post. They are not elected at the meeting.

675. But if the members of Convocation are scattered throughout the country and do not attend the meetings, and do not know what is going on in London or at the University, how can you regard their opinion in matters of election, as being really a corporate opinion, and one given with a view to the interests of the University as a whole? Is it not the case that the graduates are composed to a very large extent of medical graduates?—Yes.

676. Can you tell me in what proportion?—No.

677. Is it not the case that in a body, where medical graduates predominate, all questions which affect the medical profession will excite great interest and bring many doctors to vote, so that you might have the voice of Convocation simply representing the views of the medical profession?—I do not think that is at all possible, and in fact, the medical profession is itself divided, those who do not teach taking a totally different and in fact a contradictory and opposite stand from those who do teach in the medical schools.

678. Have you ever heard that in the general council of the University of St. Andrew's, medical graduates predominate?—No.

679. The result is that the voice of the body of graduates, practically, is the voice of the medical profession, and that important votes may be carried by medical graduates situate all over the country, who have no knowledge, it may happen, of the special affairs of the University of St. Andrew's. Would there be no danger of anything of the kind occurring in the case of the London University?—I do not think there would be any danger at all. The Arts Faculty is far larger than the Medical Faculty.

680. The arts graduates outnumber the medical largely, do they?—Yes, I should think so. The number of pages enumerating the graduates in the Calendar would probably show.

(*Mr. Anstie.*) There is no doubt of it at all.

681. (*Professor Ramsay.*) One of the objections you have to the Charter, I think, is to its interference with the independence and the standard of examinations. Does that refer to the appointment of examiners?—Yes.

682. Do you consider that your present mode of appointing the examiners is a particularly good and fair mode. I mean to say that the London University, as I have always understood, prides itself upon its examiners?—Yes.

683. Are they appointed by the Senate?—Yes.

684. As a matter of fact, whom are they appointed by?—By the Committees of the Senate. Mr. Anstie will be better able to answer that question than a senator who has never served at all. But I understand there are committees appointed by the different Faculties. The appointment of Examiners of Arts are referred to a special Committee of Arts; so with science, and so with medicine and laws. The recommendations go from the Committee to the Senate.

685. The appointment of examiners is made by persons having a special knowledge of the subjects?—That is so.

686. In that respect the University is under the Government, in that very important particular, of what you may call academic experts?—Yes.

687. Experts in their subjects?—Yes.

688. Does not the same principle apply to enlarging the powers of the University teaching? Would you not by the same argument be able to suppose that the government of the University in matters of teaching should be conducted by a body made up of teaching experts, and that the same principle which makes you approve of the mode of appointing examiners should make you approve of the principle of the draft Charter, so far as it makes the governing body of the University to a large extent consist of the teaching element? The only educational work which you say the London University does is the appointment of examiners, is not that so?—No, I do not think that at all. I think the educational work of the University of London is very much under-estimated. I think it has a very enormous effect upon education throughout the country, and over the world by its curricula.

689. Through its examinations?—Yes; not through its examiners.

690. Are the curricula not drawn up in the same way, by means of Committees, much in the same way as the examiners are appointed?—I really think it would be better to ask Mr. Anstie.

(*Mr. Anstie.*) There is no doubt that is so. The recommendations of the Committees of the Senate are undoubtedly, as a rule, accepted by the Senate.

691. (*Professor Ramsay.*) So that the Senate merely approve, in a general way, of recommendations with regard to curricula and appointments of examiners which have been made by specially competent bodies?—I am open to correction, but I should have thought the eminent men to whom you refer were on the Committees. They are placed on the Committees.

(*Mr. Anstie.*) That is no doubt the fact. Such persons as you refer to are on the Committees.

(*Professor Ramsay.*) But they do not attend, I suppose, in the same way?

(*Mr. Anstie.*) I can give you one name that is in frequent attendance.

692. (*Professor Ramsay.*) With regard to these important matters, which are the educational matters which the London University does really do, by means of which it exercises its influence—the appointment of examiners and the laying down of systems of examination—it does directly or indirectly do that by means of educational and scientific experts, who represent a teaching body of the academic character which is demanded by the supporters of the Charter?—I should not have thought that the members of the Senate were educational experts.

693. That is not quite my question. If the Senate refers these matters to committees, who may be teachers, and who often are teachers, but who are, at any rate, persons of special competence to judge of these points, it is really conducting its examinations and appointing its examiners by means of a Senate composed of specially competent persons?—Rather people who have taught than people who are teaching now.

694. Yes, but I think that is a matter of detail. Now may I ask why do you think the independence of examinations will be interfered with, and the standard broken down, under a system something like that of the Charter? What is to prevent the standard being kept up as it is now?—Would a teacher be anxious that his pupils should be unsuccessful?

E. H. Bush, Esq., M.A., LL.B.

2 June 1892.

695. I thought that point was given up in your answers to Bishop Barry. I thought you admitted that there was no question of a teacher exercising any sort of bias in favour of his pupil?—I do not say that he would do that, but there is such a thing as fixing a lower standard for the examination, so that his classes should be successful in getting their degrees. I was not at all mentioning the point that a teacher would be unfair to one candidate, or partial to one candidate, but generally the desire would be that the students at the college should pass the examinations and get the degrees.

696. And because he desires the students of his own college to pass and get the degrees, although he is a perfectly fair man, the tendency of a teaching examiner would be to reduce the examination of all to that which his own students would be able to pass. Is that what you mean?—I should have thought that would be so and I should have thought that, looking to the Universities of Oxford or Cambridge, it is plain that it is so. Scarcely anybody who goes there fails to get a degree. It is the rarest thing for anybody who goes there to fail to get a degree.

697. You may have at present teachers as examiners?—Yes.

698. I want to know what is the difference between the two systems. Why should you suppose that under the new system, which includes teaching under the University, examinations should suffer as compared with the present system, where you may have the same teacher examining the same students, taught at the same college, only not inside the University?—In the case of the University, if the teacher examines his own students, it is purely by accident, not by design. In the great bulk of cases it does not occur.

699. Are you in favour of the principle that examination should be founded upon teaching, rather than teaching upon examination?—I am afraid I am against examination being founded upon teaching.

700. Have you had any experience yourself?—I am Reader of Elementary Law for the Incorporated Law Society, and I was formerly examiner at the final examination for solicitors.

701. You do not sympathise with the feeling which desires that the teacher should not be controlled and cramped by any examinations, but that he should have a free hand, and that the examination should be regulated by the teaching rather than *vice versâ*?—I sympathise with it in this way, that I should wish to see the teachers have a great influence consultatively upon the curricula, and in that way they would be much less cramped than they are at present.

702. But you object to giving them anything more than a consultative voice. Now in your scheme you propose that the University is to be a teaching University as well as an examining University. Then how does objection No. 10 apply to the scheme? "The facilities "afforded to collegiate students, under the scheme, "cannot fail to place private students at a relative dis- "advantage." How do you propose to get rid of that in your scheme for combining teaching and examining? Would not that difficulty apply equally to any other proposal for a University to embrace the two functions?—I should have thought it would not have applied so much if the teachers did not examine their own pupils.

703. But that point is not embraced in that clause?—Is it not?

704. No?—That is a circular for which I am not in any way responsible.

705. I thought it was the circular in response to which those 1,100 post cards were obtained?—I am not responsible for it in any way. I only brought it in to show that in addition to those present in May 1891, there had been a large number of dissentients.

706. You see there is an inconsistency in that particular argument?—I do not know that I have considered this argument sufficiently closely.

707. Does this paper represent the view of a large amount of the members of Convocation. Is it worth considering at all?—Yes, I suppose it does, but it would not be safe to suppose that all the 1,100 who signed the card of dissent adopted all these reasons.

708. Now look at Clause 9 of the same paper—"The "'medical grievance' unredressed"—that is, that they cannot get the degree upon equal terms. In the second part of the clause, with reference to the standard of the degree being lowered, that means, of course, that the medical grievance would be unredressed?—I endeavoured to make it plain that although the standard of the M.B. would be lowered, it would not touch the grievance, because the grievance of the profession is that they cannot get the M.D., and call themselves doctors; and also because they have to pass the Preliminary Scientific, and both the M.D. and the Preliminary Scientific are left in the hands of the University as before.

709. Why is the honours degree taken by so few students?—The M.D.?

710. The M.B. and the M.D. afterwards. What are the practical difficulties in the way of a student, which bring it about that only 10 per cent. of the London students take the medical degree, or the M.B. either?—I prefer that Dr. Collins, whose Faculty it is, should answer these questions, but it is the Preliminary Scientific which is added to the practical professional subjects.

711. It is much more than the practical scientific requirements of the Colleges of Physicians and Surgeons?—I suppose that is so.

712. In which department particularly, chemistry?—I really have not the knowledge which would enable me to answer that.

713. You object, as I understand, to any system of incorporated colleges; I do not mean as to recognising them, but as to considering colleges as forming part of the University?—Yes; I think they ought to be under the University.

714. One of your principal objections was that the Draft Charter does nothing for reorganising or consolidating teaching; it merely recognises existing institutions?—That is so.

715. It adds nothing to them; and if it extended the same principle it might add a great number of other colleges also, without the effect of adding anything to the teaching?—Yes.

716. How do you propose to get rid of that difficulty in your scheme?—I should propose that the University of London, which now, for the first time, is set free to teach by the application of University College for powers to grant degrees, should have a professoriate of its own.

717. Would you propose that that professoriate should in the first instance be chosen out of the professors of existing institutions in London?—They should be chosen by the governing body of the new University, who doubtless would select the most eminent of those professors.

718. Would you propose to have a central teaching University?—I think that from the size of London it would be necessary to have a great many buildings in different places, and to give itinerant lectures in different parts.

719. By men appointed by the University?—Yes, and their assistants.

720. Would it be possible in your view to recognise, not the colleges, but to recognise individual departments or individual teachers, taking certain persons here and there to be professors of this, that, or the other subject, so as to make up one complete establishment of professors out of the whole of the teaching bodies of London?—Yes, I think that would be possible.

721. Would it be necessary, to do so effectively, to add largely to the resources of those Chairs that you took as University professorships?—I think it would.

722. Would you require attendance at any of those professorial lectures as essential to graduation?—That is rather going into the scheme, for which I hope the Commission will allow me a little more time for consideration with my colleagues.

723. You had rather not say anything more upon that now?—I think that, as far as my colleagues also are concerned, we had rather not answer that yet.

724. You said you could not understand colleges without residence. Have you ever considered the question with regard to the Scotch Universities and the German Universities?—It was the particular advantages of collegiate life without residence that I could not understand. I quite understand colleges without residence, but the particular advantages belonging to a college without residence was what I did not quite

follow. If I may put it again, it seems to me that we should be giving up the unvarying standard of our degree, and should possibly get a varying and lower one, without getting the advantages which are conferred by residence, as at Oxford and Cambridge.

725. (*Sir William Savory.*) With regard to the constitution of the University of London, how many graduates are there altogether?—I really do not know.

726. You have mentioned the number of members of Convocation as 3,354. You could not tell us the total number of graduates?—No. I applied to the Registrar for the register, but he has not sent it to me.

727. When Convocation rejected the scheme of the Senate, do you know how many were present?—733.

728. And do you know how the numbers were, the majority and the minority?—461 and 197.

729. So I suppose we may take it that there is a great deal of difference amongst the graduates of London University with respect to that particular scheme, the majority rejected it, but there is a great deal of difference of opinion?—Undoubtedly there is a great deal of difference.

730. But the Senate and Convocation are agreed in this, that the modification of the London University which would meet the requirements of a new teaching University would be quite practicable. They differ on the details of carrying it out, but they agree on the principle that it might be so modified as to meet the new view?—Yes, I think the majority of Convocation think it possible.

731. The Senate has propounded a scheme, has it not?—Yes, the Senate has.

732. And Convocation has also a scheme practically settled?—It was only a scheme as a basis for negotiation.

733. But enough to show that in their opinion the thing was practicable?—Yes.

734. And with regard to many of the objections which have been taken to-day to the London University those objections might be easily met, without altering the scheme at all. For instance, with regard to the lack of teachers on the Senate, it would be quite easy without altering the constitution in regard to the appointment of the Senate to have teachers much more largely represented?—Yes, it would.

735. So that many of the avowed defects of the London University at the present day rather spring from what may be called the direction and management of the University than from any inherent vice in its constitution?—Yes, I think that is so.

736. I suppose we may say, without disrespect to the Senate, that they have largely lost touch with the teaching bodies, and that for want of some intermediate body there has been a lack of communication and intercourse between the Senate and the teachers. Would you admit as much as that?—Well, I should hardly like to admit it in the face of the evidence given before the late Commission. The Senate were in constant communication with the teachers, and received suggestions from them, not only when applied to, but also voluntarily.

737. Allowing that point to be doubtful, if there were truth in that suggestion at all events it might be remedied by the reconstitution of the Senate?—Easily.

738. I suppose one difficulty that all would feel in adapting the London University to the new views would be that there would be a great danger in lowering the standard of the examinations?—Yes.

739. And upon that point Convocation is, if I may venture to say so, properly very jealous?—Yes.

740. The character of the University has been in times past very high, and all who are connected with it would be very sorry to see anything like a degradation of its present examinations?—Convocation feels that there is nothing but the standard. There are no historical associations and no endowments. There is nothing but the standard, and Convocation is also gratified to find that graduates who have taken high honours in other and older Universities come for our degrees afterwards, simply for the title.

741. Supposing the London University should fail to adapt itself to the new view, and a new University were constituted, would the danger of having a lower standard of examination be less in a new University than in the old. Is there any reason why a new University in adapting itself to the present demands should keep up the character of examinations more than the London University?—No; I should say the reverse.

742. That whatever difficulty there might be in the London University at present, the same difficulty must exist in a new University, and that many of the objections are founded upon a suspicion that there might be a lower standard of examination required?—Yes, that is so.

743. And do you think that the lower standard of examination would be likely to be assisted by teachers examining their own men?—I must confess that that is my own opinion.

744. And you think that this opinion would be largely shared by teachers and examiners, that when a teacher examines his own men there is a danger of the standard of examination being somewhat lower?—I would rather put it generally, and say not one teacher examining his own men, but when it is the system for teachers to examine their own pupils I think it would be so.

745. You were asked a question with regard to the examinations, which was put in this form, I think it was the Bishop who put the question, one examiner to be appointed by the University, and one to be a teacher. Was not a question to that effect asked you?—I think a question was asked to that effect upon the Gresham Charter, which so provides.

746. Assuming it to be put in that way, are those two appointments to be put in antithesis?—If it is the question I am thinking of, my answer was, that the external examiner would be appointed by the very teachers of the colleges also, and would be likely to be a teacher himself.

747. But in the list of examiners who have been appointed by the University, have they not generally been men who, either at that time were, or previously had been, teachers?—Teachers by profession, you mean?

748. Yes?—Yes.

749. Or, at all events, as one part of their duty?—Yes.

750. I suppose you would agree that it would be a defect in an examiner if he neither were at the time nor had been a teacher?—Yes, I think it would be.

751. It would be better for an examiner that he had been a teacher and was fully acquainted with the mode in which the subject was taught?—Yes.

752. But would it enhance very much his qualifications as an examiner if he were a teacher at the actual moment that he examined. If he had been a teacher for several years previously, might not this additional experience outweigh whatever loss might come if he were not a teacher at the moment?—I should think it might be preferable that he was not a teacher at the moment.

753. So far as the great functions of the London University are concerned, the examinations have been conducted substantially by men who either were at the time or previously had been teachers?—Yes.

754. But that is a different thing from a teacher examining his own men?—I think all the difference in the world.

755. You think that there is a decided objection to the teacher examining his own men?—Yes.

756. And apart from whatever objection might come of that to the plan of the examination, there would be a further objection in the guarantee which such an examination would give to the public as to the qualification, in the case of a doctor, to practice?—Yes, that would be a very practical question—the qualification conferred by the degree.

757. You think the public would appreciate more the guarantee of a qualification from an examination conducted by an independent man, than an opinion given by a man's own teacher?—That is my experience.

758. As it has been put lately, it would be auditing one's own accounts?—Yes. I think that among all the people with whom I have conversed upon this subject, the different character of the degree of the London University is perfectly well known, not only among my colleagues but throughout the public generally.

759. You were just asked by Professor Ramsay whether if an independent examiner examined, the examination would not be controlled and cramped. Do you think it is more likely to be controlled and cramped when it is conducted by the teacher, or when it is con-

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

ducted by an independent examiner?—When it is conducted by the teacher.

760. I will only trouble you with one question more now. You spoke of not giving up the fundamental principles of the University, and you mentioned, among other instances of that, the independence of examinations. Will you tell us a little more fully what you mean by the independence of examinations?—I thought it depended mainly upon these two points: first, that we always insisted upon our own examinations being passed; that we did not accept the examinations of any other body as being in any way substituted for them; and secondly, that the body which confers the degrees, that is the Senate, upon the report of the examiners, is absolutely impartial. The examination is conducted on a purely impersonal basis.

761. Under what conditions, if I may put such a question to you, might the suspicion of partiality come in. You say that the independence of your London University examinations makes it a perfectly impartial system. Then under what circumstances might the suggestion of partiality come in?—I should be very sorry, as the Bishop would have been, to have mentioned the word partiality in one sense; but what I feel about the examinations is, that if you get an external body to examine, you examine the candidates in their knowledge of the subject, whereas, if the students are examined by teachers, they are examined in a particular presentation of the subject. It is more as if they were examined upon a particular text-book than upon knowledge of the subject at large. It is more a partial knowledge than a partiality.

762. (*Mr. Anstie.*) You say that the examinations would be controlled and cramped if conducted in any part by the teachers. May I ask you to explain your meaning more fully?—I mean very much what I said in the last answer that I gave; that the examination would be very likely to take not such a large view of the subject, but a limited view of the subject, and that it would in that way be controlled by the views and opinions of the teachers. It would run the danger of being rather an examination upon the course of lectures that the teacher had delivered, than upon the subject at large. Naturally, his mind would take that view of the subject both for tuition and examination.

763. On the other hand, taking such subjects as the Faculty of Arts deals with, for instance, would you agree with what one of the witnesses, who has been examined before the Commission, said, that the field of study is wide, but that the examination must necessarily be narrow?—In Arts generally?

764. Yes; take classical learning, for instance, literature. One of the witnesses has said that the field of study is wide in itself, but that the examination must necessarily be narrow, and confine itself to a comparatively small range?—I should have thought that it need not. Even if it had been a short examination I should have thought that it need not have been limited in range.

765. Nor likely to become so?—No. With independent examiners I should think not.

766. You have examined at the London University, I think, have you not?—No; I have examined at the final examination for solicitors.

767. That would be, I suppose, an examination by the lecturers for the Incorporated Law Society?—No.

768. Without any reference to them?—Without any reference to them, except in the elementary law, in which I lecture, where there is a text-book. It is only my duty to illustrate that. The Incorporated Law Society do not attempt any lectures with a view to the final at all. The lectures which are delivered are upon Conveyancing, Equity, and Common Law, and they are upon very special points. Each term a lecture is given upon one of those subjects, and upon a very limited branch of one of the subjects, whereas the final examination is sweeping. In fact, a great complaint by the students is that the lectures are no use for the examination whatever, and that it is not worth while attending them.

769. Do they say the lectures are of no value with regard to the examination?—The lectures do not help in the examination, because they make so much of one little branch of the subject, and do not help to teach the others at all.

770. The lectures make much of one branch?—Yes; they are detailed in one particular chapter, as it were.

771. The result of that would be to reduce the advantage of the lecture to a comparatively small sum?—No, not in my opinion.

772. I understand that the lecturing is confined to very small details?—Yes.

773. The examination being general, and it is thought by the students that the lectures are not of much advantage for the examination?—That is so; but I think that the lectures are of very great advantage to them, because I think it is extremely advantageous to the students to see one particular part of the field minutely and carefully treated. Then in studying the other parts he has an example before him, which shows him how to exhaust the subject. From an educational point of view I think the lectures are most valuable.

774. May I ask whether the experience the student gets from attending the lectures on a comparatively small branch is such as to give him the mental power of dealing on principle with questions of law in general?—Not, I think, directly. I think it rather has the effect of showing him how to study the other branches, but he would not be able to deal with the law generally until he had studied the other branches.

775. It would give him a method of studying in one department that in which he is to be further trained in higher regions?—Yes.

776. And that would be a distinct advantage of the lectures?—Yes.

777. One who had attended the lectures would be accustomed to the higher regions, and be able to deal with them better than one who had not been so trained?—Yes, I think that is so.

778. Would a teacher being called upon to examine be likely to discard his practice in lecturing for the sake of some other method of examining? In other words, would a man who had been accustomed so to deal with his subjects as to train his pupils in the large reasoning of the law be likely in the course of his examinations to reduce his questions to the limit of small and minute, and, if I may venture on the phrase, pettifogging methods of dealing with the subject, or would his tendency be rather the other way?—Looking back on my experience at the University College, I should have thought the questions followed the system of teaching more than anything else. Where the professor was minute his questions were minute.

779. But the general tendency of these high class lectures, as you have already pointed out, is to enable the hearer of those lectures to deal in a very comprehensive way with the principles of law?—Yes.

780. So if you chose well your teacher you would have a man who would instruct his students in the broad and general principles of law, and would, I may presume in consequence of your last answer, accommodate the questions in examination to that mental attitude?—Yes, I think so.

781. In that respect, I suppose, I may say that there would be an advantage in having as an examiner a man who was accustomed to teach, and who had made upon him the demands that a teacher has made upon him in the ordinary course of his work?—That would make him much more valuable as an examiner.

782. So that upon the whole one might think a teacher accustomed to deal in the way you have described would be a man rather more than usually competent to examine upon the broad questions and general bearing of legal principles?—Yes.

783. So far then you would not be adverse to the influence of teachers in the settlement of curricula, and the conduct of examination?—No, not to their influence.

784. With respect to the degree to which teachers influence the curricula of the examinations at the London University, I think I may appeal to you as a Senator with some special knowledge upon the subject, do you know that one of the recent examiners to the University was Professor Ray Lankester?—Yes.

785. Are you aware that the curriculum was practically, at no very distant time (in his own subject of course I mean) settled by him?—No, I did not know it.

786. You have not seen Mr. Thiselton Dyer's letters on that subject?—No, I have not.

787. Are you also aware that his pupils at University College had a rather remarkable career of success in the Science examination at the University?—No, I am not aware.

788. You would not dispute, I suppose, that Professor Ray Lankester is one of the most distinguished, perhaps the most distinguished, natural science teacher of his day?—Yes, I know that.

789. Now to come to the question with respect to the practical experience of teaching. Having regard to the progress which is made not only in science but in literature, and in law, and every branch of human knowledge, is it the same thing, do you think, to have a man who has at some former period of his life had experience of teaching, as to have a man with recent experience of teaching. Would one be as valuable as the other?—It depends upon how long the former period is, but I should think that if the former period were four or five years, the former teaching would be better.

790. After that period you think the balance might change?—If it were a longer period. I do not wish to be fixed to four or five years, of course.

791. There or thereabouts?—The lapse of a few years, I think, would be beneficial, so far as I can form an opinion.

792. That, perhaps, would have the advantage of preventing too much stress being laid upon new and current theories?—Yes.

793. And would allow of the greater maturing of experience in the matters of examination and teaching?—Yes. There are new and current theories not only of knowledge but also of methods of teaching.

794. But you would still desire that there should be, what I will call, modern teaching, and you would not be content with what may be described on the other hand as ancient teaching?—No; I think modern teaching would be much better.

795. I do not want to take you through matters which have been already discussed, but with respect to the objections to what has been called the Senate's scheme, your objections to that seem to be on the whole, may I take it, much the same as your objections to the Gresham scheme. They are much the same in substance, are they not?—I should not have thought that was the result. My objections to the scheme are really to be read in that printed minority report, which I signed.

796. Then, to come to the Senate's scheme, may I take it that the substance of your objection to the Senate's scheme really was to the constitution—the method of re-constituting the Senate?—That was one.

797. Is not that substantially the whole of the objection?—No.

798. I want to see how far it is otherwise. With respect, now for instance, to the Matriculation Examination, you have read from the Calendar a regulation with respect to the Matriculation Examination to the effect that no other examination should be taken in lieu of it?—Yes.

799. You know that that is a regulation which depends entirely upon the will of the Senate, and it could be repealed, if the Senate wished, to-morrow?—Yes, I think that is so.

800. So that the non-repeal or alteration of that regulation depends entirely upon the Senate, in your view, remaining as it is now?—Yes.

801. And you anticipate therefore, that that might be altered by the reconstitution of the Senate on the lines of the Senate's scheme?—Well, it might be altered.

802. Or otherwise, what is your ground of alarm with respect to it?—I do not think the Senate's scheme caused me any alarm in that respect.

(*Professor Ramsay.*) Are you not thinking of the Draft Charter, which provide that you may take two years' course of study?

803. (*Mr. Anstie.*) No, I am not, at all. I am thinking of the Senate's scheme, which provides that the Senate may make certain arrangements with the colleges with respect to Matriculation Examinations. Is not that so, Mr. Busk?—It is a matter of confidence in the governing body.

804. The governing body is the Senate?—Yes.

805. Absolutely and exclusively the Senate?—So far as regards bye-laws, yes.

806. So far as regards anything in the examinations. What is there that escapes the jurisdiction of the Senate with respect to the regulation of the examination, in any part?—Nothing.

807, Then the Senate is the final authority and the sole authority in that matter?—Exactly so.

808. So that the Senate could at this moment alter any of the particulars referred to in their arrangements for examination?—It is technically in the power of the Senate to do so.

809. Then does it not come to this, that the objection to the Senate's scheme is an objection to the reconstitution of the Senate?—One objection.

810. But does not everything hang upon that?—No. The Senate's scheme hands over the final examinations for degrees to another body, or partly to another body, against the recommendation of the late Royal Commission, and against the evidence that Mr. Anstie gave to the late Royal Commission.

811. That is quite true. I see what it says?—It parts with the sole control.

812. Have you considered the effect of the arrangement by which the Senate is to have the power of settling the syllabuses or courses of instruction?—Yes.

813. You put in a paper, I think, in which a memorandum was contained, in which attention is drawn to that point. Could you tell me how you would deal with this question which was presented apparently (I know nothing more, of course) to the minds of the Senate. At page 49 of the pamphlet it says this:—"With respect "to the extension of what may be termed collegiate "privileges to the degrees of B.A. and B.Sc., its justi- "fication is to be found mainly in the admission of the "new and very important principle that those exami- "nations should be conducted upon syllabuses to be "arranged between the Senate and the colleges. No "such suggestion was before the Commissioners, and "until the suggestion was made the Senate did not "feel themselves justified in going so far beyond their "recommendations on this point." Do you know that as a matter of fact that suggestion came in the first instance from one of the petitioning colleges?—No; I do not know what the negotiations about the scheme were.

814. That, however, is a fact. There is this difference between the state of facts contemplated by the present scheme and the former state of facts, that the syllabus was to be settled by the Senate, and without a settlement by the Senate, no University privilege, could be given to any college?—No, but the colleges seemed to gain something. I am not surprised that the petitioning colleges asked for it, because they gained a voice.

815. But as a matter of fact the syllabus must be settled and passed by the Senate before the college in question can obtain any advantage under the scheme. That is so, is it not?—It must be arranged with the college, not settled by the Senate. I do not read that sentence so.

816. Accepted by the Senate?—"Arranged" is the language.

817. Does not that include the sanction of the Senate to the scheme?—Yes, but it does not mean that it is to stand over for the college to say what the syllabus should be. It is an arrangement.

818. Does it not mean that the Senate must accept as a proper syllabus and curriculum for study the syllabus on which the college is to act?—I do not think that that verb quite expresses the meaning of the sentence as it affects my mind.

819. But does it not as a matter of fact require that the Senate should recognise it as good. The Senate would have to agree it with the colleges, and it might, perhaps, think it would not be good, but the best possible to be got out of the colleges.

820. Could the college obtain the privilege given to it under that section without satisfying the Senate that the syllabus was up to what the Senate considered its proper standard?—You know a great deal more about the matter than I can possibly know, because the Senate did not consult Convocation.

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

821. Do not say that.—They did not consult with Convocation. But, so far as I have been able to gather from the language, this is a matter of arrangement or compromise.

822. Does no arrangement imply consent of both parties?—Yes, but perhaps reluctant on the part of one.

823. But suppose the Senate to be as trustworthy and competent a body as you would desire to see it, and as independent and powerful a body as you would desire to see it, would it not be able to settle the terms on which the college should have the advantage provided for it by that clause?—No; I cannot see how two parties could negotiate together upon equal terms, and one of those parties could be said to decide.

824. What I am pointing out to you is that they are not on equal terms, but that in order to enable the college to have the advantage for graduation purposes provided for in that clause, the college must have the syllabus which approves itself to the Senate. That being so, is it not in the power of the Senate, supposing it to be a perfectly independent Senate, to refuse those privileges until the college assents to the terms which the Senate prescribes. Is not that so, as a matter of law, may I put it, Mr. Busk?—Well, I am afraid that we must rather differ in the way we look at it. I do not think it is a matter of prescribing by one of these bodies to another; it is a matter of arrangement between them, as the memorandum of the Senate itself shows.

825. An arrangement between two parties implies that each one can prescribe the terms on which he will agree. He is not obliged to assent to the terms prescribed by the other side?—Quite so.

826. Then look at it in the light of a contract between two independent parties. If the Senate is independent, is it not able to require that the college, in order to obtain these privileges, shall come up to a standard which suits the Senate's views?—Yes, that it shall come up to such a standard as the Senate will be willing to come down to.

827. Then if you had confidence in the Senate, you would have no objection to allow that power to the Senate?—I think I should.

828. Even if you had perfect confidence in it?—Yes, I think so.

829. Can you explain that reasoning further. On what ground would it be, if the Senate were one that you had perfect confidence in?—It introduces the element of compromise to my mind altogether.

830. You think it would weaken the Senate?—Yes, I think it would weaken the Senate.

831. Then your view is that the Senate would not be so independent as you desired it should be?—Either the clause would be null and void and of no effect, or it would mean that the Senate should come down and come to an agreement with the colleges.

832. Then your objection to this clause is that it is either ineffectual, or that it would lead to dangerous consequences?—Yes, I think that is what it would come to.

833. But your fear of its leading to dangerous consequences rests upon your fear of the fragility of resolution in the Senate?—Yes, and the desire to please.

834. And the fragility and weakness result from the desire to please. Then practically it really does come, does it not, to an objection to the constitution or proposed reconstruction of the Senate. Given a Senate powerful and independent enough, and you would not fear; given a Senate not so powerful or so independent, and you would fear that it might yield to pressure?—Of course, I wish it to come to nothing. I wish the standard to be uniform.

835. I was not asking so much about your wishes as as your opinion upon this matter, and the result of your objection. Your objection really is that the Senate would not be so extremely powerful and independent as to resist the pressure. Is not that what it really comes to? Then with respect to the varying standard, does not that really turn upon the same point, the inability of the Senate to maintain an adequate standard of graduation?—We are hardly, I think, upon the same point, because it would seem to me that if the conditions of graduation are different, the standard cannot be identical.

836. I should like to ask you one or two questions about that question of identity of standard. Would you say that regarding the years from 1836 to this date the standard has been practically uniform for all graduates of the same degree?—No, it would be superhuman, but it has been very nearly uniform.

837. Having regard to the variety of examiners and their views, the difference of curricula from year to year and the changes which have been made by way of extension or diminution in the syllabus, it would be impossible to say that there would be anything like an exact uniformity of standard?—I think it has been wonderfully uniform, and I think that without changes in the curricula it would not have been uniform. Knowledge extends in different subjects, and as text-books have improved, as they have improved, and teaching has improved, as it has improved, it is much easier to come up to the standard and therefore the standard has to be raised in order to make it equally difficult.

838. I take it that the uniformity you stipulate for is rather qualitative than quantitative?—Qualitative.

839. Or rather relative than absolute?—Qualitative, but I should have said not relative.

840. Not relative you say?—No, if the taking of a degree in 1892 was equally difficult in 1852, I should call that an absolute standard. The standard is one of difficulty to the student.

841. I should like to ask you whether you consider it a good educational test that the matter should be one of equal difficulty. Is that a good educational test, perfect equality of difficulty?—I think so.

842. Then if you put a man under certain restrictive conditions which made it harder for him to pass an examination than another man you must give one man a harder examination and give another man a lighter one, because you had subjected him to these artificial restrictions, and that would be an absolute equality?—I do not know that I quite follow what the restrictive conditions would be.

843. For instance, they might consist of time; they might consist of study in certain very narrow limits; they might consist of study embracing certain peculiar and rather remote fields of knowledge; they might be varied in an infinity of ways. But your view is that what is desirable in an educational sense is, that there should be an equality of difficulty to the candidate rather than an equality of attainment in the examination?—Yes, if it could be possibly attained.

844. Is that an educational view?—Yes.

845. In what sense can it be called an educational view. In what sense would it tend to educational advantages, or to the higher attainments of the man if you take it merely as an equality of difficulty?—The highest point of education, surely, is perseverance and character.

846. That is a matter of will, not intellect?—That is what we test.

847. Not intellect?—Both.

848. Given the power to deal with the subject matter, you seek to test the perseverance which at last brings the candidate to a successful passage of the gate?—We test both.

849. But you seem rather inclined to give the preference to mere persistence and power of work?—Merely because, if I may so, I thought you were dwelling more than I can upon the exclusive necessity of a particular class of study.

850. Not exclusive. Then may I take it that your answer is that there should be tested in the examination a certain amount of power of work and perseverance of the candidate?—Certainly.

851. But, allowing for that, you would not object to the examination being conducted in such a mode as would allow of the candidate being tested in those ways which would show the possession by him of the largest intellectual attainments and the greatest power of dealing with the subject matter of the examination?—Certainly not. That is the most obvious use of the examination—to test knowledge.

852. Then, dealing with the latter, is it not possible that a teacher, teaching in the way which you have before described to us, might fit the candidate for surmounting that test of intellectual power and grasp of the subject, although he might not be put to such a feat of difficulty?—Yes.

853. Is it not possible that a person taught as you have suggested he should be taught, and in the way he has been taught by the Incorporated Law Society, would really have greater grasp of principle and power of dealing with legal subject matter than a man who has been put to the greater expenditure of will and perseverance in acquiring his knowledge at a number of different classes?—Yes, that is so.

854. The man who teaches is the man who would know his student's power of approximately dealing with the subject matter as he deals with it himself?—I should rather vary the verb, and say that he would put it in the student's power to obtain that grasp, because a great many students obtain nothing by lectures at all.

855. Or by reading?—Or by reading. It is, in some cases, a waste of time.

856. Suppose, if you like, an imaginary standard. You would not object to the variety of the examination when it rose above that; you would not object to its rising above that to any extent. If it does not fall below a certain standard you do not object to its rising beyond it?—Everyone who passes it will rise beyond it to various heights.

857. Your objection is not so much to the varying standard of the degree as to its being a variation which admits of its being depressed below a certain point?—That is the thing. You would not mark gold if it were alloyed beyond a certain point, but it might be finer than the marked standard.

858. Depression below a certain point is what you have in view rather than variation?—The steadfastness of the point below which the examination is not to fall. Want of variation in the minimum.

859. Beyond the minimum you do not care?—No. A person who passes it easily goes in for honours.

860. You would not object to any amount of variation above that minimum?—I meant variation by the candidate, not variation in the standard fixed by the University.

861. The variation you speak of is the variation of the minimum, is it not?—Yes, but that minimum ought to be fixed for all. There should not be a higher minimum for one person than for somebody else.

862. When you say "minimum," do you mean an educational minimum, or a minimum of mere intellectual labour. The two things strike me as distinct?—I think both have to be considered in fixing the curriculum.

863. There ought to be a certain amount of energetic work?—Yes.

864. But there ought also to be a certain amount of intellectual attainment?—Yes.

865. And you would combine those two?—Yes, I think I would combine those two.

866. Supposing those two were combined in a proper minimum, that is all you would care to have secured?—That seems to me to be the essential point.

867. Now to come to a different point. You say that the University, and I daresay you are right in what you say, pays its own way?—I said it with great diffidence, and I hoped that you would correct me if I were wrong. I looked round, hoping you would correct me with your additional knowledge if I were incorrect.

868. I should be sorry to contradict you. But let us assume that to be the case; do you think it a good test of the educational advantages of any particular establishment that it pays its way?—That was not my argument at all.

869. Then you do not think so?—I do not think it has anything to do with it, one way or the other.

870. An educational establishment which was dependent upon either funded resources or supplies by the Government, might occupy a much higher educational position than one which pays its way by the receipt of fees?—Yes. My answer had regard to the direct representation of the Crown on the Senate, and to nothing else.

871. With respect to the representation of the Crown, or that of Convocation, on the Senate, I do not think you look to it as being a reason why Convocation should be more represented, but why the Crown should be less represented?—I think there was a proportion fixed in 1858, which was based partly upon the amount of contribution fixed by the State, and partly upon Convocation, which was only one tenth the size it is now.

872. What is the inference you would draw, that the Crown should be less represented, or that the Convocation should be more represented?—I think the Crown wants less representation on account of the pecuniary aid being so much less. It does not exist at all now save in the shape of buildings. Now Convocation consists of a large number of middle aged men instead of a small body of young men.

873. With respect to payments, I understand your argument that the Crown contributing less should have less government. But is your argument that Convocation contributing more should have more?—In this way I think it is. If you do not have an external body governing, why should not the body govern itself. The body consists of the members of the Corporation, and the members of the Corporation are the Fellows and Graduates of the University.

874. May I take it that you look upon the position of the London University in this matter, as represented by Convocation, as being that of a corporation which has quasi private interests to conserve, and which ought to be master of its own destiny within its own doors?—I should like to leave out the question of private interests to conserve. It would govern itself by public duties.

875. Was it not founded with a view to promote the educational interests of this nation?—It was originally founded for the metropolis, and this was repeated in the Charter of 1858, and it was not till the Charter of 1863 that the United Kingdom was brought in.

876. But the educational interest was what it was designed to subserve rather than personal and private interests. Would you not think it should still subserve that interest rather than that any modification should be made in subserving those interests?—Certainly. They should be public interests.

877. Your view of the power of Convocation would depend entirely upon the view of its being able to conduce to the interest of public education?—That is so; and I may say that, although we have carefully not gone behind the report of the late Royal Commission, that is really the case. The evidence given before the late Royal Commission shows that on all these questions of reform it was Convocation which started the ball. Convocation seems to have proved itself a reforming body for a long series of years.

878. And continues so?—I can refer to the evidence you gave, Mr. Anstie, and the evidence Sir Philip Magnus gave, showing the details of how they originated with the Convocation.

879. The general effect was a desire on the part of Convocation to extend the educational benefit of the University?—Yes.

880. And that would be the desire of Convocation still?—That is so.

881. That being so, we come now to the more practical application of the question, which, if you will allow me, I should like to ask you one or two questions upon. Convocation, as you have already told us, is a large body of 3,354 members scattered through various parts of the United Kingdom, and even through various other parts of the British dominions?—Yes.

882. Is a body so constituted very well suited forthe purposes of administrative action?—No, I should not think it was.

883. There is one point I should like to ask your opinion upon. I observe that in the scheme, amongst other things, it is provided that Convocation representatives should be chosen by their respective Faculties. Would that have the effect of giving at once a more limited and a more intelligent selection of teaching representation?—Are these the members of the Council of Education, or the members of the Senate?

884. Both, especially the Council of Legal Education, which apparently by that scheme was the main moving body. It is page 241. "The Senators elected by "Convocation to be elected by members of Convocation "voting in their respective Faculties"?—Yes.

885. Then it is a little more specifically stated with respect to the Council. The representatives of Convocation to be members of Convocation, and to be elected by the members of Convocation voting in their respective Faculties. That principle, I observe, has been adopted by the Senate in their scheme laid before Convocation lately?—I believe that is so.

E. H. Bush, Esq., M.A., LL.B.

2 June 1892.

886. You would have no objection to that?—I personally objected to it. I voted against it on the Committee for the scheme of 1886.

887. May I ask on what ground?—Because I think the Faculties are likely to elect a person well known in the Faculty, and not a person of greatly predominant mind.

888. Then is it your view that the members of the three Faculties or departments which are not immediately conversant with any particular question are more likely to be cognisant of the educational claims of any candidate than that one Faculty which has the best reason to know him?—I think it very often would be the case, that lawyers would appoint a technical lawyer, and the medical men a successful medical man with a bedside manner, and so on, whereas the whole body, not excluding the Faculty in question of course, would be more likely to hit upon a really eminent man for the Senate.

889. Then this opens a new objection to the Senate's scheme—that this provision for the election of a person on the Senate is too limited?—This is my own opinion only. The view of Convocation is embodied in the scheme drawn up in 1886.

890. That is your opinion?—My opinion is in favour of electing the Council of Education by Faculties, but not the members of the Senate.

891. I think you have before you the Calendar of the University of London. Having regard to the Convocation members could you tell me how many of the Convocation representatives on the Senate have been teachers in a practical sense?—I really cannot tell you who are the Convocation representatives on the Senate, and, besides, this is an old Calendar. The list, I am sorry to say, is very different now, the deaths have been so numerous. I should think there have been five or six deaths since this time, if not more.

892. Not filled up by Convocation nominees?—No.

893. We are only concerned with Convocation nominees. You yourself are a teacher?—I am still. I am going to give a lecture this evening.

894. On law?—Yes, on law.

895. I do not think Mr. Smith Osler ever was?—No

896. How long was Sir George Johnson a teacher?—Many years.

897. Was Mr. Holt Hutton a teacher?—I do not think he ever was.

898. Mr. Fitch, I think, never was?—Never I think actually a teacher, but, of course, he is much connected with teaching. He is in the Education Department. He is one of the greatest authorities on Education in the country.

899. But he is not a teacher?—I do not think he ever taught, but I really do not know.

900. Was Sir George Buchanan ever a teacher?—I should think only professionally.

901. Except in the most limited sense perhaps I may be permitted to say I was never a teacher. As far as I know those are the Convocation representatives?—Sir Philip Magnus.

902. Was he ever a teacher?—Yes, I do not know how long. Sir Philip Magnus taught a great deal and Dr. Wilks.

903. How long is it since Dr. Wilks taught?—Up to 10 years ago, I am told.

904. I beg your pardon, Sir Albert Rollit is not a nominee of Convocation?—He is a Crown nominee.

905. The teaching contribution to the Senate by Convocation has not been great?—No. I doubt whether Convocation wishes to see teachers upon the Senate. But they wish to see them on the Council of Education.

906. They do not wish to see them on the Senate, you think?—I think they wish them to be consultative, not executive.

907. Your view with respect to the teachers and their function is that of being consultative?—Yes, that is my view.

908. Have you ever considered as a practical question whether teachers are likely to be willing to give much practical assistance to a body which regards them only as consultative, and not as regulative or administrative?—I should have thought they would.

909. Is that your experience on the Senate of the University of London?—I have never attended a meeting of the Senate of the University of London. I have not been summoned to one yet.

910. We know from evidence already given that they are consulted. But would you be able to say that, in your opinion, teachers consulted only in that way—in what I may call a casual occasional way—have a controlling voice, and are likely to give any mature and constant attention to the educational matters of the University?—I should have thought they would.

911. But you do not know as a matter of fact that they do?—How can I? I have no knowledge.

912. There is one point with regard to the institutions which I should like to ask you. There was a little misapprehension, perhaps, about the answer you gave to Bishop Barry. You said with respect to the Gresham Charter that there was no inclusion of other institutions than University College and King's College except by the will of the newly constituted council?—That is how I understood it shortly.

913. And I think it was suggested to you that there was a power on the part of those who were not allowed to come in to appeal to the Privy Council to obtain that admission?—Yes.

914. Is that the meaning, and does not Clause 26, which applies to the exclusion of colleges, only apply to colleges which are once in, and have by a resolution of council been excluded, who then have a power of appealing to the Privy Council against the decree of exclusion?—I understood him to be referring to the end of Clause 24, "In case the Council refuse any such "application, the college applying may appeal to Us in "Our Council against such refusal."

915. That you think implies the power of the Council then to compel the admission?—Of the Privy Council?

916. Yes?—I suppose so.

917. Is it not so stated?—If there is a power of appeal I should think appeals might be allowed as well as rejected.

918. When you spoke of the extension of University teaching what were the bodies which you had in view which you thought ought to be added to the existing bodies?—Primarily those which are mentioned in the late Commissioners' Report, and are not at present included.

919. What would they be?—The Government School of Science at South Kensington, the City and Guilds of the City of London Institute, the Birkbeck Institute, the City of London College, and Working Men's College, then the Ladies' Colleges, Queen's College, and Bedford College.

920. Would you put all those on the same footing?—No, I think not.

921. Have you any view as to the relative position they ought to occupy, the City and Guilds, for instance?—You leave out the School of Science at South Kensington as being a government department, I suppose?

922. No, I do not mean to leave that out. Is that one you desire to include?—Yes, certainly.

923. On the same footing?—So far as its own Faculty is concerned, yes.

924. Science?—Yes.

925. And the City and Guilds?—I think that Institute would probably be limited to science on account of its scientific laboratories at South Kensington.

926. Then what is the next?—The Birkbeck Institution.

927. Would you put that on the same footing?—I should certainly select, as has indeed been suggested by one of the Commissioners to-day, certain classes and teachers out of that. It is astonishing what the Birkbeck Institution has done.

928. I believe it is an institution which has sent up a number of candidates for the degrees?—It sent up three candidates for the M.A. in one year, and they all three passed.

929. That is an evening institution, I believe?—Yes; it is an evening institution.

930. You would desire to see that in some way recognised?—I should be very sorry to exclude a body which can produce such results as that.

931. You would desire to see their course of teaching recognised?—Yes.

932. What others?—The City of London College.

933. That would be on the same footing, I suppose?—I think one would have to select to a certain extent among these institutions.

934. What is the other you mentioned?—The Working Men's College.

935. We shall probably have evidence from those institutions, but that would illustrate what you mean by institutions which would be excluded from any participation in the advantages of the University?—Samples of them. I also wish to mention the denominational colleges in and around London, the training colleges, the ladies' colleges, and provincial schools. And I think we ought to be connected with the British Museum; there ought to be courses of archæology and natural history, and all those unrivalled libraries and collections ought to be made use of by students in a very much larger way than they are at present. It wants a far larger scheme than that suggested.

936. In Clause 4 of the petition of the two colleges I observe this statement:—"This district is in consequence "very largely resorted to by scholars, not only of your "Majesty's subjects, but of all nations, and is especi- "ally well adapted for the bringing together of those "who can impart knowledge and those who desire in- "struction." Having regard to that clause of the petition, would you consider the Charter granted in pursuance of it an adequate carrying out of the large expectations and views expressed in the petition?—Quite the reverse.

937. Might it possibly be said that it is the largest city in the world with the smallest University on this footing?—Yes. All the institutions are within a mile of each other that are included in that way, and it seems to me that the tuition of the University would have to be taken to all parts of the metropolis—both sides of the river.

938. Is it your view that any charter of this kind should provide (I do not use it in a technical sense), for an extension of University teaching, I do not say on the lines of the society known by that name, but that it should provide for other centres of University teaching?—Yes.

939. Having regard to a population of something like 5,000,000, and a diameter of something like 10 miles?—Yes. That is simply my own idea. I am not giving this officially. I cannot say what the view of Convocation may be.

940. It is one of your objections to the existing Charter?—Yes.

941. Is that what you meant by saying there was no provision for additional teaching?—Yes, it was that; that there was no necessary University teaching at all; that it was purely discretionary.

942. May I take your opinion upon this point? I observe that in the course of the evidence before the last Commission a question as to the University extension was raised, and an opinion was expressed by one of the witnesses that the professors of University College and King's College could do all the University teaching for the metropolis, including specifically what is called the University extension teaching. Is it your opinion that that would be practicable, having regard to the demands upon their time and strength?—No; I am sure it would not be practicable.

943. Would the regulation of that extension have been one of the function of the committee proposed to be constituted by the Senate's scheme for the regulation of London education?—You refer to that in Clause 13:—"There shall be a standing committee of the Senate "for the Faculties of Arts and Science in connexion "with the London constituent colleges in those Facul- "ties. This committee shall consist of the President "and Principal of University and King's Colleges, of "the fellows elected by these colleges, of the six fellows "elected by the London Faculties of Arts and Science, "and of 10 other fellows to be elected by the Senate "annually. The business of the committee shall be to "promote the organisation, improvement, and exten- "sion of University teaching in Arts and Science in and "for London, including the establishment of professor- "ships and teacherships in London"?—Yes.

944. Would that be one of the objects intended to be promoted by that clause?—Yes.

945. Is that provided for adequately in your view by the existing Charter?—No; I cannot see it provided for at all.

946. You would not, I suppose, claim for these comparatively small institutions, or minor institutions, the same rank that you would for colleges like those connected with the University of Cambridge?—No, certainly not.

947. But you think some provision ought to be made for their recognition and the increase in the value of their teaching?—Yes.

948. (*Mr. Rendall.*) One or two points with regard to the representation of Convocation. Is the feeling general that the membership in Convocation should be extended beyond the select graduates to all graduates after a certain term of two or three years from graduation?—I am afraid, I do not quite understand the question. All graduates come on Convocation.

949. I thought you said the master of arts and the doctors?—No, all graduates come on Convocation. If they be bachelors of laws and medicine, after two years, and bachelors of arts, science, and music after three years. They come on sooner if they take the higher degree in the interval.

950. Is the general feeling that the representation on the governing body should be proportioned to the growing number of Convocation; that as Convocation grows larger and larger it should more and more assume the direction of University affairs?—Yes, I think that is the view.

951. Can you tell me whether there is any University, either in or out of Great Britain, where a large part in the direction of affairs is entrusted to representatives of the graduates rather than to the teaching body?—I am afraid I do not know enough about the constitution of other Universities.

952. It is not practically so at Oxford or Cambridge. Is there any University whose experience would be valuable in this respect. You do not know?—No.

953. One other point about the teaching University. I gather that by a teaching University you really understand that a certain number of the members of the governing body should be or should have been teachers. That is really all that you insist upon as constituting a teaching University?—No; my view was that there ought to be a University professoriate.

954. And do you think that that professoriate should have a direct voice in the direction of studies and examinations?—It must, I think, have a direct voice in the conduct of the studies; but whether it should have a direct voice in the examinations, I think, is much more doubtful, although I may be allowed to add that the professoriate, which I am thinking of, would be rather a professoriate, which should follow a course that would be useful for research.

955. One question which Professor Ramsay pursued to some extent was this:—Would Convocation object to extending recognition to particular courses of study at particular institutions—University recognition?—No, I think not.

956. Do you think it would object to enforcing attendance upon any particular courses, at particular institutions?—Yes, I do.

957. They would recognise them, but not make attendance compulsory?—Yes, I think so.

958. Then, may I ask, what you would understand, or what Convocation would understand by recognition, what advantage it would carry?—Such institutions as were recognised by the University, by means of a Council of Education or some similar body, of which they would form part, would have a consultative voice in settling the curricula of the University.

959. I presume the feeling is that they would consider the enforcement of compulsory attendance irreconcileable with their idea of no disability by non-collegiate residence?—Yes, so far as I can gather.

960. Do Convocation object to the present recognition of a limited number of approved medical schools—I mean the present constitution of the London University, which accepts certain medical schools, and those only, and compels attendance at one or other of those schools?—I do not know whether there has been any movement for enlarging the list of those schools.

961. From time to time, of course, medical schools apply, and are accepted or rejected, as the case may be. A school at Edinburgh was accepted the year before last, or last year. Do they object to that on principle, limiting attendance at certain schools?—I think they would rather that was not there, but it is required by law, I think.

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

962. I think the University has full powers there. Is it not true that the powers rests with the University?—To recognise schools, I think.

963. To approve and to enforce attendances?—To approve of the schools; but I think the attendance was fixed by law.

(*Mr. Anstie.*) The Senate has the power. It rests with the Senate entirely.

(*Sir William Savory.*) You do not suppose that it is an arbitrary rejection?

(*Mr. Rendall.*) No; but I wished to know whether Convocation had any objection to that in the case of medicine.

(*Sir William Savory.*) It is founded upon the conditions and qualifications of the medical schools for teaching.

964. (*Mr. Rendall.*) I quite understand that, but it creates, from the point of view of Convocation, I understand, a certain disability, does it not, Mr. Busk?—It does.

965. And does Convocation object to that, or not?—I do not think they object. They consider it inevitable.

966. They would object to its extension to the Arts and Science Faculties?—I think so.

967. But they accept it as necessary in the case of medicine?—Yes, as inevitable, because the degree in medicine are a qualification to practise.

968. (*Professor Sidgwick.*) I think you said you were not intimately acquainted with the working of any other University?—Yes, that is so.

969. But, at any rate, I suppose you are aware of the general fact with regard to the English Universities, Scotch Universities, and German Universities, that although very different plans are adopted in each, the teaching body has a practically preponderant influence over the examinations?—Yes, I think that is so.

970. Suppose it to be granted that we are to have a University for London—a local institution for the Metropolis—in which the body of teachers in London, however organised, are allowed to exercise over the examinations a control broadly resembling that which is exercised in these various ways in these other Universities. Suppose that to be taken for granted, do you think it would be either wise or just to confide to such a body the duty at present filled, and I think by general agreement well filled, by the London University as an examining board for students in all parts of the Empire?—Yes, I should have thought so. I should have thought that would be a body well capable of examining for other parts of the Empire.*

971. But do you think that in relation to the provincial colleges or to the private teachers, who do not form a part of the teaching body, such an arrangement would be of an equitable kind. And I may also ask (it is not quite the same question), do you think it would be so regarded?—I think it might be made of an equitable kind. It seems to me there is great fear that it might be unjust, and, in answer to your second question, still greater fear that it might be regarded as being unjust. But I think it might be equitable, and it might possibly be made plainly equitable—recognisably equitable.

972. You may have read an article in the "Quarterly Review" for January 1887, which, while very strongly eulogistic of the University of London, expresses a very decided view of the opposite kind, arguing that the quasi-imperial character of the University of London and the impartiality upon which all the various institutions affected by it rely, would be impaired by any power given to the teaching bodies in the metropolis. Do you think that alarm is without foundation?—I think there are great difficulties, which would have to be surmounted in the framing of such a scheme.

973. But how can you conceive them surmounted? How is it possible to give a special control to a certain body of teachers in London over the examinations, without rendering it both in fact and still more in the belief of the students, more likely that the students who attend their lectures will attain a higher place in the examination, with an equal amount of industry on both sides, than the students who attend either the lectures of the provincial colleges or private tutors. Do you not conceive that it would in some degree be inevitably the case that these advantages would be given, and that in a still greater degree it would be widely believed to be the case?—I think it would be believed to be the case much more widely than it would be really the case. I have, of course, asked and obtained permission to keep back the points of our own scheme, and this rather falls into the suggestion we might make ourselves. But I think the main answer is what was mentioned just now; that if influence were given to a very high University professoriate, more founded for research than undergraduate teaching, it would go a long way towards meeting that difficulty.

974. Are you acquainted at all with the working of the University of Dublin, to which reference has been made?—I am afraid I know very little about it.

975. The experience of the University of Dublin would tend to show, with regard to those who would seek honours in the examinations conducted by a body under the influence of London teachers, that there would be a very strong tendency on the part of the abler students to resort to London and the provincial colleges would probably be alarmed at the prospect of losing students in that way. Do you think that that danger is one that might be met?—I think it might be met. It is a danger there is no doubt—a very great danger.

976. As I understand the scheme proposed will have that in view?—It has been one of the points that has been very much present to us.

977. There is only one more point. You made a very severe criticism of the Charter on the ground of the limitation to certain colleges. May I ask whether you had compared the regulation in the Gresham Charter with regard to the admission of colleges, with the proposal in the scheme that was brought before Convocation?—Yes.

978. If you have compared them, will you show me exactly how the Gresham Charter would have to be modified to bring it in harmony with the scheme proposed?—I think the great danger of the Gresham Charter as compared with the scheme of the Senate is that the body which is to admit new colleges is so different. Upon the Senate's scheme it is a Governing Body independently of the colleges, and here you would have certain colleges and teaching institutions largely represented on the Governing Body; and I cannot help thinking that they might wish to preserve to themselves the privileges which might induce people to come to their classes.

979. May I refer you to Clause 23 in the revised scheme laid before Convocation. It is at page 42:—"The Senate shall have power from time to time to "admit as London Constituent Colleges such other "colleges, in or near London, as (1) give academical "instruction upon a complete system and an adequate "scale in all the Faculties, and prepare, or are intended "to prepare, students for degrees in the University, or "(2) give instruction upon an adequate scale in one or "more, even though not in all, the Faculties, and "prepare, or are intended to prepare, students for "degrees in the University." You would consider, I suppose, that whatever body was entrusted with the admission of constituent colleges, ought to be very careful only to admit those who were able to give academical instruction upon an adequate scale?—Yes. I think that is a very important limitation.

980. Then your objection to the Charter would be removed or, at any rate, reduced, if there were some other body, less partial than you can conceive the Senate of the new University likely to be to which an appeal were given. As I understand in your view there is a danger that the council of the Gresham University, as proposed, would refuse to admit a college even though it had an adequate provision for academical teaching?—It is reported—I do know how much truth there is in it—that the desire was to get more students at these colleges, and that it was partly with this view that the petitioning Colleges sought the power to give their own students degrees; and if other colleges can come in, and their students also can get degrees at the Gresham University, there would not be the same reason for pupils to flock to the petitioning Colleges.

981. Do you conceive that the authorities of the University would really be able, in the face of public opinion, to refuse a college which had provided an equipment for complete academical instruction, and which had applied for admission, with the possibility of writing to the newspapers?—There must be a compliance with the conditions required under Clause 24 of the Draft Charter.

* MEMORANDUM received from the witness since giving evidence:—I did not understand this question when it was put by Mr. Sidgwick. My answers to this, and the subsequent questions, were directed simply to the feasibility of some one University undertaking the functions of an Imperial Examining University, and a Metropolitan Teaching University at the same time. The whole tenour of my evidence clearly shows that I do not approve of such a University as is indicated in Mr. Sidgwick's hypothesis.—E. H. B.

982. As regards that clause you do not, as I understand, object to the requisition that the college shall be one that gives instruction upon an adequate scale. That I understand is so?—Yes.

983. Then, I suppose, you would admit that the college ought to have the equipment for giving instruction on an adequate scale?—Yes; but, of course, that admits of a variety of opinions as to whether it is sufficient or not.

984. You will observe that in Clause 24 the new University would be not only under the influence of public opinion, but there also would be an appeal to the Privy Council?—Yes.

985. Do you think that this double control is not enough to obviate the danger, that when the University had once started the colleges which constituted it would form an exclusive trades union?—My experience as a lawyer is that an appeal on a question of discretion is rarely, if ever, successful. If you appeal on a question of law you may succeed, but the body to whom you appeal is very reluctant to interfere with the discretion of the body which has decided. I do not know whether that would apply here; but, if so, the Privy Council would not be likely to interfere with a discretionary exercise of the power by the council of the University.

986. I understand that your objection is not to the general rules laid down for the admission of the new colleges, but it is grounded on the idea that the discretion given would be wrongly used?—Those conditions are not mentioned at all in the scheme of the Senate.

987. Will you state what your precise objection is, so far as it is an objection to the conditions?—I should have thought that the condition which was laid down in the scheme of the Senate was sufficient, and that it was better for the University not to go into the other matters.

988. To impose no further conditions with regard to the colleges to be admitted?—I think they should judge of the results produced by the teaching institutions rather than the means by which those results are produced.

989. (*Lord Reay.*) Do I understand that you hold that the main object of the colleges in obtaining this Charter was rather to depress higher education than to raise the status of higher education in those colleges?—I hardly like to say that it was the avowed object, but I think it would be the result.

990. You think that would be the result, because the examinations would be too easy plan?—Yes; it seemed to me that otherwise people would not be tempted to take them. Otherwise why should not they take the examinations which exist in the London University and to which a certain prestige attaches? It would be years before a new University could get up the high character which the London University has obtained.

991. Therefore, if it could be shown that the object of this Charter, very far from being to lower the academic status of the colleges, and the status of higher education in general was to raise it, your objection would be to a great extent met?—That objection would in that case be to a great extent met.

992. With regard to terms of affiliation, you would affiliate University College and King's College on a different plan from that on which you would affiliate some of the other colleges. How would you make the distinction?—There would be more Faculties in those Colleges, and they would get more power than an institution which was only affiliated with one Faculty, and still more than an institution which was only affiliated as regards one or two classes.

993. You would put an institution in which all the professors had the status of University professors on a different footing from an institution of which all the teachers had not the status of University professors?—I should if the case occurs. Of course there are no University professors in London.

994. I have in view a reconstructed University, and start from the hypothesis that both University College and King's College have professors appointed with the sanction of the University. In that case your objection to recognise the two colleges disappears?—It would be gone, because the University would have the direct control over the teaching staff in that case.

995. That raises another issue. The first point is the appointment?—Yes.

996. It does not necessarily follow that the University should control professors whose appointment. They would be appointed as officers of the University, as I understand. You think it desirable that they should be officers of the University, and not officers of the college?—University professors, yes. This is my own personal opinion. I have had no time even to consult my colleagues.

997. I only ask for your personal opinion. You are not in favour of a University on what has been called the federal system, federating a number of institutions. You prefer to recognise the teaching staff of selected institutions as officers of the University?—I should prefer it in the metropolis. I can imagine that in other parts of the kingdom the federal system is more suitable; but here in the metropolis I should prefer a University system.

998. And you are prepared to give to a staff of University professors as distinguished from the teachers of other bodies which though recognised for special purposes would not entertain a University professorial staff, a full representation on the Senate of the new University?—That is going rather far.

999. You are not prepared to adopt that proposition?—I think we might go so far, even to-day at a short notice, as to say that we should be prepared to give them a representation. A "full" representation I should hardly like to say at the moment.

1000. Now I should like to illustrate the question of examinations by teachers in a concrete manner so as to be quite clear about your view. Let us assume that Sir Frederick Pollock, Mr. James Bryce, and Mr. Westlake are professors in the law Faculty. Sir Frederick Pollock gives lectures on Torts, Mr. Bryce gives lectures on the American Constitution, and Mr. Westlake gives lectures on the Law of Domicile and Nationality. Would you be prepared to say that greater guarantees would be given for the impartial results of the examinations if an outsider and not Sir Frederick Pollock examined his pupils on the Law of Torts; if an outsider and not Mr. Bryce examined his pupils on the principles of the American Constitution; and if an outsider and not Mr. Westlake examined his pupils on the Law of Domicile and Nationality?—I am distinctly of opinion that it would be better that the outsider should examine even with such eminent names as those.

1001. And you think it would be easy to find an outsider more competent to examine on the subjects than the gentlemen whose names I have given?—It is not exactly in that way that the question strikes me. It is that I should wish the University to examine not upon the lectures given by those very eminent men, and not upon the particular view of the subject which they take, but upon the subject generally; and it is for that purpose among others that I should wish to see an independent and separate mind in the examiner.

1002. That goes to the root of the whole subject, whether the guarantee against lowering of degrees is to found in the excellence of the teacher or in the standard of the examination adopted by an outside examiner? You wish to guard against the possibility of an eminent teacher giving his students his own view of the higher regions of a subject. The two dangers you contemplate are in opposite directions; one, that of depression, the other of specialisation?—I was not taking the former view at all upon this point, but I was taking the point that pushing into the higher regions means a particular view of the higher regions which necessarily, owing to the limitation of every mind, however grand it may be, is only a partial view. If you have the examining and the teaching from one man it is that man's view, however high it may be.

1003. But will it not be very difficult for an outsider, however competent that outsider may be, to test the scientific method applied to the investigation of legal or other problems by a teacher, when that method is not known to him?—Well, it becomes more difficult, but I presume that no one would wish that the attendance at the classes of the eminent professors you have named should be sufficient study for his pupils. It would be accompanied by reading and other investigation on the subject.

1004. Is not the object of a teaching University such as we are appointed here to consider to give the most advanced teaching, and is not the teacher's object to equip the students with a scientific method applicable to present and future investigation?—I beg your Lordship's pardon. If I may put it in the form of a

E. H. Busk, Esq., M.A., LL.B.

2 June 1892.

question I would prefer to do so. Is it not one of the functions of teaching to direct the studies outside the lectures? I should have thought it was one of the most useful things that the teacher could do, and it would do a great deal more for the student than he could get through in the time.

1005. My previous question did not exclude the postulate of private reading. I took that for granted?—Then do you not get the general knowledge of the subject which another man could examine in as well as the teacher?

1006. But was not your argument that unless a professor was kept in check by a system of outside examinations there was a danger that the professor would keep his classes on the lower plane?—That is another danger quite irrespective of the partial view of the subject which, I believe, would be only attained by the examiner and the professor being the same. I never meant to convey to the Commissioners that any individual professor would consciously lower it, but that the tendency of the whole thing would be in that direction.

1007. Would you explain what you mean by the tendency of the whole thing?—In my own small way I am exceedingly pained when any of my students fails to get through his examination.

1008. Do you not think that the tendency of the teaching bodies in London is to do their duty and to raise the status of education, and the status of the students who are sent up?—If that be so, I cannot see why they want a second examining board in London.

1009. Your only argument therefore is that there could be no other reason for the wish to establish a closer connection between those who teach and those who examine than to lower the degree?—No. But upon this particular Charter I see no extra tuition provided for—no additional co-ordination of teaching provided for — I see nothing but a new examining board created. I cannot see for what purpose it is created except to get a degree at a lower standard.

1010. You say there is no provision made for co-ordination of teaching. Is there anything in the Charter which excluded the possibility of making inter-collegiate arrangements between the colleges?—I thought it meant that the regular course of study must be at one college and not at more than one. I may have misapprehended the charter, but I thought it meant the attendance to be at University or at King's.

1011. Certainly not. One of the objects was to facilitate inter-collegiate arrangements, and thereby to increase the efficiency of the teaching in both colleges?—I am very sorry to have done it any injustice; it was quite unintentional. Then my remark upon that point would be simply limited to the fact that the inter-collegiate system is limited to those institutions and does not take in the other institutions.

1012. (*Mr. Anstie.*) There is a point which has just been put, and it is only fair to put the alternative view. Lord Reay put the question to you whether you could conceive any other object for a second examiner than to protect the examination against depression. I think it only fair to mention to you that we had a witness before us the other day who thought otherwise—that the field of study is wide and the examination narrow. It might very well be that in a particular course of instruction particular stress might, from circumstances of laboratory, or what not, be laid upon one particular branch of investigation or study, and that the external examiner, as we may call him, would afford a guarantee against that special branch of study being given undue prominence?—Yes.

1013. Would you admit or dispute that suggestion—that there might be a utility in the presence of the external examiner for that purpose, apart from the question of the degree?—Yes; but that utility is minimised when the examiner is appointed by a body on which the the teachers of the University predominate.

1014. That is something supplemental?—Yes, that is something supplemental.

1015. But as far as the system is concerned it would have the effect of preventing that particularisation of study being carried too far?—I think it would have that effect.

1016. (*Professor Ramsay.*) You used one very curious expression. You said that the presentation of a subject by the teacher practically makes his teaching a text book?—So far as instruction is limited to lectures it struck me in that way, but of course there is intercourse between a teacher and the student.

1017. The expression with regard to the text book struck me as remarkable. Are you not aware that from one end of the country to the other the great objection to the London University Examinations on the part of teachers is that practically all they have to do is to cram up their students from text books, at the expense of all freshness and originality in their treatment of their subjects?—That is what is said.

1018. (*Sir William Savory.*) It was originally agreed upon that a student has to study from his teacher. Is it not current knowledge that the best teaching is not given by the best men? Are the most learned men the best teachers?—Not by any means, always. The most learned men are not always the best instructors.

1019. What a teacher has to do surely is this. His first function is to give instruction to the pupils in the knowledge which is generally accepted on the subject?—With the lower students certainly that would be so, and not to enter on the doubtful points.

1020. Might not that great evil grow out of a teacher enforcing particular views on his pupil, might he not be led into eccentricities?—I have always thought that was an evil which ought to be checked by the independent examiner as much as possible.

1021. Just now a question was put to you about the higher regions of knowledge. Then another question was put about the too great particularization of knowledge. I expect those two questions really come to the same thing?—The higher regions, of course, would tend to be more and more particular.

1022. (*Mr. Anstie.*) I think probably you had the advantage of being at the University College during the tenure of office by the late Professor De Morgan?—Yes.

1023. I suppose he would be described as a remarkably original teacher?—Yes.

1024. Is it also a fact that he passed a remarkable number of pupils as senior wranglers at Cambridge?—Yes. Of course it was after residence at Cambridge. They had to go up to Cambridge for three or four years.

1025. I do not know whether you heard a statement by Professor Todhunter that, without mentioning names, there was a professor whose pupils he never could pass through the wranglerships, have you heard that statement?—Yes.

1026. (*Sir William Savory.*) Professor De Morgan was an accomplished mathematician?—Yes.

1027. And he was a very able man?—Yes.

1027*a*. I suppose Dr. Routh passed many more Senior Wranglers?—Yes.

1028. (*Mr. Palmer.*) I do not know whether your attention has been called to clause 27 of the Gresham Charter with regard to the district: "The London "District for the purposes of the University shall be "the administrative county of London, including the "county of the city of London." That is to say, limiting the teaching of the University in and for London to that particular district. Would you particularly object to that provision? I mean it is somewhat in contradistinction to the provincial colleges?—Yes, it is.

1029. Then there is clause 22 in the Old Commission Report, in which it is said that a University otherwise constituted would not be what is wanted; it would not be a teaching University in and for London?—That is the opinion of the late Royal Commission.

1030. Would you object to this limitation of the London district?—I think that if our present University undertook the work of a teaching University for London I should object to it. I should wish to see it extended to the provincial colleges. But if there is to be a new University, I can see nothing to object to in the limitation. I wish to say one word in justification of something that I said. The clause in the Draft Charter that misled me was this: "All persons, male "or female, who shall have pursued a regular course of "study in a college in the University," not in more than one.

1031. (*Lord Reay.*) A college does not exclude lectures in either?—The phrase a "regular course" led me to think that it meant in one only of the colleges.

Adjourned to Thursday next.

Third Day.

Thursday, 9th June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, M.A.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

WILLIAM JOB COLLINS, Esq., M.D., M.S., B.Sc., F.R.C.S., examined.

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

1032. (*Chairman.*) I think you were present the other day during the evidence of Mr. Busk?—Yes, my Lord.

1033. I will not trouble you to go over in detail all the grounds traversed by him unless you wish it, but do you, on the whole, agree with what he says?—I believe that Mr. Busk accurately represented the views and the policy of Convocation, so far as he and I are able, by the resolutions of Convocation and by our experience of it, to form an opinion of what those views and policy are.

1034. There were some points, I think, which he left for you to go into, which relate to medical matters?—I should like to say that I had the honour of giving evidence before the Commission in 1888. My evidence appears on page 134 of the report. (I then appeared with Sir Philip Magnus, Mr. Anstie, and Dr. Wood on behalf of Convocation) and to that evidence I still adhere; but I should desire to amplify it in the view of what has happened since. That evidence went to show that Convocation, as long back as 1878, had indicated a desire to bring the teachers and the examiners of the University of London more closely into touch with the Senate, while, in the words of a resolution or report of the Annual Committee of 1878, recognising the advantages of examinations conducted by a body independent of the teachers of the candidates for degrees, Convocation at that time urged upon the Senate the desirability of forming boards of studies to afford a medium of communication between the Senate, the examiners, and the teachers. Notwithstanding repeated representations to that effect, the Senate in 1882 reported against Boards of Examiners or representative Boards of Studies. Convocation, I think, has shown for many years past, a desire to meet all the legitimate demands of teachers for a larger voice in the affairs of the University, and was prepared therefore for the resolution which it carried in 1885, on the motion of Lord Justice Fry, that the objects of the association for promoting a teaching University for London would, if carried into effect in this University, add to its usefulness and importance. At that time it was feared, chiefly on account of speeches and articles by medical teachers, that the movement on foot might lead to a tendency to lower the standard of the medical degrees; and on May 13th, 1890, Convocation passed a resolution expressing its desire that the standard of attainment for degrees in Medicine and their scientific character should be maintained.

1035. There had been a great deal of opinion expressed out of doors that the medical degrees were rather severe, had there not?—That is so. It has been stated that the University of London does not perform its duties as regards the number of medical degrees which it gives. I should doubt whether the test of numbers is a very valuable test of the value of the work of the University in the matter of medical graduation; but in order to show what is the proportion of medical degrees given by the University as compared with the other English Universities I have had prepared, through the kindness of the Assistant Registrar of the General Medical Council, who is also Clerk of Convocation, two returns, the first showing the number of primary registrable medical qualifications (namely, M.B. degrees) granted by English Universities during the period 1887–91. (*For this return see Appendix No.* 1.)

1036. Showing that in every year there were more in London than in any other?—As a rule that was the case. But the total for the 15 years shows that while London gave 726 M.B. degrees, Oxford gave 130; Cambridge, 530; Durham, 436, and the Victoria University (which has been in operation only from 1888), 58.

1037. Is it the case that medical students who have done the whole of their preparatory work in London are very often, for the sake of getting a degree more easily, tempted to go to Durham and other Universities? Is there any truth in that?—It has been stated that there is that tendency for medical students to go, not perhaps so much to other English Universities as to some of the Scotch Universities.

1038. And is that the case, do you think, or not?—I believe that is the case; and if your Lordship will permit me I should like to draw attention to a remark that was made by Sir William Hamilton in his essay upon Universities, which appears as an appendix to his Discussions on Philosophy and Literature, in which he says this:—"It thus appears that the students "in medicine are attracted to Edinburgh chiefly by "the bribe of its degree; and that at least the English "candidates are almost exclusively those who are "either too illiterate to satisfy the liberal require-"ments even of the London University (for Oxford "and Cambridge are here out of the question) or pro-"fessionally too incompetent to stand the test of the "impartial examinations there organised."

1039. (*Professor Ramsay.*) Could you give me the date of that, please?—I do not mean to suggest that there has been no reform since that date which was 1853.

1040. That was before the medical Act?—Yes, but I believe there is a tendency in that direction at the present time.

1041. (*Chairman.*) You have not got in this paper the number in the Scotch Universities. It is confined to England?—Yes, that is confined to England, but it is a fact that the number of degrees in medicine given by the Edinburgh University is very large, and that many who take them have been educated in English schools.

1042. (*Rev. Canon Browne.*) Did not the Chairman's remark rather refer to the M.D. degree?—I have also a return of the M.D. degrees showing the number of M.D. degrees returned as registrable from each of the English Universities, 1877–1891. (*For this return see Appendix No.* 2.)

1043. (*Chairman.*) You have not got out the total?—I have not filled in the totals, because it was difficult to be sure that the figures with regard to Cambridge were perfectly reliable. So I was given to understand by the clerk who actually prepared them. The totals, for what they are worth, are these:—Oxford, 43, for the 15 years; Cambridge, 120, Durham, 279 (of which, I may say, 129 are those given to practitioners of 15 years' standing); London, 374, and Victoria, 2. I was simply putting these tables to show that if it be desired to institute a test of this character, while fully agreeing that the results should be weighed as well as counted, at any rate the results of London University, even in the way of numbers, can hardly be described, as they have sometimes been described, as "paltry."

1044. To return to what you were saying. You are strongly of opinion that whatever is done the value of the medical degree ought not to be altered, and that it ought not to be made any easier than it is now?—On that point I believe Convocation is quite clear, but I should rather like to make this reservation. I believe from the reports of the Annual Committee, which have been confirmed by Convocation that a very important distinction is drawn between what I may call *facilities*

W. J. Collins, Esq., M.D., M.S., B Sc., F.R.C.S.

9 June 1892.

for passing an examination and *facilities in* passing an examination. There are certain regulations requiring definite periods to elapse between certain examinations and other examinations, but I believe Convocation would be anxious to meet the wishes of medical students and medical teachers in the way of increasing facilities for passing examinations, by abolishing any restrictive regulations of that character. I believe Convocation has firmly made up its mind that it is not desirable to lower the standard or the scientific character of its medical degrees.

1045. What would be the facilities? Would it mean dividing the work in different periods, or what other facilities would there be?—It is a matter of common experience with medical teachers that many men come up to the medical schools without being aware of the Matriculation which is necessarily the first gate to all the degrees of London University, that, having neglected to take the Matriculation at the termination of their school career they find themselves handicapped in the later examinations which have to be passed at definite periods from that Matriculation—from the Preliminary Scientific which succeeds Matriculation. For instance, four years are required to elapse between the Preliminary Scientific and the second M.B. Examination; two years of which must elapse between the Preliminary Scientific and the First or Intermediate M.B. examination. In so far as those restrictions deter from graduation, I believe there is desire to relax them. Convocation expressed its desire that there should be two Preliminary Scientific Examinations each year, many years before the Senate saw its way to grant that request.

1046. If you could have a closer connexion between the teaching and the examining, so that one should lead up to the other that of itself, I suppose, would make the examinations easier to the student, would it not. I mean if he had been taught on the same principle and on the same lines on which he was to be examined?—I have no doubt that Convocation would desire in the Medical Faculty, equally with the other Faculties, that consultative and representative powers should be given to the medical teachers with a view of advising the Senate more closely than is done at present as to the course of medical graduation and medical instruction.

1047. Then I understand that you and a great portion of Convocation are in favour of the principle of establishing a closer connexion between teaching and examination, and that you are in favour of something in the nature of a teaching University?—I think I might say that the position of Convocation in the matter was largely the position of the Senate as shown in the letter of August 3rd, 1887, on page 238 of the last Commissioners' Report. That letter was based upon the petition of University and King's Colleges, and it pointed out that there was a movement on foot within the Senate, in which Convocation concurred to give the professors of associated colleges, or representatives of the professors, greater means of representing their views to the Senate, while at the same time it pointed out the importance of keeping the examiners entirely independent of the control of the teachers.

1048. So that the teachers should have no influence at all. I do not quite see how you establish a connexion between the teachers and the examiners, if you give the teachers no influence?—Powers of representation and powers of consultation, which, no doubt, would be largely influential with the Senate, but it apparently was the opinion of the Senate then, and I believe it is the opinion of Convocation now, that it would be undesirable to give at any rate a large direct representation to collegiate bodies, or to the professorial element upon the Senate of the University.

1049. And you would be very anxious that the teachers should not examine their own pupils?—No doubt a teacher examiner system as it has been termed, is one that does not commend itself to Convocation.

1050. I gather that, in the same way as Mr. Busk was, you are entirely opposed in every way to the scheme of the Gresham University?—I believe that Convocation is anxious to see all facilities given for increasing University teaching in the metropolis, but it distrusts, or at any rate it regards with jealously, the establishment of a second examining board in London. It believed that the form which that examining board took in the Gresham Charter was not calculated to promote higher education, nor was it such a scheme as was planned by the last Commission; and it was thought that it might interfere with the work that the present University is doing.

1051. Do you think that the Senate and Convocation are at all likely to agree to any alternative scheme in which the University of London should take a leading part?—In that connexion I should like to point out that at the time of the presentation of the petition of the University and King's Colleges, the Senate and Convocation were approaching the formation of a scheme which it was believed by both those bodies would meet the objections of the teachers without infringing the work that the present University is doing. On page 243 is a memorandum, which was the report of a special committee of the Senate handed in by Lord Justice Fry, which shows how far the deliberations of the Senate and Convocation had gone in the direction of supplying the want which they felt was established. The scheme numbered 15 in the Appendix, was the scheme prepared by the Senate as modified at the suggestion of a Committee of Convocation, and which was the subject of discussion at the moment when the last Commission was appointed.

1052. Would you say that any subsequent event has made you fancy that it is more unlikely that the University of London would produce a scheme than when the last Commission was sitting?—I think not, provided only that those points upon which Mr. Busk laid stress at the last sitting were kept steadily in view.

1053. The principal one being that those brought up in the different colleges should have no advantage whatever over the outsiders?—That was a very important point.

1054. That there was to be no distinction of race, sex, or creed, or whether they belonged to a college or not?—Yes.

1055. That was the important point?—Yes.

1056. Some people might think that went to the root of the whole thing, and that it would be impossible to have a teaching University in which those brought up at the Colleges had no advantage over the outside?—It may be so, and if that be the case I am afraid that Convocation would not be prepared to solve the problem before the Commission, but I believe that the scheme which was under consideration by Convocation and the Senate at the time the last Commission was appointed was the nearest approximation to a satisfactory solution of the question.

1057. That is Appendix No. 15?—Yes.

1058. Then, of course, it would be no use asking you any questions about the Charter before us, because you are opposed to it altogether, are you not?—Yes, especially in the Medical Faculty, I think it would be objectionable in several ways in addition to those to which Mr. Busk alluded last time.

1059. Would you like to state any particular objection with regard to the Medical Faculty that Mr. Busk did not state?—The proportion of representatives of medical schools upon the Senate, and the influence of the Medical Faculty generally appears to be larger than that contemplated either by the late Royal Commission or by any other scheme which has been under consideration. Then, if it be the idea of the new University or the Gresham University, that the teacher examiner system should obtain, I do not quite see how that can obtain in the Medical Faculty, because with 12 medical schools, it is hardly possible to see how there will be a teacher examiner along with an outside examiner, to examine all the candidates; and if that be the case, it is difficult to see that the medical degrees of the new University would differ very materially from the present medical degrees of the Univerity of London, except that they shall be given on a lower standard.

1060. There is nothing mentioned about the standard in the Charter. You have no reason to believe that the standard will be too low. It may be said in the evidence, but as far as the Charter is concerned, there is nothing laid down to regulate the value of the degree?—In that connexion I am bound to remember the remarks which were made by Sir George Young at the opening of the Westminster Hospital on October 1st last year, which are probably in the minds of the members of the Commission. He stated that, "It "would not be necessary for old students to begin with "the Matriculation, and so on through a long series of "examinations to the degree. The University would "consist of the various schools, and those students "whom the schools certified as being well and "thoroughly trained, might look forward to a degree "without postponing it to a time at which it would be "impossible for them to take it. Many details of "course remained to be worked out, among which was

" the question as to whether or not it would be desirable " to have a Bachelorship in Medicine or only a Doc- " torate. The University would stand in a somewhat " different position to the existing Universities, in that " its men would be required to have to provide themselves " with a license to practice before being admitted to the " examination for the degree; and it might fairly be " considered that the fact of their having obtained such " a license to practice from a body of such status ought " to entitle the holder to the degree *per saltum*." If that implies the omission of the M.B. Degree, which has hitherto been taken as connoting a certain amount of academical distinction, it seems to me that it will be difficult to distinguish the M.D. from the licenses of the Corporations.

1061. Is it usual in a Charter to lay down lines on which a degree has to be given. It is generally left to the University, is it not?—Yes, no doubt, my Lord, but in the absence of definition in the Charter, one can look only to the intentions of those who are largely responsible for the movement in favour of such a University. I may say that the standard of the University of London is not fixed by any Charter. It is fixed partly by tradition, partly by continuity of examiners, and largely it has arisen as a call from without. It has met with a response, and the statistics of the University show, that in spite of the high standard of the degrees, there is a great demand for the honours which the University bestows. I have before me statistics from the year 1838, and the last year's entrances for Matriculation are larger than those in any previous year. In 1891 there were 2,889 candidates, and I hear that the entrances for this June Matriculation are again larger than ever. That obtains with most of the Intermediate Examinations, and with the Pass Examinations in most of the Faculties, in spite of the high standard of the degree. There is at any rate a great demand for the degrees of the University of London as they are. I instituted a comparison, merely for my own information between the number of students going up for Matriculation at the University of London, and the number of students attending University and King's Colleges. Those figures were given in the last Commission Report for King's College on page 231, and for University College on page 216, and it appeared that the abolition of the requirement of certificates from affiliated colleges in the year 1858 by the University of London did not operate detrimentally as regards numbers upon either King's College or University College, and I find that from the year 1879 onwards, while the candidates coming to London University have enormously increased, (from something a little over 1,400 to something over 2,800), the students attending University and King's Colleges have hardly increased at all, but in the later years, and in certain Faculties especially, have rather declined. That (*handing a diagram to the Chairman*) merely represents diagramatically the result (for this diagram *see* Appendix No. 3.) It therefore appears to me that it is not fair to say that there is no demand for the examinations of the London University as they are, and it would perhaps be more difficult to establish the claims of University and King's Colleges at the present time to be flourishing institutions.

1062. Do you think anything could be put in the Charter to ensure that the degree should not be made unduly easy of attainment? Is there anything of that kind that you can suggest?—I think the character of the degrees must always follow the composition of the governing body.

1063. Why do you think the fact of the medical profession being very strongly represented on the governing body would tend to make medical degrees easier? Is it that you think that the medical men concerned in the government of the University would be anxious that a larger number of students should gain a degree?—I am afraid when I take into consideration the statements that have been made by members of the Committee of the British Medical Association and by several medical teachers before the last Commission, and by Sir George Young and Mr. Erichsen, that there is a desire for a lower degree in London—considerably lower—than that which is given by the present University of London.

1064. You think that each of the 10 representatives on the Council of the London Medical Schools would advocate the degree being made unnecessarily easy, or the representatives of the Medical Faculty? Would they be anxious to degrade the degree practically?—Ten of the representatives would be of course representatives of the medical schools other than those of the University and King's Colleges, and two would represent those of University and King's.

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

1065. You think they would not wish to keep up the degree?—I can only gather from the opinions of responsible medical teachers that they do desire that there should be a lower degree; and it does seem to me that there is a tendency for the degree to approximate to the examinations given by the Corporations—the Colleges of Physicians and Surgeons—to the M.R.C.S. and the L.R.C.P. Whether it is desirable or not that that should be the case is of course a matter for discussion, but at any rate it would give a title which has usually implied academical distinction as the result of an examination, to that which has hitherto been regarded only as a professional mark or a professional license. Medicine is the only Faculty in which there appears to be a demand by those who have passed a mere qualifying examination for the highest academical title. No doubt the trouble only arises from the ambiguity of the title of "Doctor." It implies a profession as well as an academical distinction.

1066. Then one of your objections to this new scheme is that you think it would make the medical degree too easy. Is there any other particular objection you would like to state?—I think most of the other objections, to the Gresham Charter in particular, have been fully dealt with by Mr. Busk, so I need not trouble the Commission further in that direction.

1067. Is there any point on which I have not questioned you with regard to which you would like to state anything or give any information to the Commission?—I should like to say, as one who has been engaged as a teacher of anatomy in a large medical school, that we always found that the London University men were, as a rule, the most industrious and the best students; and I believe myself that, given only a good primary education and a man of average ability, with, perhaps, a little more than average industry, he might obtain the M.B. and M.D. of London University; and for myself I should be glad to see a much larger proportion of medical students take the degrees of the University of London. I believe that increased facilities for taking that degree without infringing the standard, would induce a larger number to come to the University of London.

1068. Supposing this new University to be established, would it injure the London University to any great extent?—I rather gather from the report of the last Commission that that was the fear of the Commissioners. That is contained in Clause 16.

1069. You still have a large field—all the private students—and you would have the whole of England, who have nothing to do with London, who would still come to you, and if your degree was still very valuable and more valuable than anything which would be given by this new body, you would still have a number of people anxious to take it?—I believe that in view of the good work that the London University has done in raising the standard of medical examination it would be far better either that another University should be established, or that the University of London should cease to be, rather than that the medical standard of its degree should be lowered.

1070. But this would not be anything like knocking the London University on the head. It would only have a very small effect in diminishing its popularity, would it?—The Medical Faculty has been regarded as one of the most distinguished, and I should be sorry that medical students in London should be largely induced to go to another London University for a lower grade degree than that which we give. I am afraid that would not tend in the direction of raising medical education. Much has been said with regard to the tendency of the syllabuses of London University to narrow the range of teaching. I should like to say that in the Medical Faculty that remark seems hardly to apply. So far from causing the attention of the student to diverge from his studies I think that so far the Preliminary Scientific Examination has wisely directed the studies of intending medical graduates into scientific channels. Had it not been for the Preliminary Scientific Examination of the University of London, and the examinations in chemistry, physics, and biology, there would probably have been no scientific teaching, or scientific teaching of a very rudimentary character, in some, at any rate, of the medical schools of London. And as to the syllabuses narrowing the area of study or teaching, it seems to me in some cases to err rather on the side of width than

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

narrowness. For instance, in the Intermediate M.B. Examination I think that the only indication that is given is:—Anatomy, Physiology and Histology, a description which would surely be wide enough for any teacher; in the Pass M.B. Examination, Surgery, Medicine, Obstetric Medicine, and Forensic Medicine, without specifying any definite portions or courses. Then I should like to say that so far as there has been any medical grievance it does not arise within the University of London itself. The Medical Faculty as regards degrees is practically symmetrical with the other Faculties. It is not easier, as far as I can see, to graduate in science than in medicine, or in medicine than in science, but there is a symmetry of standard obtaining at present, and I should be sorry to see the Medical Faculty to be the first to lower the standard which obtains all round. I might add that although it is true that there is no organic connexion between University and King's Colleges, and the other medical schools on the one hand, and the Senate of the University on the other, yet the examiners are, as a rule, chosen (as regards the Medical Faculty at any rate) from the teachers of the medical schools in London, and University and King's certainly as a rule have a large share in the number. For instance, in the Calendar for 1891 I find that of the examiners for medicine, surgery, physiology, obstetrics, materia medica, and forensic medicine, for which there are 14 examiners in all, six are from University and King's Colleges.

1071. You wish to say that yours is to a certain extent a teaching University now?—At any rate the claims of London teachers are in no sense neglected in the way of examinerships.

1072. (*Lord Reay.*) You have said that at present there is no organic connexion between medical schools. Do you wish to see such a connexion established?—And the Senate of the University of London?

1073. And the Senate of a University?—Not by direct representation upon the Senate, or at any rate not so as to give a preponderating voice to the teachers. That, I take it, is the view of Convocation.

1074. Do you wish what are called inter-collegiate arrangements to be made between the medical schools?—I think it might be advantageous. There would be difficulties in the way of mutual jealousies in the matter. As a rule, each medical school is complete in itself, and I should imagine there might be jealousies arising from any inter-collegiate system.

1075. You say, "as a rule." Then there are exceptions?—I believe that some medical schools have less good science teaching than others, and would be prepared for an arrangement with South Kensington or elsewhere, so that the science teaching might be done there. But that is not the case with St. Bartholomew's and some others.

1076. Do you consider the medical schools equally efficient, as regards the medical teaching?—All the medical teachers in all the medical schools are in the first rank of physicians and surgeons.

1077. Therefore, with regard to medical teaching in London, you do not think any reform or improvement is required?—I have suggested reforms which I think are required if the University of London continues to be the only degree-giving body, which I hope would operate in increasing the facilities for graduation given in the London University.

1078. I am not alluding to graduation. I only want to have your opinion on the quality of the teachers and the teaching apart from the degree?—I believe that the teaching in the London medical schools at the present time is of the very first order, and I do not see that either the Gresham University Charter or the scheme which was presented by our Senate would improve the medical teaching in London.

1079. That includes teaching at University and King's Colleges?—I should speak guardedly, of course, of schools with which I have not been connected.

1080. You would not consider the teaching was inferior to other schools?—I believe the science teaching at University College is certainly above the average. The medical teaching is of the first rank undoubtedly.

1081. At University College?—Certainly.

1082. And at King's College too?—No doubt.

1083. Then the evil which at present exists is that with this excellent teaching the students who can enjoy and are enjoying that teaching go in search of degrees elsewhere?—That is a fact.

1084. How do you propose to meet that difficulty?—I should have been glad to see higher standards required in those places whither the candidates go.

1085. Levelling up the standards elsewhere to the existing standard of the London University?—For obtaining an academical distinction, but not for a professional qualification.

1086. Therefore you are in favour of discriminating between those students who aim at obtaining academical distinction and those students who are only in search of a professional qualification?—I should be glad if all could be placed in the former category, but I am afraid, looking to the necessities of the public and to the men who come to our medical schools at present, it is impossible.

1087. Are you in favour of that professional qualification being granted by a University authority instead of by outside bodies?—No, I should demur to that.

1088. Why?—Because, unless our notions of a University are entirely altered to include certificates for technical instruction and things of that kind, I should think it was a departure in the Medical Faculty which had no analogy in the other Faculties.

1089. Therefore what you call technical attainments should not be tested by examining bodies of a University?—They have not been so at present, but speaking as one who is interested in technical education, I should be quite prepared to welcome some scheme in which that might be incorporated.

1090. I was alluding to what you call the technical part of medical education, and to students who attend the medical schools. That is, although these too are educated, as a rule, in the same medical schools where the others are educated?—No doubt they obtain their clinical instruction in the same places.

1091. And you would not be in favour of whatever attainments they required for the professional qualification being tested by the University?—I should have no objection to its being tested; I should regard it as an anomaly that they should receive the highest academical distinction.

1092. I carefully guarded against that. I asked you whether you objected to the University giving a qualification for professional purposes only?—At present that work has been done by the Royal Colleges of Physicians and Surgeons, and done well, and, unless there is some strong argument in favour of it, I should not be disposed to alter the arrangement.

1093. Therefore as a matter of fact you would prefer the existing *status quo*, and you are not in favour of any other change than what you would call increased facilities for passing an examination being given by the University?—In regard to the Medical Faculty, and in view of what I have stated, yes.

1094. (*Professor Sidgwick.*) I understand that you fully admit the force of the evidence that, though there are unrivalled opportunities for learning in London, they are not taken advantage of to such an extent as would be the case, in consequence of the students leaving London to go to other Universities, and in particular to Edinburgh, to obtain the M.D. degree?—That is so. I have always felt that the unrivalled opportunities in London might fairly be met by a more than average severe examination.

1095. As a matter of fact with regard to the effect described by Sir Andrew Clark, whose evidence no doubt you have read, so far as the facts go, you do not deny that the enormous proportion of medical degrees given by Scotch Universities as compared with those given London, is an indication of the fact that students are drawn from London to those other places, though, for the sake of their education, it is in no way desirable?—There is no doubt whatever that a number of medical students from London go to Edinburgh to graduate. It is also a fact that many students entering in Dublin go to Edinburgh to graduate.

1096. As I understood you, you said to Lord Reay that a change should be made in raising the standard of the University of Edinburgh rather than by lowering the standard of the University of London?—I am afraid there is a tendency to competition downwards at present.

1097. Do you consider it within the range of probability that the evil of which you have indicated the existence will be remedied in the way you propose?—I suppose it would be an exceedingly difficult thing to accomplish.

1098. That is all I wanted to ask with regard to that. Then with regard to the general question of the relations of the examining body to the teachers you are, I presume, acquainted with the systems of other Universities in England and abroad?—I have some knowledge.

1099. I suppose we may take it as admitted that, in spite of the great differences that exist, when we compare, for instance, the older English Universities with the Scotch or the German Universities, the general characteristic of a University is that teachers do exercise important control over the examinations for the degrees?—I believe that is the case.

1100. If I understood you rightly, you think that the Convocation of the University of London is opposed to any system which would give a particular body of teachers the kind or the degree of control that teachers exercise over examinations elsewhere?—Convocation would object to surrender either the open character of its degrees to all comers, or the independent examiner principle, or the high standard of its degrees.

1101. I am not speaking now of the standard; I am assuming that we do establish a body of teachers exercising control over examinations similar to that which is exercised in almost all other Universities; and asking whether it would be desirable in your view, or so far as you know, in the view of Convocation, to assign to such a body the duty at present fulfilled by the London University as an examining board for students in all parts of the empire. You do not think this would be wise or equitable?—It appears to me the difficulty immediately arises when you discuss the constitution of the Senate with regard to the body in question, if you give that direct representation to the metropolitan colleges you immediately interfere, or it would tend to interfere, with the provincial or imperial aspect of the University, which is important because of the large proportion of students we get from outside London.

1102. Then in your view it is best that the impartiality of the existing University should be maintained whatever else you do?—That is, I believe, the view of Convocation, and it is certainly mine.

1103. (*Rev. Canon Browne.*) So far as candidates for the M.B. and the M.D. are concerned, I suppose there is no such a thing as a non-collegiate student?—No. They must have pursued their education in recognised medical schools. Those recognised medical schools are not confined to London, of course.

1104. So that Mr. Busk's fundamental principle, so far as that is concerned, applies rather to Arts and Science than to Medicine?—No doubt. The Medical Faculty of course differs in that the degree was by a special Act of Parliament in 1856 made a qualification to practise as well as an academical distinction.

1105. Then with regard to the other subject. I was not here when Mr. Busk's evidence was finished, but would the fundamental principle be met by candidates being examined on identically the same syllabus wherever they came from, the same paper and the same syllabus?—Do you mean the final examination and the intermediate?

1106. I am speaking with regard to the difference between the collegiate and non-collegiate students?—I believe—I speak doubtfully—that Convocation would be prepared to accept a scheme which retained the final examination in the hands of the University by independent examiners. The intermediate examinations were instituted in 1858 or shortly afterwards as a result of the abolition of affiliation, and to that extent Convocation might agree as the former Commission reported, that the intermediate examinations should be placed largely in the hands of the colleges, but retaining the finals in independent hands for all students whether collegiate or non-collegiate.

1107. What I was anxious to arrive at was how it can be secured that the collegiate student is not to have an advantage in the final examination as compared with the non-collegiate, because that is the fundamental principle?—It is.

1108. How is that to be secured in the examination?—In the final examination, do you mean?

1109. In any examination at all where you have a non-collegiate and a collegiate student. How is it to be ensured that there is no advantage given to the collegiate student?—Only by securing the independence of the examiners, I apprehend.

1110. So that if they are examined on one and the same syllabus and by the same independent examiners that is all that is meant?—Yes, that is all that is meant. Fully understanding that in that examination to which you refer, whether it be the final or any other, nothing is accepted except the knowledge which the candidate shows in the examination room.

1111. Any other guarantee would mean that you must examine up to less than the best standard for the sake of the non-collegiate student?—Perhaps.

1112. I do not see any other remedy you could apply. That would be a remedy you would not wish to apply?—I do not see why it should necessarily be a lower standard for the non-collegiate student.

1113. I do not see how you are to guard his interests?—I do not think the non-collegiate student requires anything in that direction. Many of our highest students at the London University have obtained their knowledge by private study.

1114. We are looking to the future. Mr. Busk's fundamental principle is maintained by having independent examiners?—Yes, that we both agree upon.

1115. When you are examining in anatomy—take that as an instance—have your candidates no possible hint except by previous papers what course the examination will take?—None whatever except the name of the examiner, if that is any indication.

1116. (*Professor Sanderson.*) You spoke just now of the teaching being of the first order, and of the teaching being unrivalled. Do you mean unrivalled as compared with the different schools in London, or unrivalled as compared with teaching of science, for instance, at Oxford or Cambridge, or the German Universities?—I do not mean to imply for one moment that the science teaching at Oxford and Cambridge is anything other than of the first rank, and quite equal to the teaching in London.

1117. You spoke of the London teaching of science, as at present existing in the colleges and medical schools, as being unrivalled, and I think also as being of the first order. The question I want to ask you is in what sense you used those expressions?—I did not use the expression in any sense as implying that the teaching in London was superior to that obtaining in other Universities, English and foreign, but that it was unsurpassed—that there was as good to be got in London as anywhere. That is what I meant.

1118. Then, in point of fact, you think there is nothing required in order to improve the teaching in London except to develop the system of examination of the University of London so as to induce a larger number of candidates to offer themselves?—In answering that question I should like to bear in mind that in all schemes of Convocation there has been a desire expressed for the establishment of professorial or University lectureships on certain higher subjects, possibly for post-graduate students — subjects which are not perhaps dealt with at present in collegiate lectureship—somewhat after the fashion of the lectures given by the Professor Superintendent of the Brown Institution.

1119. That is all you would do at present for the improvement of teaching in London?—It is more than I see guaranteed in the scheme of the Gresham Charter.

1120. (*Mr. Rendall.*) With regard to securing an identity of standard in the examinations, I should like to know on what you think the identity of standard rests?—No doubt the identity is not absolute indentity; there must be some individual variation, but, as far as possible, the standard is maintained the same, I believe, by a schedule which is given to the examiners of the University of London, in which the practice is explained to them, and each examiner is instructed that he is individually and jointly responsible for each and every question; and, inasmuch as only one examiner is

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

appointed fresh at one time, the other examiner to some extent secures continuity with the past.

1121. In the scheme which was approved by Convocation in February 1891, great stress is laid upon an examination being conducted upon syllabuses arranged between the Senate and the colleges. Do you think identity of standard rests upon identity of syllabus, or rather upon the identity of systems and proportions of marks required at the various stages of examination?—I am afraid not. I believe that scheme was largely objected to in Convocation on that account.

1122. Is it usual to have further guarantees, definite standards, for instance, required for the different divisions, or for a pass standard?—There are identical standards for the University of London.

1123. And to secure identity where the examinations differ, it would be necessary to have some standard of marks, or some identity of syllabus?—It seems to me that it would.

1124. You apprehend, I think, some danger of the lowering of degrees by the action of the Gresham University Charter. Would the lowering of the medical degree affect the standard of other Universities?—I should think it must do so.

1125. Would it be possible for the University of London to maintain a higher standard side by side with the Gresham University admitting a lower standard?—That is problematical. I should think it might, but it would probably be accompanied by a reduction of the number of its graduates.

1126. Do you think the existing standards for the M.D. degree differ at all widely from the tests of the Conjoint Board examination?—I have no doubt that they do.

1127. Do you think that the general public makes any distinction between the values of different M.D. degrees, I mean degrees obtained at different Universities?—Not much, but I think there is more discrimination than there was.

1128. Do you think then there would be a tendency on the whole to seek the lower degree, or do you think this discrimination would suffice to prevent that danger?—I think the discrimination would be inadequate to meet that danger. A large section of the public no doubt think that "M.D." connotes one and the same thing in all cases.

1129. A lower Gresham degree then in that case would tend to act on the Victoria, Edinburgh, Glasgow, and such other degrees?—It must affect the whole market of degrees, I should think.

1130. You were asked about the teaching of the medical schools; whether at the different medical schools constituted as colleges there was efficient teaching throughout. I think your reply was that the medical teachers were in the first rank of medicine and surgery. Do you think it would be equally true to say that the scientific teaching in each of those schools is efficient, or are you laying stress on the word "medical"?—I laid stress on the word "medical," and I did so intentionally, because in some of the smaller schools, and in those which have recently introduced a scientific side, I think it would not be unfair to say that the science teaching is not all of the same standard.

1131. Could all at present give fully the efficient teaching in the scientific and cultural subjects of the London M.D.?—I speak without full information, but I should imagine that the laboratory accommodation is restricted in some of the smaller schools.

1132. In such schools would it tend to create any dissatisfaction to exclude or minimise the importance of such subjects in the London M.D. degree?—I think it might tend in that direction.

1133. (*Mr. Anstie.*) I understood you not to disapprove, but rather to approve the practice of appointing teachers as examiners?—It seems to me inevitable.

1134. You gave one list comprising teachers at University College and King's College. I have here a list of the whole of the examiners in the 1891–92 Calendar of the London University, and I find that there are 52 examiners; that 26 at least, are teachers; and I think another two may be added though not so described, making 28 or 26 at least. That would be half of the whole number?—Yes.

1135. How under these circumstances, do you guarantee that the persons attending the teaching of those examiners will be in no better position than the others?—I suppose it is impossible to guarantee it with scientific precision, but it is the desire to avoid the chance of a teacher favourably considering the claims of his own students as far as possible, and I believe that the danger of the teacher examiner system would be that it would emphasise the danger that we apprehend, and which we desire so make exceptional, and to exclude as far as possible.

1136. Then you do not intend to give anything like an absolute guarantee that there should be no advantage obtained by one student over another, in respect of his having attended the course of instruction given by an examiner?—It arises out of the inevitability of an examiner being a teacher that scientific precision in such a respect cannot be guaranteed, but it is the desire of Convocation not to encourage that.

1137. Still you cannot get rid of it?—I may mention that at the Royal College of Surgeons the practice is, when a student presents himself for examination to an examiner who has been his teacher for the examiner under those circumstances to hand him over to the other examiner who is sitting with him.

1138. That would be with respect to *vivâ voce* examinations?—Certainly, and with regard to the written examination papers, except by idendification of the handwriting, it would not be known whose paper any particular one was.

1139. The same rule applies I believe with respect to *vivâ voce* examinations at Oxford?—No doubt it is a good rule.

1140. But with respect to the papers it would be impossible to adopt any such system as that. You could not have a paper absolutely set by somebody who was not a teacher of the candidate?—It occurs to me that the practice of the College of Surgeons might be more closely followed by the University of London, if there were more than two examiners in any particular case.

1141. Then your plan would invove the multiplication of examiners?—That I only suggest by the way, I am not sure that it is a feasible plan.

1142. But how would you meet the difficulty if examinations were conducted as far as writing is concerned by numbers, and not by names?—Of course they are conducted by numbers.

1143. How then would you secure that the candidate shall not have a paper set by his teacher?—Because in the schedule given to the examiners by the Senate each examiner is made responsible for all the questions, and I believe that the paper being used in the examination is communicated either to a Standing Committee or to some representative upon the Senate to pass the paper in the first instance.

1144. That does not meet my point. My difficulty is how are you to secure that the paper which shall have the flavour of the instruction in it shall not be taken by the student of the examiner who sets it?—I suppose one must trust largely to the good sense of the examiner and the good sense with which the Senate chooses its examiners.

1145. It would turn upon the integrity of the University examiner, but you cannot secure that there should be no such advantage on the part of the candidate?—You cannot guarantee it with scientific precision, I admit.

1146. Or anything approaching scientific precision?—I believe largely the examinations conducted at the University of London are impersonal.

1147. You have examined for the London University I daresay?—No, I have not.

1148. But no doubt you have examined for other bodies?—I have examined in connexion with my teaching at the medical school.

1149. You would not be surprised, I suppose, to find that a book might determine the course of the answers of a student?—No doubt that might be so. It would be less likely in the Faculty with which I have more particular acquaintance.

1150. Less likely in medicine than in some others?—I should think so.

1151. You would not be surprised to know that that was the case in other examinations?—No doubt there are

examiners with strong individualities and those may to some extent, be reflected in their questions.

1152. I am speaking of text-books. Supposing a text-book had been the peculiar study of a candidate and the questions were put, I will not say by the author of the text-book, but by someone who thought with the author of the text-book, and who was accustomed to use his work, would not that be in favour of the candidate?—It seems to me to be an argument for an impartial body deciding upon sylabuses rather than leaving a teacher to determine his own particular view of the subject which he teaches.

1153. The case I have put would exist, would it not? A student might get as much advantage out of the text-book as out of the course of instruction?—No doubt—possibly more.

1154. He would get as much advantage in the examination by reason of the text-book being made the basis of the examination, or to a considerable extent the basis of examination. I should think if the paper largely reflected a particular text-book it would not be an examination on the whole of the subject?—It would be the duty of the Senate which revises the papers to correct such a question or to make a representation to the examiner.

1155. But do you really think it would be competent to the Senate to revise papers with that exactness?—I understand that such is the practice; whether it is a matter of form or not, I do not know.

1156. Are you sure that is the fact?—I have been informed so by the officials of the University.

1157. At any rate there are these two elements of difficulty: that you cannot prevent the candidate from being examined by his teacher, and you cannot prevent the candidate from being examined in such a way as to give him greater advantage by having pursued his course out of a particular text-book? You can get rid of neither element of difficulty?—No, but as far as possible we endeavour to exclude them and to avoid that possibility.

1158. I mean you desire that it should be as far as possible excluded?—I believe it is the desire, and I believe the practice largely secures the effect of the desire.

1159. You desire, I suppose, also that the teachers should have influence upon the curricula, not merely that they should be examiners?—I should think that would be a most essential part of the functions of the Boards of Studies, or whatever body of that character is constituted.

1160. So that the teachers determining the curricula and the teachers conducting the examinations it becomes a matter of great difficulty to altogether exclude their influence in examinations?—I should distinguish between the personal influence and the collective influence; I should think the collective influence in determining the curriculum would be valuable, but the personal influence in conducting the examinations should be excluded as far as possible.

1161. You speak of a collective influence. Is it not a fact that curricula are usually settled by very few or, perhaps, only by one person peculiarly fitted for it—a master of the subject?—I am afraid that as a member of the Senate you speak with more authority on that subject than I could.

1162. Now a question as to Matriculation. You referred to that as a test. Is it not the fact that the matriculation examination is largely resorted to as a leaving examination for schools?—No doubt.

1163. And performs a most valuable function in that respect?—I think so.

1164. So that the number of those who go up for Matriculation and pass the Matriculation bears no proportion at all to those who go afterwards for the degree?—The portion of those who matriculate, no doubt, bears a ratio to those who subsequently proceed, but there is a large portion who are satisfied with the Matriculation as the terminal examination.

1165. A very large proportion perhaps?—I have not the numbers clear in my mind.

1166. (*Sir William Savory.*) I understand you to say that, as representing Convocation, you think it quite practicable to modify the present plan of the University of London to one adapted to the present wants?—I believe so, and I think the scheme I have indicated, No. 15 in the Appendix, shows an approximation to that.

1167. You cannot reconcile it in any way which is practicable you think with the scheme propounded by the Senate?—The scheme I have just mentioned was one prepared by the Senate anterior to the last Commission.

1168. But there is a scheme by the Senate, is there not?—Which took form in the last Charter?

1169. Yes, and a scheme by Convocation?—There is no scheme by Convocation subsequent to the report of the last Royal Commission.

1170. But there is a scheme by Convocation?—Yes, that of 1886.

1171. And the scheme of Convocation and the scheme of the Senate you consider irreconcileable?—No, I should not think so. I believe if Convocation had had an opportunity of discussing the whole situation prior to the presentation of the draft Charter to it on the 12th of May 1891 there would have been very good hope of a compromise being arrived at between the Senate and Convocation.

1172. But the other scheme fell through practically on the ground of the difference between the Senate and Convocation, did it not?—It did.

1173. And you think if circumstances had been more favourable that difficulty might have been got over?—I believe it was possible.

1174. And if that difficulty had been got over practically then the reconstitution, if I may use such an expression, of the London University would have been secured?—Yes.

1175. Do you think I am right in saying that many of the objections which have been urged against the London University are objections rather against its administration than its construction?—I believe they are, inasmuch as there has been ground of complaint to some extent in the constitution of the Senate.

1176. If the constitution of the Senate were largely modified, that would be an important step in the right direction, you would say?—We all agree to that in Convocation, I believe.

1177. And you further agree that by the constitution of Intermediate Boards or Faculties there would be a further advance made?—Yes.

1178. You think that if those two steps could be taken the University would go a very long way to meet the present demand?—I believe so.

1179. Now there is great jealousy in Convocation, as you have expressed it, of lowering the standard of medical examinations?—There is, undoubtedly.

1180. It may be said that all those who are most interested in the progress of our profession would be most anxious to keep up the standard of the examinations?—Presuming that would be the only interest, I should answer unhesitatingly, yes.

1181. It is not the only interest?—I am afraid it is not always.

1182. But where interests clash, would not you make that interest practically supreme?—I hope I am not presuming in saying that I should endeavour to do so.

1183. At all events we are agreed upon that point?—I think so.

1184. Do you think that it would be practicable in any way to take the present system of examination at the London University, and even to raise it and constitute that an Honours Examination, and then to have something less which might be a Pass Examination, putting it somewhat on the lines, for instance, of Oxford and Cambridge in other matters for classes and the Pass Examination?—That proposal took form in one scheme prepared by the Senate, but I am bound to say that it was not a proposal which appeared to commend itself either to committees or to Convocation in general.

1185. Let us assume that all of us interested in the London University would be sorry for it, but would not the constitution of another University be the graver of two evils. Looking at it from our point of view as members of Convocation, would it not be a less evil than the other?—It is quite possible to take that view, but I think one must remember that that would tend to upset what I have termed the symmetry of the Medical

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.S.C.

9 June 1892.

Faculty with the other Faculties. The M.B. Examination as a Pass Examination is not an Honours Examination. There is the Honours Examination in addition to it.

1186. Would Convocation go as far as to say: "We had rather run all risks for the University and see another University constituted with this peril that some of us suppose might exist of a lower order of degree, than accept that other evil?—It is quite likely that a large number, even a majority, of the Medical Faculty, would share your view or what I understand to be your view, but there are a large number of Arts and Science graduates who might look with jealousy upon any such change.

1187. You think the chief opposition would come to it from that side?—I think it is quite likely.

1188. Now looking at the matter on the medical side alone, do you think the ordinary examination of the London University are equal now to what they were?—I think the examination papers of recent years differ somewhat from those of earlier years.

1189. And differ somewhat from those of earlier years in the respect of greater laxity?—I should say that the questions appear to be somewhat less reasoned than the earlier questions.

1190. Would you go as far as saying, that looking back at former papers and former examinations, the present examinations are not quite up to the mark of the former ones?—I am afraid, perhaps owing to my having graduated relatively recently, that I am not able to institute a just comparison in that respect.

1191. The place of teacher in a University should not be one of supremacy you say?—Not as regards executive or administrative functions.

1192. But would you rather have a body controlling the teachers, and under which they work, than a University itself in which the teachers are the governing body?—That seems to me to be the opinion of which Convocation has arrived, and at which impartial thinkers like Sir Wm. Hamilton and others have also arrived.

1193. You think the wisdom of Sir Wm. Hamilton, 40 years ago, still holds good in that respect?—Refreshing my memory with some of his articles, I have found a good deal which seems to help us in the solution of this question.

1194. You are thoroughly in favour of teachers conducting the examinations?—It seems to me it must be the case.

1195. Men who are or have been teachers, are of course more qualified to be examiners than others?—Necessarily.

1196. Then you might say that if a man had not been a teacher, he was thereby but ill qualified to be an examiner?—No doubt.

1197. But it would not do to say that a man must be actually in active teaching at the time in order to be a good examiner. If a man had taught for a number of years, and then passed on to be an examiner, resigning his teaching, that would not disqualify him for examinership?—No; I agree with the view expressed by Mr. Busk at the last sitting of the Commission with regard to the period which was not a relatively early period in a teacher's career, and which might be a relatively late period in his life at which he would be likely to be a competent examiner.

1198. That is a very different thing from saying that a teacher should examine his own pupils?—Very different indeed.

1199. I understand you to say that Convocation had expressed an opinion adverse to that?—I do not know whether there was a definite resolution, but I am sure it was one of the motives which induced Convocation to throw out the scheme of the Senate.

1200. Then I may take it that Convocation is opposed to the principle that teachers should examine their own men?—I believe so. It has been largely reared upon the opposite principle, and it believes in it.

1201. I suppose, I may assume that Convocation has amongst its numbers many teachers and examiners of the highest authority and experience?—No doubt that is perfectly true.

1202. Setting aside for the moment the objections what advantages should you put to the plan of the teacher examining his own pupils?—I have heard the advantages enumerated, but I am afraid they do not commend themselves to my view. The chief advantage that I have heard urged is the increased opportunity for encouraging originality in the students and for permitting original teaching in the teacher.

1203. But do you estimate original teaching and originality in the student as qualities of the first importance?—I think the first duty is to make himself acquainted with current knowledge before he embarks upon the original.

1204. A teacher, I suppose, might be original in his method with advantage, but it would be rather hazardous if he were original in his subject?—I should think so.

1205. The knowledge which is current and which is generally accepted would be the safest knowledge for the student?—In his earlier career no doubt.

1206. But there is an advantage which has been spoken of with reference to the scope of the subject. It is said that some subjects are of such wide scope that the student can only learn part of them, and it would be very unfortunate if the examiner should not hit upon that part which has been taught. That would only apply to some subjects?—That is all.

1207. It would not apply to subjects in our profession?—Hardly at all.

1208. We should take it that the great subjects which are taught and examined upon, are subjects a general knowledge of which may reasonably be expected?—And that view increases in importance in that the examinations result in a qualification to practice as well as in a University degree.

1209. And in certain exceptional cases where the scope of the subject was too wide for the teacher and examiner the difficulty might be met by a syllabus, as it sometimes is?—No doubt, or by specifying definite work, as in the Classics.

1210. And further. In the great majority of our examinations—the conjoint examination and others—is it not the case that a choice of questions is given to the student?—That is done more frequently now than formerly.

1211. A man is not called upon to answer every question in order to pass, but some six questions are set and four only require to be answered, so that a student is not ill-used in that way?—I have heard very little of complaint from students on that ground.

1212. I presume you see many objections to the plan of the teacher examining his own men?—It seems to me to be altogether an objectionable plan. I have been most familiar with our University system. It seems to me to have been successful, and I should be sorry to see it altered in that direction.

1213. Do you think any single teacher could teach all that a student should learn?—Most undoubtedly not.

1214. And do you think any teacher so infallible that a student should think that all that he says is absolutely right?—Certainly not.

1215. Reducing the matter to a practical form, no man I suppose on the medical side is taught by a single teacher in anything, is he?—Never.

1216. All the great subjects, anatomy, physiology, medicine, and surgery, are taught by several teachers?—No doubt; and students are frequently well capable of discriminating themselves between the good and the bad teacher of any particular subjects.

1217. But it would be really in a measure impracticable for each teacher to examine his own men on the medical side?—Precisely. The teacher examiner system must fail on the medical side in the Gresham Charter.

1218. You were asked a question just now about the flavour which books might give, but in some of our subjects there is a better way of learning than from books?—No doubt there is in subjects with which our Faculty is familar.

1219. Anatomy could be learnt in a better way than from books?—My experience in the dissecting room teaches me so.

1220. Medicine and surgery can be learned in a better way than from books?—No doubt.

1221. Or from teachers except as guides?—No doubt.

1222. Do you not think that the plan of a teacher examining his own men in our branches of knowledge

would tend very much to narrow the conception of the subject?—That is my fear.

1223. Surgery as taught and practised in London may be said to be a wider thing than any single man teaches or practices?—I am sure of it. The practice in different medical schools differs so considerably. That enforces the argument.

1224. It is of great advantage to the student to get those different views, is it not?—I think he should try to familiarise himself with the teaching of different teachers on the same subjects.

1225. These examinations which are called Pass Examinations are very different things from those which are held in schools as supplemental to teaching?—Undoubtedly, a totally different thing.

1226. Those examinations in schools have the advantage of testing whether a man has duly profited by his teacher's work?—They are necessarily partial and limited examinations.

1227. But what you want in the Pass Examination is something very much larger than that?—Certainly.

1228. Even if it were practicable in our profession that a teacher should examine his own men, would not that involve a great deal of inconvenience and inequality in the examinations?—I should have thought the plan would have been objectionable to many medical teachers.

1229. But would it not necessarily involve a great deal of inequality, would not the examinations of necessity be very unequal?—No doubt, that is one of the cardinal objections to the plan.

1230. It is said that this might be counteracted to some extent by an outside examiner, but in proportion as the influence of the teacher was great so would the objection prevail?—No doubt, and I should think the tendency would be for the influence of the teacher to be great.

1231. And, therefore, the less influence the teacher had in it the better?—In that matter no doubt.

1232. And would not there be a tendency of students to seek education less worthy of them, perhaps where teaching was lowest and the examinations easiest?—I think that has been shown by Sir Joseph Lister's evidence before the last Commission. He said that at Glasgow he had reason to think that if he had not been the examiner as well as the teacher. his class would not have been so large as it was.

1233. I presume a teacher should have other qualities for attracting his class than the fact that afterwards he becomes the examiner of the men whom he has taught?—I should think it would be a very sorry reason if that were the only one.

1234. You were just now asked about the identity of the standard of examinations. I suppose nothing could make the difficulty of identity greater than allowing each man to be examined by his own teacher?—It seems to me to be a perfect negation of identity.

1235. In fact in our profession, would you go so far as to say that the method would be really impracticable, at least without subverting the whole method of teaching at the present time?—Impracticable and most objectionable I should think.

1236. Now I should like to clear up one or two points. It seems to me that there was some misconception in the answers you gave to Mr. Anstie; in *vivâ voce* examination if there is a sufficient number of examiners it is quite easy to avoid a man examining his own pupils?—It is done at every examination of the College of Surgeons.

1237. It is done at the conjoint examination of the two colleges, is it not?—It is.

1238. And if one thought it advisable it is perfectly practicable to prevent a man reading the papers of his own pupils?—Providing some third party has the arrangement of the papers, no doubt it is.

1239. For instance, at the conjoint examination the examiners to whom the papers go and to whom the students go for *vivâ voce* are arranged by the secretary, are they not?—I believe so.

1240. Quite independent of the examiners, and the secretary takes care to carry out that principle, that students are not sent to their own teachers in order to avoid what appears to be a very strong objection. But the principle in the case of the papers is not so rigidly carried out because the students' names are not sent with the papers but only their numbers; the numbers identifying the names being known to the secretary, but not known to the examiners, so that when an examiner reads a paper of one of his own pupils he does not necessarily recognise it?—Quite so. I believe the College of Surgeons is quite at one with the University of London in desiring that impersonal character of the examination.

1241. Although it is quite true that a man does acquire a different style of knowledge according to the hospital or school at which he has been educated, that is not such an overbearing thing as to make the identity of the paper a matter of course for the examiner?—It would verge upon eccentricity if it were.

1242. If it were considered necessary, if examiners could be so little trusted as that, the difficulty might be got over by even the papers not being sent to certain examiners; but because the name of the student is not sent with the paper that is not so rigidly enforced as in the *vivâ voce*?—I should have thought that might be practicable.

1243. At the London University the number of examiners is much more limited than in the conjoint examination?—That is so; they are limited to two to each subject.

1244. But, speaking for the medical side in the examination there, even there, the teacher avoids as much as possible, if he should happen to be a teacher, examining his own men?—I can remember in the *vivâ voce* for the M.B. degree myself being handed over to the other examiner, because one of the examiners was my teacher.

1245. But where there is a greater number of examiners the thing is much more easily worked?—Just so.

1246. But beyond all these questions relating to the examiner and the teacher, do you not think it is a more satisfactory thing for the public when a man has a diploma which is granted on an examination by an independent examiner, and not by his own teacher?—I believe the public would probably distrust a degree in which the educator was also the examiner.

1247. At all events both in the profession and by the public it is more satisfactory that the diploma should be given after a totally independent examination?—Quite so.

1248. And there is not really in our subject the slightest difficulty in conducting an examination by a totally independent man?—The practice at the colleges proves that.

1249. A man must have a very imperfect knowledge of anatomy who could not undergo an examination in anatomy by an independent teacher?—I should think he deserved to be plucked.

1250. And would it not be true of physiology?—Certainly.

1251. What would a knowledge of medicine and surgery be worth if a man complained, because he had been examined by an independent physician and surgeon, he had suffered in answering the questions?—It would reflect very badly upon the teaching of the particular professor..

1252. So that the principle which has always been upheld in our profession in different degrees at different places, but most strongly perhaps at the two colleges, has been the principle that teachers should not examine their own men?—No doubt, and I believe it to be the right one, and so does Convocation.

1253. (*Mr. Palmer.*) One word as to Sir George Young's *per saltum* speech. Are you not doing him rather an injustice in saying that the intention of the speech might have related to the M.D. degree? Has it not been stated by Sir George Young himself that he referred specially to the M.B. degree or the intermediary degree, and not to the M.D.?—I know there was some correspondence in consequence of attention having been called to the statement, but I did not gather that there was any desire on the part of Sir George Young to insist upon an additional medical examination in those who had the licenses of the Corporations before they proceeded to M.D.

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

1254. But he distinctly disclaimed that the speech related to the ultimate or M.D. degree at all, did he not?—I read the letter to which you refer, but I did not gather that it largely altered the position.

1255. And Mr. Erichsen likewise?—They both wrote to the "Times," I think, and to the two medical papers.

1256. One word in passing as to the degrees. You apprehend that these degrees are likely to be unduly lowered. These papers that you have handed in contain, I see, 58 degrees of the Victoria University of the M.B. and only two of the M.D.'s. Does that give you any reason to anticipate on the part of the Victoria University such a lowering of degrees as you anticipate might happen from the action of the Council of the Gresham?—I do not see that those figures furnish an argument either way, but as Professor Stirling is here he will probably be able to tell you.

1257. Does that lead you to anticipate that there will be such a lowering of degrees on the part of the Victoria University?—I believe the standard is not as high as that of the University of London, but I believe it is quite as high as some other English Universities.

1258. Now, as to the scheme in Appendix No. 15, that scheme is one which provides for associated colleges to be selected from the colleges and teaching institutions in any part of the United Kingdom?—It does.

1259. It is practically for leaving the London University as the only University itself, and associating with it the colleges or teaching institutions in and out of London anywhere in the United Kingdom. Do you consider that an extension of the Gresham Charter or contrary to the principle of the local limit laid down in the Gresham Charter?—It was, of course, altogether anterior to the Gresham Charter, but it was an extension of a previous scheme of the Senate in which the colleges were limited to London.

1260. I understood you to recommend that as the nearest recommendation to a general scheme which you had?—That was the nearest approximation to an agreement that the Senate and Convocation had arrived at.

1261. Of course your attention has been called to the fact that in the Gresham Charter there is a distinct local district specified. It is in the last paragraph of the Gresham Charter?—That is so.

1262. And there is also a very strong expression in the report of the old Commissioners. But would you regard going outside the district so as to include the associated bodies throughout the kingdom as contrary to the principle of this Charter which may be considered as one local in its nature and in its character?—I am sure Convocation attaches great importance to giving equal facilities to provincial schools from whom it has received, certainly of recent years, the larger proportion of its graduates.

1263. And it would not be prepared to throw over those provincial schools for the sake of a local University for London?—Certainly not, if it would infringe the present openness of its character to the provincials.

(*Witness.*) Might I supplement the answer which I gave to Mr. Palmer with regard to what Mr. Erichsen had written to the "British Medical Journal." It appears, in a letter of October 17th, 1891. Mr. Erichsen said:—"The examination for the M.D. degree of the "Albert University will doubtless be of a purely prac- "tical and clinical character, such as should present "no serious difficulties to a London diplomate. As the "candidate for the M.D. degree of the Albert Univer- "sity must hold a registrable qualification, it may "fairly be assumed that he has already been examined "in the more elementary subjects of medical education, "and further examination on these subjects might, in "some cases at least, be dispensed with, as, for instance, "in that of the holder of the M.R.C.S. and L.R.C.P. "diplomas, such qualifications being considered equi- "valent to an M.B. degree; the holder of them, as Sir "George Young pointed out in his admirable address "at the Westminster Hospital, might at once be allowed "to proceed to the examination for the M.D. degree; "but these and similar questions will have to be con- "sidered and decided by the Council of the new Uni- "versity. I can but express an unofficial opinion." I mention that as bearing out what I said, that it seemed to be the view of those who were promoting the Gresham University that the M.R.C.S. and the L.R.C.P. diplomas might practically be regarded as the equivalent of the M.B. degree.

1264. (*Sir George Humphry.*) I suppose one of the great points we have seriously to consider is the complaint arising out of the fact that although there are a larger number of medical students in London than in any other place in the world, and although the teaching in London is, as you have said, so highly estimated, yet that there is a greater difficulty for medical students to obtain a degree in London than in any other place in the world?—Bearing in mind, as I have shown, that London University gives more medical degrees than any other English University, no doubt what you say has been largely the cause of the complaint that has arisen.

1265. Because although the London University gives a great number of degrees, yet the number of degrees given is small in proportion with the number of medical students?—Just so.

1266. As compared with any other teaching and examining place in the world?—Yes, I daresay.

1267. I think that is, perhaps, the great difficulty we have to meet. I think you said that the Convocation of London distinguishes between facilities for passing and facilities in passing?—Just so.

1268. That it would not propose to increase the facilities in passing, but that it is disposed to increase the facilities for passing?—Yes.

1269. I do not quite understand to what extent and in what manner they propose to increase the facilities for passing?—Some facilities have already been given, namely, of permitting candidates for the Preliminary Scientific Examination to postpone one of the two subjects, biology or chemistry and physics, to a subsequent examination. Another concession, which only obtains in the Medical Faculty, is in the Intermediate M.B. Examination in which the physiology paper may be postponed to a later date. Then, again, in the M.D. examination there used to be an examination in the elements of formal logic and psychology. That has been abrogated in favour of a mental physiology paper. Lastly, I suggest that it might be possible to rescind the regulation which requires two years to elapse between the Preliminary Scientific and the Intermediate M.B., and two years between the Intermediate M.B. and the Final M.B., so that really a student might take the Preliminary Scientific, the Intermediate M.B., and the M.B. Final Examinations at any time convenient to himself during his medical curriculum.

1270. As regards the Preliminary Scientific the only point on which the concession is granted is on scientific subjects?—It is exclusively a science examination, there is no concession in the matter of Matriculation.

1271. Therefore the Matriculation must be passed at a period considerably preceding the final examination?—That is so at present.

1272. They would not allow, but would debar a student who had been for some time in London, and who during his course felt that he was equal to, and would be glad to obtain, the degree in London?—I think there would be no objection to allowing a medical student who had progressed some distance in his career to go in for Matriculation if he pleased.

1273. But there is no provision of that kind?—He may do so at present, but still he has the five years subsequently to keep. That is one of the difficulties which I believe Convocation would desire to see removed, and I think the Senate would probably acquiesce in that.

1274. If that bar were not removed it is no concession at all. That would be the real serious bar?—I quite agree that it is a serious bar.

1275. That ought to be removed?—I think so.

1276. But further than that, on this point to which you have alluded, you do not think Convocation would go?—I do not, with the limitations I have mentioned. I should like to point out that the Matriculation of London University is at the present time second in popularity of the several Primary Arts Examinations which must be passed by medical students.

1277. But supposing a medical student passes a Primary Pass Examination elsewhere then would he be allowed to pass the Preliminary Scientific Examination at a later period?—That, I think, would be touching on one of the questions on which Convocation would be sorry to see any alteration. Matriculation is the one portal through which all graduates must pass.

1278. Quite so; I was not suggesting at all that they might not pass it, but that they should be allowed to pass it at a later period—that there should not be the four years, necessarily intervening, because that debars a large number of students from going to the London University?—I think the Senate and Convocation would acquiesce in the removal of that difficulty, but not in the acceptance of other Arts Examination instead of the Matriculation.

1279. The standard of the examinations throughout you feel should not be lowered?—That is my view.

1280. With regard to the standard, of course there can be no such thing as exact identity of standard—that is an impossibility?—That I have already admitted.

1281. The examination in two consecutive hours by the same man is not identical in standard—it cannot be?—That is neither possible nor desirable.

1282. But a lowering of that standard you would not feel should be permitted. There was some proposal, I think not a formal suggestion or resolution passed by the Senate, that the examination of the Conjoint Board of London should be to a certain extent accepted by the University of London?—Yes, that their examination in the preliminary science should be accepted under certain circumstances in lieu of our Preliminary Scientific.

1283. And I think that the medical examination should be accepted in part by the London University for their degree?—I think only when conducted under a Committee which was partly composed of representatives of the Senate and partly composed of representatives of the Colleges.

1284. Suppose members of the University of London to be present or suppose persons deputed by the University of London?—No doubt there was some delegation of powers in that proposal.

1285. So it is possible that some compromise in that way might be effected?—I do not think that particular proposal was one that was favoured by Convocation.

1286. Not by Convocation, but it was favoured, I think by the Senate?—It was part of the Senate's scheme.

1287. And rejected by Convocation?—The scheme was.

1288. I suppose Convocation is rather a large body?—Mr. Busk stated last time that it consists of over 3,000 members.

1289. And I suppose decisions by a large body are very uncertain. We have at Cambridge a very large body on the Senate, and we find that the decisions of that body are very liable to be influenced in various ways. Is it not the case with the Convocation of London that you have very great difficulty in relying upon any plan being passed which has been proposed and brought forward by the thinking members of the University, who have taken great pains and trouble in preparing a scheme? Is there not very great uncertainty about such a scheme whether it would be passed by Convocation?—There has been no inconsistency in Convocation in any large matters of policy.

1290. No inconsistency, but still the Senate feel that they cannot rely upon Convocation passing that which they have recommended, even though the grounds of recommendation be good?—I think that shows how desirable it would be for the Senate to have consulted Convocation on the scheme before they submitted it to them for acceptance or rejection *en bloc*.

1291. Then with regard to the question of the medical examination of the University of London you are aware that they were visited by the inspectors of the Medical Council?—I am.

1292. And that those inspectors did not report quite so favourably?—I know there were many inaccuracies in their report.

1293. They did not come to quite so favourable a conclusion respecting the examinations as we find here?—Their report was the subject of consideration by the Senate, and a memorandum in answer to it was prepared, which showed, I think, conclusively, that there were many inaccuracies in the report.

1,293*a*. Still there was a report from those inspectors; they are inspectors who are inspecting examinations in various parts of the Empire, which was not quite so favourable to the University of London. They thought that certain alterations ought to be made, and that the examination was not quite so complete and fair a test of men as it should be?—I remember one of the criticisms of the Committee in question was that the Latin in the prescriptions at the M.D. was very bad, considering every candidate had passed a degree in Arts. It so happened that in that particular year not one of the candidates had passed a degree in Arts. That was one inaccuracy, and there were others.

1294. I do not think it was with respect to the prescription only but on the more general view?—The general criticism was that it was more scientific than practical.

1295. That was part of the criticism. So that there might be measures taken for proving even that examination?—I think myself that criticism was completely met by the memorandum of the Senate. It was shown that the examination was conducted by the same men who conducted what were called "practical" examinations at the Colleges of Physicians and Surgeons.

1296. And you think it still might be possible that the Senate and Convocation might agree to some modification of the method of obtaining medical degrees, such modification as that proposed, namely, that the examination of the Conjoint Board should, to some extent, be accepted?—I should answer that with a reservation, that Convocation would view with jealousy any delegation of examining powers to a body outside of the University or partly outside of the University.

1297. Still, to meet what perhaps is the greater evil, which we ourselves have emphasised, that a large number of medical students go to places in which they can obtain degrees more easily, it might be possible that advantage would be obtained by the University of London descending a little, meeting the requirement to a certain extent, and in that way would have the advantage of affecting a large body of students and extending its influence for good over a larger number of the medical students?—So far a your question implies the increased facilities for passing I should answer in the affirmative, but I am sure that Convocation regards the standard of the medical degrees as a right and proper one, and it has no desire in any way to lower it.

1298. I think the increase of facilities which you mention is so very little that it is a very small concession, and that unless there was some alteration in the examination or in the requirement for the degrees the need felt by the profession would hardly be met?—I am afraid one must consider also the interest of higher medical education as well as the mere demand for making a number of Doctors, and it is quite possible that by lowering the University degree to an indefinite extent you might do so much harm to medical examination that that harm would not even be counterbalanced by turning out a larger number of Doctors in London.

1299. That is very important; that is really the crux as regards the medical question?—No doubt.

1300. You have spoken of the teaching of the London schools being so high as scarcely to admit of improvement. I suppose you would admit that the teaching of the Universities of Edinburgh and Glasgow is not of a less high order?—I believe the teaching at Edinburgh is also excellent, but I believe the standard of graduation is hardly proportionate to that teaching.

1301. A large number of students resort to Edinburgh not simply for the facility of obtaining degrees, but also being attracted by the great reputation of the teachers there?—I should be glad to think that both objects, and not the first only, are influential.

1302. With regard to teaching and a teaching University at present the University of London does no teaching, I believe?—It regards itself under a tacit obligation with University and King's Colleges not to teach.

1303. Is there any proposal before them for having laboratories and carrying out teaching?—The proposal of the Committee of Convocation of 1886 distinctly dealt with the provision for higher education. It is Section VI. It proposed that there should be the establishment of University Chairs and Professorships on certain subjects. While I am mentioning that report I may add that in addition to the scheme which was mentioned by Mr. Busk at the last sitting of the Commission, the presentation of that scheme to Convocation in 1886 was accompanied by a reasoned report which deals fully with the grounds of Convocation's action which, I think, have not been before the former Commission or this Commission. I have secured all the copies I could, which I shall be pleased to hand to the members of the Commission. The report in question is found at page 183 of the proceedings of Convocation for the year

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

1866. That had for one of its objects the provision of higher education in London.

1304. Would Convocation regard it then as of very great advantage to the higher teaching in London that there should be attached to it professors, laboratories, and other means of carrying out such higher teaching? —Convocation adopted the resolution suggested by the Committee.

1305. That there might be a plan by which the education for ordinary degrees might be carried out as at present by the various colleges; but that there should be higher teaching connected with specially trustworthy professors and laboraties under the direction of the University of London, as distinguished, you understand, from the teaching required for the ordinary degrees?—That is so.

1306. Means of higher study, higher research, and so forth?—That is so, and it was in pursuance of the previous policy of Convocation so far back as 1878, in which it is suggested that such professorships, especially of a higher character and largely for post-graduate students, should be instituted.

1307. It would be a great advantage?—The subjects enumerated in that Committee's report for 1878 were higher mathematics, critical study of classics, jurisprudence and public law, history of medicine, public health and forensic medicine, certain departments of physics and ethics——

1308. Not professorial and teaching laboratories in the ordinary sense, as we understand it, as preparatory for examination, but something beyond the range of ordinary examinations?—That was precisely what was intended.

1309. And in that way the University of London would become a teaching Univesity in the very highest sense?—Convocation would favour such a proposal.

1310. Has it ever been suggested how it was to be done?—I understand that the question is largely one of means.

1311. Suppose an application were made to Government?—At present the University has no funds of its own.

1312. I suppose there are no other means than the Government grant?—Imperial or municipal funds, I presume.

1313. It would a very great advantage if something of that sort should be done, and that would be a teaching University in the very highest sense?—Of course you are aware that something is being done in the matter of technical education with regard to municipal funds at the present time.

1314. Yes; you are referring, I suppose, to South Kensington?—No, I am referring to the funds set aside for technical education under the Local Taxation Act, 1890, by County Councils.

1315. (*Chairman.*) That does not apply to London, does it?—As a member of the Technical Instruction Committee of the London County Council I am happy to say that we have decided to set aside a sum for that purpose, and we have at present a committee sitting on the subject.

1316. (*Sir George Humphry.*) So that the University of London should have relation in one instance to this higher kind of teaching, and in the other to these various colleges which are giving the teaching required for ordinary examinations?—Yes.

1317. Then the difficulty is what is to be the relation between the University and those several colleges?—No doubt that is the chief difficulty.

1318. Have you any suggestions to make with regard to that?—Not further than those which I find embodied in the schemes which Convocation has sanctioned.

1319. That is to say, a representation of those colleges on the Senate and on the several Faculties of the University?—A representation which shall not be predominant of Teachers, a representation by Faculties, which shall be composed of teachers.

1320. A fair representation of them on the Senate and on the Faculties, and that the examiners should be appointed by Faculties so represented?—I do not think Convocation has acquiesced in any scheme in which the Faculties should appoint the examiners, and I think it would be unlikely to approve of such a scheme.

1321. You have been asked with respect to text-books and the evil which might result from an examination on a text-book. I suppose in our profession every text-book represents pretty fairly the current knowledge required by the student?—I have no doubt it is the endeavour of the best text-books to do so.

1322. The examination of a good examiner would usually be satisfied by the information obtained in one text-book pretty much as well as by information obtained from another?—I should be sorry to think that in our profession the preparation for examination was exclusively from text-books or largely from text-books.

1323. Of course not. It is not so much to be apprehended that an examination from a text-book would be?—There would be less room for the exhibition of any individuality in our faculty, I should think.

1324. I am not referring to practical work, that of course is a different thing; but the text-book generally represents the general standard of knowledge for a student to acquire, and it is the general standard of knowledge upon which examinations should be based? No doubt the best text-books cover the whole ground.

1325. And the same applies with regard to an examination by teachers. A student who is prepared fairly well by any one teacher will usually pass the examination conducted by any other?—Of course everything may turn on what is meant by "fairly well." He might or he might not.

1326. Up to the ordinary standard. But it need not make much difference. A student is not at any particular disadvantage in being examined by one who is not his teacher, provided he has been fairly and sufficiently grounded in the ordinary standard knowledge of his profession?—I think it is better both for the teacher and the students that the students should not be examined by the teacher.

1327. (*Professor Ramsay.*) The basis of the objection of Convocation to the Charter is that the standard for degrees would be lowered, and you have drawn, I think, a very clear distinction between what you call an academic honour in the way of a medical degree such as you say the degree of the London University is, and the amount of knowledge which is necessary for the qualification to practice?—Yes.

1328. Do I understand you that there is a distinction, something like the distinction between the Pass and honours degrees at Cambridge, between the ordinary knowledge which is enough for a license to practise, and the extra knowledge which should qualify for a University degree?—I should be glad to see all desirous of practising medicine and surgery, aspire to the academical distinction; but, as I have previously said, I am afraid that the demand for medical men by the public at the present time, and also the character of the students who come to some of the medical schools, would hardly permit that.

1329. That is rather a pious opinion?—It is an opinion founded upon experience of the facts; I should be sorry to make any hard and fast and permanent distinction between them, as I understand your question to suggest.

1330. You draw a very broad and fundamental distinction between the examinations for the London M.B. Degree and the examinations for the qualification of the colleges?—For the lower qualification of the colleges.

1331. The ordinary qualification of the colleges for practice?—The M.R.C.S. and the L.R.C.P.

1332. At the same time you brought out the numbers of those who take the degrees of the University of London with a view to showing that after all, it does meet the wants of the profession as a whole?—That was not my object.

1333. I thought you were comparing the amount of degrees conferred by the London University, and you showed by your figures, I thought, that the number of degrees conferred by the University of London was not insignificant?—That compared with other English Universities, it was not fair to say that the results, as merely counted, are paltry.

1334. Though you practically get as many students coming forward for degrees as you would have reason to accept for so high a qualification?—I think if the facilities which I have alluded to were given, we should largely increase our numbers.

1335. They might be increased with reference to the students in London?—I think so, and in the future I hope largely increased.

1336. You made a remark afterwards to the effect that you thought there was nothing more than what average ability and fair industry might expect to reach. Are those two answers quite consistent?—I said that with a good primary education, with average ability, and more than average industry, the London M.D. Degree could be obtained by the medical student.

1337. With more than average industry and with a fair primary education?—I should regard those as essential.

1338. One of the essentials, therefore, is the passing of your Matriculation Examination. I suppose that is what you mean by the good elementary education?—That is an essential *de facto*, and no doubt it largely assists the student in his subsequent career.

1339. That is one of the elements you value most in the London University degree?—No, I should be sorry to say it was the one I value most. I think preliminary knowledge of chemistry, physics, and biology, is also a very important and essential advantage.

1340. It is an element that you value and that Convocation values, and I understood you to say you were not prepared to make any concession with regard to that; you made some concession with regard to other points, but you held to the Matriculation examination being maintained at the highest it now is?—I believe the opinion is practically this, that the London University degree is not so much valued on account of being very much higher in the stand of purely professional subjects, but because in addition to that, there is a good preliminary knowledge in Arts and in Science.

1341. Have you ever heard the objection made about the Preliminary Examination that it contains too many subjects?—Do you mean the Matriculation?

1342. Yes, I mean the Matriculation Examination, and that what the London University aims at, is a multiplicity of smatterings rather than a solid training in a few subjects?—The number of subjects has recently been reduced, giving greater choice with regard to physics and chemistry, but I am disposed to think it is a good examination, and the numbers who come up to us are increasing every year, which seems to show that this examination is one which meets the public wants.

1343. But it is an examination which the great majority of the medical students who come up to London are not, as a matter of fact, fit to pass?—I should hardly say they are not fit to pass, I believe a larger proportion is fit to pass it, but they do not go in for it.

1344. Have you the subjects there? It is much higher than what is supplied by the General Medical Council for general knowledge?—It is higher than that:—"Candidates shall not be approved by the examiners "unless they have shown a competent knowledge in "each of the following subjects, according to the details "specified under the several heads: (1.) Latin; (2.) one "of the following languages: Greek, French, German, "Sanskrit, Arabic." No credit will be given for more than one of those subjects. "(3.) The English language, "and English History, with the Geography relating "thereto; (4.) Mathematics; (5.) Mechanics; (6.) one "of the following branches of Science: Chemistry, "Heat and Light; Magnetism and Electricity; Botany."

1345. That is six subjects, it is a very comprehensive examination; what is meant by mathematics; how "is mathematics defined?—Mathematics consist of "arithmetic. The ordinary rules and processes of "arithmetic, including proportion, vulgar and decimal "fractions. Extraction of the square root. (2.) Algebra, "addition, subtraction, multiplication and division of "algebraical quantities. Reduction and manipulation "of algebraical fractions, arithmetical and geometrical "progression, simple equations, and easy quadratic "equations, with questions involving their use. (3.) "geometry. The subjects of the first four Books of "Euclid and simple deductions."

1346. That is six subjects, three languages and three mathematics and science. That is a very much more comprehensive examination than is required by the Medical Council in general knowledge?—Yes.

1347. Have objections been made on the part of schoolmasters that the number of subjects is too many to secure a really good and high standard in them all?—The subject has been repeatedly before Convocation and also the Senate, and minor modifications have sometimes been made. I might call your attention to the appendix to the Report of the last Commission in which Mr. Fitch spoke of the Matriculation Examination, at page 287, as a leaving school examination, more especially with regard to the way it was looked upon by schoolmasters.

1348. Without going into particulars you are not prepared to recommend there should be any substantial reduction in that examination. It is one of the points that Convocation consider essential, that there should be an adequate Matriculation Examination of that kind?—I suppose your question is applying only to the Medical Faculty.

1349. Yes, my question applies only to the Medical Faculty?—I believe Convocation would be unwilling to see a concession with regard to Matriculation in the Medical Faculty which would make it unsymmetrical with the other Faculties.

1350. We have had evidence here to the effect that in some cases much importance is not attached to the Preliminary Examinations. If the other Faculties of Science or Literature were to accept a modified scheme of entrance to the Matriculation Examination, I suppose the Medical Faculty would offer no objection?—The Medical Faculty has no separate existence in the University.

1351. I am rather speaking of examinations in the interests of Medical Science; you would not be likely to hold out for any higher examination than is required for other Faculties?—I believe that the Matriculation in its present standard has the common assent of all the Faculties.

1352. Then the only concessions towards making the M.D. more accessible are these concessions of time, and date, and so forth, and as Sir George Humphry suggested of taking the Matriculation Examination subsequently. Those are the only substantial concessions you are inclined to make with regard to meeting the demand of the ordinary medical student of London who wants a degree, and does not get it here now?—Those are the concessions I have alluded to.

1353. The demands of the Preliminary Scientific Examinations are considerably higher than are demanded by the regulations of the Medical Council?—They include an additional subject, biology.

1354. Is biology not required at all under the conditions of the Medical Council?—It is not, at present.

1355. But the colleges are to examine according to the schedule of subjects, as I understand, which is approved of from time to time and may be changed by the Medical Council?—I think you will find that there is no examination in biology by the Colleges of Physicians and Surgeons at the present time; I remember that Sir Joseph Lister, before the last Commission, regretted its omission.

(*Sir William Savory.*) One is now being constituted.

1356. (*Professor Ramsay.*) That is one of the points?—I should imagine there would be such an examination in all the Universities.

1357. Is there or is there not a difference in the matter of chemistry in the University requirements?—In the Preliminary Scientific there is an examination in chemistry and physics.

1358. But is there not an examination in organic chemistry?—That is in the Intermediate M.B. examination, it is a good examination.

1359. Is not that a much more severe examination than is required in the colleges?—The organic chemistry in the colleges is quite subordinate, you hardly get a question on it.

1360. I have heard it said that it is necessary to give a student two years in organic chemistry alone to pass an examination at the London University, is that a fair statement of the fact according to your experience?—I can give you the syllabus, if you please, but from my experience, I can say that two years would be quite unnecessary, probably one would be ample.

1361. It is a considerable examination?—Yes.

1362. The point I wish to bring out is the importance which you attach to its academic character as distinguishing the M.B. of the London University from the licensing of Corporations. Is it the case that in regard to both the Matriculation Examinations at the beginning and the previous Scientific Examination the London University has requirements, which are very consider-

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

ably in excess of what is required for a mere medical qualification, and which you, as representing Convocation, are unwilling to relinquish?—That is so.

1363. You admit, of course, the existence of the desire on the part of a large number of medical students who cannot take the M.D., to have a medical degree of some kind?—I believe a large number of medical students do desire to become Doctors of Medicine.

1364. You would consider it very unsatisfactory that there should be another University constituted for the express purpose of granting a medical degree upon a lower qualification?—I think it would be undesirable.

1365. And you object to the London University having two separate qualifications, a higher M.D. and a lower M.D.?—That objection was expressed in Convocation.

1366. That means the problem is unsoluble. You think it is undesirable that any arrangement should be made by which a degree in medicine should be constituted upon a lower platform than you are willing to accept?—Always assuming that we do not intend to give to the title M.D. another meaning from that which it has usually held.

1367. Either of those two ways of meeting the difficulty are equally objectionable to you; that is what I wanted to ask?—I think all that is legitimate in the demand for greater facilities for medical graduation might be obtained under some such plan, subject to the modification which I have alluded to, as that agreed upon by the Senate and Convocation. There may be claims beyond that which I should regard as illegitimate.

1368. You quoted Sir William Hamilton in the year 1853 with regard to the Scotch Universities. Did you mean to associate yourself with the substance of the remark which you quoted?—To the extent that inasmuch as Edinburgh offers a degree upon a lower standard than obtains probably in any English University, that causes a tendency of students to gravitate to Edinburgh for reasons which are not academical ones.

1369. You remember, the words you quoted were written in 1853. I suppose you are aware that since that date the Scotch Universities have been subjected to two Commissions, one in 1858 and the other in 1889, which have completely overhauled the whole system of granting degrees and so on, and everything connected with the Universities?—Yes, and I believe there has been another one quite recently—another one within the last year.

1370. No, not the last year. The Commission was established by an Act which passed in 1889. I want to ask you whether you are aware that the whole of the University system of degrees has been revised under the direct authority of Parliament, and consequently it is scarcely reasonable to quote in 1892 language used in 1853?—I think my quotation was qualified by words indicating that there had been considerable reform since that date.

1371. You asserted just now that the degree of the University of Edinburgh was probably lower than that of any English University. Have you any direct knowledge which enables you to say that?—When I was a teacher in St. Bartholomew's Medical School I prepared students for nearly all the medical examinations, and the impression left on my mind was that the standard required at Edinburgh is lower than that at any English University.

1372. In what capacity do you prepare students for the Edinburgh Examinations?—I was Demonstrator of Anatomy. I taught them in classes, and I also taught them in private classes.

1373. In London you mean?—Yes.

1374. What years are you speaking of now?—1884, 1885, and 1886.

1375. Do you mean to say that students go from London just for the examination to Edinburgh and get their degrees there upon the examinations?—They have to pass one year at any rate in the University of Edinburgh.

1376. Only one year in the University of Edinburgh?—Only one year in the University of Edinburgh, I believe.

1377. And where else?—And one at some other University.

1378. Do you know the number of classes which a medical student has under ordinary circumstances to attend in a Scotch University—in any one of the Scotch Universities—before he can get a degree in it?—I know that the number of lectures are specified in the schedules.

1379. You speak as if one student may in one year obtain a degree?—I said I think only one year is required to be taken in the University of Edinburgh.

1380. No doubt there is community among the Scotch Universities. Are you not aware that a student in any Scotch University up to this time can only take four classes out of sixteen in what are called extra mural classes unless he has taken a University course elsewhere? If you mean to imply that a student can take his whole course where he likes and then go up for a single year and get his degree at Edinburgh, I wish to know upon what authority that statement is made?—I was not aware of all the details you tell me, but I speak of the men I have known in their student days who have prepared for the University of Edinburgh, and of the men whom the University of Edinburgh has turned out, and the result of my experience is that, as a rule, they are not as highly qualified as those who have taken their degrees at London University or at English Universities, with the possible exception of Durham.

1381. You have never examined at Scotch Universities, have you?—I have not.

1382. Do the Scotch professors exclusively examine their own students?—I do not know.

1383. You do not know that many of the most distinguished English medical men are upon the staff of the Scotch Universities as examiners, and that in every case an external examiner has to be associated with the work of examining?—I know that Sir Joseph Lister stated that at Glasgow the students were largely examined by their teachers.

1384. Quite so, to the extent of one half, but there is an examiner who is external to the professor and who is chosen from the whole profession; and, as a matter of fact, in all the great subjects there are distinguished medical men who have an equal power with the professor and an absolute veto upon his arrangements. Now another point is this: I think in answer to Sir George Humphry you said you excluded the teaching from your criticism. You did not put the teaching of the Scotch Universities under the condemnation that you put upon their graduates?—I do not think I used the word condemnation, and I hardly intended to imply it, the professorial Chairs, I believe, are most worthily filled, and the instruction given is the very highest.

1385. You know, of course, that it is not only from London but from the whole of the colonies, India, and all parts of the world that students, righty or wrongly, have been attracted to Edinburgh in great numbers upon the belief that it has a great reputation?—It has a great reputation.

1386. Have you been over it at all?—I have visited the University.

(*Sir William Savory.*) It is a cheap one.

1387. (*Professor Ramsay.*) You are aware also of the great difference in cost not only in medicine but in everything else. You are aware that the cost of students' tuition, whether in arts or medicine, is extremely small.

(*Sir William Savory.*) Living is cheap as well.

(*Professor Ramsay.*) Yes.

(*Witness.*) I have no doubt that cheapness is a factor in the attraction.

1388. Sir George Humphry called attention just now to a visit of inspection which was made upon the examination of the London Universities and other bodies. Were you not aware that that body visited Scotland?—I believe it is their duty to visit all the qualifying bodies.

1389. Have you seen the report they made upon the University of Glasgow?—No, I have not.

1390. I should like you to refer to that, because I think you would find that to some extent it would qualify the remarks you have made. You say the teaching of the London Medical Schools is of the very best. Your acquaintance, I think you said, is with St. Bartholomew's?—Chiefly, but I have some knowledge of others.

1391. Do you put all the schools upon the same level as being all up to the very best standard?—I have already said, I think in answer to Lord Reay, that I did not—more especially in the science department.

1392. But you would in the medical department or surgical?—I should think the distinction was not so much one of school as of individual teachers.

1393. Then you would not make the same statement of the teaching in every one of the schools—that it was the very best?—My last answer implies that I should not.

1394. Is it not the case that there are in some of the schools a great number of specialistic Chairs each devoted to special subjects, such as the throat and so on, to a much larger extent than we have in Scotland?—As a rule those stand upon a lower plane to the regular lectures; they are more in the nature of demonstrations.

1395. By whom are the teachers appointed in the various London Schools?—Usually by committee—the Medical Committee. They are usually chosen from members of the staff.

1396. (*Sir William Savory.*) Their names are submitted to the Governors?—Yes.

1397. (*Professor Ramsay.*) Their names are chosen by a Committee?—Yes.

1398. And the report is sent up to the Governors, I suppose, just as appointments at University College are sent into the Council?—I cannot speak with definite knowledge on the subject.

1399. But the appointment is really made by the teaching body, and it is approved of by the governors of the hospital as a matter of form—as a matter of course?—I really do not know very much about it.

1400. Are all the appointments in all schools, as a rule, confined to those students who have been educated at that particular school?—As a rule, but occasionally members of the staff are elected from other schools.

1401. Is that frequent?—No doubt there is a general tendency to supply vacancies from their own school.

1402. As a matter of fact is not promotion through the different teacherships regulated mainly by seniority?—Promotion on the staff is almost entirely by seniority.

1403. Then seniority may lift a man from one subject to another if it is a more important one?—It may not necessarily imply that he will assume the chair occupied by his predecessor.

1404. May it not imply that in the ordinary course of things a member of the staff rises from one particular post to another particular post?—Yes, that is very often the case.

1405. And very often without a teacher having a special qualification?—I am not prepared to give that opinion with regard to the constitution of the hospital staffs.

1406. Have you ever heard of a case of a man having been appointed to a subject about which he knew so little that he eventually gave up the post?—I am afraid appointments have been given to members of the medical staff who have not previously exhibited special knowledge of those departments.

1407. But have you heard of a case of a man having held such a post for six months and then resigning it because he knew nothing about it?—I am not aware of an instance of that kind, but I can imagine its occurrence.

(*Sir William Savory.*) It is not right to say that the appointments are made by seniority. In the Medical Schools in London, it is supposed that the fittest man is chosen for the post. When a man once gets on the staff, it is a very different matter. Then unless there is something against him, he rises in rotation on the staff. But it is different from the school.

(*Professor Ramsay.*) I presume that the teachers are taken out of the staff, are they not?

(*Sir William Savory.*) Not necessarily.

(*Professor Ramsay.*) Then, is it possible for a school if it had no really first rate surgical teacher, for instance, to take a surgeon from another school?

(*Sir William Savory.*) I do not know an instance.

1408. Take each subject separately; would you have the same guarantee for getting for every post the very best men available, as you would if the appointments were open to all the whole world?—It is no concern of mine to defend the constitution of the Medical Schools.

1409. Now there is one last question upon the subject of examinations. Your remarks, of course, have reference mainly to science, and to medical science?—No doubt in the main.

1410. When you say that it is a very undesirable thing for the teacher to be an examiner of his own student, and when you say that it is quite unnecessary that he should be the examiner of his own student, out of fairness to them you refer to those subjects in which a certain amount of knowledge is required to prove that a student has more or less covered the subject—that he has a certain amount of knowledge, not that his mind has been trained in a particular way?—I should think that training had a share in the knowledge.

1411. Have you had any experience in relation to such subjects as philosophy or history?—I included those in my graduation.

1412. Take the Philosophy School at Oxford, and the Philosophy School at Cambridge, do you think it would be altogether fair, or desirable, or, in fact possible, that students who had been trained in the Philosophy Schools at Oxford or Cambridge, respectively, should be examined in philosophy by a total outsider, who knew nothing except philosophy at large?—I should think it most desirable that they should.

1413. Without his knowing anything of the particular lines which philosophy took in those places?—I should think that philosophy was a subject in which it was most desirable that the results of the teaching of one should be examined by another.

1414. Can you tell me of any two teachers of philosophy whose conception of what a philosophical cause should be would be altogether the same?—I am afraid I cannot. My preparation for examination in philosophy at the London University was entirely confined to text-books.

1415. That is exactly an answer to my question. It must be confined to text-books in cases of that kind. Is it not rather this, that the view is maintained from the point of view of a teacher who wishes to make the most of the mind of his student by developing such originality as he possesses—whether it is in harmony with the teacher's views or not, would be immaterial—by drawing out some original power of mind, as contrasted with a mere system of examination founded on text-books like that of the University of London?—No doubt it is regarding graduation from a totally different stand point.

1416. One is the point of view of the educator and the other the point of view of a tester. Having the two together, the outside examiner and the inside examiner, gives security for the adequacy of the test?—I think the tester has been the epucator, certainly in the Medical Faculty of the Scotch Universities.

1417. When you object to a control of the examination by teachers is not that met by the very fact brought out by Mr. Anstie that what is desired by teachers over the country at large is that they shall have men who know what teaching means amongst the examining body, not necessarily that teachers shall examine the students they themselves have taught? That is what you maintain is attained under the present system of Edinburgh University?—I dare say.

1418. And that would be obtained under the draft scheme of the Senate by which the teaching bodies in London would have a direct voice with regard to both examining and teaching?—[*No answer*].

1419. (*Lord Reay.*) After the orgainzation of the Medical Faculty would you place a medical school under the Board of Studies?—I do not think medical teaching in London has suffered from the independence of medical schools up to the present time.

1420. Would you make the teachers at the various medical schools professors of the teaching University?—That is largely a question of name I should apprehend, whether they are Collegiate or University professors.

1421. If they were members of the Faculty of Science or Medicine of the new University they would have in some way or another to be recognised by that University. How would you propose to establish the con-

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

nexion?—That the Faculties composed of teachers in the different schools should be electoral bodies who should elect Boards of Studies from their number, and who should elect a certain proportion of representatives on the Senate.

1422. Would the Faculty be composed of all the teachers in the medical schools, or of a limited number appointed or recognised by the University?—I should think the Faculties had better be large bodies consisting of all the teachers, but only exercising electoral functions.

1423. Therefore the Faculty would be composed of all the teachers, although the teachers would not be appointed or recognised by a University authority, but appointed by their own Governors?—That is an anomaly no doubt. At the present time there is no arrangement for the Medical Faculty to appoint the medical teachers, and I am not sure that that is not one of the points upon which the scheme might be amended.

1424. You have been, I believe, at a German University?—I have visited some, but I have not been there for any length of time. I have been to Bonn and to Munich.

1425. Did you observe when there, that any inconvenience arises from the fact of the professors examining their own pupils?—My knowledge of them is not sufficiently deep to answer that question profitably.

1426. With regard to the Gresham Charter, do you fear that the medical degree which would have been created under it, would have been lower than the medical degree of the existing London University?—I am bound to conclude that from the utterance of its promoters.

1427. But you do not impute to the Gresham Charter the object of creating a degree lower than the degree of other institutions, such as the Scotch Universities and the Victoria University?—No, I understand the claim to be that it should be on something like the level of Edinburgh.

1428. (*Mr. Anstie.*) There is a question arising out of a statement made by you which I should like to clear up for my own satisfaction. You refer, as I understood you, to Appendix No. 15, at page 241 of the Blue Book, as expressing more nearly than anything else the opinion of Convocation?—As modified by a conference of its Committee with the Senate.

1429. May I ask whether that has ever been accepted by any vote of Convocation or has ever been before the Convocation for acceptance;—No, Scheme No. 14 was approved by Convocation as a basis of conference with the Senate. Scheme No. 15 was the Senate's scheme as modified by the suggestion of that Committee of Convocation which promulgated the former scheme.

1430. No. 13 is the scheme which was prepared by a committee of 40 submitted to Convocation and rejected by them?—Not rejected. It was referred to a new committee.

1431. The result of the reference was No. 14?—That was so.

1432. That was accepted by Convocation?—As a basis of conference with the Senate.

1433. Is there any other scheme which has been accepted by Convocation as a basis for anything but that?—Not that I am aware of.

1434. That is the only one that has in any sense the imprimatur of Convocation?—Yes.

1435. In what sense, then, do you say that No. 15 expresses the mind of the Convocation more than No. 14. No. 14 having been accepted by Convocation, and No. 15 never having been so accepted?—In this sense: that No. 14 having been accepted as a basis of conference with the Senate, No. 15 was the result of that conference.

1436. And has No. 15 as the result of the conference ever being accepted by Convocation?—No, I hope I have said nothing which would imply that it has been.

1437. Then we cannot refer to it with any confidence as expressing the mind of Convocation?—No, I believe there are several points in it which Convocation would desire to see modified.

1438. In your opinion does No. 15 most resemble No. 13 or No. 14?—In the proportional representation of Convocation and in the fact that the associated colleges might be in any part of the United Kingdom it seems to me to be more similar to No. 14.

1439. And in other respects it is more similar to No. 13?—In other subordinate respects it is more similar to No. 13.

1440. Would you call the incorporation and the inclusion in express terms of the bodies referred to in No. 2 of the No. 13 subordinate point?—Not from the point of view of those bodies. I think it is from the point of view of the University.

1441. You think it of less consequence?—Less consequence than those two I have named.

1442. You referred to some statement of Sir George Young, which I am not quite sure that I heard the whole of. I gathered from it that, his view was that the M.R.C.S., the meaning of which we all know, should be accepted as practically the equivalent of the M.D. Is that so?—Plus the L.R.C.P. it should be equivalent to the M.B.

1443. That means the result of the joint examination by the Royal Colleges?—That is as I understood him.

1444. Assuming that to be so, whatever the defects of the Senate's scheme may be, would Clause 47 which provides for a joint examination by the Senate and the Royal Colleges, but reserves to the Senate the duty of being satisfied as to the adequacy of the examinations for the purposes of the degree of M.B., be superior in that respect at any rate?—It was largely because it was feared by Convocation, as expressed in the circular which was issued to its members, that such arrangement would tend to assimilate the M.B. examination to the M.R.C.S., and the L.R.C.P., that that scheme was so much opposed in Convocation.

1445. Assuming the M.R.C.S. and the L.R.C.P. to be one thing, and the degree to be another thing, to be determined by a different standard—the standard of marks, if you like—in that respect would the scheme in Clause 47 be superior to the one you have been commenting upon—the Gresham Charter?—I think there would be a guarantee of greater independence of examination to some extent in the Senate's scheme than in the Gresham Charter.

1446. It would not bring in the licentiates, would it?—That might not be the intention, but I am afraid the result would be to assimilate them, taking into view the desires of the medical colleges.

1447. The desire might exist, but that desire would not make the licentiates into graduates, would it not?—I do not imply that, but I mean given a medical representation on the Senate which would be practically supreme in medical matters, and given a large representation of medical teachers in London schools, I believe there would be a desire to approximate the M.B. to the M.R.C.S. and L.R.C.P., even to the point of identifying them.

1448. I am asking you about the result. You do assume, then, that the result would be to make the licentiateship and the degree identical?—I think that would be the result.

1449. I understood you to say that it was within the aim of Convocation and also of the Senate to establish professorial Chairs which would give a higher range of teaching—post graduate, I think you described it in a general way?—I believe I did.

1450. That would be so, would it?—I believe so.

1451. Could those only be provided from imperial or municipal funds, or are there Chairs already in existence which would meet that description—say, for instance, the one you referred to at the Brown Institution, or the Chair of Classical Literature at the University College, which was lately held by Professor Newton, from which he delivered a series of lectures which were attended by a class consisting of teachers?—I think what Convocation had in view was not anything which would interfere with work being done in collegiate courses, but rather to establish professorships in subjects at present not treated in the ordinary professorial courses.

1452. It would be higher teaching and post graduate, and it was to be established in University chairs as distinguished from collegiate?—Yes, I believe that it would be valuable, and that it would encourage research.

1453. With regard to funds. You referred, I think, to the County Council as furnishing means for this. You have, of course, examined the Acts. Do you mean those funds would be applicable for the establishment of Chairs which might be properly described as for post-graduate teaching?—No doubt under the Acts the destination of

those funds seems to be defined as being for objects which are rather for the improvement of the workman than the culture of the man. The dead languages and things of that kind would, necessarily, be excluded. But I believe the definition of technical education is extremely wide. It largely depends upon the grants of the Science and Art Department at South Kensington, and anything included in those grants is technical education.

1454. I think that "technical education" under the Act includes commercial education?—It has even been understood to include University extension lectures in different parts of the country.

1455. But it does, under the Act, include commercial education, does it not?—I do not think they would be perfectly synonymous.

1456. But is it not a fact that under the Act technical education includes commercial?—No doubt commercial forms part of technical.

1457. Do you think funds of that kind could be appropriated for the establishment of post-graduate Chairs?—I do not think I suggested that that would be the source of the remuneration for post-graduate professorships.

1458. Would it be applicable in your judgment to post-graduate purposes?—I should think not.

1459. (*Professor Ramsay.*) There was one statement you made to the effect that students went from Dublin to Edinburgh for the purpose of obtaining degrees?—Yes. I have been looking through some figures prepared by the General Medical Council, and I find that a large proportion of students who entered upon their medical course in Dublin subsequently qualified in Edinburgh.

1460. Can you refer to any statistics upon that point?—I could send them to the Commission.* I have not got them with me now, but they were contained in the returns of the General Medical Council. The office is 299, Oxford Street.

1461. Were these students who have spent a substantial part of their course in Dublin, and who began a new course at Edinburgh?—That I am unable to say. They were students who entered their course in Dublin and terminated it in Edinburgh.

1462. And your belief was that they went from Dublin to Edinburgh, because they could get the degree there on easier terms?—I did not say that, and I should be sorry to be understood to say that.

1463. Then in what sense did you mean it?—They may have been attracted by the teaching.

1464. Then your statement is founded upon a general impression from having met Edinburgh graduates as compared with other graduates?—I have had them as house surgeons under me, and I have met them as a teacher meets students, and also in a professional capacity; and the impression is left upon my mind that the Edinburgh man is not as highly qualified medically as most of those who graduate in English Universities.

1465. You do not exactly mean to say that he would not have got a degree elsewhere. You did not mean to say that?—I do not think he would have graduated on the strength of his knowledge at Cambridge, and certainly not at London.

1466. Were these students who had been in Edinburgh for a part of their course, and had afterwards come up to London to get some special coaching at St. Bartholomew's?—Chiefly those who had come up to London after being at Edinburgh.

1467. To make their course so much the richer?—Yes.

1468. And it is upon the experience of those students that you found that general remark?—And those I have met with as house surgeons and in hospital experience.

1469. If they were appointed as house surgeons, was that on proof of their competency?—Yes, if that means their relative competency among those who were also candidates.

1470. What was the principle of selection?—It may be allowed that the graduate of Edinburgh is superior to a licentiate of the Society of Apothecaries.

1470*a*. These were taken from among the trained students at St. Bartholomew's?—At St. Bartholomew's and other hospitals.

1471. (*Professor Sanderson.*) Would it be admitted by those competent to judge that the medical degree of any English University is equal to that of the University of London?—I should think in the matter of standard none is equal to it. I should think Cambridge comes as near as any.

1472. And what about the Victoria University?—Victoria is, no doubt, a good degree, and probably superior to Durham—certainly superior to Edinburgh.

* The statistics referred to are to be found in Table XIA., p. 103 of the Third Report of the Statistical Committee of the General Medical Council, 1806.

W. J. Collins, Esq., M.D., M.S., B.Sc., F.R.C.S.

9 June 1892.

The witness withdrew.

Professor WILLIAM STIRLING, M.D., examined.

Prof. W. Stirling, M.D.

1473. (*Chairman.*) I believe you have come to offer evidence on behalf of the Victoria University?—I have. Victoria University has some general objections to the Charter, but I come here with respect to the objections on the medical aspect of the Charter. I think the document which has been already circulated will put you in possession exactly of the position of Victoria University, but there is another document which I will hand in now. (*For this document, see Appendix No. 4.*)

1474. Will you tell us what position you occupy?—I am Professor of Physiology in Owen's College, and, therefore, a professor of Victoria University. I am also Secretary to the Departmental Board of Medicine of Victoria University.

1475. There was a memorial presented by the Victoria University to Lord Salisbury. Is that substantially the same as the paper you have handed in?—In some respects it is.

1476. You prefer that we should take the paper which you handed in last?—Quite so, because this deals exclusively with the medical aspect of the question.

1477. I do not know whether you sent that to the Secretary?—No, I did not. I have just had it printed.

1478. Then will you just take your own course and state your objection?—Under heading No. 1, "Victoria "University disclaims taking any part in opposition to "the foundation of a teaching University for London. "On the contrary, it is in hearty sympathy with a "movement for this purpose." That is the first definite statement. Number 2 is, "Victoria University, however, objects most strongly to a Charter being granted "to any University which permits of any one Faculty "having numerically a commanding influence. There "should be a proper balance of Faculties, so that the "power of arranging the subjects, extent, and method "of examination, and that of granting degrees in any "Faculty, should not practically rest with that "Faculty."

1479. That refers chiefly to the Medical Faculty?—The medical or any other. Again, "The proportion of "medical members on the Council or general governing body of the new University seems in itself unduly "large, and it is perfectly clear that they will all be "persons resident in London, and likely to be regular "attendants. Thus on the Council, which is the only "University authority comprehending all the Faculties, "the influence of this solid body of medical opinion, "as against that of the other Faculties, and even "as against that of combinations among them, will be "practically irresistible."

1480. How do you make the numbers to stand?—That is rather a difficult matter, according as one puts it. Take the composition of the Council.

1481. That would be about 14?—There might be 16 or 17, or there might be more.

1482. Out of a total number of 50?—It is difficult to say what the total body might be. It depends on how you look at it.

1483. You would not make out a majority of the Medical Faculty? There would only be a minority?—Yes; but in any case Medicine might outvote Science

Prof. W. Stirling, M.D.
9 June 1892.

and Arts. The constitution of that Council is rather complicated if you take it that the Royal College of Surgeons and the Society of Apothecaries are to come in. There might be 16 or 17 medical representatives on that council whatever the total number may be, or there might be more.

1484. In your opinion, and in the opinion of the body you represent, that is too many?—Yes, and more especially when I take this other clause in connexion with it:—"A Medical Faculty should not have a "numerical representation on the Council or other "corresponding board which would enable it to outvote "the representatives of the Faculties of Arts and "Science. Such an arrangement would be specially "objectionable, where the weight of medical influence, "as indicated by the number of medical colleges, "lecturers and students was largely in excess of that of "any other Faculty." It gives that medical opinion on that council very considerable weight, probably greater than would be represented by its numbers. That is our first great objection.

1485. You have not looked into the Charter with sufficient care or interest to make any practical representation of how the medical element could be reduced or the other increased?—Well, it may be done in this way. We have laid down here a broad proposition.

1486. In this paper?—Yes. The broad proposition is that the number of medical representatives should not be such as would enable them to outvote the representatives of the Faculties of Arts and Science.

1487. That they should be reduced?—That the number of medical representatives should be reduced. We do this more especially, as I point out to you, that there is no University authority comprehending all the Faculties, between the Council and the Boards of Studies, where the different aspects of any question can be thrashed out and discussed. You will notice that follows out the last clause:—"The Victoria University "is of opinion that on the governing body of the pro- "posed new University there is undue representation of "medical colleges pure and simple." That practically means to suggest that the number of representatives that the medical colleges send should be diminished. Our first objection, then, hangs on the medical representation on the Council. Then comes the second. You will notice that this University is different from all other Universities that I know of in requiring this. This clause has been introduced:—"Provided that no medical "degree shall be conferred on any person who shall "not previously have obtained a qualification for "registration under the Medical Acts for the time "being in force." That is to say, that in the case of every other University its degree carries the right to registration on the Medical Register. This new University, if created, its degree will not primarily admit to the Register, and any person wishing the degree of the new University would require to obtain some registrable qualification, say from the Conjoint Colleges, and that renders it absolutely anomalous in the whole University system of the country. I will give you the reason for that. That is necessitated by the Medical Act, 1886. The clause in the Act is there quoted:— "Any University in the United Kingdom or any "Medical Corporation legally qualified at the passing "of this Act to grant such diploma or diplomas in "respect of medicine and surgery." These were in 1886, and they are now the only Corporations and Universities whose diplomas or degrees carry a license to practice.

1488. You object to it on general principles, not because it would injure you in any way. It would not affect the Victoria University, and you only object on general grounds?—Yes. We think it makes the University anomalous, and we think it may further have the effect of lowering the standard of general medical education.

1489. It would not affect you in any way. You only appear on behalf of the general public and on general principles, not from anything that affects your body personally?—Nothing of this would apparently affect us directly, but in so far as if medical education were lowered in one part of the country there is no saying what the effect might be on other parts.

1490. (*Professor Sanderson.*) The witness has not stated what he proposes to substitute for this clause beginning with the word, "Provided"?—We would wish, under these circumstances the Medical Act, 1886, to be so amended, that if this new University is constituted its degree, would be a registrable qualification.

1491. (*Chairman.*) You think that, in addition to everything else, their requiring that the graduate of medicine should have had a registrable qualification would tend to lower the medical education?—It would tend to affect it in this way: the person who comes forward for this degree must previously have obtained what is admittedly a lower qualification, namely, that of the Conjoint Board. Now I think it is extremely unlikely that a London student would be asked to submit himself to a series of conjoint examinations, beginning with the first right on to the final, and be at the same time, or a little time afterwards, subjected to a series of University examinations.

1492. Do you think this would be so construed as to mean not only that the man should necessarily have a registrable qualification, but that if he had had a registrable qualification that would be quite sufficient, and nothing more would be required?—No; I think it is possible that the University under this might accept the earlier part of the examination, say of the Conjoint Board, and make simply a final examination, and that final examination gives to this individual a degree in medicine, I say it is possible under the Charter.

1493. That they should require nothing but a final examination, and you do not think that would be enough?—It is possible.

1494. I suppose it is possible to have that anyhow, unless you specially guard against it in the Charter?—No, I think not.

1495. You think it might be guarded against. This is what you would propose. Do you propose that they should have a power to grant a degree which would of itself——?—Be a registrable qualification; and then it would be in line with the Victoria University and all the other Universities.

1496. I am only trying to get what your views are?—I do not think I have anything more to state than is printed there. These are the two chief objections.

1497. You deprecate the absence from the Gresham Charter of any safeguard for maintaining a high standard. Is there any other safeguard that you would suggest?—I think it ought to be imperative that the student should be submitted to tests in science in addition to those required, say by the Conjoint Board, because I do not consider that the test in science of the Conjoint Board is such as would meet the University requirements.

1498. Is it dictated to them by their Charter what subjects they are to examine in before they choose to grant the degree?—No, it is not. But you will notice the anomaly in this Charter—the requiring of a registrable qualification before the M.D. That differentiates it from all other M.D.'s and other Charters.

1499. And your fear is that would be considered sufficient without anything else?—It is possible for it to be considered sufficient under the Charter.

1500. In the Charter of the Victoria University is there anything said about requiring science, or anything else, as part of the education or qualification for a medical degree?—Science is required by all.

1501. But not by your Charter. It is merely because you choose to make it so?—We must make it.

1502. Are you obliged by Charter?—I do not know whether it says so in the Charter in so many words. It does not say in the Charter that science shall be demanded at all.

1503. But yet you do demand it?—Yes, because you see there is this anomaly of this University requiring this registrable qualification. We think there must be a safeguard. We think the lower science qualification should not be accepted. In what way it is to be introduced we do not know, but we think it ought to be there.

1504. You think there should be some greater safeguard to ensure that science should be taught?—Yes.

1505. Then that is really the substance of your objection, is it?—That is really the substance of our objection under this head. I might say in other respects that the Charter is drawn very much on the lines of the Charter of the Victoria University, and therefore as Victoria University we cannot object.

1506. You do not object that it would draw away students from you, or anything of that sort?—No, we do not suppose they will.

1507. Do you think students in the hospital schools of London will still go to you for a degree?—The medical student is a migratory animal. We get some from London and the London people get some from us.

1508. And you are not afraid of a new University?—No, certainly not, provided it is on a level with our own or the Scotch Universities.

1509. That is, you approve of the Charter as it now stands, with the exception that the Medical Faculty is too strongly represented, and you think there ought to be a safeguard that there should be scientific instruction?—I am not prepared to speak as to the other aspects of the Charter. I am speaking merely as to the medical aspect of the Charter.

1510. Have you anything to say as to the other aspects of the Charter?—No, I am not here to speak upon that. I do not know whether Victoria University will give, or intend to give, any other evidence upon that point.

1511. And all that you have to say has been put down here upon this document?—Yes, there are one or two things which follow from this which I might point out, one or two very important things. One is that the examinations of the new University would not be subject to the inspection by the General Medical Council, That is a matter which I have already heard brought out by Sir George Humphry to-day.

1512. (*Sir George Humphry.*) That it would not give a qualification?—That it would not give a qualification, and in as far as it does not give a qualification it would not be subject to inspection by the inspectors appointed by the General Medical Council, so that the public would have no guarantee as to the standard of examination in this new University. There would not be any guarantee given by a publicly appointed official and of course his reports are printed. There is no clause in the Charter which would make this examination of the new University of London open to inspection by the General Medical Council.

1513. If the degree carried a qualification with it, would that bring it within?—It would bring it within the Statute of 1886. That follows naturally from the Medical Acts, almost.

1514. (*Professor Saunderson.*) But you do not mean to say you would be satisfied with the Charter, in respect of medical degrees, with that alteration?—No, we would not be satisfied if merely that alteration were made.

1515. (*Chairman.*) You would want a less representation of the Medical Faculty?—We want to have a better balance amongst the Faculties, more especially as the Council is the supreme body. We do not care as long as this medical element is not so predominant, and as long as it does not outweigh these other two Faculties at least, Arts and Science.

1516. Is there anything else which follows from this?—No, I do not think there is—not directly.

1517. (*Professor Ramsay.*) Is it part of your objection to the Charter that it puts the whole power into the hands of one single body?—That is part of it. You will notice what it says here.

1518. You would rather a division of power were made between two or more bodies?—We had rather there was a body intermediate between the Council and the Boards of Studies where all the Faculties were represented where any matters touching medicine should be discussed by the representatives of Arts and Science and Laws, or any question touching arts could be discussed by those representatives, before it reaches the higher body.

1519. Would you give those Faculties any powers excepting those of consultation?—In our own body they have not any powers excepting consultation.

1520. The object is this, that every scientific or art question shall first be considered by persons conversant with that, and then considered by persons conversant with the University as a whole?—That is what we think.

1521. That is what you consider a good arrangement?—I think it is much better.

1522. It does happen that when matters are referred to a particular Faculty special views are likely to prevail which are corrected in the larger body?—That is so. I may point out that the Council, under the Gresham Charter, has power to refer a subject to the Assemblies of Faculties. It may, however, if it pleases, ask other Faculties to join with it, and deliberate upon any subject referred to it, but there is no arrangement whereby any subject so discussed in the Faculty of Medicine would pass through an intermediate body upon which all the four Faculties were represented before it came to the final body.

1523. You think there ought to be an arrangement of that kind?—Yes, I think it would be preferable.

1524. Do you object also to the fact that there is no appeal against the decisions of the Senate as constituted?—I do not see how we, as the Victoria University, can very well object.

1525. How do you stand with regard to new statutes at Victoria?—It is quite different. I daresay what you are thinking of is what obtains in the Scotch Universities.

1526. I want to know how you stand with regard to new statutes at Victoria?—In that case our Court would be the highest.

1527. Has that Court power to change entirely the conditions for degrees?—Yes.

1528. To make new degrees?—Yes, to make new degrees.

1529. And alter the statutes?—Yes, and alter the statutes—all the power. There is no such safeguard as exists in the Scotch Universities. We are not obliged to submit our alterations of statutes to the Privy Council or to any English University. Of course the Scotch Universities are all tied together. The statutes of Edinburgh University cannot be altered without an opinion of the other Scotch Universities. There is no such tie in the Victoria.

1530. And has no evil been felt from that?—No.

1531. No ill-considered changes have been adopted?—I would not say that no ill-considered changes have been adopted, but no inconveniences have been felt.

1532. Are changes frequent?—No, they are not frequent.

1533. Putting the case of the Gresham University, where we are competing with another University, you would think it desirable that some arrangement should be made by which reference could be made to the Privy Council?—That would be some additional safeguard.

1534. You would think that a mode of meeting partially the difficulty as to the lowering of the standard?—It might, possibly.

1535. Do you oppose the system of the Draft Charter by which attendances at other Universities are allowed to be taken *pro tanto* as part of the course?—As Victoria University we cannot object with regard to accepting two years from the other Universities.

1536. And you will in no case accept more?—No.

1537. (*Mr. Rendall.*) I think there must be two years at least?—Two years at least at Victoria.

1538. (*Professor Ramsay.*) Do two complete years mean a certain number of subjects?—A certain number of subjects *per annum*.

1539. Two *anni academici*?—Yes.

1540. And you think you see no objection to that system by which students are tempted, as you see, to indulge their migratory propensities?—We have found no objection so far.

1541. Is there no danger that students may rush about from one place to another, according as they may think one part of the course is more easily passed at one University than another?—They must pass all their examinations at the Victoria.

1542. You take the Preliminary Examination?—We accept very few Preliminary Examinations, we have an entrance in Arts of our own.

1543. And the English Public School certificate, I suppose?—I could not say exactly, but we are very stringent in that respect with regard to accepting the entrance in Arts of the Scotch Universities.

1544. The whole examination must be taken in Victoria?—Yes, we accept the London University Preliminary Scientific, but I think that comes to an end very shortly.

(*Mr. Rendall.*) No, that is still accepted.

1545. (*Professor Ramsay.*) It may be any two years of his course, providing that they are completely made up?—That is so.

Prof. W. Stirling, M.D.

9 June 1892.

1546. (*Sir George Humphry.*) I think I understood you to say that you thought a University might accept the Conjoint Examinations of the Royal Colleges of Surgeons and Physicians, as part of the examination requirements for their degree?—I think it is possible under the scheme under the Charter.

1547. You do not think it undesirable that the qualification examination should be accepted as part of the requirements of a University for its degree?—Will you put that in another way so that I can get it clearly.

1548. For instance, that a University we will say is London, might accept the examinations of the Colleges of Physicians and Surgeons *pro tanto*, and then add on certain other examinations?—No, I do not think that is sufficient, because I say the standard of Science is not sufficient in the Conjoint. In my opinion it does not come up to the standard.

1549. Anywhere in the preliminary, the medical examination might be taken *pro tanto*?—It depends what you mean by "Preliminary."

1550. Say scientific, the examinations in physiology, medicine, and surgery might be accepted by the Victoria University as part of the requirements not entirely?—I should put it in this way, the subjects naming them chemistry, physics, botany, put zoology under the head of biology, and then anatomy and physiology. These, in a University are of a higher standard than that demanded by the Conjoint, I do not think the University could accept all those *pro tanto*, but I think they might accept the final examinations far better than they could accept the earlier ones.

1551. (*Mr. Anstie.*) I am not quite clear that I understand the tenor of your evidence. You object, amongst other things, to the fact that the examinations of this University should be conducted without any supervision by the Board of Inspection?—I do not think I said that.

1552. I gathered that that was one of your objections, that the inspection of the Medical Council would not be required?—I beg your pardon. What I did state was, that the Medical Council would have no right to inspect the examinations of this new University.

1553. And you made that an objection, did you not?—I say it follows naturally.

1554. I want to know is it an objection in your view or not?—I think it is an objection.

1555. Then you do think it an objection that the Medical Inspectors should not control or supervise the examinations of this University?—Yes, I think it is a defect at any rate.

1556. There seems to be a little inconsistency. The Charter, as it stands, provides that for the purpose of license they shall have no power?—Yes.

1557. Therefore some examinations which the Inspectors of the Medical Council have control over, must have been passed by whomsoever takes their degrees?—Yes, that is so.

1558. That hardly amounts to an objection, does it?—But in addition the public has a guarantee as to what is the standard.

1559. Is there any standard that the public has except that of Medical Council Inspectors?—There is no absolute standard, but there are these reports which give one a distinct statement as to what is done at the several examinations conducted by the Colleges.

1560. Do those reports deal with anything except examinations which end in a license?—They do not.

1561. Then with respect to those examinations which do not end in a license, are they such as can be passed by no person except one who has gone through an examination which does end in a license?—The candidate coming up would have already submitted himself to an examination which was open to the inspection of the inspectors appointed by the General Medical Council. That is so. But the examinations of this University, of course, would not be inspected by the inspectors of the General Medical Council.

1562. That is an additional, a superadded examination?—Anything superadded would not. That fact remains.

1563. That examination which went to the academic character of the degree is the only part which would not be subject to the inspectors, and it is only the licensing part which is subject to the inspectors now?—It is the licensing part which is subjected at present. It is the final qualifying examination. That is laid down by the Act.

1564. Is what you rely upon not so much the inspection of the officials as the report they make about the mode in which the examination is conducted?—I think the reports have had a healthy influence upon all the bodies.

1565. And you do rely upon that rather than on direct inspection?—I would not say I rely upon that altogether, but I know in most of the Universities these reports have had a wholesome influence upon the examiners, and, I think, for the good.

1566. Your view, I gather, is rather this—that this Charter errs in not allowing to the academic degree the licensing power?—We should prefer that.

1567. You say it errs in not giving that?—Yes.

1568. Then if it gives that the only external check upon them would be the action of the inspecting officials?—They would be the same checks as obtain in all the other Universities.

1569. That is a check, is it not?—That is one check.

1570. But what other check is there, so far as the public is concerned?—So far as the public is concerned that is the chief one.

1571. Then supposing that check to exist, by virtue of these degrees having that power, instead of being confined to persons who have already passed that test, you would desire that this University should have the licensing power?—Yes, I think it should have the licensing power.

1572. If the University had the licensing power, and if, as has been pointed out to us by one witness, the tendency of the new University, under this proposed Charter were to make the Conjoint Examination of M.R.C.S. and L.R.C.P. together, a qualification for a degree there would be no superiority in the new degree to the existing Conjoint certificate?—No, but I should hope that the balance of scientific influence, and the influence of Arts, and the other Faculties of a properly constituted University would be such that it could not happen.

1573. I am not talking of the thing as it stands. It would be possible if the Charter were reformed on the lines that you suggest, that this examination, in surpassing in its character the Conjoint examination conducted by the two colleges on the Embankment, should be practically the Degree Examination of the University?—Well, they might choose to make a very low standard if they pleased, which might not exceed that of the Conjoint scheme. They might, but I should not conceive it possible for a University to do so.

1574. You mean to say you consider it likely, because you say they might?—Yes, I mean likely.

1575. If they might and did, can you tell me what would become of the functions of the two Royal Colleges?—I do not know what would become of the functions of the two Royal Colleges. I am not concerned with their interests. They are sufficiently well able to look after themselves.

1576. As a matter of fact they would disappear, would they not?—I do not know that they would disappear. I do not know what would happen to them. I am not concerned with their interests.

1577. If a man by passing an examination no more severe than that which they required, could get something more than they give, namely, the license, together with the degree, would not they all go to the new University and pass by the colleges?—It is possible the colleges might lower their standard.

1578. So as to give something lower still?—Yes.

1579. So it would be a kind of rising diminution?—I do not say so. I say it would be a possibility. You suggest to me the possibility of this alteration causing the two colleges to disappear.

1580. Yes, but see the ground on which I put it. I put it on the ground that it has been stated to us on the evidence, communicated, apparently, of some promoters of this Charter, that the M.R.C.S. and the L.R.C.P. Conjoint examination might be acccepted as equivalent to the medical degree?—We think they ought not.

1581. But I am asking, assuming that the views of persons influential in the matter were carried out, and

that happened, you would then have two examinations, one of which would not be superior to the other?—That is obvious on your own statement. You say they are identical; I have not alleged it.

1582. I am putting it as alleged by other persons, not as alleged by me. If that were so, I am correct in saying that the functions of the two colleges would be extinguished unless, as you put it, they went lower?—Yes, but the examining function and the other functions they have, would still remain.

1583. The license depends on the examination?—Yes.

1584. If that event happened, would there be any possibility or likelihood of a further competition, taking place between the examinations of the Royal Colleges and the new University?—That I do not know.

1585. But you do not seem to think it unlikely?—I do not say it is at all unlikely. I have put my point from the very beginning. I do not think any University would lower its standard in that way.

1586. It has been already put to us by the promoters of the new University that that is what they would do—not that they would lower the standard, because they have not got one, but that their standard would be such that it would not be greater than the standard of the other examination?—We fear it would not be any more.

1587. Then, if you fear that, you think it not unlikely that it would happen?—We think it might happen. All we allege is that it is possible under the Charter.

1588. You fear it?—We have said it is possible.

1589. Then, if you fear it, you think it is not unlikely to happen, and, thinking it not unlikely to happen, are the results also, perhaps, not unlikely to happen—a kind of competition on the downward grade?—That I do not know.

1590. You would not go so far as to say that?—No, I would not go so far as to say that.

1591. To pass to the remedies, whatever they may be, do you suggest for that there are some reasons contained in the earlier paper?—Which earlier paper do you refer to?

1592. The one in large print. I see there that on page 2 you say:—"But the Draft Charter gives no "indication that candidates for medical degrees will be "subjected to any further preliminary test, either in "Arts or in Science, beyond the minimum requirements "accepted by the General Medical Council from the "various bodies, University or other, whose examina-"tions qualify for registration"?—That has not been said by me, has it?

1593. This is by the Victoria University?—Yes, it has been said by the Victoria University.

1594. On behalf of the Victoria University, and its constituent colleges?—Yes, that is so.

1595. Owen's College, University College, and the Yorkshire College?—Yes.

1596. You would not suppose that any Charter would contain any standard or syllabus?—No, I would not say that. You cannot put a standard or syllabus into a Charter, but, as I have already pointed out before, this differs from all the others in this remarkable point of its requiring a qualification to practice, and that this University degree would not primarily entitle a person to go on the Register. It differs in all respects.

1597. As you have taken us back to that point, I will ask you this? Are you aware that in respect to the London medical degree also, there was a considerable time in which the University degrees did not give at license to practice?—I believe that was so.

1598. So that would not be a novelty so far?—At present it would be.

1599. At present it would be an introduction of what would have become a novelty?—It would be the introduction of a new system.

1600. Not the introduction of a new system in the sense that it has never prevailed before, but in the sense that it does not prevail now?—Yes, that is so.

1601. Putting aside that same question of novelty, you do not suggest that in the Charter there should be any limitation of the amount of preliminary scientific or other scientific knowledge that should be evinced by the candidate?—No, not in the Charter. We think that might be got in another way.

1602. That is why I am going to call attention to what is said on another page. On page 4 you say:—"On the "other hand it will not be possible for the Victoria "University to accept the earlier stages of the medical "course required by the Albert University, unless the "Victoria University is likewise prepared to reduce the "preliminary qualification in arts and science to the "standard required by the General Medical Council as "qualifying for registration." So you desire to have something for your degree which would even surpass that Conjoint examination, which we have been told by some authority might be accepted as equivalent to the degree of the new University?—Yes, that is the minimum that is required by the General Medical Council of which you are speaking just now.

1603. You require more?—We require more, and I think all Universities require more.

1604. Do you mean by the necessities of their existence they require more?—I think they do require more.

1605. As a matter of fact?—Yes, as a matter of fact they require more.

1606. All Universities?—I think so. It is not necessarily with regard to the number of subjects perhaps, but in the standard.

1607. Now we come to this. You object to the constitution of the now body on the ground of its predominating medical character and, as I assume, that there would be a tendency rather, on the part of the strong medical element to allow of an easy graduation. Is that right?—We think it is not right that there should be numerically such a representation of the medical element on this General Council.

1608. How do you conceive that this large preponderance of the medical element would operate?—I think it would operate, not in the way of maintaining the standard, but lowering the standard.

1609. I observe that, taking it altogether, one may assume that there would be at least 16 or 17 medical members out of 38?—Yes, I think there might be 17.

1610. I think one cannot put it lower than 16?—I calculate it 16 or 17.

1611. There would be one from University College, one from King's College, and 10 from the Medical Schools?—And four from the Assemblies of Faculties?

1612–13. Then there would be probably one at least to come out of the Convocation and the Crown; which would be 17, so that 16 or 17 would be the number out of 38, and that you think excessive and tending to lower the standard?

(*Mr. Rendall.*) Might I add on the question of numbers that there would be one additional from the Royal College of Surgeons?

There would be 11 instead of 10 if the College of Surgeons came in. If the Society of Apothecaries came in there might be 18 or 19. It is a very complicated question to get it out exactly, but there may be anything from 16 to 19, I take it.

1614. (*Mr. Anstie.*) Is it your view that the strengthening of the other Faculties would tend to maintain the academical character on the medical side of the University?—It is.

1615. It is in this direction that you think you will find your redress against the difficulties you have suggested?—It may be found in two ways. I think that there may be a more equal balance, say, increase the number of arts, increase the number of science on the Council, or diminish the number of medical representatives.

1616. It comes to the same thing?—It comes to the same thing. That is to say, it is not necessary that each of these medical colleges should send a representative, limiting the number of medical representatives on the Council, and letting these colleges elect from amongst themselves whom they are to send there.

1617. Your defence against what you fear is making a greater balance between the different Faculties?—That is so. We desire to see that; but of course I may say that when that is done the Charter would practically be in the position of the Victoria Charter as regards that.

1618. I should like to ask you whether you have formed any view upon the provisions of Clause 47 of the proposed Senate's scheme, which proposed to allow a conjoint examination with the two colleges, preserving the academic standard in the hands of the Senate?—That has not been before us, I may say.

1619. Has not that been before you at all?—No.

1620. Taking it in the way I stated it, as being a provision for allowing a conjoint examination with the

Prof. W. Stirling, M.D.

9 June 1892.

Conjoint Board of the two colleges, reserving the academical standard in the hands of the Senate, do you see any objection in principle to such an arrangement?—If you ask me (I speak for myself) I should prefer to see a distinction between the University and the Corporation.

1621. Do you say that on the ground that you think the power of license and the power of graduation should be in two distinct hands?—No, I am going on the supposition that an alteration is made in the 1886 Act.

1622. I am now quite away from that; I am putting the thing on broad lines. Do you think there ought to be a distinction between the licensing or qualifying power and the graduating power—that they ought to be different powers?—They are different now.

1623. I am asking you your opinion whether they ought to be?—Yes, I think they ought to be. I think there is a class of medical students that comes up to the Corporation standard, and I think there is an entirely different class who come up to the University standard. I do not think it would be possible to educate all those to the University standard. There must always exist for the more humble practitioner a portal such as is given by these lower examining boards. I do not think we shall ever get them all up to the University standard.

1624. You do not object to the Universities being invested with the power of granting qualifying degrees?—They have that privilege now.

1625. You do not object to that?—No, certainly not.

1626. Therefore, to that extent, you have no objection to the licensing and graduating power being in the same hands?—That is what we desire; that they should be in the same hands.

1627. Then if you rather desire that the licensing and graduating power be in the same hands, would the licensing powers be likely to be worse administered for being in the hands of a power which also had the power of graduation?—I believe the net result would be to lead to confusion. The joint power would come to be practically equal to the M.B.

1628. Do you think it would be practically impossible to distinguish between the classes?—I think it would lead to those two things becoming confused. I think ultimately that would be the result of a scheme of that sort.

1629. Why should that be the case more than happens between the Pass and the Honours. If the same body can discriminate between the Honours and the Pass, why should it not distinguish in the cases of qualification and graduation?—Here, there is a body imported from outside the University altogether—the Colleges of Surgeons and Physicians—which has nothing to do with the University, which comes in merely for examination purposes.

1630. And supposing they had the determination of that which should be the minimum qualification for license, why should not the University retain the determination of that which should be the minimum qualification for the degree?—Will you put that again, please.

1631. If the external body had vested in it the determination of what should be the minimum qualification?—Which external body?

1632. The Royal Colleges. If they had the determination of what should be the minimum qualification for licensing, why should it not remain for the Senate to determine what should be the minimum, that is, the Pass qualification for the degree?—It seems to me to be causing a great confusion as between colleges and the University.

1633. What is the nature of the confusion?—You say the Senate should determine whether a person should have a degree.

1634. What is the confusion?—It seems to me that there would gradually be a confusion between those two bodies. I cannot help thinking that in a few years, it would simply amount to this, that the Conjoint qualification may practically carry the degree.

1635. Now to bring it to a practical test. Supposing the standard of marks for a qualification was 30 per cent., and the qualification for a degree was 50 per cent., and the qualification for honours 80 per cent.—they will do as well as any other numbers—what would be the difficulty?—Who is to conduct those examinations. Is it to be a Conjoint board, or is it to be the members of the University?

1636. Supposing it to be either one or the other?—I cannot conceive a University degree given at any examination conducted by an outside body like the Royal College of Surgeons.

1637. Why "outside body"?—It is not in any way in the Charter at present.

1638. I do not wish to deal with mere terms. As a matter fact, do not the two colleges examine by means of experienced and distinguished teachers?—They do.

1639. Then in what sense, dealing with the matter in its substance, do they conduct their examinations differently from other bodies?—They are not in any way in conjunction with this University authority at all. They are completely outside it.

1640–1. Never mind the name of University. The question is whether experienced and distinguished teachers are persons to whom the determination of the course of education and the testing of the results ought to be entrusted, and, assuming that there is a body which entrusts those matters to experienced and distinguished and well-accredited teachers, in what sense, in point of substance and reality, apart from name, does it differ from another body which does the same thing under a different name?—That is teaching; but I should like to know who is to arrange all the curricula and so on, preceding this. You must take that along with the examining.

1642. I am assuming them to arrange curricula, on which they subsequently examine?—I do not see your point. I do not see what you are driving at.

1643. I want to know the difference between a distinguished medical teacher prescribing the curriculum and conducting an examination under the name of an examiner of the Conjoint Royal Colleges, and the same person prescribing a curriculum and conducting the examination under the name of an examiner of a University?—Theoretically, as you put it, I do not see that there is any difference.

1644. Then apart from the name you say there is none. Perhaps you would agree that there is not very much to be regarded in the name?—I think I do regard the name a very great deal. I think the term "University examination"—the University stamp—whatever that is worth, bulks more largely in the public eye than does the diploma conferred by the Royal College of Surgeons or the Royal College of Physicians, that is to say, the ordinary qualification to practise.

1645. But apart from the bulk, which may be deceptive, is there anything in the substance of the cases different?—It is quite possible in your theoretical way of putting it to make the two identical.

1646. Is there any essential reason why they should not be identical?—Then what are you to do for the great bulk of students, for a great many of them are not able to come up to the University standard at all.

1647. What I am asking is why they should not have their license granted by a body which has also the regulation of the higher branches of medical science—Will you find the colleges giving up their right?

1648. I am not asking what the colleges would do, but I want to discover why a body which is competent to determine the higher levels is not also competent to determine the lower levels?—Clearly you may set up any theoretical discussion of that, as you please.

1649. Then your answer is that you see no reason why they should not?—Theoretically, when you put it in that particular form.

1650. Then what is the practical reason why they should not?—Because we do not wish to see any confusion arising between what is a University degree and what is a diploma of the Royal College of Surgeons or of the Royal College of Physicians. We think that difference ought to remain.

1651. Is that a scientific or an academical or a medical distinction?—I am speaking of medicine, and the difference rests especially on the medical side of the curriculum.

1652. And you think the confusion could not be avoided if it were in the same hands?—I think it would be difficult to avoid it.

1653. But not impossible?—I will not go the length of saying it would not be impossible.

1654. (*Professor Sidgwick.*) There are two questions I want to ask you. In the first place you said there were other objections to the Charter into which you could not enter?—Yes, I believe Victoria has others.

1655. But whatever objections may be entertained by individuals, Victoria University does not put forward any other but the two objections to the medical part?—As I understand at present they do not. I do not know whether they reserve any other objections or not.

1656. With regard to the objection you put forward, can you describe exactly the evil that you think would result from the large number of medical members of the Council?—My experience at any rate goes to show that when the matter is left simply to a Faculty of Medicine alone, or a body of medical men alone, perhaps the requirements in arts and the requirements in science are not likely to be so carefully balanced as they would be, were it a body consisting of medical men and arts and science, all in due proportion, discussing the matter.

1657. I should like to give you my own experience and see how far it agrees with your own on that point. From my own experience I should say that it was a comparatively small matter whether any particular Faculty was large or small because, if the Faculty is practically agreed upon any change, it can always have its way whether it is large or small, whereas, if it is divided, speaking broadly, the other Faculties will always be able between themselves on one side or the other to turn the scale?—We have occasionally seen it when it has been the other way.

1658. Where the Faculty have thought it right to practically override the unanimous view?—The practically unanimous view.

1659. Would you be prepared to say that the non-experts in this matter ought to override the unanimous view of the experts?—I would put it in this way, that in the education there is the arts side, the science side, and the medical side. I would not call a person examining in arts and science non-expert, because they really play a part in the medical education.

1660. If the Medical Faculty of the University is unanimous in desiring that the preliminary examination should only contain a certain quantum of arts and science you would still think it desirable that the other Faculty should override it?—We consider it a good thing that medicine should not be able to carry that practically by itself, that a case of that sort ought to go before the Faculties and be thoroughly discussed in all its bearings.

1661. I am suggesting that if the Faculty were agreed it is probable that this view would be right even when against the majority of other people?—Well it might or might not be.

1662. Then as regards the third objection. There appear in your answers to previous questions to be two points. First, as I understand, you appear to attach great importance to the inspection by the Medical Council of the University who are legally qualified to grant diplomas?—We do.

1663. And you consider the Gresham University would be inferior, because it had not the advantage of that inspection?—I would not put it in that way. I would rather put it in the other way, that the public would not have any statement by an official appointed by the General Medical Council as to what was the nature of the examinations.

1664. Is the object of the inspection to do more than to ascertain that the qualifications that the University in question gives are up to the standard?—That is so.

1665. Then it seems that in the case of the Gresham anybody who has previously obtained a qualification renders an inspection necessary?—Yes, it does as regards that; but the inspectors report as to the nature of the examination, not only as to quality, but they also state how the examination is conducted. They state all about examination. That, at any rate, would not be the case in the Gresham University.

1666. Then with regard to the safeguard and what you describe as continuous pressure to lower the requirements, could you indicate more clearly where the pressure would come in. I suppose in all Universities there is greater pressure. But it might be argued, in exactly the other way, that a University was obliged to come up to a certain external standard, and already had a safeguard which a University that is not obliged to come up to a certain standard has not?—Take it this way. It seems to me that when a student begins as a medical student he may elect to go either on conjoint lines, if one may call them so, or on University lines. Very well; the conjoint examinations do not fall precisely at the same time, at least that is the case with all the University examinations that I am acquainted with. Their examinations for Science take place at the end of the first winter. They pass their anatomy and physiology at the end of the second winter. In all the other Universities the anatomy is not passed until the end of the third winter. If they insist upon these students coming up to the standard that is required in anatomy a curious state of things comes in. The College of Surgeons renders it imperative that a man must spend three winters and three summers after passing his anatomy and physiology before he can obtain a qualification to practise. That is five years. But if this new University demanded what would be a science standard and an anatomy and physiology standard, which cannot be passed till the end of the third winter, he would still have to attend other three years, and that student would have to attend six years. Therefore there would be continuous pressure for a University to have something less, so that he might get his qualification at the end of five years.

1667. As I understand, you mean that if they prepare students for the examination of the Conjoint Board, they could not in the same time prepare them on what you call a University standard. It would be practically impossible to combine the two?—That is the way it works by the new Statute of the Royal College of Surgeons. By the new Statute of the Royal College of Surgeons a man must have passed all his scientific subjects, including his anatomy and physiology, or at least he ought to pass those at the end of the second winter. They put time barriers between that examination and the final examination, that is to say, three years must elapse before he can get his qualification to practise. That is five years. But in the Universities that I am acquainted with they require a standard of science, a standard of anatomy and physiology, such as requires at least three winters, so that that man would have to pass it at the end of three winters.

1668. But why could he not pass a lower standard required by the Conjoint Board, and then a more advanced standard afterwards? We do not, at Cambridge, find it at all inconvenient that men should pass an examination at the end of the second year in one subject, and then a more advanced one. Do you mean that in the normal course of study it would be undesirable that he should go on for anatomy and physiology so long?—Yes, he has done with anatomy and physiology at the College of Surgeons at the end of two years, or ought to have done so.

1669. You say in Victoria getting his qualification in five years, that is not so high a standard as we aim at, and we shall require you to attain our highest standard the year afterwards. I do not see why he should not pass the lower standard first and the highest standard afterwards?—He could do that.

1670. (*Mr. Rendall.*) Would not that involve the duplication of courses?—That is the point. There would be duplication of examination there, and it seems to me unlikely that a student would be submitted to two examinations—a Conjoint Examination and a University Examination. Therefore the tendency inevitably, when that system was found not to work, would be to accept something else.

1671. (*Professor Sidgwick.*) Are you acquainted with the system of the German Universities?—To some extent I am.

1672. I am under the impression that the rule in the German Universities was that a candidate for the degree of M.D. must have passed an external examination: and if I am right, the general experience of German Universities is opposed to your view that the mere fact of having to pass an external standard produces an inevitable and irresistible tendency that the University on which that condition is imposed should lower its own standard. It is not, as I understand, held that the result has taken place in Germany?—The examinations are of a much more simple character and less elaborate than they are with us.

1673. But would it not be a point of honour for the new University, even if its own examinations might not turn out to be really very much harder than those of the Conjoint Board, have an apparently more advanced examination, even on the lower view of human

Prof. W. Stirling, M.D.
9 June 1892.

nature which seems to be assumed. Even on that assumption would not the University have a character to maintain and would not that lead to its adopting a higher standard?—I am not so sure. I do not think it is likely that they would be subjected to two sets of tests. I think the chances are that they would accept the lower.

1674. Why should this examination of the Conjoint Board be taken as a kind of preliminary examination?—It would have to be a preliminary examination.

1675. I do not quite see what the practical difficulty would be?—I think it very likely that the student would not pass a conjoint examination and a University examination.

1676. Why should not the University impose something higher?—I think the University is bound to impose a higher one, because the first one is not up to the University standard. I think in the end it would be found so. I think it would subject the student to so much examination that they would not do it. Then the outcry would come that something must be done to modify this. They would say, we cannot subject the student to two examinations while other students get off with one.

1677. I can quite see that it is an inconvenience to the new University and no doubt they would be glad to get rid of it, but I have not been able to gather why any other University should put any bar upon that ground?—There will be duplication of examination, and I think it will be extremely unlikely that the student would be subjected to two examinations.

1678. (*Mr. Rendall.*) To develop this subject of duplication of examination is it the case that there are examinations of entrance in arts, of some form?—At the University.

1679. And again there is examination in Science subjects?—Yes.

1680. And over and above that, I understand that there would be duplicated courses in such subjects as anatomy and physiology?—There might be.

1681. And practically the point is, is it not, that the two curricula would run parallel, only with a somewhat lower standard demanded for that of the Conjoint Board as compared with that of the University?—Yes.

1682. And that is where the danger would arise with the two parallel courses, that the inconvenience would be felt in maintaining a double set of examinations?—That is what we fear.

1683. And it would be likely, if maintained, to lengthen unduly the curriculum of the medical student?—Yes.

1684. Extending anatomy and physiology over three years in the course of the University requirements, and over two years in the conjoint requirements?—Yes.

1685. In that case the third year for anatomy and physiology for a University purpose, would, I presume, interfere not a little with the further studies required for the Conjoint Board—the supplemental subjects?—That is so.

1686. And that is where the point of inconvenience comes in?—Yes.

1687. It would inflict, I imagine, an extra course?—An extra course, and it would delay him. I think the actual working of the system would be the delaying of the graduate—getting a qualification at the end of five years—I am afraid it would work in that way.

1688. Can you give us any indication of the number of examinations it would entail upon the medical student, satisfying both the University test and the registration test?—You mean the conjoint scheme and the other?

1689. Yes. What would be involved by the student passing a double test?—In the double tests he would have four examinations by the conjoint, and by the University either three or four.

1690. Then that would mean seven or eight examinations?—It would.

1691. Are these examinations always taken in one part or are there cases where they would be sub-divided?—They would be sub-divided.

1692. How much?—The first one may be taken in three parts. The second one—I am not quite sure about the conjoint scheme—may be taken in one or two parts. How the third is divided I do not know; and the fourth is sub-divided.

1693. There ars something like 12 different stages of examination to satisfy both tests?—He may satisfy it in eight or ten parts, but that is a minimum.

1694. That is more than is required by any existing University curriculum?—In most University curricula they are not allowed to sub-divide so far.

1695. But it would be multiplying the number?—Yes, it would be multiplying the number.

1696. Beyond that of any existing University?—I could not exactly say that, but it would be multiplying very considerably.

1697. Now, coming to the sheet with which you have furnished us, the part about the proper balance of Faculties referred to in Clause 2 was not, I think, completely argued by Mr. Anstie. I understood from you that the representation of the Medical Faculty would amount, assuming the representation of the Royal Colleges and the Society of Apothecaries, to 18 members?—It might be 18 or 19, I take it.

1698. And the natural representation of the Arts Faculty, assuming one from University and one from King's College, would be six?—Yes.

1699. And science likewise six?—Yes.

1700. Law, four?—Yes.

1701. That gives a total of 18 medicine and 16 arts, science and law combined?—Yes, that is the way it stands.

1702. That is to say, all the academical members?—That is to say, all the academical members.

1703. That does not take into account the non-academical members?—No, it does not take into account the non-academical members, the Chancellor and the High Steward.

1704. Then out of the total of 36, 18 might be medical?—Out of a total of 36 or 37, 18 or 19, as the case may be, would be medical. That is what I make it; I am not prepared to say that that is absolutely correct, but it is as near as may be, as far as I can make out from the Charter.

1705. It is pointed out in the next paragraph, that the Council is the only Univerity authority comprehending all the Faculties. That I understand, is a reference to Chapter II. of the Gresham Charter, which defines the various assemblies of the Faculties. The constitution, if I read it aright, is that there is a Medical Faculty included as one of the Faculties?—Yes.

1706. That is a body before which the medical policy would be discussed, and by which medical reform would be initiated?—Yes.

1707. That would be entirely medical?—Yes.

1708. And their resolutions, if I understand the Charter, would pass up direct to the Council?—So I understand it.

1709. Then it would be a body of 38 or 39, of whom 18 or 19 are medical?—That is so.

1710. In that case the medical authority would be, in the first place, initiated by a purely Medical Faculty, and would then receive final judgment from a body, of which fully one-half might be medical?—That is what it appears to be.

1711. I think there may have been some misapprehension in Professor Ramsay's mind with regard to the constitution of such a University as Victoria. With whom there is medical policy ordinarily initiated? What corresponds to the Medical Faculty of the Gresham University?—I put it in this way:—In the Victoria University there is a Court which would correspond to the council of the Gresham. There is a Council in Victoria University, I understand there is nothing comparable to that in the Gresham. There is what is called a General Board of Studies in Victoria. I understand there is nothing comparable to that in the Gresham. Then in Gresham we come to the Assemblies of Faculties. The Assemblies of the Faculties in the Gresham, are equal to what we call our Departmental Boards of Studies, that is to say, to the Departmental Board of Medicine, the Departmental Board of Law, and the Departmental Board of Science. Then the Boards of Studies of Gresham University are Boards of Studies delegated by the Faculties. They have an entirely different significance from what the term "Board of Studies" has in Victoria. The term "Board of Studies" in Victoria University means a body in which all the different Faculties are represented, and the

Board of Studies intervenes between the Departmental Boards of Studies and the higher body, the Court, while in the case of Gresham, there is the Board of Studies, but the Boards of Studies are nominated by the Faculties, that is to say, medicine nominates its Board of Studies, and science nominates its Board of Studies. Then there are assemblies of Faculties. Then the Board of Studies reports, say to the Assemblies of Faculties, and that body reports to the Council. There is no intermediate body by which a matter would be discussed before reaching the highest body in the Gresham Charter.

1712. (*Lord Reay.*) How are your Boards of studies appointed:—The Departmental Boards of Studies?

1713. Yes?—That will come out of the Charter. It is not very clear in the Charter. The Departmental Board of Medicine consists of all the professors and lecturers on medicine in the three colleges, plus all the external examiners. (*Here the witness handed in a copy of the Charter of Victoria University*).

1714. (*Mr. Rendall.*) That is an entirely medical body?—That is an entirely medical body. The same would apply for science and the same would apply for law. Then the next is the General Board of Studies. That general Board of Studies consists of all these separate Boards, that is to say, all the representatives of medicine, science, and law are on the General Board of Studies.

1715. In fact the whole body of teachers?—The whole body of teachers. Then there comes the Council. Well that is rather a complex body.

1716. (*Lord Reay.*) Are the examiners also on the General Board?—Yes, they are also on the General Board. That is as regards the Council, shall I read it?

1717. No?—It is rather a complex body.

1718. (*Mr. Rendall.*) The question of medical curriculum in the case of Victoria University would first come before a body of medical teachers?—Yes.

1719. Then it would pass to the general Board of Studies, and receive the judgment of the general body of teachers—arts, science, laws, and medicine?—Yes.

1720. After that it would pass to the representative body, into whose status we need not go—the Council of the University?—Yes, that is so.

1721. Corresponding somewhat to the Council of the Gresham University?—Not quite; there is nothing exactly comparable to it.

1722. Then it would pass from this representative body of the Council to the Court of the Victoria University?—Yes.

1723. So that any matter concerning the curriculum would necessarily pass through four stages?—Yes.

1724. And do those four stages constitute an effectual series of safeguards?—I think they have proved to work so in the Victoria University.

1725. That is my own opinion. I only wanted to make clear a point that was raised by Professor Ramsay, that the whole power lying in the Court, it might be in the power of the Court to take hasty action in the matter of curricula. Then we come to a point with regard to the proviso that every medical degree shall require a qualification for registration under the Medical Acts. Does any other University Charter contain such a proviso?—No.

1726. None at all?—None at all.

1727. Then that puts this University in a new position?—Quite a new position.

1728. Is there any method of obviating that proviso?—The other way, of course, would be some arrangement with the existing London University. That is the only other way.

1729. If it were embodied or incorporated or built up on the basis of the London University that objection would be avoided?—That objection would be certainly avoided.

1730. Did I understand you to imply that in your opinion there ought to be some insistence in the Charter or University tests to ensure high standards in arts and science?—Yes, that is our position.

1731. Are there any safeguards existing in other Universities which would not exist at Gresham apart from this proviso. Is there any safeguard for a balance of Faculties at the Victoria?—Yes, on the Departmental Boards of Studies and on the Council.

1732. Is there in the constitution of the colleges?—A college before it is admitted in the Victoria University must show a reasonably complete curriculum of science and art.

1733. Is there any proviso regarding the Faculties that each college must possess the number?—It must at least possess two, arts and science.

1734. In all cases arts and science?—Yes, in all cases arts and science, at least.

1735. In the case of every college of that confederated University, there is always a Faculty of Arts and Science to balance the Faculty of Medicine?—Yes, always.

1736. There is no provision of the kind in the Gresham University?—There is not.

1737. Assuming that there should result from the policy pursued by the council some lowering of degrees, would that be likely to affect the standards of other Universities?—I think probably it would.

1738. It would make it more difficult for London University to retain its present standards?—Well, I suppose it would.

1739. It would constitute competition of degrees, carrying in the eye of the public something of identical value?—I am afraid that is what would happen.

1740. Would it be at all likely to re-act on Victoria University?—That I do not know; I am not prepared to say to what extent it actually would.

1741. Is there any tendency in medical students to pass from one University to another?—I think the medical student would probably go where he thought the examination was easiest.

1742. He might be tempted to select the University where the highest degree, the doctor, might be more easily obtained?—I think he might.

1743. So there would be some danger of the standard of Victoria University or that of other Universities being lowered?—It is possible.

1744. Then it cannot be spoken of as a mere theoretical objection that it might affect practically the degrees of London University and other Universities in the country?—It might do so.

1745. There is an effective difference between the degree and the medical qualification?—Yes, a very considerable difference.

1746. Can you support that at all by numbers? We have had some figures given us this morning showing the number of degrees?—I think they have been handed in already.

1747. Showing 58 in the four years; can you give us at all the kind of proportion of students who proceed to a University degree, as contrasted with the conjoint examination, in the Colleges of Victoria?—I can give you the numbers in this way. I take the colleges of the Victoria University. At Owen's College, 1889-90, the total number of medical students was 337. Of these 134 were Victoria students, 66 were London students, making up 200, and the remainder consisted chiefly of conjoint students and a certain number who entered for special classes. That is to say, there is still a very large proportion go for the conjoint.

1748. Does that represent the number who train for it?—The number who were present that year and in training for it.

1749. How does that compare with the number who succeed in getting the degree?—You have them there. If you take Victoria for four years as 134, there would be, roughly, 40 students studying for the Victoria degree each year, this gives four years.

1750. (*Mr. Anstie.*) It would be more, would it not, they would run together?—40 or 50 would be the outside. In 1891 the numbers were the same; 341 total entries, Victoria 124, London 59, and the remainder conjoint.

1751. (*Mr. Rendall.*) In effect, that is a minority of students who are successful in securing the University degree?—Yes.

1752. Something like 25 per cent.?—I should say something like 25 or 33 per cent., or even less.

1753. Perhaps 50 commenced to train, and 25 or 30 succeeded in securing it?—As in all University examinations.

Prof. W. Stirling, M.D.

9 June 1892.

1754. And they are prevented from attaining the degree owing to the difference of standard of difficulty?—Yes, the preliminary and scientific standard.

1755. (*Lord Reay.*) Would you explain, with regard to these conjoint students, where they are educated?—They may be educated at any school of medicine in the country.

1756. Have you got any in the colleges of the Victoria University?—In the colleges of the Victoria University more than one half of our medical students are students training for the conjoint examination.

1757. Are they mixed up with students training for the academic degree?—Yes, but there are special classes for the Victoria University men which the conjoint men do not attend.

1758. But the conjoint men do not attend any extra-mural classes outside the University?—We have no extra-mural school in Manchester. It is not complicated in Manchester as it is in Edinburgh or Glasgow with an extra-mural system.

1759. Those conjoint students, I understand, are solely and absolutely prepared for those examinations by attending your lectures?—And the lectures of the other professors in Owen's College and in the other colleges of the University.

1760. If they are solely taught at the colleges of the University, why should the teaching given at the University not be tested by some University examination which would then not confer an M.B. or an M.D. degree, but a licentiateship?—That is to say, you suggest that Victoria University should have two standards. Is that what I understand you to suggest?

1761. Yes?—That the Victoria University should give a lower qualification and a higher qualification—the degree qualification and something less?—Yes.

1762. I am probably wrong, but I should think that as a University it would only have power to give the degrees that other Universities can give by its Charter.

1763. I am asking the question not in its application only to your University, but to all Universities. What is the educational advantage of a licence being obtained from the outside when the students have received their tuition at your hands, and might just as well be examined by the University, which conduct the higher examinations?—The Universities have no power to give a lower degree.

1764. I ask what is the objection to such power being given to the Universities?—But how is such power to be given to them?

1765. We need not enter into that. I merely ask what educational objections there are to such a course?—It seems to me that there is already a sharp enough distinction between the Universities and the colleges. I do not see that the University desires to give anything else than it does at present.

1766. Would not the outside world find a greater guarantee in a lower degree granted by a University authority than by a lower degree granted by an outside body?—There is no outside body grants a degree. It only grants a qualification.

1767. Let me put it in this way. What objection would there be that this qualification should be conferred by the University authorities after an equally severe test instead of being conferred by an outside authority?—It seems to me that what Mr. Anstie suggested was that the function of these Royal Colleges would be abolished.

1768. Would you kindly answer my question. What would be the academic objection to your students who came up to you for a special purpose, in order to see whether that special purpose had been accomplished?—These conjoint students are not members of the University.

1769. Why should they not be made members of the University, although they only enjoy the teaching of some classes and frequent it for a professional purpose only?—They are not members of the University until they have passed the entrance examination. We have the barrier of the entrance examination. That is the barrier that keeps them out.

1770. Therefore those students are outsiders altogether?—They have nothing whatever to do with the University.

1771. Except that they sit on the same benches and in the same lecture rooms with the other students?—Yes.

1772. And are they never examined?—There are class examinations always, but we have nothing to do with examining them in any other way.

1773. But they have class examinations?—Certainly, but these conjoint students at the colleges of Victoria University are not what are called members of the University. They are as much outside the University as the student, for example, in London, studying at a London College.

1774. So that these students, who afterwards are licentiates and get their licenses from the Royal Colleges are, according to your evidence, in no sense of the word University men?—They are in no sense of the word University men. Certainly not.

1775. And at the same time you admit that to supply the demand which exists for such medical practitioners, this inferior course of studies must be upheld?—I think so.

1776. And that the Universities must supply the inferior course. I do not mean inferior in quality, but from your evidence I conclude that it is inferior in quantity—for the purpose of passing that lower examination?—Do not confound the University with the colleges. There is a very sharp distinction. The colleges of University that I am speaking of (Victoria) supply what you call the inferior teaching—using the word in no invidious sense—for these conjoint men.

1777. But the University gives its sanction to the inferior teaching, or the reduced teaching, limited in quantity?—The University has nothing to say to it.

1778. But have the colleges power to give lectures to students without deriving those powers from the University?—Certainly.

1779. Therefore the colleges with regard to admission to their lectures enjoy a distinct autonomy as separate from the University?—They do.

1780. The admission of these outside students to your lecture rooms has never been sanctioned by the University Court?—They are not on the books of the University. The University has nothing to say to them. They are simply enrolled as college students.

1781. But the University has authorised the college authorities to admit them to the lectures?—The University has no jurisdiction in this respect.

1782. But supposing now that this question came before the University authorities as distinguished from the college authorities, what attitude ought the University to assume upon this special function of the colleges of teaching these outsiders who, as I understand it, have not had even a sufficient general preparation?—Yes, they have had a sufficient general preparation. They have had the preparation demanded by the General Medical Council. They are not admitted into our school until they have passed the minimum required by the General Medical Council.

1783. But they have not passed the minimum required by the University authorities?—Certainly not. As soon as they pass the minimum required by the University, they become University students, but that is exactly what they cannot do. I mean, the University minimum is so high, that it puts a barrier to these men becoming University students, and then they go for the conjoint qualification.

1784. And you consider that it is better that this qualification should be granted by the outside body, and should not be conferred on them in the centre where they have been taught?—No; the colleges where they have been taught can confer nothing on them. They have no powers.

1785. I ask whether it would not be desirable that for them as for the University students teaching and examining should go hand in hand? What would that amount to in the London schools?—That would amount to 10, or 11, or 12, qualifying bodies alone, and in the Victoria University it would mean bodies giving a lower qualifying standard that the Victoria University.

1786. Therefore you require an outside body for the conjoint students, because the University will not and the colleges ought not to examine them?—Yes.

1787. You are afraid of multiplying opportunities for acquiring the professional qualification?—Certainly; that would multiply the portals of admission to the Medical Register by I do not know how many. There are plenty already, about 20. I do not know how many it would be upon that scheme.

1788. As for the University students you do not require an outside body, and you do not object that the degree should be conferred by their own teachers?—No, the degree is not conferred by their own teachers. The examinations for the degrees are conducted in part by their own teachers, and in part by external examiners appointed by authority of the University.

1789. But you do not object to the external examiners being associated with the teachers?—On the contrary, it is part of our system. The examiner is a teacher in many cases if not in all, but there is always an external examiner along with him.

1790. And you think that system is superior to other systems?—We think that system works well. It is especially the system which is adopted in the Scotch Universities. In the Scotch Universities the Scotch professor has put upon him not only the duty of lecturing, but he is called upon also to examine along with an external examiner appointed by the University. With us we have practically that Scotch system, and a great many, at any rate of our external examiners, are teachers of students. Along with the teacher is associated always an external examiner.

1791. Therefore, the system of examinations which is applied to those students who study on University lines is one which you think preferable to the one which is applied to those who study on the conjoint lines?—Yes, I think so.

1792. The practical difficulties are so great that it cannot be extended to those who study on conjoint lines?—No.

1793-4. Now I understand that the Victoria University is prepared to support the promoters of the Gresham Charter in obtaining for them the power of granting degrees which shall entail a registrable qualification?—That is so.

(*Mr. Rendall.*) It is not so with the present Gresham University Charter. The Victoria University supports a University.

1795. (*Lord Reay.*) The Victoria University will not object to the Gresham Charter with reference to medical degrees, if that condition is inserted. That is one of the conditions?—Certainly.

1796. Another condition is that the Gresham Charter, as it is now laid on the table, should not give to the Medical Faculty the commanding position which it is feared it would occupy?—Quite so, that there should be a due balance of Faculties, an equality amongst the Faculties, and in no case should the medical representatives, as expressed here, be able to outvote the representatives of the Faculties of Arts and Science. That is simply a way of putting it, that it shall not be too commanding a position.

1797. Your memorandum, of course, only refers to the Medical Faculty. I quite understand that it is not exhaustive with regard to the other faculties; but if those two objections are removed, your objection to the Gresham Charter with regard to the Medical Faculty——?—It would nowhere hold, for this reason; in other respects the Gresham Charter is practically our own. It is practically our own on the same lines as the Victoria Charter. There is the other suggestion that a safeguard would be expedient perhaps between the council and those Boards of Studies. That is a subsidiary thing that one does not enter into.

1798. Then, obviously, you do not lose sight of the fact that the Victoria University is composed of constituent colleges in different places, whereas a London teaching University would be absolutely local?—Absolutely local.

1799. And you admit that this circumstance would influence its constitution?—Yes.

1800. Especially in some of those details?—Yes.

1801. You are distinctly in favour of an entrance examination for University students?—Certainly. Entrance in arts, you mean.

1802. An entrance examination for medical students?—Yes.

1803-4. Would you have an entrance examination on distinct lines for each Faculty, or the same for the University generally?—In Victoria there is a special entrance examination in medicine. There are two entrance examinations, one to arts, science and law, and one to medicine.

(*Mr. Rendall.*) Are you not confusing the preliminary and the entrance in arts?

(*Mr. Rendall.*) In the case of the medical students there is a special entrance examination in arts, which constitutes their one and only arts test. All other students enter for arts with a preliminary examination corresponding very closely indeed with the London Matriculation.

1805. (*Mr. Anstie.*) There is one point in which I failed to follow your answer to one of his Lordship's questions. I understood you to say that in the University the examination of the candidates for degrees, and the other University titles are conducted by the teachers in the University?—By the teachers in the University.

1806. Being themselves teachers in colleges belonging to the University?—Yes, not necessarily all the teachers.

1807. But that body together with outside help?—Yes, external examiners; that is the title they get.

1808. Therefore, it is not the case that in each college the candidates are examined by those who have taught them personally, necessarily?—They might be and they might not be.

1809. Not necessarily?—Not necessarily, they might be, or they might not be.

1810. But they, are in fact, examined by what may be called a Conjoint Board composed of teachers in the various Colleges?—Yes.

1811. Then I do not follow your answer to his Lordship's question why the same practice might not prevail with respect to the licensing examination, and why you should think it necessary that the individual college and not the University should conduct the licensing examination?—We have no licensing.

1812. But his Lordship put to you this point, as I understood, why should not the University, which teaches through its college students for the conjoint, itself conduct a licensing examination? and you seemed in your answer to think that in that case it would have to be conducted by each college separately. Why is that?—It does not seem to me that the University has any power.

1813. That really is not the point. Is it not whether it has power, but whether any objections lies to a particular course being taken, and I want to know, if the University had in charge the conduct of the licensing examination so as to give a qualification for practice, as distinguished from a degree, on what ground you think that in that case the examination would have to be conducted by each separate college. Why should it not be conducted by the University?—Under any Act of Parliament or anything of the sort that I know of there is no such thing. This is a purely theoretical question.

1814. We are now engaged in an educational inquiry, and I am asking on educational grounds, and supposing the whole matter to be moulded afresh, what is the ground on which you say that the examinations would have to be conducted by each separate college?—Would there have to be three? A license to practise conferred by a University; then an M.B.; then an M.D. with honours? Would there be three?

1815. You might have any number?—The objection to-day constitutes what has been the objection all along, that it would increase the number of portals to the medical profession.

1816. My question is a very simple one: assuming the University had the power, not only of examining for and conferring degrees, M.B. and M.D., please assume that, and also had the power of examining for a licensing qualification, why do you say such a power could not be exercised by the University, but must be exercised by the several colleges?—I did not mean that it could not be, but what I mean is that under any existing Charter or Act of Parliament, it cannot be.

1817. We are not talking about existing Charters, or existing Acts of Parliament, but about the advantage or disadvansage in an educational point of view, or in a public point of view of a certain course. Now I will put the question to you on that line. Do you see any reason from a public point of view, why a University which has the power of examining on its own teaching so as to confer a license accompanied by the degree, should not also have the power of conferring a license not accompanied by the degree on its own teaching?—Of course I must go back and harp on that old string, and say that, put theoretically, as you put it, there is no difference. But I want to be guarded in this way, that there would still come in the practical difference

Prof. W. Stirling, M.D.

9 June 1892.

about students having to pass these two sets of examinations.

1818. Why would he have to pass two sets of examinations?—The conjoint and the other one, if that second examination is not to be a registrable qualification.

(*Lord Reay.*) The conjoint student, in Mr. Anstie's view, would not have to pass the Conjoint Examination, because the examination of the University would be a registrable qualification.

1819. (*Mr. Anstie.*) What I am putting is that the University should have and exercise the two functions: first, upon its own teaching, that is to say, the teaching of its colleges, examine the students for the purpose of a licensing qualification merely; and also upon its own teaching given through its colleges, examine students for an academical title?—On that I say I see no objection to it. Theoretically I see no objection to that.

1820. And, if adequately guarded by the inspection of the Medical Council, which you laid much stress upon, you see no public objection?—No public objection.

1821. (*Lord Reay.*) Do you think that the public would attach less credit to a license conferred by the University without degree than to one conferred by the licensing bodies which at present have the power?—It is a very difficult question to answer, how the public would take a matter of that sort. I could not speak for the public. You see, this would be a new thing altogether; if the University were to give a license to practise as distinguished from their M.D. or their M.B., that would be a distinct thing altogether. How the public would look upon this new thing as against a qualification to practise given by the old colleges, I do not know. I think they would probably prefer the colleges.

1822. (*Mr. Anstie.*) But theoretically you see no objection?—I think it just possible that certain Universities would be extremely glad to have the power. What the College of Surgeons would say to it is another point.

The witness withdrew.

Adjourned to Wednesday next at 11 o'clock.

Fourth Day.

Wednesday, 15th June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.	JAMES ANSTIE, Esq., Q.C., B.A.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	RALPH C. PALMER, Esq., B.A.
Professor GEORGE G. RAMSAY, M.A.	Principal G. H. RENDALL, M.A.
Professor H. SIDGWICK, Litt.D.	J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

GEORGE CAREY FOSTER, Esq., F.R.S., examined.

G. C. Foster, Esq., F.R.S.

15 June 1892.

1823. (*Chairman.*) I think you belong to University College?—I do. I am Professor of Physics.

1824. You are one of those who have taken a line against the proposed scheme of the Gresham University. You are not in favour of it?—No, I do not agree with it.

1825. You have come prepared, I suppose, to give evidence as to your objections to that scheme, and also with regard to what scheme you would prefer?—Yes.

1826. Perhaps it would save time if you were to take your own line in giving us your views as to the general subject, and how you think a teaching University for London could best be formed. Will you take your own line and make your own statement?—It has seemed to me in considering this subject that the most important of all points is to attain unity of organisation and administration. I have very little hope of any really great step being made in the organisation of university matters in London by a mere alliance between independent institutions. They must necessarily compete with each other. They may desire to be as friendly as possible, but the conditions of existence would render competition and rivalry both for funds and for teachers and pupils inevitable. I do not think that under that state of things any of them can be as efficient as they ought to be in order to bring into existence a really great University of London, such as I hope may be the outcome of this attempt. On the other hand, if the existing materials in London could in some way be brought together I think we might see before very long a university which would compare with any of the great Universities on the Continent. My chief reason for thinking that a mere federation such as is proposed in the scheme of the Gresham University is not likely to give any valuable results is this. In the first place that was only a federation for degree-giving purposes; it would not have put the teaching and the promotion of knowledge on any better footing than it is already upon; at any rate not directly. By indirect operation, such a result that might to some extent have come about. My chief reason for thinking that a mere alliance of independent institutions would be inefficient, is that almost everything that can be done runs up sooner or later, and generally pretty soon, into a question of finance. Unless there is unity of pecuniary interest I do not think there can be much efficient union of an academical kind. Different subjects vary very much indeed in the extent to which they can be made self-supporting. There is a much greater demand for the teaching of some subjects than others. Of course those subjects for which there is a great demand are more nearly self-supporting than those which ought necessarily to be included in any University curriculum, but which are studied only by a much smaller number of students. Again, in any one subject the elementary stages are much more sought after than the more advanced. The special work of a University seems to me to be to promote

the most advanced study that there is any demand for at all—to create a demand, if possible for the highest kind of teaching, and to meet it where it exists. For reasons of this kind it seems to me impossible in an alliance of different institutions to assign to each of them the work which it might most usefully do. There can be no real co-ordination and adjustment of resources to what is required to be done. Of course I have very much in my mind in thinking of these matters the relation between ourselves at University College and our friends at King's College. We are on very friendly terms, but we look to the same sources for pecuniary support and for students, and so on. We really are competitors, and it would be quite impossible, as things are at present, for us to give up any of our more important subjects, because for reasons of organisation it seemed better that they should be carried on at King's College. We simply cannot afford to do it. We must each of us do that kind of work and at those stages, which we find there is a demand for. And again, if we seek for outside help, say if one of our colleges were to go to any public body like the Corporation of London, or to appeal to Parliament for help, the answer in such a case might easily be, "Your work may be very valuable, but you are not the "only body that is doing this kind of work, and if we "give to you we must give to other institutions of a "like kind." That is a very easy way of saying no all round. Whereas if they were combined in a single body there could be no question in that case where any funds available for the purposes of higher education ought to go. If there were any question of devoting money to the higher education in London it would naturally be given to the University. It may not come immediately, but what I should like to see, and what I should like to work towards, would be a University which should not comprehend a number of separate colleges, but, like the Scotch or German Universities, would be a teaching body which might carry on its work in various buildings and which would also exercise the University function of giving degrees.

1827. Then what would happen to King's College and University College. Would they be merged in the new University or continue to lead their independent existence?—My idea is that they should be merged, amalgamated into a single organisation.

1828. And cease to exist?—And cease to exist as separate institutions with separate interests.

1829. Would you have anything to do with the London University. Would that come into your scheme or be left outside altogether?—I should wish to see it come in if it is willing to do so. Any such amalgamation must be the result of voluntary co-operation. I should think it would be impracticable to impose it. I look rather to the creation of public interest and public opinion upon this subject which would affect the various bodies that are concerned, and when they have really considered it and got used to the idea they would see that the work they are doing could be more efficiently carried out by an amalgamation of interests.

1830. You think the London University might be the new University you describe with a certain amount of re-modelling?—I think it would be very desirable that there should be, if possible, one University in London rather than two. I hardly look to greater continuity in the present University than in the colleges. I think they will all have to go into the melting pot on a common footing and a grand University will come out. That is my idea, but perhaps it is a question of words more than anything else whether it could be said to be the present University that is continued with alterations. I think the work the present University is doing is of its kind most valuable and that it should be provided for in any new scheme. I am not absolutely clear in my mind whether the work that the present University is doing can be satisfactorily taken in hand by the same body as would deal with the teaching—the more direct promotion of knowledge. If it can be, which I think is probable, I think there would be very great advantages in having only one University. If it turns out on coming to closer quarters with the question that it cannot be satisfactorily provided for by one body I do not think that should be a reason against two Universities, though I strongly hope that that would not be found necessary.

1831. Did you read the scheme that was proposed by the Senate of the University and rejected by Convocation?—Yes.

1832. Do you think anything in that direction would meet the difficulty?—I was very much in favour of that at the time. I was not as hopeful at that stage as I have been since the question has been re-opened of anything better. That appeared to me to be a great improvement on the existing conditions, but it would still have left the colleges autonomous, which, for reasons I have already partially indicated, seems to me inconsistent with the best idea that could be formed of a London University. It would have brought the teaching into much closer relation with the degree-examinations, and that, I think, would so far have been a very valuable result.

1833. You attach great importance to the connexion between the examination and the teaching?—I think that examinations carried on according to a schedule laid down by a more or less non-academical body will always fetter the best teachers. I think it must tend to suppress individuality, which I think it is desirable to encourage within reasonable limits.

1834. Then with regard to the voice in determining the curriculum of the examination?—I should wish the teachers to have so much influence upon the examinations that any teacher who is considered worthy to be a University professor should be able to decide very much for himself what he would teach and how he would teach it. He should not be trammelled in that by considering whether his pupils would be able to pass any special examination afterwards.

1835. Your chief objection to the Charter as it stands is that the University would hold a subordinate position to the colleges; that the colleges would not only retain their own autonomy but would really govern the new University as well?—I should hardly put it in that way. The Gresham scheme I do not look upon as constituting a University for anything but degree giving purposes. My own feeling as to what I consider is the change required in a London University is to promote the highest teaching and original investigation—in fact the direct promotion of knowledge. No doubt well-conducted examinations are valuable for that purpose, but it is only an indirect operation which they have. My own interest in University re-organisation in London is in the hope that the result of it may be that the teaching and promotion of knowledge will be put on a more satisfactory and efficient footing than they are now. I do not see that the Gresham Charter as it stands does that, except in a very indirect way.

1836. When once started might it not gradually improve itself and the University part become more strong and the college part more weak, and thus get to fill the position which the University ought to fill?—It seems to me that that might possibly be the result, but that would be rather in spite of the Charter than in consequence of it.

1837. You think there is no hope of getting at what you want through this plan of combining the two Universities and strengthening the University element and weakening the colleges. You think there are no means of getting at it through this line at all?—I do not wish to weaken the collegiate element in the sense of taking anything from them. I want rather to strengthen it. The colleges at present do not receive either from public or private sources as much support as is required to enable them to do their work as efficiently or as well as they are capable of doing it, and that, I think, in the public interest, is a very great misfortune.

1838. The plan that you would wish for would require a large grant of public money, would it not?—I consider that large funds are necessary to produce an effective London University whatever its constitution may be; but I think there is a much greater chance of getting money for a single magnificent organisation than if you have a number of bodies, none of them so great and so distinguished as to stand out very much from the rest, and if they are all competing with each other. Whether the organisation is of one kind or another very considerable pecuniary support is essential to any great improvement on existing conditions.

1839. Supposing the new University to be established, would you have the teachers for the different colleges appointed by the University authority or their own governing body?—If my idea of a London University were carried out there would be no longer any separate colleges. They would all be merged in one body.

1840. You would appropriate the buildings and the funds that they already possess for the University?—That is my hope of what may sooner or later be arrived at.

G. C. Foster, Esq., F.R.S.

15 June 1892.

1841. It would be nothing in the nature of Oxford or Cambridge, but more in the nature of a foreign University or the Scotch Universities?—Yes.

1842. It would be doing away with individual colleges altogether?—What I look to would be very much a return to what was attempted some 60 or more years ago, when what is now University College was founded. That was founded as the University of London on the model, practically, of Scotch or German Universities; that is to say, it did not consist of a University with a number of subordinate colleges; but the University professors were the only teachers recognised by it; it never had the power of granting degrees, but it was intended that that power should be obtained and should be exercised by the same body as that which was responsible for teaching. It is that idea, though it would be carried out now, if at all, under different conditions. In 1828, or whenever it was that the original University of London was founded, that was the only body. Now there are other bodies that would have to be considered and brought into the same organisation.

1843. You would have the degree open to all comers. It would not be necessary that they should have gone through a course of University instruction? You would let it be open to all comers as the University of London does now?—I should be willing to do that. I am not sure that it is in itself intrinsically desirable. I think it might, perhaps, be better that there should be separate examinations open to all comers, different from those which would be set to the regular students of the University, but that, I think, is a point that might be dealt with hereafter. I do not consider it a fundamental question. I think that the open examinations ought to be continued though the precise arrangement of them is a matter upon which I am not perfectly clear in my mind.

1844. You would arrange it that the examinations should be in strict accordance with the teaching given by the University—that the two should be on the same lines?—I think the examinations for University students ought so far to follow the teaching that they have received that they would not, as I said before, tend to suppress individuality on the part of teachers or prevent them doing the best work they are capable of.

1845. If outsiders came in they would be under the disadvantage of not having the teaching which led up to examination?—Quite so. I am not clear that the examination that would be the best for the students of the University would be entirely suitable for outside candidates; therefore I think it may be possible that it would be better to have a separate scheme of examination for the two classes.

1846. A separate examination altogether, that they should not be in competition with one another?—I think it is very possible that it would be better that they should not be so.

1847. Then you think it possible that you might adopt some scheme in conjunction with the University of London, but you do not think the scheme of joining the two Colleges, as is proposed here, could possibly be so modelled as to suit your views in any way?—I do not think that that amount of union would produce any very valuable result.

1848. Then no mere amendment of any sort in the Charter would meet your wishes at all?—I am perhaps hardly prepared to go as far as that. I think many points in the Charter might be retained, but I think it would want so much change that it could hardly be regarded as the same Charter over again.

1849. It would not be worth while going through the Charter and asking you what alterations you would have made because they are so fundamental that they would go to destroy the whole thing. Or is there any particular part that you would like to direct our attention to?—I think that what I most fundamentally object to is Clause 25: "The authority over Colleges.—"A college in the University shall not in any way be "under the jurisdiction or control of the Council, "except as regards the regulations for the duration "and nature of the studies to be required of the "students of the college as a qualification for Univer-"sity degrees or distinctions." That seems to me to keep the colleges alive as separate institutions having their independent interests and organisations. I do not think that that is, as a permanent arrangement, at all satisfactory.

1850. What control would you give to the Council over the colleges, if you kept the colleges alive at all?—I want to merge the colleges in the University. I should be prepared to do that gradually if one could devise a scheme of transition, but I do not want to keep them alive as they are.

1851. That would be the principal clause which you would modify?—I think that marks a difference between a University produced by the amalgamation of existing bodies and a University depending upon an alliance for degree-giving purposes between independent organisations. That is, I think, my fundamental point of objection to this scheme. There are various others. For one, I object to the preponderating influence which the Medical Faculty would have in it. I think they have much too great weight.

1852. You mean too much weight for medical degrees, too many representatives on the Senate?—Too large a proportionate representation.

1853. With regard to the amount of weight that is to be given to the teachers in fixing the course of the examination, do you agree, or do you disagree?—Yes, I do not think I have any important fault to find with that.

1854. And with regard to the assemblies of Faculties, and the Board of Studies, all that machinery?—It seems to me rather unnecessary to settle so much detail in a charter, but I have no particular fault to find with that. It does not seem to me fundamental at all.

1855. You agree with affiliating the medical schools to the central University?—Yes, I think the work of medical education in London is so important that it ought to be connected with the University.

1856. I suppose the medical schools would retain their autonomy. You could not merge them in the University?—Certainly not so fully as I hope would be possible for colleges dealing with education in arts and science. Probably it would be necessary that the medical schools should remain independent.

1857. Is there any other point in the Charter to which you would wish to draw our attention, or anything else that you wish to say with regard to the general subject with which we are dealing?—I should like to say that in advocating a University on the model of, say the Scotch or the German Universities, which I have often referred to in trying to explain in my ideas, that implies in my mind the existence of endowed professorships; I do not want to see individual professors having an undue monopoly or power of excluding others from teaching in their own subjects, so far as that may be desirable in the public interest. I should like to see more than one professor of the more important subjects, probably professors of co-ordinate authority. Besides that, I think there should also be teachers of, in some respects, inferior standing, more or less analogous to what are called in German Universities extraordinary professors, and also perhaps, lecturers corresponding to the German *Privat-docenten*.

1858. And you would allow the students to choose which professors they would go to?—Yes, I would allow freedom of choice. If you had endowed professorships as permanent appointments it is desirable that there should be sufficient emulation amongst other teachers of the same subject to prevent the professor becoming inefficient. There should be an intellectual emulation between him and other teachers dealing with the same subject.

1859. Would you make it compulsory on the students that they should attend some lectures upon some subjects, or would you leave it entirely optional?—The only sort of compulsion that I see is practicable is making attendance on a certain amount of University teaching necessary for admission to the degree examination.

1860. That would shut out the outsiders?—If the degree examinations are open to all comers, of course, that kind of compulsion no longer exists. In a University I do not see that you can do anything else. You cannot exert the same sort of discipline that you can over schoolboys. The lectures are there and they must take the benefit of them if they choose. If they choose to neglect them they do so on their own responsibility.

1861. The teachers are there, and would be giving a sort of instruction which would be in full harmony with the examination that has to be passed, and it would be an inducement to the students to attend; but there would be no compulsion?—No. They would be drawn in rather than driven in, I should hope, by the quality of the teaching which is accessible to them.

1862. (*Lord Reay.*) Do you propose any alteration in the appointment of the teachers at the medical schools under your scheme for a University?—In the scheme that has been thought out to a considerable extent by an association for bringing forward this view of a University, an association founded for promoting a professorial University in London, it has been proposed that a certain number of the teachers in the medical schools should be nominated as University professors. In that way a connexion between the University and the schools might be brought about, and so far there would be a change in the mode of appointment.

1863. Are you in favour of an entrance examination to the University?—I think on the whole that is desirable. I do not know that it is a very vital question.

1864. I also gather from the evidence you have just given that you are distinctly of opinion that further provision is necessary for the higher scientific teaching in London?—Distinctly.

1865. At this moment you think London has not a sufficient amount of that higher teaching?—I do not think there is a sufficient amount of it, or that the appliances in the way of laboratory accommodation, and so on, are adequate to what a University for London ought to offer.

1866. And you think organisation of this advanced science teaching should be undertaken by the new University?—I should hope that would be the result of the re-organisation of a University, that instead of the various teachers each being obliged to go over the same ground as his colleague in a different place they would be able by co-operation amongst themselves to speciallise to some extent. Each man would be able to devote himself more specially to that part of the subject in which he had most interest, or in which he was most competent. As things are now every professor has to teach every branch of his subject himself. For example mathematics: take the professor at University College and the professor at King's College. Each of them has to deal with the whole round of the subject, whereas if there were two co-ordinate professors in the same University one man might devote himself more especially to the geometrical side, and another to the analytical side; and so with regard to any other sub-division which might be found desirable.

1867. Did not this Charter contemplate such co-ordination by means of inter-collegiate arrangements between the two colleges?—Possibly it did, but I do not think that could be effective. As I said earlier in my evidence, any such interchange of work between the different colleges would very soon come in contact with pecuniary questions. One part of the work is more remunerative than another, and as we are now, neither we nor King's College, to take those two examples, could afford to give up the better paying part of our work, because somebody said it had better be done elsewhere. Unless we can amalgamate funds we cannot co-ordinate teaching.

1868. (*Professor Sidgwick.*) I think you said that you were in favour of an organisation of the University such as would resemble the Scottish or the German type. You are probably acquainted with the German Universities in their working?—To some extent.

1869. Would you desire to see the University to be established for London under the control of the teachers to an extent resembling that which exists in the German Universities, speaking broadly?—So far as I know the arrangements for graduation in the German Universities that is not the part of their system which I should be most anxious to copy. I confess that in thinking of this matter I have never had very prominently in my mind the question of graduation at all. It is rather the organisation of teaching which I have thought of as the most important point.

1870. I did not mean only to confine your attention to graduation, but with regard to the general government of the University, would you have the teaching body, or the representatives of them, placed in a position corresponding broadly to that in which they are placed in German Universities. Would you have as much power given to the various Faculties as is there given?—I think that probably it would be better for England that the professoriate should be diluted by a very appreciable lay element, as we might call it—non academic people—those who are interested in education and who would be sympathetic in the work that has to be done, but not themselves engaged in it. I should not advocate so full control over a University by the professors as, so far as I know, it exists in Germany.

1871. Would you think professors ought to have a preponderating influence in the government of the University?—Will you say exactly what "preponderance" means?

1872. For instance, if there is a governing body, should the representatives of the teaching body have a majority?—I should be quite satisfied with half and half. I think in that case the professors would have a preponderance. I should be prepared to accept even a smaller proportion of professors, because I believe they would always be at the meetings and would know the ins and outs of their work, and they would naturally get a sufficient voice, I think.

1873. You spoke of a Scottish or German University as though the two types were from your point of view broadly the same. Are you acquainted with the working of the Scottish Universities?—Not minutely; but in speaking of them in that way as for my purpose the same, I merely meant that they are Universities which do not rest on the number of separate bodies like the colleges of Oxford or Cambridge, or the constituent colleges of the Gresham scheme. It is a single organisation; there is no distinction of University or college.

1874. The point to which I wish particularly to direct your attention is the practical difference between the two types in respect of the necessity of attending lectures of particular teachers. In Germany, if I mistake not, the necessity hardly exists; and owing to the free conditions under which the *privat docenten* are appointed there is usually, at least, a possibility of competition in a German University so that a professor who is palpably inefficient is not likely to retain his class. Do you understand that to be so?—In that respect the German Universities differ very much from the Scotch.

1875. Which of the two types have you in view?—I should wish to follow the German model there, not the Scotch.

1876. I was not quite sure, with regard to a certain point in your answers to the chairman, how far you did intend to impose the necessity of attending the lectures of a particular individual?—I think that on the whole I should incline to requiring attendance at University lectures as a condition for graduation, but I would include any recognised teacher, the principal professor in any subject, or any subordinate professor, or any University lecturer.

1877. And would you practically allow anyone who could prove his competence by passing an adequate examination to become a recognised lecturer in the University, or would you limit the lecturers who should be recognised to a certain number appointed by the governing body?—I should wish to see rather an open door in that respect, but whether it should be entirely open or not, I confess I am not quite clear, whether any competent man should be able to claim recognition as of right. I think probably it would be better that the governing body of the University should be able to say, "There are plenty of people teaching "this subject, and no more are wanted."

1878. You would leave it to them to say?—I am not quite clear whether that sort of limit should be placed or not.

1879. Would you, in the examinations, retain what we may call the English system of mainly written examinations, or would you allow oral examinations to play the kind of part that they play in the German examination system?—I should prefer that the examinations should be mainly written. I think it is desirable to retain the power of supplementing that by oral examination, if it is thought desirable.

1880. Do you not think that if teachers were admitted as you say through an open door, there would be in England, owing to our traditions and habits, and especially in London, a certain danger of admitting teachers who would teach with a view to examinations, and thereby if the students were allowed to choose would draw away students from the professors?—Probably there would be that danger, and it is upon that account that I am rather inclined to leave to the governing body of the University a right to say, "We do not want more for any special subject."

1881. Then with regard to the relation of your proposed University to the existing institutions, I think

G. C. Foster, Esq., F.R.S.

15 June 1892.

you used the phrase that you wished all to go into the melting pot. That certainly seemed to me to express the view that you gave. I mean that the Charters of University College, and King's College, and the University of London would all have to be done away with, and an entirely new scheme made which would include the three?—That is my idea.

1882. Do you desire and think it feasible that this should be carried out against the wishes of the governing bodies of the three institutions, or even against the wishes of any one?—I should like to see that done, but I do not think it practicable. It must be voluntarily if at all.

1883. You do not really look forward to Parliament overriding the wishes of these existing institutions?—I should be very glad to see it, but I do not regard it as a thing that it is worth while to ask for.

1884. Then if we have to assume that the London University and University College and King's College all continue to exist as self-governing and independent institutions, I do not quite understand how you would amalgamate them. Let us take first the relation of the two colleges. How would you propose by a gradual process, assuming that they agreed to the process, and thought it desirable, to combine them to one University. Would you found a University with certain powers which should be exercised by degrees or would you adopt any other proposal?—I think it would be better to take things very much as they exist to start with. For instance, I think existing teachers must either receive equivalent appointments in the new University or they must be compensated for being got rid of. So that, to begin with, very likely the appointments in the new University would not be exactly what would be thought most desirable for the ultimate arrangement. I have not in my mind any very definite process of transition. I think we should have to begin more or less on a sudden with the new University.

1885. But would you propose that at once the governing bodies of the two colleges should be amalgamated, or destroyed, or absorbed?—I should propose that they should be united to a considerable extent to form the governing body of the new University. The non-professorial members of the governing body would be mainly taken or perhaps entirely taken from the governing bodies of the colleges combined—and of the present University.

1886. Then you would look forward ultimately to this: that there would be one body who would merely use the buildings and appliances, if I may say so, of University College and King's College for common objects?—Quite so.

1887. You desire that no competition whatsoever should remain between the two institutions?—I desire no competition between institutions, but competition between individuals.

1888. In speaking of your objections to the Charter, I gather that you allowed that an intercollegiate system was contemplated, and that opportunities were given for that, but that you thought the opportunities would not practically be taken?—I do not myself recognise very clearly that those opportunities are given or that there is much to encourage it. It is not excluded.

1889. I conceive that the meetings of teachers in assemblies of Faculties and of the representatives of the Faculties on the Boards of Studies would tend to produce that effect, but I rather gather that your view was that no such effect would take place?—I do not think it would go far unless there is an amalgamation of funds.

1890. Are you acquainted with the recent history of Oxford and Cambridge—say for the last 15 years?—Only very generally.

1891. But, perhaps, you know that by an entirely voluntary arrangement the old separation among the teachers of the same subject in different colleges has been to a large extent broken down through the establishment of an intercollegiate system?—Yes, I am aware of that.

1892. Why do you think that would not take place to any extent from the same causes in London, as soon as University College and King's College became constituent colleges in a new University and were led to meet to talk over the academic interests of the body in the assemblies of the Faculties and the Boards of Studies? Do you not think that this point would tend to bring about wherever convenient an intercollegiate arrangement?—Yes, very possibly that might come about to some extent.

1893. I think you drew a distinction between elementary work and advanced work, and also between classes numerously attended and classes slenderly attended. I suppose you hold that the advanced work would always be smaller in amount, and, therefore, the fees received from it would be a smaller item, and the more advanced it was the smaller that would be?—Certainly.

1894. Do you not think that the question of finance which you regarded as fundamental might be settled by arrangements between the colleges of this kind; that they should combine for the advanced work in which the financial question was not of fundamental importance, while retaining on the other hand in the twofold organisations the elementary work in which the financial question was of importance?—One difficulty in carrying on teaching to more advanced stages is the fact, that as things are now, every teacher is obliged to give so much time to the most elementary part of his work; his existence depends on his elementary classes; and there is not very much of his energy left for more advanced work. But if we had community of funds then a certain number of teachers might devote themselves entirely to the elementary stages and others might devote themselves entirely to the more advanced stages. There you want very much more sub-division and specialisation of work. Perhaps it is going too far to say that they should take only the elementary or the advanced; but anyhow there should be much greater separation than is possible at present.

1895. I was rather asking whether that could not be brought about by intercollegiate arrangements so far as the advanced work is concerned; because, taking the view you put forward that the question of finance would always be found important, it appears to me that that would not be likely to interfere with intercollegiate arrangements so far as regards more advanced work. Therefore, assuming that some additional endowment were obtained, from whatever source, it might be equally applicable by arrangement to the support of advanced teaching if the federal system were retained as it would be in a more complete unification?—Yes, I think that certainly something might be done by some such arrangement.

1896. Now with regard to the University of London which you wish also to be included in the same amalgamation, I understand that you desire to retain the existing examinations open to the British Empire?—I think that they are extremely valuable. They afford a standard and give a definite aim to the work of many isolated students who would not otherwise know what to be at.

1897. Do you not think that if we had a University for London in which the London teachers exercised even the degree of control which you think desirable, which is decidedly less than that which the Professors exercise in a German University, it would be very doubtful either in respect of wisdom or of equity, to assign to such a body the duty at present fulfilled by the University as an examining board for students in all parts of the Empire?—Yes, I think it is a great question whether the two functions could be satisfactorily united.

1898. Then suppose, as is proposed in the scheme to which you referred, with which at the time you were in agreement, there were a system of separate examinations separately organised for the London students and for the outsiders respectively, do you not think that a great confusion would arise as to the meaning of the two degrees, and that the confusion would be far greater than if we kept the two Universities distinct; two different degrees of the University of London would be much more likely to be confused than a degree of the University of London and a degree of the Gresham University?—I do not know that there would be more confusion, or that if there was it would be of much importance. The London University gives the same degree now for various examinations, and I think no harm comes of it. Master of Arts is given, I think, for something like four or five different branches; Bachelor of Science is given for a great many courses; but no harm comes of it, and I do not see that there would be any harm in the sort of difference that would come about in the way you have mentioned.

1899. Supposing this system of differently organised examinations is adopted, do you conceive that these separate examinations for the London students only should be restricted to Pass Examinations, or that it

should be extended to Honours examinations. I ask that because, if I am right, in the scheme of which you approved, the power of the teachers to examine is restricted to Pass Examinations?—I think it would make the honours examinations much more valuable if they were on a wide basis, and if the University holds honours examinations open to all the world. I think those ought naturally to be open to what we may call the internal students of the University. I am not at all clear that it would be necessary in that case to hold separate honours examinations for them.

1900. But you are in favour of the plan of the teacher examining his own pupils?—Yes, I would have the teacher examine, but with the co-operation of an outside examiner.

1901. You would not extend that system to the honours?—I do not know where you would get more efficient examiners than the professors ought to be, but I have no desire that they should have exclusive control of examinations. I only want so much connexion between examination and teaching that, as I have said, the best teachers should not be fettered and prevented from doing the best work they can by considering whether they are adapting themselves to an outside schedule.

1902. Do you not think if an examination is made so as to be really impartial between the London students and the students of all other parts of the Empire it must be found to have a more fettering effect on the London teachers than if they exercised a greater control?—Yes.

1903. Therefore that would be two systems to be adopted, one system for the London students and the other for the others?—I think that would probably be desirable. It would be very difficult to frame an examination so that it would not fetter teaching and at the same time would be fair to outsiders.

1904. Then may I repeat a question on which I am afraid I did not quite follow your answer. If you adopt two systems, one for the Empire and the other for London, would you desire that the London system, as distinguished from the Empire system, should be restricted to the Pass Examination?—I do not know that I am of a very decided opinion upon that point. On the whole, I see less reason for separating the honours examination than the Pass Examination.

1905. (*Mr. Rendall.*) I understand that, theoretically, you would think it best that the colleges as corporations should cease to exist and be merged in the University, but you did in one part of your evidence say you would wish not to weaken the collegiate element but to strengthen it. Was that deliberate?—I wish to strengthen the teaching side of the University. That is what I meant by that answer.

1906. The teaching conducted in the colleges?—Yes, that is not as efficient or well equipped in many ways as it is desirable. I think of the colleges as the teaching organ of the University, and that I want to strengthen.

1907. Somewhat in the same way, perhaps, as the colleges at Oxford and Cambridge in their relation to the University organism. As a matter of fact the colleges there do supply a large part of the teaching, though I do not know they are recognised as so doing by the University?—The theory of the London colleges is that they are themselves Universities. University College was founded, as probably you are aware, as the University of London, and King's College were founded on the same model with modifications of a special kind. They were intended to be complete Universities. They now have the name of colleges, but all the teaching is done by them. That is their sole function. The sole function of the present London University is examining. It was rather the distinction between the teaching and the examining side of the University that I had in mind when giving the answer you referred to.

1908. Practically you feel it inevitable that they should continue to exist as teaching institutions—as places of resort for students?—I see no reason whatever for destroying the buildings. That would be simply waste. There is a very large amount of provision for teaching purposes which, I think, ought to be utilised. We should never think of beginning again and disregarding those. But as self-contained organisations I do not wish to see them administered separately from the University.

1909. Would not you be prepared to conserve on their governing bodies certain portions, at any rate, of the autonomy, administrative and financial?—In certain parts of their work probably that might be necessary, especially in the case of King's College. I think their Divinity School would probably have to be dealt with in that way. That, I should imagine, would be kept apart, I should not contemplate in the new University a Faculty of theology.

1910. Could not you, without doing any damage whatever to the central University, leave them control over the appointment of their own college as distinct from a University teaching staff. If I look in the Calendars of King's College or University College I see, for instance, in King's College some 60 or 70—I daresay a much larger number—professors. I suppose many of them, or most of them, are not endowed professors. Would it not be possible to leave the appointment of such teachers as college teachers in the hands of the governing body?—If there were the complete amalgamation that I contemplated they could hardly be. The college councils would be absorbed in a more general body.

1911. Could you not conceive a scheme that gave on the one side to the University financial and administrative control over its teachers, and on the other side to the colleges somewhat of a similar financial and administrative control over their teachers, drawing of course a line of distinction in terms of appointment, in tenure and remuneration and the rest of it between University teachers and college teachers?—That I should think would be possible, though I do not see the advantage of it; and would it not have the effect of putting the college teachers on a lower level than the University teachers?

1912. Naturally, I should apprehend they would be on a lower level in the same way as, speaking broadly, college teachers at Oxford or Cambridge are on a lower level than University teachers. The highest status I should consider as belonging naturally to University professors, and University professors holding a place very possibly in the colleges. Would you not wish the higher status for the University professors rather than the college teachers?—It appears to me that that would rather be in the nature of superseding the colleges by the University rather than taking them into it and absorbing them on an equal footing. I should not myself feel willing to see University College superseded, but I am willing to see it absorbed into a more highly developed organism.

1913. It would remain within the power of the colleges, or it might remain within the power of the colleges, to appropriate certain portions of their funds for specified or unspecified University purposes?—That would be within their power no doubt.

1914. Would not that be the practical method of securing a transition from the present college arrangements to a University organisation?—I should have thought that from some points of view it might be almost more difficult to get the colleges to consent to that than a complete amalgamation—that they would hand over the more dignified and important part of their work to an outside body, continuing to exist to do what was recognised as inferior work.

1915. Surely it would strengthen the college very much if its foremost teachers gained the status of University professors with the natural University prerogatives of jurisdiction, discipline, representation on the governing body of the University, and the like?—Perhaps I did not quite understand the question. The University professors would still remain college professors connected with their colleges as previously.

1916. My thought was rather that the appointment of professorships should be vested in the University, though they would still remain attached as regards place of teaching to the particular college which appropriated funds on that behalf. Does that seem to you impossible?—That is an alteration that I have often contemplated as one way of passing from our present condition to the sort of unity of organisation that I wish for, but I confess that it always presents itself to me as I have said, that it is rather a superseding of the colleges and a diminution of their dignity, and on that account less likely to be assented to by them than a complete amalgamation.

1917. You spoke of the preservation of all vested interests, either by the appointment as University professors or by some kind of compensation. Would you look forward to the University, in the first instance, nominating as University professors the whole body of

G. C. Foster, Esq., F.R.S.

15 June 1892.

King's College professors. I see there are professors of Armenian, Burmese, Chinese, colloquial Persian, and the like?—Yes.

1918. Would all those become from your point of view University professors?—I do not know that the title of professor was quite appropriate in many of those cases, and the vested interests are extremely small in those cases—very few, if any, students, and very little, if any, pay.

1919. The vested interest consists very largely of a titular distinction, and would it not be a bad precedent for University professors to be at the outset made of just the same grade as at present determines the University or King's College professors?—I am not quite sure that I understand the question.

1920. I mean to say there is an intellectual distinction. At present, in King's College let us say, there are a large number of professors, many of whom have not quite the same intellectual place or position as one would assign to professors in a German University, or as one would assign to the professors in a Scotch University. They are receiving little or no endowment, and little or no remuneration, and in many instances give a small amount of their time or attention to college work?—I certainly contemplate that professors of that kind should not exist in the new University, but it may be necessary, as a temporary arrangement, to take things very much as we find them. I should rather wish in such cases to make use of the compensation clauses.

1921. And to your University, or the governing body of the University, you would entrust all financial control, all control of appointments, and all administrative control?—That seems to me desirable. I see no advantage in separating the control, pecuniary or administrative, and I see many advantages in union.

1922. Superseding and abolishing all college prerogative in those particulars?—That is what I contemplate as the most desirable thing.

1923. You could not even introduce college teachers in your ideal as extraordinary professors?—That might be, and very likely some scheme of that kind might be as far as we should get, at any rate for a good while; but what I look to as the most satisfactory ultimately is absolute unity of organisation.

1924. (*Mr. Anstie.*) I understand that you do not wish to pledge yourself to the details of any particular mode of bringing about the object, but the object you desire to aim at is unity in teaching and adminstration?—Yes, I should wish the scheme to be as little rigid as possible, and to have a clear aim.

1925. I observe this with reference to one of the questions put to you with regard to the state of things existing at Oxford and Cambridge where, under the statutory powers conferred by Act of Parliament on the Commissioners, a considerable number of University professors—not only Regius, but connected with the foundations of particular colleges — are scheduled. They are made University professors, scheduled under the statute as University professors. Suppose a similar Commission to be created by statutory powers here, would you see any objection to a similar course being pursued with respect to the London colleges and institutions?—I think not.

1926. Would that be one way in which what might be described as vested interests in existing institutions might be preserved?—I think it would.

1927. And would it also tend in the same direction if, as has been suggested to you, the appointment to certain Chairs were, in the first instance, made by particular institutions, but the confirmation and ratification of those appointments reserved to the governing body of the University, so that without that ratification and confirmation they could not become University professors or lecturers. For instance, at University College you have very high class lecturers of post-graduate order such as the Chair lately filled by Professor Newton; if the ratification of the appointments to such Chairs were made by the governing body of the University, would that tend towards the end that you desire?—It would be in that direction.

1928. I know it would not meet all your wishes, but would it tend in that direction?—I think I can certainly go as far as that.

1929. The status in that case of the professor as a University professor would depend upon his recognition by the central governing authority. Would that be an advantage?—That, I understand, would be a temporary condition of things.

1930. No; I am now supposing a permanent condition, that together with the scheduling of certain professorships for certain institutions there should be left in the institution the appointment, subject to the approval of the central body?—Unless the University undertook, to some extent, the remuneration of professors confirmed in their appointment in this way, I should rather doubt whether the colleges would agree to it.

1931. I am not speaking of whether the colleges would agree, but supposing that to be done, whether by consent or superior power, would it tend in the direction you desire?—I think distinctly it would.

1932. You have expressed some doubt as to its being done voluntarily, but supposing this Commission, or any other competent body, were to report that a new University should be created on certain terms and on no other terms, would that tend to induce the bodies who desire the powers, and could get them on no other terms, to consent to take them on those terms?—Probably it would.

1933. And that might apply both to the colleges and to the University of London. That would be so, I suppose?—Yes.

1934. The difficulties which you refer to of doing what you desire to do by a voluntary agreement under the proposed Gresham Charter would, I suppose, be likely to be greater in the case of a new institution like this than in the case of institutions like Oxford and Cambridge which are of very rich endowment, and where there is much surplus revenue, admitting of diversion from its present purposes?—Yes; I think that would no doubt be the case. I do not see very much internal difficulty, perhaps, in the scheme of intercollegiate lectures, but that would not go very far towards improving the status of teaching bodies in the way that seems to be essential. We should still have the competition between different bodies, and any appeal to the public would be met in the sort of way that I have indicated, namely, saying that one cannot be helped without the other being helped also.

1935. You think the thing could not be completely done without a much greater union than has been contemplated by the Charter?—I think not. Whatever can be done in that way would be itself valuable, but I do not think that very much could be done.

1936. I want to ask one or two questions with regard to the system of examination. You seem to have some doubt whether it would be possible to carry on satisfactorily the system of examination of internal students practically following the course of instruction given in the University considered as a teaching body with the examination of external students. Are you aware that that is in fact practised now at Dublin to a large extent?—I was aware that that was theoretically provided for in Dublin, but I was not aware that it actually took place to any great extent.

1937. You are not aware that about three eighths of the students at Dublin are external students?—No.

1938. You do not know their system of what they call keeping terms by examination?—I have heard of it, but I do not know at all minutely the working of the Dublin University.

1939. Assuming a system of this kind, one in which the internal students should keep their terms as it is called by attendance with the usual sessional examinations, and so forth, and pass say three examinations in the whole of their course, of an open kind, for the purpose of getting their degree, and that the external students who do not keep their terms by attendance, but who keep terms by examination should be required to pass through a much larger number. Would that be a method which would commend itself to you as one that might solve the difficulty?—I think there would be advantages in that sort of arrangement, but I still doubt whether examinations founded upon the teaching of particular teachers would be quite fair to those who had no access to the same kind of teaching. I think it important to keep up examinations of the kind that the University of London conducts, examinations open to all comers without a question asked as to where they

studied. And I think it would be difficult for examinations that are adapted for that purpose to be equally well adapted to the students of the University teachers themselves.

1940. If you had an examination for external students you would require of course for that examination a certain public syllabus?—Yes.

1941. Would you see any objection to making that public syllabus follow the lines of University teaching?—Personally I should not, but I think very likely it might be objected to by many teachers.

1942. Apart from its being objected to, do you see any reason in itself why it should not be done. Is there any other better standard to go by than teaching. Where would you get your standard if you do not go to that?—It is the sort of thing I could best answer by imagining myself in the position. I could well suppose that the kind of examination best adapted to students who had been hearing my own lectures, would not be the examination I should give if I were examining, that is, if I were examining quite apart from my own teaching. I should, perhaps, give special emphasis to certain parts of a subject which do not always receive it, or treat certain things from a different point of view from that from which they are generally treated.

1943. But would you desire that your examination should be limited entirely to those special branches which you have given special attention to?—If I were examining my own students I should examine them upon what they had been taught, and put myself in the same point of view in examining as in teaching. That might be more special than would be quite fair under an open examination.

1944. You do not contemplate, do you, in any case that those who would come up for examination should come from a single teacher and be examined by him alone?—I am not sure that I would not say that that is, if practicable, a most desirable system.

1945. Supposing it to be practicable, do you suggest that as a possible one, or one of which we have any experience in this country at all, that the sole examiner should be the teacher, and that he should teach and pass his own pupils?—I do not contemplate a sole examiner at all. I have said previously that I should always wish for outside examiners to be associated with any professor; but if one is to think of what is most desirable in the interests of teaching, that is, I consider, in the interests of the pupil I should wish that the examination should be founded on the teaching of the individual professor.

1946. Would you concur with Professor Thorpe in thinking that the presence of an external examiner would be useful, not merely for the purpose of securing impartiality, but also for the purpose of taking care that the examination covered a sufficiently wide ground, and was not too much confined to the special views of the teachers?—Yes.

1947. To that extent you would desire that the examination should not merely follow the teaching of one particular professor?—I should wish to guard against what one might call eccentricity on the part of the professor. I should wish to give him reasonable freedom.

1948. If you guard against that is there any better method of grounding a course of examination than the experience of teachers?—I do not think you can very well find better authorities as to what examinations should be than the opinions of experienced teachers, but, nevertheless, I think that very likely the same teacher would set a different examination in dealing with his own pupils from what he would in dealing with outsiders.

1949. Would that difficulty to any extent be met by Professor Rücker's proposal of alternative papers?—I have had some talk with Professor Rücker about that, but I do not think I understood exactly what he meant or how it would work.

1950. You have not considered that question?—I have considered it without understanding it. I have tried to understand it, but I could not do so.

1951. Supposing that in place of keeping terms by attendance, if I may use that phrase, you had, as a substitute, a greater number of open examinations for the external student, would not those external examinations be conducted on a more open basis?—I should think that would be quite possible.

1952. In that way then you would get rid in the case of the external student, to that extent, of what you describe as the eccentricities of the teacher?—Yes.

1953. Supposing a teaching University for London to be founded, and supposing the Kingdom also to be covered, as it probably will be before long, with other University areas, do you think it would be very easy for a then continuing London University not connected with any teaching system to conduct its examinations in such a way as to produce any advantageous effect upon learning. Of whom would you desire that the Senate of such a University or the governing body of such a University should consist?—If several other Universities were founded in different parts of the Kingdom certainly the necessity for a University, such as now exists in London, would be very much diminished, and its functions would be, to a great extent, superseded.

1954. If the necessity were diminished what sort of functions would you design for the University so continuing? What is the class of students whose necessities you wish to provide for, and what is the nature of the governing body which you would provide for those necessities?—I should contemplate the work of the present University being taken over by this new professorial University, as we might call it, but I think it desirable that the examinations for outsiders should be different from those set to the students of the University itself.

1955. Then you contemplate that this new University should perform that function of examining outsiders?—Yes, I think that ought to be continued until it is found that it is no longer called for.

1956. Would you require them to have a different examination, or would you leave that to the determination of the governing body?—I should leave that to the discretion and experience of the governing body.

1957. And I understand what you say to refer to Pass Examinations and not to honours. That was your answer, I think, to the Vice-Chancellor of Victoria University. I think you said you saw no reason for difference in the honours papers?—I think there is no less reason for separating honours papers than for separating Pass papers, but, as I think I said before, I do not feel very decided on the point.

1958. (*Mr. Palmer.*) Would it be a sufficient description of your ideal of a merger or absorption of the colleges of the University to use the word "centralise"? Would it be a sufficient description of the position or relation of the colleges to the University to say that they should be centralised in a general University?—I do not know that is exactly the word that I should choose to describe it, but certainly it would be in the direction of centralisation.

1959. I understand you describe it as a state of things in which there would be no distinction between the University and the colleges, and, if possible, community of funds?—Yes, that is my idea.

1960. Assuming such a state of things to exist would not the amount of life that there would be left in the separate colleges tend to make them still more independent in the future? Would not they draw all the powers their own way?—The separate colleges would not continue to exist in my view.

1961. But they must exist in some form under the University. You would allow the buildings to remain?—The buildings of course.

1962. I daresay you are acquainted with the constitution of the City and Guilds Institute which is quite a modern thing. Are you acquainted with it?—Generally.

1963. That, of course, is a central body having a community of funds which has been in existence for 14 years. The effect of that now is that there are three separate buildings and bodies who really constitute the institution?—Each building having its special purpose.

1964. Its separate purpose, separate professors, and, practically, a separate government. Would that be the sort of thing that would be likely to eventuate from the merging or absorbing the colleges in the proposed University?—Possibly it might be found desirable to locate certain departments of work in certain buildings and others in different ones, and, so far, it would tend to develop.

G. C. Foster, Esq., F.R.S.

15 June 1892.

1965. You have considered the drift of the Gresham Charter as being that of a voluntary association of those colleges around a given centre, which might have been the London University, but now is Gresham. That centre would not be sufficient from which to found the University principle which might govern the others, the separate colleges?—I think a very much closer union, in fact a fusion of the separate bodies is desirable, closer than is provided for in the Gresham scheme.

1966. (*Sir George Humphry.*) I think you said in the early part of your evidence that the duty of a University was mainly to promote the more advanced or higher teaching?—I consider that is a special function of the University.

1967. But not by any means the only function?—Not the only function by any means.

1968. In fact, one may say broadly, that there are two functions of the University, one to promote higher and more advancced, or what we may call honours teaching, and the other to promote the more elementary teaching, that teaching which has relation chiefly to the graduation examations?—Yes, I would regard the more elementary teaching as really drawing its strength from the most advanced, the high standard maintained in the higher part of the work.

1969. The elementary teaching is a very important and essential work?—Yes.

1970. The elementary teaching indeed covers a larger amount, and operates necessarily upon a larger number of persons?—Quite so.

1971. But, in fact, as regards the education of the country, the elementary teaching is at least as important as the more advanced teaching?—In some respects more so; but I think that the small number of really eminent scholars or men of science indirectly affects the intellectual level of the country to a much greater extent than a large number of moderately intelligent people.

1972. It is, I will not say the most essential, but an essential work or the University to teach and to promote that elementary knowledge?—Certainly.

1973. And, therefore, there must be examinations having reference to that elementary knowledge?—Yes.

1974. Those examinations being, what we may call, Pass Examinations for the degrees?—Yes.

1975. And you think that as regards those examinations, they should cover the general ground of principles of the several subjects?—Yes.

1976. That, therefore, there should be no, what have been spoken of as eccentricities, or what have been spoken of as individualities, in teaching or examinations of that kind; that it shall be general principles of any particular subject which general principles are universally known and universally taught, or should be so?—Yes, I think I agree to that.

1977. And that in education, the first point is to ground your student in that kind of work before leading him on to individualities and specialities?—Yes.

1978. That, therefore, there can be no good reason for the teacher examining his own student, because all the teaching and all the examinations in each particular subject should, on the whole, cover much the same ground?—I think I should hardly go so far as that. Even in the elementary parts of the subjects, a teacher is obliged to make choice of what he will deal with. Every department of learning is now so enormous, that a selection is necessary, and I should like to leave the University professor, free to make his own selection and also the precise point of view upon which he places himself.

1979. Does not the fact of the ground of each particular subject being so enormous, render it more desirable that there should be some general code or rule, or principle, laid down for those parts of it, which should be generally taught?—I look at the value of teaching as depending much more on the quality of what is given than upon the particular material. If a man has been taught something well, it is comparatively speaking, I think, of littleimportance what it is.

1980. But the teaching something well may be done in elementary work as well as in higher and further advanced work?—No doubt it can; but it seems to me unnecessary that there should be any minute directions to a teacher of the parts of a subject he has to take. I should leave him free to consider what he can usefully or advantageously do.

1981. Still, if there is to be an examination which is to cover the subject taught by any considerable number of teachers, if there is to be a common examination and the training of students to take place by each teacher, that examination must go upon some principle of recognising and examining the broad general principles of the science?—I think as a practical matter it must.

1982. You have mentioned the Scotch Universities, and you rather mentioned that you would desire to have the University upon the model of the Scotch Universities. I apprehend that the great work of the teachers in the Scotch Universities is to ground their students upon the great general principles of their science and to prepare them for their examinations, that is to say, to give them elementary knowledge. That is the great work of the Scotch teachers generally, is it not?—That is the work that probably takes up most of their time.

1983. That is the great work, I may say?—Yes, I think so.

1984. I suppose these colleges, King's College and University College, are sufficiently qualified; their apparatus, machinery, and professors are sufficient for what we may call this elementary or Pass Examination teaching?—I think it is.

1985. Therefore they are well equal to do that work?—Yes.

1986. Then with regard to the higher and more advanced work they are not equal to do that; they have not the laboratories and they have not the means for doing that?—In some subjects they are equal, I think, to all demands upon them. They are not as well equipped as I should like to see, in most subjects. But there is the difficulty in carrying on teaching so far as it is desirable, that the same teacher has to deal with every stage of the subject, and by the time he has done the necessary routine teaching, it is impossible for him to go very far into the more advanced parts.

1987. In fact we do want laboratories equipped, for and teachers who should devote themselves more to, the advanced subjects?—Yes.

1988. And it would be desirable on the whole if they could be separated to a certain extent from the teachers who have the laboratories in which the more elementary work is done?—The precise arrangements for teaching, and what is the most useful work that any particular man can do, depend very much upon his own idiosyncrasies. I can imagine that in some cases the University professor would be best employed in teaching a small number of very advanced pupils. Another man would be best employed in giving a general supervision to the teaching of his subject at all stages, perhaps himself giving some of the most elementary.

1989. And on the whole the professor who is most occupied in advancing his science, which is what we all desire should be done, would probably be the professor who would be best suited to teach and to guide the more advanced student?—I should think so, distinctly.

1990. On the whole, if we could have our ideal, it would be a University in which there should be large first class laboratories; and first class professors we will say, on the one side, and in which there should also exist good laboratories, good professors and good teachers for the more elementary or Pass Examination work. It is very desirable if we can, to have these two systems carried on and carried on at one University?—That is quite my idea.

1991. And that might be possible if there were to be such first class laboratories and professorial systems as I have been speaking of which do not exist and which can only be obtained by some large grant in some way or other. Supposing that the existing several colleges might be combined and united to carry on that teaching for which their laboratories are more especially suited, you would not destroy them and you would not do away with them, but you would utilise them to the extent for which they are so well capable of being utilised?—Yes.

1992. That would be the thing to aim at, if possible?—Yes, I think that in some departments our college laboratories are already pretty well adapted, but they would not be sufficient at all for what, I should hope, would be the future University of London, they ought to be very largely supplemented.

1993. For the work of advancing the science of this nation?—Yes.

1994. I think you mentioned that the amalgamation of the several colleges which exists is not practicable, the amalgamation in the way you mentioned, their abolition as individual or autonomous bodies, and therefore we can scarcely contemplate that?—I should hope it is practicable.

1995. But, that at any rate, there might be a system by which they should combine certain subjects. They might be combined together in that inter-collegiate system which Professor Sidgwick has mentioned and which exists at Oxford and Cambridge. Take, for instance, a subject in which the number of students is few. They might combine there and teach that one subject with more effect?—I think a good deal might be done in the way of inter-collegiate teaching, but, after all, that would be in my view only in the nature of a makeshift. I think what would be very much better would be complete amalgamation and redistribution of teaching power and appliances so as to make use of all we have in the most efficient way.

1996. But still there they exist, and it may not be possible to extend the buildings of either of them or one of them to such an extent as to render it equal to your desires a teaching body. The buildings cannot be enlarged very much, some of them, at any rate, there is no space?—I should hope that very much larger buildings will eventually be wanted than either of us have now.

1997. That is what I mean, that there may be such larger laboratories and larger staff, but yet not to do away with or destroy the present existing colleges and their laboratories and their staffs. Then, taking that view that the examinations should cover the ordinary ground of the principles of science, there would be no difficulty in the way of one University in London examining students coming from all quarters?—I think in the lower stages there is much less need for making provision for specialisation.

1998. I am speaking of the stages marked off by the ordinary examination for degrees?—Yes.

1999. And therefore this University we are contemplating might fairly examine the extra-collegiate as well as the collegiate pupils coming from any part of the world or from any class of teachers. There need not be different examinations, one examination for the University students as we may call them, and another examination for collegiate students perhaps, and another examination for non-collegiate students. The great plan of arrangement of examination might be the same for all?—If you go into detail as to the working of examinations, I think difficulties would arise even there in some subjects. So far as examination is mere paper work, I see no difficulty in working upon the same system so far as is pointed out, but in a great many scientific subjects it is found already desirable that there should be laboratory examinations as well as written work. That system is extending more and more, and has been found to be of great importance; I see great difficulty in conducting satisfactorily laboratory examinations in my own subject, in physics, for candidates who have not worked in the laboratory where they are examined. Of course this is rather a matter of detail, but it is a difficulty in many subjects in conducting a large examination for outside students.

2000. Does that apply in many subjects. Now, for instance, in chemistry a student in his examination would be expected to show in the laboratory the ordinary laboratory work which a student would be taught anywhere?—I should fancy it is a difficulty that probably applies to physics almost more than any other subject, simply on this ground, that instruments for the same purpose are very frequently in very different forms. A man comes in to be examined, and has certain instruments put before him, he may be very well instructed in his subject, but yet cannot, to begin with, recognise the instruments that are before him, and that he is expected to use. He would spend a great part of the time of his examination finding out what his tools are.

2001. That is, of course, a subject upon which you are better fitted to judge than I am. In medical subjects I do not think that would apply very much?—No doubt that is a matter which would arise differently in different subjects.

2002. There is anatomy and physiology. I should have thought that the question I put would apply to the larger number of subjects. Then taking that view there would be no particular objection to this examination for the degree being regulated to some extent by schedules, that is to say, a certain general tone, tenor and direction should be given to the examination?—Yes, I do not think I should object to that.

2003. So you agree in making a considerable difference between elementary teaching and the elementary examination and advanced teaching, and the advanced examination as regards matters of that sort?—Yes. I want to preserve for the teachers more freedom to specialise, and to follow their own individual ideas as to what is the best way of teaching their own subject as they go further into it. Naturally such differences of judgment hardly affect the elementary stages.

2004. And yet the elementary stage and the elementary work of the University is very important?—Certainly.

2005. (*Professor Ramsay.*) I will take the last point first. I see that you feel the difficulty of combining the two modes of giving degrees, that by examination only, and that by examination upon the basis of teaching: but do you regard these difficulties as being so great as to countervail or counterbalance the objections to having two separate Universities in London?—I think there are difficulties, but I think they are probably surmountable.

2006. And if I understand your evidence aright on the whole, what you desire is to see one great University fulfilling all the functions of a truly metropolitan University for the City of London as well as the Empire?—Yes, that is what I earnestly wish for.

2007. There are difficulties which may be got over, but your great object is to have one great University conducted on the best possible lines?—Distinctly.

2008. Now with regard to teaching. It has been suggested that the London University should have only post-graduate professorships and only post-graduate professorships, that is to say, the University should not conduct the teaching for ordinary degrees, but should only have professorships for higher research. Is it your experience as a teacher that it is possible in any institution to have the higher kind of teaching unless you have teaching of a more ordinary and elementary kind which leads up to it?—I should think the various stages ought to be conducted in connexion with each other, and that they support and help each other.

2009. You could not expect to found a really satisfactory system of professorships of a high research class, unless you had also lower stages of teaching which prepare the pupils for the higher stages?—I think that is the case.

2010. And is it not the case that in doing the lower work the finer minds are brought out and developed so as to reach the higher fields of science, which perhaps they would not have reached at all if the higher teaching had been separated from the lower?—I think the lower teaching would suffer if any attempt were made to separate it sharply and specially from the higher stages, and I think the higher stages would be starved.

2011. Therefore the idea you aim at is a University combining teaching of all University grades?—Yes.

2012. Now to take your scheme for the University. You prefer evidently the Scotch model, that is to say, the kind of University which does not recognise the college at all?—Quite so.

2013. The Victoria University is founded upon a different principle. As far as the University goes, it is like a Scotch University, but it is founded upon the principle of having three independent colleges. Therefore there are college rights, college government, college appointments, as well as University rights, University government, and University finance. You want to avoid this quality?—I want to avoid the complication which seems to me to be undesirable.

2014. Therefore we should have nothing but University appointments, University finance, and University government?—Quite so.

2015. With regard to the mode of arranging that, perhaps you are not quite aware of the system now adopted in Scotland? I should like to know whether that system would meet your views. There is, in the first place, a supreme governing body, exercising the functions which Mr. Rendall has spoken of, which has the supreme

G. C. Foster, Esq., F.R.S.

15 June 1892.

control of finance, without whose decision no penny of University money can be spent, which makes all University appointments, except such as are made by the Crown; and in whose hands is the ultimate control of the administration of the University, has a veto and a power of review over what is done by other bodies. That body consists to the extent roughly of about one-third of a purely academical element, four professors and one principal. Four represent the graduates, *i.e.*, Convocation, the remaining third or rather more are elected by important officers or public bodies. There is one-third only of a strictly academical element, and that one-third academical is always there, and the outside members are always perfectly willing to listen to those who know better than themselves on any particular matter, while at the same time they are sufficiently numerous to prevent the perpetration of any University job. Underneath that supreme body comes the Senate. The Senate, called the University Court, consists of the whole body of professors. The Senate has in their hands the whole arrangements for teaching and examining, subject always to an appeal to the University court. They do not merely have a consultative voice, such as is suggested in the Gresham Draft Charter, but the governing and regulative voice. At the same time, if there is a warm contention of opinion on any point there is an appeal. Any student or graduate may appeal against its decisions to the Court. The teaching and examination is composed of the four different Faculties, and it has these matters entirely under its control, subject always to review entirely: whereas the administration of finance and the ultimate approbation of everything is in the hands of a smaller body, in which the academical body is represented to the extent of one-third. Would that meet your view?—That, I think, would be satisfactory; an excellent constitution, but I can imagine other constitutions, and I am not prepared to say which I should like best. For instance, the control of funds might be in the hands of a larger body on which all the principal professors would sit with a certain number of non-academical members. Probably in such a case they would break up into committees, perhaps a financial committee and departmental committees of various sorts. On the other hand, I think there would be advantages in the control of pecuniary matters being in the hands of a smaller, and perhaps, you may say, a specially dignified body, who would probably carry out the recommendations of the professors.

2016. I was asking that question especially with reference to the Gresham Charter, and in regard to two points on which I imagine you would probably take the same view. Do you consider the power there given to the professors, through the Assemblies of the Faculties, of merely electing representatives to the Boards of Studies; and the power of the Boards of Studies as being in themselves, which is not initiative, but only a power: do you consider that power of suggestion sufficient to put into the hands of the teaching body?—I think that is a defect in the Gresham scheme.

2017. And there are very good reasons why, if you have what is called a Professorial University, the management of finance should not be in the power of a body, the majority of whom are persons who are themselves teachers or professors of the University?—I think the body in which the control of funds is vested should be so far in touch, as it is called, with the professors that they should carry out almost as a matter of course recommendations which are sent up to them from the professorial body.

2018. But in almost any kind of University which you could have financial questions would arise. There are questions of appointing new professors, new assistants, of recognising teachers, and so on, which may involve financial considerations; and it will be desirable, will it not, to have an impartial element, so that the mere teaching body should not have the preponderating influence in the administration of such questions?—Yes, I think so.

2019. Now to come to the practical question about London: your idea is that University College and King's College should exist as buildings, as bricks and mortar, but as nothing else?—That is my idea.

2020. What would you do with the Principals of those two colleges, if the colleges are to have no organisation, no discipline, no finances?—In University College we are an un-Principaled body.

2021. Is there a president?—A President of the Council, a President of the College, who presides at meetings of the Council.

2022. It is a rotative office?—No, it is elective from year to year, re-eligible without limit.

2023. Then there would be no difficulty about that, because he would become a Dean of Faculty or something of that sort?—I do not think there would be any difficulty in our case with regard to the President or with regard to any member of the Council.

2024. Then with regard to King's College, what would become of the Principal?—I do not quite know what his function would be in the new University.

2025. What would become of the present governing bodies of those two institutions as distinct from the professoriate?—I imagine that a great many of their members would be absorbed in the governing body of the new University.

2026. And you think it would be a satisfactory arrangement that a new governing body such as we contemplated just now should be composed, at the start from the governing bodies of University College and King's College?—I think it would be a natural measure.

2027. And these bodies might fairly be subjected to a euthanasia dying out gradually in course of time? There are no vested rights to interfere with?—I am not minutely acquainted with King's College, but I imagine it to be the same in this respect as University College. The members of our Council sacrifice a great deal of time and do a great deal of work for the college, but they have no return for it except the satisfaction in the work done.

2028. And they would practically welcome any arrangement which they believed would be for the benefit of the ideas which their institution represents?—I hope so.

2029. Then the University must offer some inducement to these colleges to come in and so to speak efface themselves. What is the inducement to be?—The inducement that the work that they are trying to do would be more efficiently carried out by a more complete organisation.

2030. Would you not have opposition on the part of the staff or a portion of it?—I think a large proportion of our staff at the University College are in favour of the general idea that I have been advocating this morning.

2031. And it would be quite possible, you think, to utilise the whole or nearly the whole of the staff making special arrangement for those abnormal posts mentioned by Mr. Rendall?—I think it would.

2032. The whole staff might be utilised either as professors, assistant professors, or extraordinary teachers?—I think, in anything like an ideal University of London there would be work for more teachers than we have in the two colleges together.

2033. How would you treat the medical colleges. They cannot efface themselves?—That, no doubt, is a complicated question. I think they might with advantage give up the teaching of their non-medical subjects; they all at present teach chemistry, and, to some extent, physics and other matters which could probably be much more efficiently done by the University or at two or three centres under a University control; but the teaching of the purely professional subjects, I should think would have to be kept in connexion with the hospitals, the clinical instruction certainly. Some of the teachers might receive the dignity and emoluments of University professors.

2034. And that would have to be matter of arrangement with each college at the start, to decide what professorships each should suppress as being unnecessary, or, at any rate, not recognised by the University?—That, I should imagine, would be the sort of process that would have to be gone through.

2035. And is it your belief that there is a large number of such teacherships that would require to be suppressed as being unnecessary to a University system?—I believe that all the medical schools are complete in themselves. They teach all the subsidiary scientific subjects; there are not only the purely medical branches but chemistry and physics, and physiology.

2036. But the purely medical subjects of course they would not give up?—No.

2037. No medical school could give up the purely medical subjects?—I should imagine not.

2038. Would you also suppose that every one of those teachers would find a place?—I should think that only a certain number of their teachers would become University professors.

2039. And these might be spread about the colleges all, so to speak, anatomy in one college, physiology in another, and so forth?—Quite so.

2040. Would it be practicable to have a state of things in which you would have, let us say, the best of the ordinary staff in each school recognised as professors in their respective subjects, and allow students to go from one to the other according to the reputation of the different teachers, taking one subject in one school, and another subject in another school?—I am not sure how far that would be found practicable for the students, but so far as the professorships are concerned that is what I should like to aim at.

2041. Is there the slightest reason to hope that the schools would agree to such a plan?—That is very difficult to answer.

2042. What consideration would be offered to them to induce them to sacrifice such Chairs as they would have to sacrifice?—I think the dignity and status they would get by having some of their most distinguished teachers nominated as University professors.

2043. And their students being able to go forward for degrees?—Yes, they have that now.

2044. But without departing from their curriculum in the schools?—Yes.

2045. You could not of course make all their teachers profesors. There would be too many. Would you give the professors any special privilege as regards the other teachers, or would you simply hope that the prestige of their names as professors would attract students to their classes? You have said you would require some compulsory attendance. I understood that part of your system was that attendance at University teaching should be given?—The University of London has always required attendance in a recognised medical school as a condition for graduation in medicine.

2046. But would you make a distinction between those called professors and those not admitted as professors? Should the University require that a student should attend either the whole of his course, or a certain part of his course, with University professors?—I think the University might nominate professors in these various schools choosing some of the most distinguished men in the various subjects, and they might also recognise, if they thought proper, the remaining teachers as University teachers for University purposes.

2047. Giving them a sort of status as *privat-docents*?—Yes.

2048. And, so practically, the whole of the staff might be recognised?—They might be recognised as University teachers, but not as professors with a seat on the Senate.

2049. Then how would you have the appointments at the medical schools made?—I think they must be in the hands of the governing body of the University.

2050. Not of the colleges?—The schools, I should presume, must appoint their own teachers, but the University would decide for itself whether it would appoint any of those as University professors.

2051. Now then going past the schools. You have heard that there are claims by other bodies in London to be admitted to the rank of colleges under such a scheme as the Gresham. Would this scheme apply equally to them? Would you contemplate there being any other colleges in London, such as the Women's Colleges or the Birbeck Institution, or organisations like the University Extension Movement; can you see any way of fitting them into the system?—I think the University might usefully have power to recognise lecturers in such institutions, though I do not know that there are many bodies. I think the Birkbeck Institution, so far as I know it, and the other places named are hardly of a status to entitle them to come in to complete connexion with the University.

2052. Then you would not recognise the possibility of anyone obtaining the degrees of the University unless he had attended the lectures of some recognised teacher, of some grade or other?—In non-medical subjects I contemplate that there would be open examinations, but whether those should be the same as the examinations for University students or not, is at any rate an open question.

2053. But supposing the two examinations should be combined, it is obvious that enforcing attendance would be futile if you enforced it only in some cases and in other cases admitted persons who had made no attendance at all at the University classes. In that case you could not keep up the distinction?—No, the only mode of enforcing attendance at the University, would be by saying that admission to the examinations, or at any rate to some of their examinations, is open only to students who have gone through the University courses.

2054. Unless you had some distinction, such as that suggested by Mr. Anstie by which you would have one set of examinations for the outside students, and another set for the University students; but in any case it would be a principle of yours that there should be a degree for which students would have the privilege of attending qualifying lectures in other institutions besides those named?—I am not quite clear about that. There would be the University lectures for degree examinations founded upon University teaching. I do not think I should be inclined to recognise attendance outside the University.

2055. But you would be inclined to recognise the teachers in any institution that might be admitted hereafter as coming up to a University standard?—I think the University should have power to recognise any teaching that they think is of the proper standard.

2056. Then you might draw in the first instance a distinction between colleges which are now fully equipped, and to whose teachers you would give representation in the governing body of the University, and other institutions less fully equipped, which might be recognised hereafter for the purposes of teaching, but to which you would not grant representation on the governing body of the University?—I think so; I think it would be possible for the University to recognise individual teachers in these less fully equipped colleges.

2057. Without giving any representation to the bodies to which they belong?—Simply recognise them for graduation purposes.

2058. Then it is a fundamental part of your scheme that there should be a degree, however differentiated, which can only be reached by attendance at certain classes, either conducted by or recognised by the University?—That is what I should personally favour, certainly.

2059. (*Mr. Anstie.*) You are familiar with clause 46 of the scheme of the Senate to which I think you were a party, and which is contained in the pamphlet which has been put in?—Yes.

2060. Without going in detail into that, do you adhere in general principle to the plan adopted by the Senate of having distinct series of examinations up to and inclusive of the degree examination for external and internal students?—On the whole, I think that is desirable.

2061. (*Professor Sidgwick.*) I should like to ask a question merely because the answers that you gave to Sir George Humphry did not appear to me quite to cohere with those that were given to me. I think you told Mr. Anstie that there would be two systems of examination, one for inside, and one for the whole Empire. I assume that you contemplate a system of two-fold examinations for degrees in the University?—I think that would probably work best.

2062. I thought that in replying to me you said that the difference or the duality need not extend beyond the Pass Examination, and need not go as far as the honours examination. On the other hand, replying to Sir George Humphry, I thought you said that the more advanced the teaching became the more need there was of this duality?—I am not surprised at being asked a question on that point. I noticed it myself. A Pass Examination takes place according to some recognised syllabus. There the farther you go, I mean to say the higher the subject, there ought to be more and more freedom and scope for individuality of teaching. On the other hand, the honours examination is not tied down by syllabus; you examine on the whole range of the subject.

G. C. Foster, Esq., F.R.S.

15 June 1892.

2063. Then the difference is that the honours examination even for outsiders should not in your view be cribbed and confined by a syllabus?—I think not. I think it should be as little tied down as possible.

2064. Now it seems to me that that introduces this new difficulty, if you have this unconfined honours examination administered by a body under the control of the London teachers it will, at least in those subjects with which I am acquainted, tend to get a certain stamp. I mean, for example, in my own department, if I had to prepare a student for an examination under the control of the teachers of philosophy of the University of Oxford, I should consider the students would be under a material disadvantage in the most advanced part of the work. The more the examination was free from syllabus the more it would follow certain lines depending on Oxford traditions; and I should expect this further consequence of considerable financial importance, that any student desiring to enter for this examination would prefer to go to an Oxford teacher rather than to me. Do you not conceive that if the honours examination designed to be for the Empire is left uncontrolled by the syllabus, but practically under the influence of the London teachers, the teachers everywhere, except in London, would feel themselves under the kind of disadvantage that I have described?—I think very probably they would.

2065. (*Lord Reay.*) I want to ask you a question about what was called the more elementary teaching at a University. The great reason why the German Universities, as you are aware, are able to give so much time and scope to the higher teaching which you have in view at your University, is that the students come up after having received a careful training in elementary knowledge at secondary schools. I suppose your object is to raise the preparatory curriculum in the secondary schools with regard to classics and science, so that the University should be able to deal with its students in accordance with University teaching methods which are essentially distinct from the methods which prevail in secondary schools of the best kind, such as the German gymnasia Universities, greater freedom both with regard to the personnel and with regard to the time at your disposal in regard to disposing of professors' students for the higher teaching?—Certainly.

2066. (*Professor Ramsay.*) Would that apply to an entrance or matriculation examination which I think you said you do not regard as necessary?—I think an entrance examination has advantages. At University College we have not had one within my recollection, and I do not know that we suffer very much in consequence, the people who contemplate coming find out what the range of teaching is, and if they think they cannot profit by it they do not come.

2067. (*Mr. Anstie.*) Supposing an entrance examination existed, might it not be possible to combine with that the taking of equivalent certificates from other institutions?—Yes.

The witness withdrew.

WALTER FRANK RAPHAEL WELDON, ESQ., M.A., F.R.S., examined.

W. F. R. Weldon, Esq., M.A., F.R.S.

2068. (*Chairman.*) Did you hear the evidence of the last witness?—Yes.

2069. Do you agree with him in most respects?—Yes, generally.

2070. Therefore, without going over the same ground again more than necessary, would you give us any particular points on which you would like to enlarge and take any subject on which you wish to say more fully what was said by him?—I heartily agree with him with regard to the necessity for abolishing a series of separate institutions which all teach the same thing and which are only united by an examination schedule. I should like to emphasise more than he did the waste of teaching energy which is involved in the system of teaching laboratory work in such separate institutions. As an example of the economy of centralisation, I would give the way in which zoology is taught in Cambridge. Mr. Sedgwick was originally a lecturer of Trinity, but he always threw his lectures open to the whole University, and taught in a laboratory to which all students of the University could go. The result of that is, that the whole of the elementary teaching in zoology is in Mr. Sedgwick's hands, the students in each year number something like 200, or they did a few years ago, which is the time I know most about. That is about half the number who pass through the examination of the London University each year; I think an organisation of the same kind, with perhaps two teachers instead of one, and teaching the whole of the elementary students in London each year will be an improvement. The students of Cambridge pay a fee which is half of what students pay in University College for the same work, and the fees of these 200 or so, being all gathered together in the same place are sufficient to pay the greater part of the working expenses of the laboratory. By doing that they give a certain amount of money to the number of junior men who assist Mr. Sedgwick in the practical work of the laboratory, and so they incidentally provide an inducement for new graduates to remain in the University for a year or two to see if they can do work of their own and adopt some branch of teaching as a profession. In that way there is enormous economy, it seems to me, in the unification of elementary teaching; what I should like to see is a central body formed composed of University professors and a large minority of outside men who are interested in education and men of business, especially men of business. These men should, I think, be able to say to a particular college:—"You have "now such and such laboratories, you have now such "and such teachers, you will be the nucleus of a "particular Faculty. The University teaching in these "subjects will be done in your buildings, added to, of "course, if necessary." Then they will say to another college. "This branch of knowledge is not taught so "successfully by you; we will have teachers and place "them in another part of the building, and you shall "devote yourself to some other work." I suppose there will have to be a Faculty of technology in London. I am sorry to suppose there will be, but I am afraid it is the case. Such a Faculty will perhaps have to be organised in the City and Guilds Institute; I simply take that as an example, but I should like the central body to say to these people:—"You teach applied physics more com-"pletely than any other body in London, you will be "the centre of that Faculty." Then I should like them to say to another college:—"You teach pure physical "science better than any other college in London, you "shall form the nucleus of the Faculty of pure science." Then another body shall be told:—"You have no "laboratory, but you have sufficient teachers of "literature. It is better to place all the teachers of "literature in your buildings rather than to give you "second-rate laboratories, and so on." So that the existing buildings should be utilised in that way by the localisation of each Faculty in the building which it is most adapted for, and the staff of which is most distinguished in any one particular branch. It seems to me that that would enable the teaching in London to be conducted with a minimum of waste of effort. From the number of students who enter London University, I do not think that in any reasonable time the number of students in each particular subject would be so large, that this plan of centralising the subject would be impossible.

2071. You would give either to the University of London or to the new University, whatever it might be, complete power to do what they like with these buildings and with these colleges; to restrict them to one single Faculty, or to do anything else with them that they liked?—Yes, absolutely.

2072. And gradually, in fact, to absorb them and do the work?—Yes.

2073. Professor Carey Foster was asked repeatedly why inter-collegiate efforts of the kind which go on at Oxford and Cambridge would not meet that difficulty; why that difficulty might not be solved by inter-collegiate lectures—It seems to me that the reason is this, a college at Oxford or Cambridge does not rely for its income upon any teaching work. It has in the first place very large endowments, which it inherits. In the second place it relies, at any rate in Cambridge, entirely for its fees on its functions as a lodging-house. A student who lives in a college pays the same money whether he attends a single lecture or all of them.

2074. (*Professor Ramsay.*) The fees are quite separate?—I beg your pardon, not quite.

2075. Then it is different in different colleges, is it?—Yes. In St. John's I paid eight guineas a term. I never attended a single lecture by any member of the college all the time I was at Cambridge.

2076. (*Chairman.*) They are paid by fees?—Yes, but partly also by endowments.

2077. That is why they overlap one another and give more lectures than are necessary?—Yes.

2078. There is rather an advantage, you think, in having sometimes a choice of professors, two or three to lecture on the same subject and allowing the under-graduate to choose between them, so that there should be a little competition?—I do not in the least object to that, but I think all the lecturers who teach one subject should be enabled to teach in the best possible way by being given equal facilities in one institution of some kind. I should like to see a number of professors in each subject appointed in that way by the University, and I would admit as fully as might be the German system of *Privat-docenten*.

2079. With regard to King's College and University College, you would take possession of their buildings and control their teaching, and have complete command over them?—Absolutely.

2080. And with regard to the medical colleges?—With regard to the medical colleges I would leave them independent. Here is a document drawn up by the Association for the Promotion of a Professorial University in London. (*For this document see Appendix No.* 5.) Those propositions were agreed to at a general meeting yesterday. There has not been time to print these and circulate them, but we shall be glad to furnish copies to the Commission. The proposal there is to leave each medical school with complete control over its own teachers as it has at present.

2081. And yet it would be joined to the University?—Yes. The schools which are recognised by the Medical Council would be entitled to nominate teachers as University lecturers, who would have the privilege as recognised teachers of preparing students for the medical degrees, and it is proposed to nominate a certain number of medical professors. The suggestion there is that these should be a quarter of the whole number of professors in the University. These would be distributed according to some scheme—the number of beds, or the accommodation, or the richness of the hospital—in some way according to the size of the hospital, and each hospital should have the right of choosing from amongst its own teachers the men it would call professors.

2082. Would they have any representation on the Senate?—Yes; the Senate I conceive to consist of the professors and of a very large minority of business men.

2083. (*Mr. Anstie.*) What do you mean by business men?—Business men, not actively engaged in teaching; men who are used to organising, not teaching.

2084. (*Mr. Rendall.*) By a large minority do you mean, a powerful minority or a minority small numerically?—I mean a large numerical minority.

2085. (*Professor Ramsay.*) Something less than half?—Yes, something less than half.

2086. (*Chairman.*) You would be very much in the same position with regard to your University as they are in the Gresham?—There is a very much larger proportion in the Gresham Charter.

2087. How much would you give them?—Less than half.

2088. They are less than half now?—I am afraid I do not know the Gresham Charter as well as I should.

2089. There are only 42 members of the Senate and 15 or 16 medical representatives?—I did not understand that you meant medical representatives, I mean the people who are not professors. I think the professors should be more than half. The medical professors should not be more than a quarter of the whole body of professors.

2090. You think, in fact, that all the arts should have the same sort of representation, medicine being one of the four?—Yes.

2091. You agree with the last witness as to what he said with regard to the desirability of getting the University of London to undertake the work?—Certainly, only I should emphasise rather more than he did the necessity of having a completely dual system of examination.

2092. For the whole of England and the other colleges taught by the University?—And the mode of compulsion or invitation to attend University classes would lie in the fact that a man who had attended for two or three years the classes organised by the University would be examined in a special way by the teachers. I think that would be inducement enough.

2093. Then, with regard to compulsory attendance at lectures?—I would have no compulsion. If a man did attend, he would be examined in this way; if he did not he would be treated in an outside way and examined according to the schedule.

2094. If he attended a certain number of lectures he would be examined in this way?—Yes. He would have to satisfy his professor that he had attended the course he pretends to have attended, that is all.

2095. And this plan of dual examination with regard to Pass as well as honours?—I do not feel so strongly with regard to Pass. I differ from Professor Carey Foster there; but I am very strongly of opinion that it is necessary for honours. It seems to me that what you want to teach in an Honours Examination is not so much a set of facts. I do not care for any guarantee that there will be a wide range of examination with regard merely to facts. What you want is a habit of mind. I feel that very strongly. There are two men who taught me, Professor Balfour of Cambridge and Professor Ray Lankester of University College. I do not suppose there were two men in the country more personally different. You cannot have two men who treat a subject from two more entirely opposite points of view. Professor Ray-Lankester emphasised facts which Professor Balfour was in the habit of overlooking, and Professor Balfour devoted a large portion of time and attention to what Professor Ray-Lankester was in the habit of skipping over. But the two men had the same scientific habit of mind. That is the thing one wanted to learn. It did not matter whether one learnt the anatomy of molluscs in one way or another, but one was taught to consider each branch of the subject in a scientific way. For that purpose any kind of schedule or any kind of attempt to test a man by his knowledge of facts, by his power to go into an examination room and then to be examined by an outsider, who does not know the details of his teaching, is rather harmful than otherwise I think.

2096. Do you think the new University of London or the new side of the University of London would require an endowment, a large endowment?—That point I have not considered. I do not know enough about it, but the present London University earns a very large amount of money, and pays a great part of that money in salaries. If every professor of the University were, *ex officio*, an examiner of the new University, he might reasonably receive the salary of one of the examiners of the present University of London, and that in itself would be a larger salary than many professors receive in London. It would be a very important addition to the salary of any London professor.

2097. Now we will go to the Charter itself which is actually before us, the Gresham University Charter. There is Clause 25, which, I suppose, you also would wish to see expunged or altered?—Very strongly.

2098. Is there any other suggestion you want to make?—It seems to me that the Council of the Gresham University represents the governing bodies of the contituent colleges rather than the teachers. I do not hink there is a sufficient representation of teachers, and in a document which some of the promoters of the Charter issued, they stated very frankly that they believed the wishes of the governing body of the colleges to be very frequently at variance with the wishes of the teaching staff. That was the reason they gave for this preponderating influence.

2099. You would wish to give the Faculties power to elect a greater number and reduce the members nominated by the council?—Yes, I should give the Faculties some kind of executive power. It seems to me that if you give a large body of men simply the power to recommend, without the power to execute, they are very apt to do nothing at all. They have not got a feeling of responsibility, and they waver from time to time, and their influence is frittered away.

W. F. R. Weldon, Esq., M.A., F.R.S.

15 June 1892.

2100. In the way of appointing examiners, do you mean, or in what particular way?—I think it most important that they should appoint teachers, but I see that this is impossible if you adopt a federal scheme with independent colleges. I think it is most important that a University should appoint teachers.

2101. You say that you would give the Faculties more power?—Yes, that the body of teachers should appoint.

2102. You would allow the teachers to appoint the other teachers?—Yes.

2103. In the case of a vacancy in the place of teachers you would give the other teachers a great deal of power and influence with regard to filling it up?—Yes.

2104. They would nominate their own body?—Yes.

2105. (*Professor Ramsay.*) You agree generally with Professor Carey Foster's view?—Yes.

2106. But with regard to the government of the University, your idea is, there should only be one governing body?—Yes.

2107. You do not approve of the idea of a mixed constitution with two bodies?—You mean with a supreme council, or body of visitors, or something of that kind.

2108. You would give your teachers a certain amount of executive power. Would you give it to them simply through the Senate of which they should form a part or would you give it to the teachers purely as teachers?—Simply to the Senate.

2109. You do not think it is necessary to have an intervening body like the Senate in the Scotch Universities which consists entirely of professors, and which has power to make all arrangements about teaching, examining, and so forth. You do not think it is necessary to have a body of that kind?—I have not thought so, but I should not have the least objection.

2110. Is it not desirable to have one body which represents the views and experience of all the teachers, and which represents nothing else?—It may be desirable.

2111. Its decision might be binding *pro tanto*, but you would not make that the governing body of the University?—Quite true.

2112. Would you prefer that all teachers of University standing should exercise their powers immediately in an assembly of their own or only through a mixed body of which they formed a minority?—I imagine that the teachers in each group of subjects would have a sort of Faculty, or whatever one chose to call it which would recommend to the general body.

2113. A body consisting of the recognised teachers in all the Faculties?—Yes.

2114. But Faculties would only meet for purely Faculty purposes, and make representations to the general body of professors. The proposal suggested was that the whole body of professors should sanction any proposal suggested by a Faculty, but that such proposals should not be carried into effect unless approved of by the governing body?—I should not have any objection to it. I do not much care about details of that kind. I have had no experience of them. I did not want to make a suggestion, because I do not know how it would work.

2115. What is the average salary of a professor at University College?—From 50*l.* to 60*l.* in very small ubjects to 200*l.* or 250*l.* in the larger subjects.

2116. Have you contemplated the endowment of a University of this kind with large funds. You would require increased laboratories to begin with?—Of course such a fund would be a great advantage; but the existing buildings might be very largely modified and improved if all the students in each subject were sent to any one building.

2117. Then the professors would be paid, would they, by fixed salaries which would be gathered out of the fees paid by students?—Yes, I think so.

2118. Without any shares in the fees of their own individual classes?—I should be anxious that they should have no share of that kind.

2119. No share at all?—Or a minimum.

2120. Does it not give a certain amount of incentive to a professor to feel that he is rewarded to some extent by the work of his hands?—I think there is a great danger that a professor might be led to teach those branches of his subjects which are popular rather than those which lead to research.

2121. There is also the danger that a teacher might devote himself to research subjects and neglect the popular subjects?—Yes, but I think that is the less danger of the two.

2122. That is only a subordinate matter. Then your view is the same as that of Professor Carey Foster, except that you think that each building should be used as the centre of a special group of studies?—Yes.

2123. As a matter of fact each college would hold the members of one Faculty?—Yes.

2124. Have you thought at all which college would be most appropriate to which Faculty?—I have thought, but I would rather not express an opinion.

2125. The idea would be one for Science and one for Arts—using the old name?—Yes; I should be sorry to see mathematics split away from science.

2126. That is a subject which does not require a laboratory?—Yes.

2127. You mean, I suppose, what is commonly called applied science?—Yes.

2128. Then you would require one for the Faculty of Law?—Yes.

2129. The Faculty of Medicine would be represented in all the schools?—Yes.

2130. That would involve a mutual shifting of Chairs between the two colleges as they now exist?—Yes.

2131. Do you think that could be done practically without raising much opposition?—I think so. I do not know. I can only say that the Senate and the body of Professors of University College has recommended the Council of the college to support this scheme, and it recommended it by a unanimous vote at a not very large meeting, but a meeting containing representations of every Faculty.

2132. Then your scheme gets rid entirely, does it not, of the present governing bodies of the two colleges?—Yes.

2133. You do not even contemplate retaining them for a time on any governing body?—Yes, I have no objection to that.

2134. Then as regards the curricula for students taking the degree, or collegiate students, if we may call them so, you recognise a compulsory amount of attendance?—If they choose to take the degree in that way.

2135. What would be the advantage of taking the degree in that way? Supposing the collegiate students and the non-collegiate students had the same set of examination papers, then collegiate students, simply by cutting lectures, would be in the same position as non-collegiate students?—I should most distinctly wish that they should not have the same examination papers. I do not think you could conduct that kind of examination without definite schedules.

2136. The one examination to be regulated by the course and the other by schedule?—Yes.

2137. The course would exact a certain amount of attendance, and you would require the student to produce a certificate to show that he had done the work of that course?—Yes, I should like that.

2138. In the Scotch Universities the student must present a ticket showing that he has attended a certain number of classes; he must also produce the professor's certificate that he has done the work of each class satisfactorily, of which the professor is the sole judge. Would you approve of that system?—Yes, very much.

2139. Would you make that applicable to the Faculty of Medicine as well as the other Faculties?—It is practically applied to the Faculty of Medicine now. I would leave the Faculty of Medicine as far as possible alone.

2140. But as I understand you would have certain persons appointed professors?—Simply as a kind of compliment. For example, if there were a professor of clinical medicine at St. Bartholomew's, there might be another at Guy's; you could not attempt to give a University professor of clinical medicine the control over the whole of the clinical medicine in London; you cannot take the whole of the clinical teaching and centralise it at one place, and you cannot give one pro-

fessor at one hospital control over a man in another hospital. The only difference between a University professor and an ordinary teacher would be that one man represented his subject on the Senate of the University, and the other did not.

2141. Then the upshot would be that you would choose out of the whole of the medical schools a number of professors corresponding to that of the other Faculties, who would have a corresponding amount of representation, so that the Faculty of Medicine, while resting upon the basis of all the medical schools, would in itself be no larger than the Faculty of Science or that of Law?—Quite so.

2142. And the share which each of them would thus have in the University should be the same?—Quite so.

2143. (*Chairman.*) About the degrees. There would be two sets of degrees given on two entirely separate papers, but you would not distinguish these by anything else. Each of them would be Bachelor of Arts or Master of Arts of the University?—Yes.

2144. There would be no distinction between them at all?—No.

2145. Would it be easy to find two separate papers so exactly alike?—I do not think that matters; you have not the remotest notion what I mean by calling myself Master of Arts. The Cambridge M.A. may have passed an examination which is simply ridiculous, or he may have seriously trained himself in something. You have to look in the Calendar to find out, and I think you would have to look into the Calendar of the new University to find it out there also.

2146. (*Professor Ramsay.*) I understood that the professors in the colleges would all be appointed by the University Senate?—Yes.

2147. But in the medical schools, I understood you to say that the whole of the teachers should be appointed by the governing body of the medical schools?—As they are now.

2148. The University should only have the power of selecting out of them persons to be called professors?—I would leave it in the hands of the hospitals. I would allow each hospital to choose a certain number of the men it considers its best men, and call them professors.

2149. Is it not desirable to get for the professorships in every subject the very best men the kingdom can afford?—You cannot do that without taking into your hands the control of the hospitals, or else you must say to the hospitals, "You must have no professors."

2150. The hospitals confine themselves at present to their own members?—Yes.

2151. Or at any rate largely. Would it not be most desirable that the University should be able to appoint an eminent man, even though not connected with a school?—You have to permanently attach him to the hospital—to a hospital. I do not myself see my way to interfere with that.

2152. Then the University must be restricted to the staff?—Yes. It seems to me that taking the staff of every hospital all round you can find men fit to be professors, and you can trust hospitals to keep up the level of their staff.

2153. All hospitals?—All hospitals which are recognised.

2154. Will they have to be combined into one body?—No, I think it would avoid that.

2155. Would you have the same security for excellence in the case of the small schools that you would have with regard to the bigger ones?—I think so. It is not a thing I know anything about.

2156. The plan would be this: Supposing the professor of surgery was a teacher in one of the hospitals, and his post became vacant, the particular college would first proceed to fill up that post and then the University would consider, after taking all the teachers of the subject in all the schools into consideration, whom they should appoint as professor?—No, I think what the hospital would say is, "This man is scarcely sufficiently "eminent to represent us on the Senate." If he were, the hospital would say, "We nominate this man our professor." If not they would nominate someone else as professor of something else. The only meaning of the title of University professor, applied to a physician, would be that he represented the Medical Faculty on the Senate.

2157. But not in his particular subject?—No.

2158. Then you might have all the professors of one subject?—Yes.

2159. You do not think it desirable that the University should have a complete staff, and be able to say, "Here "is our professor of surgery, clinical surgery, physio-"logy," and so forth?—Yes, but I do not see how it is to be done unless the University takes over some hospital and says, "This is the hospital that the University has taken"——

2160. It is a practical difficulty and not a theoretical one?—That is so.

2161. (*Mr. Anstie.*) An expression was made use of by you, to the effect that a habit of mind is a thing which it was desirable that an examiner should test. Is it your view that it is only the teacher of the student who can test his habit of mind?—I think he can do it better than anybody else.

2162. Do you limit that to physical science or do you extend it to all branches of knowledge?—I think it is probably true of all other branches of knowledge, except, perhaps, pure mathematics, but I do not know anything about teaching other branches of knowledge, so I would rather not give an opinion.

2163. But still you have had experience of teaching and examining upon particular lines, and that has probably given you a test by which you may ascertain, by analogy, what is likely upon other lines. Is it your opinion that the man who has taught is the only man who can ascertain the habit of mind of a candidate for a degree?—Certainly. I do not think, as a matter of fact, whether you have taught a man or not, you can learn very much about his habit of mind by a couple of papers; but if you have known him for three years, and you know already so much about his habit of mind you can pick up what indications there are better than anybody else.

2164. Do you think that by looking over an examination paper a man can not form any judgment as to whether the candidate before him has a grasp of the subject and is able to deal, in a logical way, with the subject matter?—I think it is an absolute matter of chance whether he can or not. It depends on the paper.

2165. Whether the examiner can or not?—Yes.

2166. You say that is the result of your experience as an examiner?—On the whole, yes. I have not had very much experience as an examiner. I have examined for two years in Cambridge, and in college examinations a good deal; but in degree examinations I have only examined two years in Cambridge. Certainly I do not think I learned very much about the men I examined for the tripos.

2167. You have never examined for the University of London?—Never.

2168. May it depend to any extent upon the nature of the examination papers?—I think enormously; but my whole point is that unless you know a man you cannot tell what examination papers will bring out his habit of mind.

2169. When I say depends upon examination papers, may there not be examination papers which are not directed or intended, or at any rate not calculated, to test a man's general power of dealing with the subject matter; and, on the other hand are there not examination papers which are?—Certainly.

2170. Is it not desirable that the examination papers should, upon the whole, be of the latter character?—Yes, certainly.

2171. If the examination papers were of the latter character, would it not be possible for the examiner by them to ascertain something of the habit of mind?—That is rather begging the question. You say if the examination papers are of such a character as to enable a man to judge of the habit of mind, he can judge of the habit of mind by them.

2172. No; it is not begging the question at all?—Then I beg your pardon. I do not understand what your point is.

2173. Does not that depend to some extent upon the mode in which examiners are chosen?—No doubt.

2174. If you have examiners chosen who are chosen in such a way as to give peculiar predominance to a

W. F. R. Weldon, Esq., M.A., F.R.S.

15 June 1892.

special mode of teaching, you naturally would not be able to test the general power of mind of the candidate?—Well, I am not sure. If it were the mode of teaching in which he is accustomed to exercise his mind, I think you will be able to test him in that way better than in another.

2175. Does it not suppose that the man who has been accustomed to exercise his mind has been accustomed to exercise his mind in the right way?—I do not think there is any right way. I think that is one of the biggest fallacies of the examination system.

2176. I am not talking of results, but of the way of exercising his mind in examining a subject. Is there not a right and a wrong way in that?—Yes; you must assume that the man has been taught by a capable teacher; you must assume that.

2177. Why must you assume that?—You legislate on the basis of teachers.

2178. If you legislate on the basis of teachers merely as teachers, you do not legislate on the basis of the capacity of teachers?—Yes.

2179. But you are legislating on the basis of teachers independently of their capacity?—Independently of their capacity?

2180. Yes. You legislate upon the basis of teachers as teachers?—I think you must make the scheme of the University on the hypothesis that you can obtain capable teachers. If you do not you had better not make a university at all.

2181. What is the best method of obtaining capable teachers?—That is another question.

2182. Yes, but it is a question I want you to give your help upon?—I think the best method is to appoint such a board as that I suggested—a board composed of other teachers (you must start with teachers) and certain outside persons, who shall judge of the men before them as well as they can, and pick out the man who seems best.

2183. Then it comes to this, does it not, that what you have to aim at in this whole inquiry is how to obtain in every sense the best teachers, and the best teacher is the man who creates the best habit of mind?—When you have them you have complete control of the whole thing.

2184. Having obtained that, do you think you can find any other set of men more competent to determine what ought to be the syllabus of the examination, or the method of conducting it?—For other people certainly. They would only determine their own syllabus of examination, and they would conduct their own examination in their own way, but it does not at all follow that these men will do justice to the students.

2185. How do you ascertain those men who will be more likely to do justice?—I think you will have to ascertain that by saying, "We do not expect you to "show me a particular grasp of the subject," but as the London University does it, show me a knowledge from particular books.

2186. The London University does not say that?—The existing London University does.

2187. Excuse me. The existing London University does not say that?—It says, "Candidates shall be examined in the following facts."

2188. But what I want to know is how the examination ought in your view to be conducted, because if one looks at the Calendar one does not find anything about text-books?—No, but one finds special branches of the subjects. For example, the Bachelor of Science schedule in zoology was practically drawn up by Professor Ray Lankester, and Professor Ray-Lankester learned zoology by making a series of researches on the anatomy of molluscs, and it is simply full of the anatomy of molluscs. But if he can bring out his own mind and impress upon the students what zoology means better by that method than by any other he would be doing what is wanted. In the same way Professor Balfour in making such a schedule might perhaps have dealt with dogfish, and have brought out his meaning best in that way. In my case, assuming I have anything to impress upon students, I have to take another man's mind, and work through all the operations by which he has been led to his conclusion, and then try to fit that in with what I want to say. As a matter of fact, I want to get just now a number of students to work at a branch of variation.

2189. Variation of species you mean?—Yes, which is not included in that syllabus. I have to wait till they are Bachelors of Science before they will listen to me. They send scouts into the room to find out what I am going to say.

2190. Professor Lankester, you say, is the man for molluscs, and Professor Balfour was the man for dogfish. I want to know how we are to determine the question between the dogfish and the molluscs?—There is no method of doing it. Either is an equally good basis for education, and that is my objection to examination by a schedule.

2191. There are certain general principles, or habits of mind as you describe them, which may be displayed and called into force in different departments. It does not matter much in which department you call them into force provided you call them into force, and each particular candidate ought to be left to each particular school or branch in which he has been accustomed to be trained?—Yes.

2192. And provided you have him rightly trained in that he ought to be entitled to University recognition?—That is practically the mode which you admit by giving the same degree for the man who trains himself in mathematics or chemistry.

2193. To that extent you would agree with Professor Carey Foster in adhering to the view propounded or adopted by the Senate as set forth at page 46 of the Senate's Scheme. It provides substantially for making the whole examinations, up to and including degree examinations, dependent upon the teaching course?—That is for the Pass Degree.

2194. Yes, that is for the Pass Degree. I will hand you a copy of the scheme?—Yes, I approve of this. I should like to extend it to the Honours Degree. I think the individual character of the teacher becomes more important the more the student studies a subject.

2195. Would you have it arranged on this footing that each particular teacher should test the Honours Class with respect to his own students?—I should prefer it.

2196. On that footing you would not have anything like a determination of individuals?—No.

2197. But only of classes?—That is all.

2198. That is to say, you have a man following Professor Lankester on one hand or Professor Balfour on the other; you would put him in such and such a class, but would not put one above the other?—Yes.

2199. You would adopt in that sense the Oxford system as compared with that of Cambridge?—Cambridge has given up the practice now.

2200. More or less, but we know how it is historicaliy. You would go for the class division rather than the individual division?—Yes.

2201. And would that manner of going for a class division as opposed to individual distinction, allow in your judgment sufficient weight to this method of individuality on the part of the teacher, and the testing by reference to that individuality the habit and power of mind of the candidate?—Yes, I think so.

2202. Is that the ground on which you would prefer to have a system of dual examination rather than single examination?—Yes.

2203. Then for the other examination—what we may call the open examination—you would have something that was independent of the peculiar class of the teacher with his peculiar views?—I do not see now you could help that.

2204. Now I should like to ask you this question. With reference to that open system of examination, is it your opinion that the examiner would not be able to test the habit of mind, the power of grasping and dealing with the subject matter of the examination of the candidate, or that he would be limited simply to ascertaining what sum total of particulars he might know?—I should say altogether he would be limited in that way.

2205. Do you speak of that as the result of experience yourself as an examiner or not?—I have never examined other people's students.

2206. So you have not any means of ascertaining whether that would be so by personal experience?—No.

2207. May I ask you this further question—whether by analogy you think that that necessarily must be so?—I think it is so. It is a very hard thing to say with any degree of accuracy. So far as I know class lists, so far as I know the men, I do not think the places in the examination lists at which the men I know something about have obtained are particularly trustworthy.

2208. Of their own subjects?—In any subject.

2209. But your own experience would only extend to your own subjects?—Quite so.

2210. You would not be able to form a judgment on other subjects?—No. I do not want to lay any stress upon a statement of that kind, but that is my general impression.

2211. Is that a result, do you think, of the special subject with which you have to deal being less conversant with general principles and the co-ordination of thought than most others?—I hope not. I cannot be expected to judge of that, but most of the teachers whom I know share my view with regard to their own subjects.

2212. Your view is, so far as ascertained from your own subject, that the power of an examiner to ascertain by answers in examination papers what the general power of thought and grasp of the subject is, is very small?—Yes.

2213. I understood you to tell Professor Ramsay that you have not considered with any exactness the position of what we may call the *Senatus academicus*, that is to say the body of professorial teaching and knowledge—what position they ought to occupy in the regulation of University study?—No, I do not much mind. Their position would as a matter of detail, it seems to me, settle itself.

2214. When you come to consider the question with reference to such a matter as the disposition of funds and the endowment of Chairs it becomes of some consequence, does it not?—Certainly, but I should be inclined to accept any proposal that was made; I should certainly accept Professor Ramsay's proposal.

2215. You would be satisfied with Professor Ramsay's proposal of a *Senatus academicus* which had the power of nomination subject to the approval of another and more composite body, and you would consider that a sufficient representation of the academical interests?—Provided always that the academical interests were sufficiently represented on the higher body.

2216. The effect of that would be that nobody could be appointed who was not in the first instance approved by the teaching body?—Yes.

2217. There is, of course, a difference between that and the position of an appointment which is, in the first instance, made by somebody else, and has only to be sanctioned by the *Senatus academicus*?—Yes.

2218. You would prefer, I suppose, the position of those who had the nomination in the first instance, to those who had to approve after nomination to them?—Yes, I think I should.

2219. That would give them more power?—Yes, I think more real power.

2220. Now, with reference to the distinction you drew between a course and a schedule. When you speak of a course as distinguished from a schedule, I understand you to mean a course prescribed by a teacher as distinguished from a schedule issued by the central body?—Quite so.

2221. When you speak of a course prescribed by an individual, do you mean a course prescribed by a certain number of subjects written down upon a prospectus or syllabus, or the course actually pursued by the teacher?—I mean the course actually pursued by the teacher.

2222. Not something known beforehand?—Not necessarily, and certainly not necessarily known from year to year.

2223. But depending upon the development from time to time, from week to week, which the teacher saw fit to give to it?—Yes.

2224. Really it would only be known *a posteriori*, and not *a priori*?—Yes.

2225. Therefore the teacher would be the only person competent to examine?—Yes.

2226. You spoke with some regret of technology being possibly required to be admitted into the course of the system of the University. What do you understand by technology?—Any branch of knowledge the primary business of which is to give a man a training so that he can make money by it. I personally do not think it is the business of a University to look after those branches of knowledge at all. I think it is the business of a University to give no professional training, but to teach absolutely knowledge for its own sake.

2227. This is a very contested question, I know, but I should like to ask you, whether as a matter of fact, it is not true that the German Universities direct their attention to a very large extent to the practical application of scientific knowledge?—I do not know much about German Universities, and I am fortunate enough to study a science which has no practical application, so that I cannot answer that question.

2228. Which science is that?—Zoology.

2229. That has no practical application you say?—None.

2230. Absolutely none?—So far as I know.

2231. Do you regard that as a scientific excellence or otherwise?—It adds to its interest to me.

2232. (*Mr. Rendall.*) You regard it, as I understand, as a prime function of the University to secure or even to enforce localisation of given branches of teaching at given centres?—As a great function of the University.

2233. As a prime function. It is one of the functions you look to the University to secure?—Yes.

2234. At one point you said that all students should be sent to the approved centre. What machinery was in your mind?—I suppose the Unversity will have an office somewhere, an advertising agency of some kind, so that students who wish to attend such and such a course of lectures might be told, "You will find them in this place." Something will go on at Gower Street, and something at South Kensington, and so on.

2235. Do you look to compulsory attendance as the main inducement?—No.

2236. Moral suasion?—If sufficient institutions were absorbed into a scheme of this kind, there would not be anywhere else in London to go to.

2237. That is what I want to get at. Would you wish to limit a particular branch of teaching to one centre?—Not by any form of compulsion, but I would limit the sort of teaching which associated itself with the University to that centre, because in that way you would get more money and more complete equipment in one place. The thing would be done better in one place than in several.

2238. Do you think a central body should recognise no other teaching, and that none other of any kind would be required?—No doubt a great many elementary classes would have to be multiplied.

2239. And recognised?—And recognised of course.

2240. Do you think you would admit a rival class on the *privat-docent* system where the subjects allowed it?—Certainly, I would admit as freely as possible the *privat-docent* system. The only danger of admitting it is this. If you have a double system of examinations, one by schedule and one by course, it seems to me that there is a danger that the ordinary crammer may come in and cram for a schedule examination. In the University I should like to see some precaution taken against that, but, except for that, I should like to see a large number of the *privat-docenten* taking special branches of lecturing, as well and as ably as they could, and getting as many students as they could.

2241. Which system of examination would you approve of the *privat-docent* student going to, the local University, or the Imperial?—The local.

2242. You quoted an instance of the teaching of zoology by Mr. Sedgwick?—Yes.

2243. Is that in any sence directed or enforced by the central authority?—There is no central authority.

2244. Is there any present existing professor of zoology?—Yes, but he is not interested in that branch of zoology at all.

2245. Mr. Sedgwick, following Mr. Balfour's footsteps took it up?—Yes.

W. F. R. Weldon, Esq., M.A., F.R.S.

15 June 1892.

2246. That instance seems rather to go against your conception of enforced attendance at a particular centre. How do you reconcile those two?—Mr. Sedgwick lectures in the same centre.

2247. That is at Cambridge. That would hardly occur in London. You would have the position of professor of zoology occupied at a given centre. Would not there be danger of an able man being excluded by that system?—That is of course the danger. But I would point out that Mr. Sedgwick is encouraged and helped in every possible way by Professor Newton. He is not in the least excluded. It is simply that he has taken up a branch of study which does not interest Professor Newton, so the two men work separately, but there is not the least rivalry or unpleasantness. There is no attempt on the part of one man to keep the other man out.

2248. In London do you not foresee a possible danger of centralising in a single place, and having there a single professor who practically has a monopoly with University status and the University authority at his back, and so keeping out a rather healthy competitive element?—Yes, I see that danger, and the only answer I can give to that sort of question is not a complete answer. I took the German Universities Calendar the other day and looked through all the Universities in which I knew the professors of zoology, and some of the *privat-docenten* — Berlin and some of the largest zoological Universities. I am quite sure that there is no rivalry of that kind between the *privat docent* and the professor. I am quite sure that the men are all working in harmony. Of course the place where the difficulty arose would be the place one did not know, because it would be a place where the professor would be an obscure man. It may arise in some German towns for all I know.

2249. With regard to securing mechanical co-operation between the centres, in point of time arrangements of lectures and so forth, would you leave that to the central body?—It would probably be fixed by the Boards of Studies.

2250. You would not give a free hand to the professor, but he would always be subject to the judgment of the Boards of Studies?—Yes, obviously.

2251. You said you would leave the medical schools with complete control over their own teachers. Did you intend to limit that to their medical teachers or did you include their scientific teachers also?—I should very much like to encourage medical schools to give up teaching science for the same reason that I should like to encourage other schools to give up teaching science. I think if University and King's College were to fuse with such a University as I want and leave their hospitals alone, the medical schools would be willing to give up teaching science. I believe the only reason why it is not now done in University and King's Colleges is this. Everybody would be told, "You go on to our hospital."

2252. You think the topographical difficulty would be only slight?—Very slight. For the first year a man would not go to the hospital. He would go to the dean of the hospital who would say, "Good bye, I "shall see you in a year, when you come to do your "medical work."

2253. I notice that you continually single out University and King's College with an idea that they should be merged in the University; that the University should take possession of their buildings, and virtually administer their funds and organise the teaching conducted in them. You do not mention an institution like the Birkbeck Institute, or the City and Guilds Institute, or the Royal College of Science?—I am sure the teachers in the City and Guilds Institute are willing to adopt some policy of fusion, and I think they should naturally become the centre of the College of Science Faculty. The Royal College of Science I should be glad to see fused in the same way, only it is a Government Department, and I did not mention it for that reason.

2254. There you recognise that there are difficulties, and probably insuperable difficulties?—Yes.

2255. Would you think it advisable to make that a chemistry school?—It would be a most excellent thing if the Science and Art Department allowed it. I am sure the professors would allow it.

2256. It is so far advanced?—Yes. Professor Frankland is a member of our organisation, and so is Professor Huxley.

2257. Do you regard these as the interests of the University and the interests of the college likewise, or do you look upon it as sacrificing the selected colleges to the creation of a really great University?—I do not see that any real interest of any college would suffer.

2258. It would involve surrendering the administration of the power by the governing body?—I do not think they will mind being relieved of it.

2259. But it is attractive labour, managing men and conducting education?—Yes, but the men who are willing to do that work would naturally be the men to perform the non-professorial work on the governing body of the new University.

2260. You would try to introduce them to the governing body of the new University?—I should not like to say that myself. I should leave it to the Royal Commission or something of that kind.

2261. Have you thought at all of the method of inducing the colleges, King's College in particular, to surrender their independence. Do I understand that University College would be prepared?—I think a considerable body of the professors would. I do not know anything about the other part of the college. That is a large corporation of which I know nothing.

2262. Have you thought of any other inducement?—There is this inducement, that if one college of any sort of importance joined London University in a scheme of that kind so that its professors were *ex-officio* examiners, every other college would be obliged to come in or disappear.

2263. Natural self-interest would be enough, you think?—Yes, if one body would start.

2264. (*Mr. Anstie.*) Mr. Rendall referred to two institutions, the Birkbeck Institute and the City and Guilds. You would not put them on the same level would you?—I do not know much about the Birkbeck Institution.

2265. They are both valuable but you would not put them on the same level?—I think Mr. Rendall said, Would I make the City and Guilds Institute the centre of applied science.

2266. I understood you not to put it on the same footing as those parts of University College and King's College which deal with a corresponding branch of teaching?—I should like to unite the equivalent Faculties of those three places.

2267. The Birkbeck Institute, I understand, rather corresponds to the evening class department of King's College?—There is a footnote in that paper which I have handed in. I would send recognised teachers to take charge of such classes. If a place like that, came to the University and said, "We want evening classes organised," there might be a board which takes charge of such classes.

2268. I shall not have time to master this paper at the moment, but I will ask you first with respect to evening instruction as given at the Birkbeck Institute, the City of London College, King's College, and other institutions which have classes of the same kind. You would put them in a secondary position to the University teaching?—Certainly.

2269. You would put it so far as possible under the direction of University teaching and you would, for the purpose of ensuring its having justice done it be prepared to allow it some representation upon the governing body?—I should suggest that those teachers might be members of the Faculties, but not of the Senate in any way.

2270. Then you would contemplate the possibility of persons who were engaged in evening teaching, that is to say, at King's College, City of London College, Birkbeck Institute, and places of the like kind, being recognised University teachers?—Certainly.

2271. And as University teachers having a place on the University Faculty, although you would not admit anything like a representation on the University Council or governing body?—Precisely.

2272. Would you be able, do you think, to deal in any way, on broad principles, with what is generally known as the extension of University teaching in London?—Yes, I think so. The University of Cambridge deals with that kind of teaching in precisely the way I suggest.

2273. Perhaps I might go on to ask you whether you would be prepared to grant to attendance at their courses of teaching any privileges similar to those which you would give to the strict University teaching at the higher colleges?—I think not. I do not see how you can expect people who devote only two hours a day—of course it is by no fault of their own, but they only devote two hours a day to mental work—I do not see how you can expect them to be treated in the same way as those people who devote the whole day to such training.

2274. Then the advantage you would secure to that kind of evening teaching under your proposed system would be that it would be dominated, regulated, and animated by the higher professorial system of the University?—Yes; and its representatives would have a share in the preparation of the schedules of the external part of the examinations. I would not mind a provision being made that the representatives of that particular class of teachers should always be on the Board of Studies.

2275. You would give them a special representation?—Yes.

2276. You would give, in the first place, to those teachers of evening classes sanctioned by the University a position on the University Faculty?—Yes.

2277. And you would, in the second place, give them a special right to be represented on the settlement of the external schedules?—I think so; I do not feel strongly about it one way or the other.

2278. That is your suggestion upon the matter at present?—Yes.

2279. But you would not give to the students of those classes any further privilege than is given to the world at large?—No.

2280. You would leave them, then, to be dealt with by whatever arrangements the University saw fit to sanction with respect to the conduct of the more or the less numerous of University examinations for the degree?—Quite so.

2281. (*Lord Reay.*) Is your view about University teaching mainly to this effect: that a professor should elicit the originality and the capacity for scientific investigation in his pupils by showing them the method which they should follow in their own independent studies?—Certainly.

2282. That is, I believe, what you mean?—Certainly.

2283. Illustrating this by another example, than that which you have given derived from your own branch of knowledge, I might take history. It would be the duty of the teacher of history at secondary schools to give his pupils the framework of the history of England, France, or any other country?—Yes.

2284. And to use text-books for that purpose?—Yes.

2285. For instance, at the end of such a secondary course the boy might be examined in Green's History of England?—Yes.

2286. He reaches the University with something like a general knowledge of his subject?—Yes.

2287. He is well grounded in his facts?—Quite so.

2288. The task of a University professor will be absolutely different. He will have to apply a critical analytical review to a specific period, either the period of Queen Elizabeth or the period of William Pitt, or any other period, and thereby teach his students how to investigate the immense field of history and how to criticise results obtained previously by methods of research which are not scientific?—Quite so.

2289. It does not matter what period he takes?—Quite so.

2290. The result, therefore, is that in justice to the student he must be examined in the period to which this method has been applied either by his professor or by himself independently?—Yes.

2291. It would be obviously unjust to examine him in any other period?—Yes.

2292. That, I believe, represents what you meant, as applied to history. You applied it to zoology?—Yes.

2293. With regard to the examinations would not the difficulty of securing impartiality in the examinations and not giving too much advantage to the professor who has taught, be solved by his pupils being examined before a delegation of the Faculty?—I should be perfectly content with that.

2294. The professors of the Faculty would understand each others methods and rapidly detect any unfairness?—Yes.

2295. You would be prepared to examine your own?—students in the presence of your colleagues?—Yes, I should be perfectly willing to see that.

2296. Now, with regard to Matriculation, you have no objection to a Matriculation examination?—On the contrary.

2297. With the views you hold with regard to the high aims of a University education you would naturally be in favour of screwing up Matriculation as high as you possibly could?—Yes, and I should prefer Matriculation to take the form of an examination at schools, so as to approximate as nearly as may be to the German system, so that a student on leaving school might apply to be examined by the University, or the school might apply and students who passed certain standards of that examination might be excused.

2298. Something like the leaving of certificates in Scotland?—Yes.

2299. With regard to emulation among the teachers I understand you hold that it is rather a question of distribution of labour?—Quite so.

2300. That a professor should take one part of the subject-matter and the lecturer or *privat-docent* should take another part by arrangement with the University authorities?—Yes. There is one point that I should like to mention with regard to what Sir George Humphry said, I am very anxious that the professor should not be prevented from teaching elementary subjects. I am anxious that there should be no hard and fast separation between the institutions which undertake Pass teaching and the institutions which undertake honours teaching in the University.

2301. Is not that more a matter of internal organisation?—Well, I do not quite think so. I have in mind Professor Michael Foster at Cambridge. The physiology training in Cambridge seems to me to be the best organised system of any that I know anywhere. He gives nothing but a course of introductory lectures to first-year students, but he permeates the whole, and the whole of the higher teaching is animated by his spirit. Anyone who knows Professor Michael Foster knows what I mean. Some professors may best influence in this way the work of their institutions. I should not like a man of that sort to be precluded from controlling all classes of students.

2302. You mean that where a professor, besides giving to advanced teaching and research of great eminence, wishes to give introductory lectures, he should not be precluded from doing so?—Professor Michael Foster does not give any advanced lectures at all.

2303. That is the point I thought you wanted to establish, that no professor should be precluded from doing both?—Or doing either.

2304. In the case of Professor Michael Foster does he limit himself to the lower stages?—Yes, but his influence is then acquired. He teaches in the institutions in which the higher things are taught. As I understood Sir George Humphry he suggested that the University should be instituted for the Pass teaching, and that there should be new bodies instituted for the honours teaching.

2305. Where a professor has such a special gift of which I recognise the full significance he will, though teaching in the lower stages, make it easier for his pupils to grapple with the difficulties in the higher stages?—Yes.

2306. And he will permeate the whole system?—Yes, and therefore I do not wish the two things put in separate departments.

2307. Are you of opinion that in London there is a great deficiency which must be filled up with regard to advanced teaching in science?—Yes, I think so.

2308. (*Mr. Rendall.*) I wish to make one thing clear with reference to a question put by Lord Reay. By Matriculation do you mean an entrance examination imposed by the new University?—Yes; I mean an

W. F. R. Weldon, Esq. M.A., F.R.S.

15 June 1892.

examination which must be passed before the University will teach at all.

2309. And that examination is to be made compulsory on all students entering the University?—Yes. I would say they must before either pass an examination held by the University at certain times or before leaving school (which I should very much prefer) by a special organisation.

2310. (*Mr. Anstie.*) I suppose one may take it that with reference to the teaching of an ideal University, it would only be given to those who have passed the antecedent stage; you would not teach anybody at all who had not passed the Matriculation?—Quite so.

2311. But, on the other hand, you would not teach anybody in the second stage who had not the Pass?—I would not examine a man too often. Throw a man for three years into a subject; let him wrestle with it by himself or with the help of his teachers, and then examine him at the end of it. You do not want to examine him step by step.

2312. Cambridge has not fewer examination than Oxford, has it?—Yes; an honours man passing from the previous examination either immediately on joining the University, or just before, is left alone for three years.

2313. There is nothing between that and the final?—No.

2314. Would your answer be limited to honours?—Yes.

2315. The great majority of men are Pass?—Yes.

2316. And you would give a greater liberty to honours students in consideration of their ultimately passing the higher degree?—Yes.

2317. (*Professor Ramsay.*) When you spoke so strongly of the Oxford and Cambridge certificate just now, what subjects did you refer to particularly?—Latin, Greek, and mathematics.

2318. Have you had any experience of those examinations?—No, except by the men who have come up.

2319. Have you had any experience of what the men know who have passed these examinations?—No.

2320. Then what makes you take so disparaging a view of the examinations?—I know the previous examination, of course.

2321. I am speaking about the Oxford and Cambridge leaving certificate?—Well, I am rather sorry I did speak about it.

2322. You do not know anything about what is required to obtain distinction in Latin, Greek, modern Languages, or mathematics respectively?—No.

2323. You do not know that when a student has got distinction in any subject he is considered to have reached a standard which might get him a scholarship?—I am sorry I spoke of it.

2324. (*Mr. Rendall.*) You would make the Matriculation Examination a *sine qua non* to a candidate proceeding to a degree?—Yes.

2325. But would you do so in the case of a student applying for admission to the course—a student not proceeding to a degree but who wished to attend the course—would you also be prepared to impose a Matriculation Examination?—No.

2326. (*Lord Reay.*) Those are exceptional cases?—Quite so.

2327. (*Mr. Rendall.*) In Scotch Universities they frequently do not take degrees, do they?—Those would not be students recognised by the University; they would not be provided for in the scheme of the University; they would attend as women do in Cambridge, by arrangement with the teachers.

2328. I assure you that would not be so. Take a department like chemistry. The majority of students may not be preparing for a degree, though they may be studying chemistry and be very far advanced?—I had not considered those questions. I should certainly leave them to come to the laboratory as they pleased.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Fifth Day.

Thursday, 16th June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Right Rev. Bishop BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

FREDERICK VICTOR DICKINS, Esq., M.B., B.Sc., examined.

F. D. Dickins, Esq., M.B., B Sc.

16 June 1892.

2329. (*Chairman.*) What is your position in the University of London?—I am assistant registrar to the University of London.

2330. You also belong to an Association for the establishment of a professorial University?—I do. It is in the latter capacity that I appear, not with any mandate from the University of London.

2331. Do you appear to speak on behalf of this Association or merely in your individual capacity?—In both.

2332. I think you were present during the evidence of the witnesses yesterday?—I was.

2333. Do you in the main agree with them?—In the main I agree, more especially with what was said by Professor Carey Foster.

2334. In fact, as to the scheme for the establishment of a University which will eventually absorb the colleges?—Yes, if such absorption should be possible. I very much doubt whether any such absorption will be possible by voluntary co-operation of the colleges.

2335. If it could not be done voluntarily, we could have it done compulsorily?—Of course it might be done by Act of Parliament, but I think there is another way in which it could be done without compulsion.

2336. What is that?—If the colleges should decline to become a portion of the proposed new University, I think that the Royal College of Science and the City Guilds would be quite willing to join themselves as a Scientific Professoriate at all events to the University of London, and in that case the colleges would, I think, almost be obliged to come into the scheme.

(*Bishop Barry.*) No compulsion, only you must.

2337. (*Chairman.*) One plan to make it easier was, that the existing teachers of these two colleges should be appointed University professors?—That, I think, is the sentiment of all of us, not absolutely that every teacher should find a permanent position in the new

University, but that the principle of finding positions for existing teachers should be carried out as far as consistent with the objects of the University.

2338. The previous witnesses, though they did not attach paramount importance to it, were inclined to preserve the existing University of London. Is that your opinion?—I think it would be a very great misfortune for the higher education in London, in fact, in my opinion, and from my experience, I think it would be fatal to the success and development of the higher education in London if there were two Universities; and I think the proposed new University might take the existing University as a nucleus.

2339. That would necessitate two sides, as it were, to the existing University, one a teaching University for London, the other an Imperial University giving degrees to all comers?—I do not think so myself. I do not think it is necessary that there should be a University of a totally novel character, especially for a particular place, and I do not think it necessary, but the Senate of the new University might find it advisable to have two sides of the University so far as the examinations are concerned. I do not think that is at all a necessary thing. That is my opinion.

2340. It would entail the remodelling of the Senate of the University of London, I suppose?—It would entail a complete re-organisation of the governing body of the University and the addition of a complete set, so to speak, of Faculties and subordinate machinery.

2341. You are strongly of opinion that the teachers or professors ought to have a position on the Senate sufficient to insure attention being paid to their wishes and opinions?—Yes; I should even be inclined to say that, on the whole, seeing that the work of the University is to teach and examine, those who do teach and who do examine should be in a position of some preponderance on the Senate, but not excessive.

2342. The expression was a large minority; what is your opinion?—I should rather say a small predominance. I think there is one strong reason for that which, perhaps, was not present to the mind of Professor Carey Foster yesterday. That is this: I think it important that on the Senate the different branches of learning and science should be adequately represented, and that would necessitate a rather considerable number of professorial members of the Senate. If in addition to that you had a larger number of non-professorial members, I think the Senate would be unwieldy and of an unworkable bulk.

2343. It is suggested that the professorial element, even though it was in a minority, would, from constant attendance, and from the deference paid to it by the other members, possess a power out of proportion to its numbers. I suppose that is true to a certain extent?—I have no experience to guide me on that point beyond the experience of the University of London itself. I am not quite sure that that would be the case in all instances.

2344. Then with regard to the medical part of the question; though you would absorb the colleges, University and King's Colleges, you would not make any attempt to absorb the medical schools. They would, I think, retain their own autonomy, but would at the same time be affiliated to the University and have a representation on the Senate?—Generally I am in favour of that. I think the medical schools might either individually or jointly retain in their hands the whole direction of medical education, but the preliminary scientific portion of their education ought not to be separated from the University itself.

2345. You mean the matriculation?—I should say with regard to the whole of the education of the medical student (having used the expression) that before he becomes a medical student, that is to say, before he enters upon his work in the anatomy room and in the hospital, he should matriculate and follow preliminary scientific courses. I think it is of very great importance indeed, from my experience of examinations, and from the large experience I have had of candidates in the University of London. I have had to do altogether during the last 10 years with perhaps some 40,000 candidates. I think it is of very great importance that sufficient attention should be paid to the preliminary scientific training of a medical man, and I think there would be some fear of that training being omitted, or not being paid sufficient attention to, if the whole direction of it, or any predominant share in the direction of it were left to the medical schools.

2346. You think they would be inclined to make it too easy?—They would be inclined to get hold of students at the earliest possible moment, and turn them at once on to practical work, the result of which would be in my opinion that medicine would be almost pure empiricism on the part of those who went through no sufficient general training in science.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

2347. One of your objections to the Draft Charter of the Gresham University is that it gives the medical authorities too much power?—That is one of my great objections. On the governing body of the proposed Gresham University there would have been twice as many medical representatives as of arts and science put together.

2348. And you think that they could not be trusted to see the necessity of a good scientific education and a general education in other matters, and that they would make the thing entirely practical, merely a matter of medical knowledge?—I should not like to say that they could not be trusted, but I think there would be some danger that the scientific side would make a complaint of being neglected. If I may point it out, there would be not only 16 medical representatives on the Senate of the Gresham University, but all the teachers of the medical schools would be comprised in the Medical Faculty, and there are nearly 400 teachers in the medical schools in London. That would have given the medical element in the governing body and the consultative body together such an enormous weight, that the other portions of the University would have run the risk of being starved.

2349. You would give the Medical Faculty only the same amount of representation as the other three Faculties?—The same amount of representation on the Senate as to each of the three other Faculties, but I should give special power to the Medical Faculty over its own subjects.

2350. I suppose I need not ask you anything more about the Gresham University, because the people who appeared with you, the previous witnesses seemed to think that no amount of alteration or remodelling, or change of any sort, would make it work according to their opinion?—I do not think it would be possible without such an amount of change as would practically change it in nature. I entertain all the objections to the Gresham University that were formulated by those who gave evidence yesterday, but there is also a special objection that they did not express, and that is that the work the Gresham University proposes to do, is really the very work, only restricted in extent, that the London University now does: there was nothing that the Gresham University proposes to do that the London University does not do, or, with a very slight alteration of machinery, could do, with the one exception that it could not exclude from its examinations the external students. The Gresham University could have done that.

2351. The chief advantage belonging to the scheme of the Gresham University was, that it brought the teaching more into harmony with the examination. Is not that the real reason of its being brought forward?—I do not think it would have done that any more than is now the case with the University of London. On the Senate of the University of London the different teaching Corporations are more or less represented, though not in a formal manner.

2352. Not the men who were actively engaged in teaching?—Some of our members are actively engaged in teaching, and the Gresham University did not propose that the professorial body should be represented as a professorial body on the Senate, but simply as the representatives of the different teaching institutions.

2353. The professorial body formed the Faculties, did they not, and the Faculties practically fixed the examinations?—It has for some time past been proposed to do the same in the University of London, there would be no difficulty whatever. The University under its charter has full power to do that; it has not done so, but it has full power to do it, and now in fact it may be said to be almost on the verge of doing that very thing.

2354. In the last Commission there seemed to be a great deal of evidence to the effect that the examinations were not in accordance with the teaching, but there seems to be a difference of opinion: a good many people do make the objection that the examinations are not in accordance with the teaching?—I really do not know what facts would justify so broad an assertion as that.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

2355. That is not your opinion?—No, I have had myself a great deal to do with the drawing up of various syllabuses in science, and in doing that I compared the kind of work done by other Universities, the kind of syllabus upon which they founded their courses of instruction, and their examinations, and I do not find any very great difference in most of the subjects that I have had to deal with—in biology, for instance, which I know best.

2356. Then you think there is an existing teaching University for London?—I think, to some extent, in practice, though not by any formal machinery. In practice the wishes of the London teachers, of all the teachers generally, but more especially the London teachers, are consulted.

2357. Then in your opinion I may take it there is no strong necessity for anything very new?—There would have to be something more than re-modelling, because I contemplate a more perfect union of the teaching Colleges with the University than would be possible under its existing charter, and also a direct and formal recognition of the professorial element, which at present does not exist; in practice it exists to some extent, but formally it does not exist.

2358. In the opinion of the other witnesses what seemed necessarily to follow any attempt to bring the teaching more into harmony with the examinations and to lead up to them was, that there would have to be a different kind of examination for those who had been brought up under the teaching of the professors, and those who came from outside, and that it would necessitate a double set of papers for the examinations, one for those who had been brought up by the professors belonging to the University, and another for the outsiders?—That was stated by Professor Carey Foster no doubt.

2359. Do you agree with that or not?—I do not altogether disagree with it. It may be found that such a system of double examinations is necessary. If so, I am quite sure that there will be no difficulty whatever in carrying on the two sets of examinations. But, I do for my own part very much doubt whether such examinations are necessary at all, no facts have ever come to my knowledge showing the necessity of such separate examinations, or showing in what way any one would be advantaged by them.

2360. You think it is possible to do without them?—Yes, I think so, but that is only my own opinion, and I think it is a matter that ought to be left to the Senate of the new University. I think if the Senate of the new University had power to institute these separate examinations if it should be found advisable, I think that almost would be sufficient. I myself think it would not be found necessary. It might be found advisable, but it would not be found, I think, necessary. On that point, perhaps, I may venture to point out one or two things which do not seem to me to have been touched upon so far. The professorial instruction given in London will have to be given, so far as pass candidates are concerned, up to the degree, that is so far as elementary instruction is concerned, at several centres in London simultaneously, and upon the same subjects. It will be impossible to say that a student in one subject shall study in the north, and a student in another subject shall study in the south, another east, and another west. The amount of time lost in running about would render such a scheme quite impracticable. Hence you would have three or four or more classes going on at the same time. And I do not apprehend that it is proposed that there should be three or four sets of examination papers, to suit the wants, desires, and idiosyncrasies of each particular teacher and each particular class. Something in the nature of a common schedule would have to be drawn up, and I can see no reason why if such a common schedule were drawn up the provincial and private students should not conform to it. They have done that for the last 50 years in the University of London. The schedule has been practically drawn up principally by, or under the influence of, London men, or at all events by or under the influence of men who did not teach provincial or private students. These syllabuses have been acted upon all that time, and, as far as my experience goes, I never heard a complaint about them on that score. You get complaints sometimes that the papers are beyond the syllabus, or that they are not fair upon a given syllabus, and occasionally an objection is made to some item in the syllabus; but I have never had any knowledge of any objection made on behalf of a private or provincial student or teacher to syllabuses drawn up in London, and chiefly under London influences because so drawn up. Take the Medical Faculty, for instance, I may say that is entirely London.

2361. I suppose you largely intend to increase the professorial element on the Senate of the University. Therefore I suppose the examinations would be much more in accordance with the teaching than they are now?—Yes; that is, I tried to make the distinction in a paper I wrote between what may be termed the teacher examination system and what recommends itself to me as the professorial system. It is in paragraph 16 on page 6 of the paper I handed in: "In the *individual* "sense the teacher-examiner system would not be "adopted; it was not asked for by the Gresham Uni- "versity; but there would be complete corporate control "over both examination and teaching, and therefore, "due concordance between examination and teaching."

2362. Therefore, those who have been brought up by the professors would have an advantage in the examination, because they would probably be asked to a great degree questions of which they had already been taught the answers, and they would be in a better position than the outside people?—There is a very strong example, which tends rather to do away with that supposition, which is now present to my mind. We had for 10 years, and during my tenure of office as examiner, one of the teachers of University College. He examined upon a syllabus which was practically his own work, even the very language of it. It was practically drafted by him, and he examined upon it. That syllabus, nevertheless, was accepted by students from other London colleges and students from the provinces who had had no teaching from the professor in question. I have not gone into statistics upon that particular subject, but certainly the impression on my mind is that the students who had not had the benefit of that professor's teaching came out in the result of the examinations as well on the whole as that professor's own particular students.

2363. And even if the outsiders were at a little disadvantage they would have to submit to it for the sake of the great advantage there would be to London in the union of the teaching examination?—Yes, just so; and then, if I may venture to point this out, some body or other must draw up syllabuses for the private student—for the student who does not go through any professorial course. Some body must draw up syllabuses, and whatever that body may be, the teachers of the private students would not be represented upon that body, and, therefore, the private students would be as a matter of necessity examined upon schedules more or less drawn up by men who had no connexion with them at all. I think myself that the question must be looked at from two points of view; from what may be termed the arts point of view, or from the science point of view. So far as the arts point of view is concerned, I should say that the student with the various editions of the classics, and the various excellent grammars, and the other aids to instruction that exist, would be often as well off without going through a professorial course as if he did go through it. With regard to science the case is different. There, I think, a man has no chance unless he goes through a thorough training in the laboratory, and, as a matter of fact, at the present day, and increasingly, the students in science who come to the University of London do go through such a training. They have learnt by experience, not always of a pleasant character, the absolute necessity of doing so, and I doubt very much whether we have five students a year, especially in natural science, who have not been through a complete course of laboratory training somewhere or other. And I do not know that they would gain any special advantage by going through the laboratory of any particular teacher. We do not find that those who have been in the laboratories of the men who examine at science examinations do very much better, if at all. I do not know that they do at all better than the men who are brought up in what may be termed foreign laboratories so far as the examiners are concerned.

2364. You said that for the University of London to fill the position which you wish in this new scheme of professorial University a great number of alterations will be necessary?—Yes.

2365. Modifications and entire re-construction of the Senate and various other changes?—Yes.

2366. Have you any reason to think that the Convocation of the University of London, which has a veto, would agree to anything of this kind any more than it agreed to the scheme which was before it?—I think it

is difficult to know what Convocation would do. It is a very large and a very heterogeneous body; also there are over 3,000 members of Convocation, and they never, except upon very extraordinary occasions, get more than 50 or 60 members together who are not to my mind, and cannot be taken as representatives of Convocation as a whole. I think that what Convocation is principally anxious about is, as far as I know their feeling—I do not pretend to be extensively acquainted with the feeling on the matter—I think the principal feeling is that the value of the degrees should be maintained. I think that is the reason why they rejected the senatorial scheme. I am pretty certain of that, because I have heard it suggested in so many quarters. The principal reason was that under the senatorial scheme the examinations fall more or less into the hands of the colleges, and would be more or less out of the control of the governing body of the University, so that practically, if not formally, the degrees would have suffered and been lowered in value. It was that, I think, that brought about the rejection of the London University scheme.

2367. Did the senatorial scheme meet your wishes and the wishes of your body?—The professorial body was not in existence then, at least I do not think it was. At all events, I was not a member of it.

2368. Would it meet your wishes now?—No, not at all. I was very much opposed to it.

2369. It does not go far enough?—No, it did not provide for a teaching University. It did not provide for close relations between the colleges or the collegiate bodies, and the University body, and I wish to say it did not provide for the governing power being in the hands, at least in a large measure, of the professoriate as such, not as mandatories of this college or that college, but as professors.

2370. Do you think you could draw up any scheme which would suit you, which would have more chance of being passed by Convocation than the senatorial scheme?—To a certain extent I can hardly give an unbiassed or impartial opinion upon a scheme which I have tried to think out myself; but with one exception I am inclined to think some such scheme as that which I have endeavoured to foreshadow the outlines of might be considered. There is one point I do not think they will accept, but with that exception I am inclined to think that they would not be disinclined to consider it favourably.

2371. What was that one point?—That one point is, that I do not give in my scheme any representatives on the governing body to Convocation. I take away from Convocation the power of vetoing the proceedings of the Senate which they at present possess. I replace that by a power of appeal to the Privy Council, which appears to me to be a more useful, and a more usable mechanism, and I do not give them any representation on the Senate. Under the scheme drawn up by the Professorial Association which I accept, however, it is proposed that the Chairman of Convocation should, *ex officio*, be a member of the Senate in order that Convocation may have an adequate spokesman to represent its views and its grievances when it may have any of the latter to the governing body.

2372. You think Convocation would not consider that enough?—I am inclined to think that Convocation following what seems to be the fashion of the day in these matters, would suppose that it had interests of some sort contrary to those of the University, or which might be contrary or opposite to those of the University as a whole, or of the predominating body in the University, and I think it very likely that Convocation would require a larger representation.

2373. But supposing Convocation not to agree with any scheme that would suit you and supposing it to be impossible to remodel the University of London so as to fill the position which you wish it to fill are there any other means of starting this Professorial University?—Yes, I think there is a means. The means that has hitherto been considered has been that of attaching a degree-giving body to existing teaching institutions and in that way converting the teaching institutions into a University. I do not by any means wish to be considered as a champion of the University of London. I am expressing my own personal opinions formed quite independently of my position and of course without in any way binding the University of London or any part of it. But another way in which that might be effected would be by attaching a professoriate to the existing University, that is remodelling it as far as the University is concerned.

2374. You mean the University of London?—Yes, and attaching a professoriate to it either with or without the aid (but I think the aid would be forthcoming) of the Royal College of Science and the city and guilds.

2375. How would the money be provided?—We receive a considerable sum of money at the University of London; altogether in the shape of fees and so on we receive about 15,000*l.* a year. Then, in addition to that I think the Government do entertain, and have for some time past entertained the idea of making the University independent and giving it a yearly grant. I do not know what that grant would be. I think possibly something like 10,000*l.*

2376. But taking the idea that the University of London has proved itself to be unable or unwilling to come into your views or unable to carry it out, would you then compel it to do this by Act of Parliament or how would you get over the difficulty?—I can scarcely conceive that the University would refuse to be made a teaching University by having a professoriate attached to it in connexion with South Kensington or otherwise, but if the University should refuse to do that I am afraid I should be travelling out of my sphere if I were to go further.

2377. You have not thought out the idea of establishing a second University altogether independent of the University of London but on different lines to the Gresham?—No, I think it would be ruinous to education; it would be dividing resources and you would have two Universities practically doing almost the same thing. In medicine exactly the same thing.

2378. Then you cling fundamentally to the idea of working through the University of London?—No, I do not go so far as to say working through the University of London. I look upon the University of London as material in existence, and I think that material might be utilised in some proper manner for the creation of a new University.

2379. Which will absorb the old University?—Yes, it should be more than an addition to it.

2380. The University of London still continuing to be an imperial body examining people from the whole of the United Kingdom?—Still to have the power of examining students from the whole of the United Kingdom. But I do not know that I should quite call that an Imperial body any more than I should call Trinity College an Imperial body. Trinity College, Dublin, does exactly the same thing. It has, I think we were told yesterday, about three-eighths of its students who are non-collegiate and non-residential who come from Scotland and England and other places.

2381. It really consists of Trinity College?—Yes. It is called the University of Dublin.

2382. But it is so closely identified with this one college that it is practically the same?—It has its open University side. It may be said to be a concentration of the instructional machinery of Dublin which offers its advantages under certain conditions to those who are not resident in Dublin.

2383. And do they take advantage of it?—Yes, in very large numbers—very large numbers indeed, and I believe they are increasing.

2384. I think you have explained your idea. Is there anything I have omitted to ask you or any other subject you would like to touch upon?—There is one point which Professor Carey Foster named in his evidence yesterday. He seemed to think that some difficulty might arise with regard to the examinations—more especially with regard to the practical examinations—owing to the circumstance that students in particular laboratories become familiar with particular forms of apparatus. Well, I have had specially to do with the practical examinations of the University of London for many years past. They are conducted there on a very large scale. For the last three or four years, we have had examinations on a very large scale in Professor Carey Foster's own subject, physics, and certainly for pass practical purposes I have not found that difficulty one of any importance, as a matter of practice. I can conceive that for certain kinds of examinations possibly of a very special character there might be difficulty, but I think it would relate only to certain forms of apparatus, such as different forms of galvanometers, &c. used in electrical work. I do not think it would obtain with regard to what may be called the natural philosophy division of the subject, heat, light, and sound. As far as my experience goes, I have had to look out for a great deal

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

of apparatus, and I do not think there is that amount of difference between them which would puzzle the student. There are differences in form, but any student who has been through a laboratory can at once detect the essential parts of the mechanism even if it is somewhat slightly different in external arrangement and form. There is also another point which I should be glad to mention and that is with regard to German Universities. Some of my colleagues on the Professorial Committee I think take a rather incorrect view of the mode in which the German Universities do their work and also of the scope of it. For instance, it is generally understood that in Germany the teachers examine their own pupils, but as a matter of fact that is not really the case. I have here a very interesting little book written by Dr. Schaible, who was for some years examiner in Germany to the University of London and who is also Professor of German in the Royal Academy and who is known as a University authority. In an essay which he has written he gives a very admirable account of the German system. As to the maturity examination at the schools which every student must pass before he enters upon a University course he shows that that examination is only in a very partial degree indeed conducted by the schoolmaster or by the teacher. It is conducted to a large extent by persons appointed by the Government, who, however, take into consideration in the oral and written examinations the course of instruction which the master or principal authority of the school shows the boys had been through. Then he also shows that one great reason why the number of students at the German University is so great is that every applicant for a position in the Civil Service must go through a University course, and hence a large number of persons are obliged to follow the University course in Germany who but for that provision in all probability would not follow it. Then, again, the student who goes through a course in a German University is obliged to attend certain lectures, but he is not obliged to pass any examination whatever unless he wishes to take a degree and the number of those who take that degree according to Dr. Schaible is very greatly lessened. In fact, he goes so far as to say this: "In Germany the University is now for the most "part nothing more than a teaching body; and the State, "by rendering its professional examinations obligatory, "has reduced very materially the value of the once "important examination for a University degree. The "latter examinations do indeed still exist, but as they "are not necessary, and have no value as an introduc"tion to a career, they have little more than an honorary "character, and the great majority of professional men "do not therefore take a University degree." The great majority of professional men therefore do not take a professional degree at all. They have to go through whatever career they take up, jurisprudence, engineering, finance, theology, the educational profession, or pure science, or medicine, whatever they go up for they have to go through the complete series of examinations.

2385. State examinations?—State examinations with which the University professor has nothing to do. They are obliged to go through the course of the University, but they are not tested with regard to that course, and the examination which they afterwards would have to pass, are not based upon the University course necessarily by any means, nor are they examined by the University teachers. So that I myself think, therefore, that the great mass of German students who do not go in for a professional career and who attend the University just learn as much or as little as they like. There is nothing to compel them and nothing to induce them to pay any special attention to their studies. And also, according to Mathew Arnold, in his well-known book, he states that only about one-third of the students who attend the German University really attend with attention; it is a physical attendance rather than a mental attendance.

2386. Very few of them go in for the degree?—Only about a third of them go in for the degree. He also says in his book that he thinks the German system, unsupplemented as it is by a proper hierarchy of examinations, is so far not to be imitated.

2387. Those who do go in for a degree are examined by their own teachers, are they not?—That does not follow because it is very much the custom for a German student to go to several Universities. It used to be the custom when I knew more about them, and I think it still is. The German student will go to a University where one man is famous in physics to another where a man is famous in chemistry, and to a third where a man is famous in mathematics. When he comes to be examined he is examined by the University course of the last University in which perhaps he has had the minimum of instruction. So it is not made a *sine quâ non* in Germany certainly, that the individual personal teacher should examine his own student, but it is made a *sine quâ non* that in any University the government should be in the hands of the teachers who of course direct both the teaching and the examination. Those are the three points which form the basis, or would form the basis, of any University that I should like to see established, but I do want to see examinations as well. I think there should be examinations interpolated in the University course which might be conducted by the professor himself, or in the place where the student took his course and I think that where those examinations were held the University might dispense altogether with what it calls its intermediate examination. I think that would be a very great attraction to students to get rid of the intermediate examination by attending professorial courses and doing whatever their teachers or the authorities of the place where they attended those courses might require them to do.

2388. There were some questions asked of the other witnesses about what inducements there should be to induce students to attend these professorial lectures. I think they both agree that it would not be necessary to make it compulsory?—No, I think among the inducements would be the one that was adverted to by your Lordship, namely, that the student who went through a professorial course, would know that he probably would have some slight advantage by being examined by that man. At all events, he would be sure to think so, and that would relieve his mind considerably. Another advantage in the scheme that I contemplated, would be that he would get off the trouble of attending the University Intermediate Examination and his final examination would be conducted upon a schedule and upon papers which his teacher had a share in settling.

2389. On the general question of the advantage or disadvantage of the student being examined by his own teacher, have you strong views?—If I myself were a teacher, I should refuse absolutely to examine my own students. I should like to have a proper share in the establishment of the curriculum and the enactment of the syllabus, and in the preparation of the papers, but personally for my own part, if I were a professor, I should like to be excused from examining my own students.

2390. Would you be afraid of being partial?—No, I should not be afraid of that, but I should have an antipathy to it.

2391. I suppose there would be no strong wish on your part to favour one pupil more than another?—I do not know that I should, but I might be unconsciously biassed. On looking over papers, if I found a man expressed views which I admired, which he had perhaps got from me, I should be inclined perhaps to view that answer with a little more favour than otherwise.

2392. That is if it was a mixed class consisting partly of your own pupils and partly of outsiders?—Yes, either I should be so, or it would be an effort that one would have to exert to prevent one's self from being so.

2393. (*Bishop Barry.*) May I ask you what you mean precisely by the absorption of colleges?—By the absorption, I mean the taking over by the University of the whole teaching apparatus and equipment, including the buildings and such funds and other property as, to take an instance, University College might possess, but subject to any trusts affecting that property or any public duties which University College might have undertaken with respect to that college.

2394. In other words the colleges would cease to be independent corporations?—The academic portions of the colleges would cease to be independent corporations.

2395. May I ask what you mean by the academic portions of the colleges?—For instance, at University College there is a school attached to the college, there are certain lectures that I think depend upon trust funds left for special purposes.

2396. But the college proper would cease to exist as an independent corporation and would become a kind of delegacy of the University?—It would become part and parcel of the University.

2397. But it would be worked from head-quarters, I suppose?—Yes, but the University would consist of it.

2398. But what I mean is this. There would be a new body called the University of London, either the present or some future one, and King's College and University College would have to surrender their charters?—Yes.

2399. Then their buildings in some way would be handed over to this new body?—Yes.

2400. That new body must work them through delegates of its own?—Yes.

2401. And, if I understood you, in disestablishing these colleges you would save vested interests by appointing a certain number of their teachers as University professors?—Certainly, nearly all their teachers of a certain rank would at once become University professors I should say.

2402. Would this be done by an Act of Parliament or by the Senate of the new body?—What is proposed in the scheme is that there should be a small and independent Commission of legal and educational experts to be appointed with full powers to investigate the claims of institutions wishing to be absorbed to arrange for a proper disposal of the trust funds of those institutions and determine the conditions under which the property should be dealt with and generally to do whatever may be necessary.

2403. Appointed by Act of Parliament?—Yes, appointed by Act of Parliament.

2404. I think you said that you did not suppose that existing colleges would willingly come into such a scheme?—I certainly did not suppose it till some time ago; one hears such various reports.

2405. I thought by your former evidence that you rather seemed to take that view?—My own opinion is that so far they have not shown any willingness to do so.

2406. Then the second plan in carrying out your scheme would be to compel them to do so by Act of Parliament?—No, I only regarded that as an obvious means of doing it. I was rather inclined to put pressure upon them in a different way by attaching a professoriate to the modern University derived in large measure from South Kensington, and, then, I think, that in their own interest the colleges would find it an inevitable thing.

2407. It would be a case of indirect as distinguished from direct compulsion?—It would be a more polite form of compulsion.

2408. I do not know about the courtesy of it, but it would be indirect compulsion?—Yes, it would be, really.

2409. You do not propose in that way to deal with the medical schools. Will you tell me why you would allow them to exist, while you would practically destroy the colleges of a larger and more comprehensive character?—Principally because of the very great specialization of the work of the medical schools. Another thing is, I do not see how we could possibly do it because the medical schools are proprietary institutions attached to the different hospitals; we could not take over hospitals or their property.

2410. Why not? Are not King's College and University College proprietary institutions, or were they not so in the first instance, and are they not both of them attached to hospitals. Why should they cease to exist, while the medical schools are to remain?—I am not so familiar with King's College, but as far as University College is concerned the hospital does not belong to the college at all. It is under entirely different management.

2411. That is not exactly the point I mean. I see that you would not merely allow medical schools to exist, but if I gather correctly, you would allow them to direct practically all the professional part and the technical part of medical education?—Yes.

2412. What I fail to see is why you give that privilege to institutions of that kind, while you seem to think the existing colleges are an injury to University training?—I think it would be a better thing if we could persuade the medical schools to fuse themselves together into a single department of the University, and I believe that in time that would come about, but for the moment it does not seem to be possible to interfere with proprietary arrangements of a kind such as those under which the medical schools exist, which are proprietary and profitable.

2413. Might I ask in what sense you use the word "proprietary" there?—They belong to the physicians and surgeons, or at all events they belong to the members of the hospital staff.

2414. The hospitals?—No, I am talking of the schools.

2415. Then you would not interfere with them, because practically they are too strong to be interfered with?—It is not only that they are too strong but that they are too much divided amongst themselves. We do not know what settled policy the medical schools may ultimately agree upon.

2146. That does not quite touch my point as to why theyshould be preserved. I do not see how their being divided should be a reason why they should be preserved?—No, it is not a reason why they should be preserved, but perhaps it is a reason for us at the present stage at which the University question is not taking up the difficult and complicated part of the question.

2417. Does it not practically come to this, that they are too strong to meddle with?—I do not think it is so much a question of strength; it is a question of complication; the interests are very complicated. I am not able to say exactly in what way that complication may be described, but that complication undoubtedly exists, and it does not seem to me to exist to anything like the same extent with the colleges. And, moreover, as far as University College is concerned to this scheme, we have not got the assent, as far as I know, of any professor of King's College. I believe they are not allowed to discuss these matters, or at all events to join in any public discussion of them.

2418. As this will be published may I ask on what ground do you base that statement, that the professors of King's College are not allowed to do that?—Publicly they are not.

2419. May I ask on what ground do you base that statement?—It is only my impression.

2420. Then it had better go out as your impression, because I have reason to think that it is absolutely incorrect?—I am glad to hear it. I said it was my impression; but it is my impression strengthened by the fact that no professional member of King's College has taken the least public part in the many discussions that have taken place recently with regard to the question of a professorial University.

2421. Still, I should wish it to be understood that that is simply your inference, and that you have no ground for making, what I think is a serious statement, that they have been forbidden by the Council to take part in any discussions?—No, I did not say that. Here again I may be wrong, but my impression—and this, I think, I have derived from conversation with professors of King's College—is that on their appointment they sign something which prevents them from taking up a position in public which would not be or is not endorsed by the college authorities.

2422. I have had something to do with King's College in my time, but I know of nothing of the sort. Now, we will pass on. I think your general idea is that the present University of London being largely remodelled ought to be sufficient to meet the whole needs of the teaching?—It will be something more than remodelling.

2423. Revolutionised?—Re-cast.

2424. We are to re-cast the University of London; how it is to be re-cast we will examine presently. Then it is your opinion that, so recast, it can well discharge the double duty of examining students from all parts of the world, and organising practically the teaching of London?—When it is said that the University of London examines students from all parts of the world there is a certain amount of truth in that suggestion, but a very large proportion of our students are inhabitants of the United Kingdom.

2425. Then I will restrict my question. I meant simply from all quarters. You see no difficulty in its discharging that double duty?—I myself am not aware of any circumstances tending to show that there would be any difficulty.

2426. You extend this answer into the whole question of examinations, and you see no difficulty on that matter?—I am not aware of any circumstances.

2427. In spite of the previous history of the University of London itself?—I do not know of any circumstances that show any difficulty in it whatever.

2428. I mean the point in its history when it practically gave up the affiliated colleges and threw its examinations open to all parts?—Of course that was long before I had anything to do with the University, but I have

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

always understood that the reason why the affiliation scheme was rejected was that it really depended upon certificates of attendance and nothing more and the certificates of attendance became to a large extent a mere bare formality without substance or meaning, not in all instances, but in many instances.

2429. You think it had not anything to do with the difficulty of conducting examinations?—I am not aware that it had. I am not familiar with that portion of the history of the University of London.

2430. With regard to the University of London as it at present exists I think I understand you to state that you considered the teaching corporations in London were virtually if not formally represented upon the Senate?—I think in one way or another they are represented in such a way that they have opportunities of making their views known and it is proposed still—quite apart from the professorial University idea—that they should be associated in the Faculties.

2431. I had the honour once of being a member of the Senate, and I do not remember then that any teaching corporations were separately represented. I was nominated by the Crown?—Of course I can only say that if you take the members of the Senate of the University of London since I have been there those who have been members have practically represented to a large extent the interests certainly of University College, I think to a less extent King's College, perhaps less than any large educational institution in London, because King's College really has had very little to do with the University of London. It has sent us very few students, scarcely any in Arts, very few in Science, more in medicine of course.

2432. That is quite true, but still I do not remember that at that time University College had its representatives upon the Senate?—No, not as representatives of University College, but there were numbers of men who were members of the Senate and at the same time members of the University College Council. There was Lord Justice Fry for one.

2433. I was thinking of the professorial element?—The professorial element would not be on the University College Council.

2434. No, not on the Council but on the Senate of University College?—No, as far as I can recollect I do not know that we had. In order to answer that question I should have to look at the names and refresh my memory.

2435. I think you saw no difficulty in the present University of London putting the examinations practically into the hands of the Faculties or Boards of Studies?—I do not think I said that—putting them under the control of the professors.

2436. I thought, however, it was rather a principle of the University of London—I remember hearing Lord Sherbrooke speak upon it—that teachers did not examine, and were not allowed to examine, their own students?——I do not know that it is quite so strong as that; I think it was more a matter of accident than a matter of principle.

2437. I doubt whether it was thought it was accident. I attended a good many of the Commemorations and the giving of degrees, and I do not remember ever failing to hear Lord Sherbrooke make that remark; and generally it was received with a good deal of applause. The supposed law might have been unwritten, but it was not unspoken?—I do not know that it has been so since I have held my present position there, I should not think so.

2438. Then, as far as I can gather, the scheme you would like to adopt would be largely that of a German University?—It would.

2439. But I presume with certain modifications?—Yes.

2440. Would you provide, as the German Universities do, a large system of State examinations independently of the University?—I hardly think it would enter into my province.

2441. I do not mean you would provide it; but would you wish that it should be provided?—I cannot say that I have considered that question. I think the matter stands upon a different ground. I think in England the public examinations were instituted, not so much, if at all, with an educational view as for the purpose of replacing the system of patronage.

2442. I am afraid I do not put the matter quite clearly, I think I understood from you that you considered it a very important part of the actual working of the German University that, although the Degree Examinations were in the hands of the teachers, the examinations, which were more important for progress in life, were in the hands of more independent examiners appointed by the Government?—Yes.

2443. Do you think that would be desirable in the University proposed in London?—My own personal opinion is, I think, in that direction. I think what might be termed the technical or the technological part of a man's course is better tested by outsiders than by the University.

2444. Would you consider it a healthy condition that not more than one third of the students of the University should work for a degree, which I understand to be the German practice?—I did not go so far as to say that. I said that what Dr. Schaible said in his book is that about one third of the German University students work seriously, but what the proportion of men who take the degrees is I do not know.

2445. Probably less than a third?—I am inclined to think from what Professor Schaible said in his book it would be less than a third.

2446. Would you think it desirable that we should have a large number of students of whom only a small portion should proceed to degrees?—Not at all.

2447. But that is a part of the German system which you wish to introduce, I understand?—I said there were some points about the German University system which I do not admire. I do not admire the German University system in its entirety, I do admire that portion of the University system especially which favours and provides for the advancement of learning, but that portion of the German University system which is concerned with the ordinary University student, I do not very much admire, because I do not think it provides sufficient inducement to work.

2448. You admire the German Universities as homes of research and learning rather than what we call here educational institutions?—With certain modifications I should be inclined to accept that.

2449. As far as I can see, you would introduce the German University system with what at the very least are important modifications?—I require the addition of an examination system more or less upon English lines to the German system.

2450. That would be an important modification. Then the present University of London when it has been recast is to have a large professoriate attached to it?—In the University that I contemplate the professorial element will be largely represented upon the governing body, and in addition to that the Faculties, will consist wholly of professional teachers.

2451. But these professors are to be appointed by the University itself?—Yes, the professors are to be appointed by the University itself.

2452. And for that purpose, large funds would no doubt be requisite?—I do not think that very large funds would be requisite, not to begin with, in addition to the funds which, if absorption takes place, would be at the disposal of the University.

2453. Practically then the resources of the colleges would be used to establish an independent professoriate?—Yes, partly, not absolutely independent, because in the professorial governing body there would be a large number, a large minority or a small majority of Government nominees, and those Government nominees might include whatever persons might be thought necessary to safeguard the general interests of the public.

2454. I did not use the word "independent" in the sense of uncontrolled. I should have said an University professoriate not in connection with colleges?—A non-collegiate professoriate, that is a strong part of the scheme.

2455. Then how would you provide for the laboratory question which would entail an enormous expense and a whole system of new laboratories?—I do not think that would necessarily be the case; take, for instance, the two colleges, University College and King's College, to make our example a concrete one; the laboratories of University College might be used for educational pass purposes and the laboratories of King's College also for educational pass purposes. But at University College they might take certain portions of higher science and at King's College they might take up other portions of higher science, to restrict myself to

higher scientific matters. I think in that way the necessity for spending large sums of money for providing east, west, south and north, complete laboratories would be unnecessary.

2456. Did I not understand also that you contemplated also absorbing and using the City and Guilds Institute and the college at South Kensington for the same purpose?—Yes, if that can be done that is contemplated. Of course the City Guilds being on lines of its own and the Royal College of Science being a Government Department I do not think that complete absorption would be possible, but I think sufficient absorption for University purposes.

2457. I am afraid I do not quite understand how you can have a partial absorption, I can understand complete but not partial absorption?—Take South Kensington, for instance, a great deal of the work at South Kensington is in examinations for giving certificates to teachers in elementary schools, I do not think we should take that away.

2458. You would let that alone?—Yes, I should let that alone.

2459. Still you would want to use their laboratories and museum, and all the rest of their appliances?—Of those who go to laboratory work of a very elementary character I fear very few would come to the University at all. I do not know that we should use——

2460. Do you mean that the University would not want extensive laboratories to be provided somehow or other?—The Government have already agreed to provide a complete set of laboratories for South Kensington; they have not enough for their present purposes. I think the laboratories that would be established, the laboratories that exist in the City Guilds at Finsbury, the laboratories that exist at University College and King's College, and one or two other laboratories at the Chemical societies, and other places, would be enough for the present. I am inclined to think there would be a tolerably fair outfit to start with. It is a matter of organisation rather than anything else.

2461. Then you would propose to lay your hands upon various properties, so far as this can to be done, and utilise them for this non-collegiate professoriate which it is proposed to establish?—Yes.

2462. (*Professor Ramsay.*) I presume you are not a member of the Senate of the University?—No, I am only a servant of the Senate.

2463. Is it your opinion from what you know that the general outlines of the scheme you have suggested today would be acceptable to the Senate or to the Committee of the Senate which has already considered this matter?—I think it would be acceptable to the professorial element of the Senate.

2464. To that body which drew up the charter which was before Convocation previously?—Yes. Three of the members who signed this proposal of the professorial University are members of the Senate. Of course I cannot bind them by an assertion of my own, but I am very much inclined to think that all the professorial members of the Senate would accept most if not the whole of the proposals contained in that paper.

2465. Then what would be the opinion of the non-professorial members? Take Lord Justice Fry, for instance, and the party which he represents?—I am inclined to think that they have an open mind on the subject.

2466. You think there would be a reasonable probability that if the Commission were to form an opinion favourable to a large scheme of that kind for forming one great University, to combine teaching and examining functions, and to absorb, as you put it, all the best teaching in London, the Senate would support such a proposal?—My own opinion is that the Senate would support such a proposal.

2467. Then the opposition, so far as the University of London is concerned, which is to be apprehended is the opposition of Convocation?—It is the opposition of Convocation, but I do not know that one would have any right to say that even Convocation would oppose that scheme. I have no ground for supposing that it would, except the one ground which I have specially pointed out, there not being sufficient representation of Convocation.

2468. But your view on the whole, I understand, is that rather than extend the power of Convocation in remodelling the University of London your desire would be rather to curtail those powers?—Yes.

2469. On the ground that Convocation is a very large fluctuating body, that its members cannot attend, and that probably they would only express an opinion upon any subject upon which they are whipped up for some special party motive?—Just so.

2470. In fact you have very little respect for the opinion of Convocation exercised as it now is?—Exercised as it now is: I should like that modification introduced.

2471. But would your objection extend, as I also understood it would from what you said, to an increase of the mere representation upon the Senate?—They might come in under the Crown nominees.

2472. But supposing Convocation to be a body which has to be dealt with and which has to be consulted in some way or other, would you see any great objection to allowing Convocation to nominate a greater number of members of the Senate, a larger proportion than was named in Lord Justice Fry's scheme?—I might not object to it as a matter of practical politics, but I should object to it as a matter of principle.

2473. Then is it your opinion that Convocation has really served no useful function in the government of the University?—I am not able to call to mind any particular matter in which they serve a useful function except (and there they certainly did serve a useful function), in the rejection of the senatorial scheme.

2474. It is the case, is it not, that Convocation has an unlimited power of discussion on University matters?—Yes.

2475. It can make representations to the Senate which the Senate is not bound to return any answer to or to pay any consideration to; it is not bound by its constitution?—I should think the Senate is bound to consider whatever representations Convocation makes, and as a matter of fact, as far as my experience goes, it does consider whatever representations Convocation makes.

2476. Is it definitely entitled by its Charter to make representations to the Senate in the way in which the general councils of the Scotch Universities are?—No, I do not think it is by its Charter; I am not quite sure. Perhaps Mr. Anstie will be able to assist me on that point, but I do not remember whether there is any special power given to Convocation in the Charter at all except the power of vetoing the acts of the Senate having reference to any re-organisation of the University.

(*Mr. Anstie.*) It has power to discuss and declare its opinion on matters relating to the University.

2477. (*Professor Ramsay.*) But whether or not there is any such power you do not desire to give it them?—I do not desire to take the power away from them in the least.

2478. (*Professor Ramsay.*) The power of discussing, but not a formal right of making any representation?—If it is necessary to give them that express right I should not object to give them that express right.

2479. The difference would be this. In the Scotch Universities the General Council has the power of making a representation. That implies that the governing body o which it is made must consider it and must return a final answer to it, which of course, gives the deliberations of the body greater weight than if they were merely discussions. You would have no objection to that?—I should have no objection to that whatever. Only in the Scotch Universities would that power extend to an unrepresentative meeting of Convocation such as we, from the physical necessities of the case, have in our University. Our 3,000 members of Convocation are scattered all over the United Kingdom, and some 50 or 60 meet in Burlington Gardens occasionally and pass resolutions and so on. Would they be obliged to pay attention to resolutions of that kind as well as to resolutions which really were of a representative character?

2480. No, certainly not. Under the constitution as formerly existing they could only meet twice a year, and they had no power of adjournment. But, by the new Act of Parliament the General Councils, whose power has been considerably extended, are given the power of adjourning and holding special meetings upon certain conditions, to which special meetings all the powers attach, which at present attach to the statutory half-yearly meetings. You would have no objection to powers of discussion and representation of that kind, if that would serve to conciliate Convocation?

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

—No, I should like it quite independently of any desire to conciliate Convocation. I should very much like to see Convocation put under such a rule instead of the small irregular and unauthoritative meetings which now take place.

2481. Is it not a fact that on various occasions Convocation has discussed, and usefully discussed, possible improvements in the constitution and practice of the University?—I should be very loth to say that discussions were useless, but, with the exception, perhaps, of some alterations that were made in the matriculation sometime ago, I cannot at the present moment call to mind any very substantial results.

2482. Can you call to mind any large question which was first taken up by Convocation and pressed upon the attention of the Senate, and which ultimately did meet with the consideration of the Senate and was passed into law?—Is that within the last 10 years?

2483. It is within the last 10 years, I think. Is not that the case with regard to the question of the admission of women to graduation?—I am not sufficiently acquainted with the history of that part of it.

2484. You cannot say that it was not the case that the proposal to admit women first came up in Convocation, was approved by divers Convocation meetings, and ultimately pressed upon the Senate and accepted by the Senate?—No, I cannot say that.

2485. Did not something of the same kind occur in the matter of compulsory Greek? I do not say that I regard the abolition of compulsory Greek as an improvement but was it not the case that the question of compulsory Greek was first mooted and ventilated in Convocation, pressed upon Convocation, and ultimately accepted by the Senate?—I cannot say that either.

2486. Nor can you speak with regard to any other question?—I cannot at this moment. I should have to refresh my memory in order to do justice to that.

2487. Supposing we were to assume that that were the case or might be the case, would you be prepared to say that it would be a useful function for the general body of graduates to discharge, to ventilate proposals which are not perhaps quite ripe for discussion, and to put them before the Senate in order that they might be acted upon and brought into practice if approved of?—I do not myself see the necessity for any such action of Convocation in a University where the Faculties are sufficiently represented. I think questions of that kind would be better discussed, and discussed with more knowledge and more authority and with more fruitful results by the Faculties.

2488. But are there not certain popular questions which a professor would be rather inclined to shirk, which academic opinion, by itself, might not desire not to raise and yet on which it might be desirable that the University should have the means of expressing an opinion through some popular body like Convocation? Questions of that kind would not be raised perhaps so readily by a strictly academical body. Supposing those two cases I have mentioned turn out to be as stated, would you not say that Convocation had performed a useful function in at any rate causing questions of that magnitude to be seriously considered by the Senate?—Yes, but if at the time when Convocation considered those questions there had been in existence a proper set of Faculties and a sufficient number of professors, teachers, lecturers, and so on, attached to those Faculties, I do not say it would be unnecessary, but it would be inadvisable to have Convocation.

2489. Might it not be desirable to have some kind of popular body to let in public opinion, apart altogether from professors or the direct managers of Institution. Is there not an educational opinion which arises from time to time in the public mind on questions which deserve consideration by a body which is national, and which attends to the higher educational wants of the whole nation?—If a feeling of that kind can only be sufficiently and properly discussed in Convocation, then I think Convocation would subserve a useful purpose in the economy of the University. But I think they would be adequately and even better discussed without Convocation if we had a proper suit, so to speak, of Faculties.

2490. Are you acquainted with the powers which Convocation have at Oxford, or the analogous body of Cambridge?—No.

2491. You would not care for a body of that kind, which acts rather as an obstruction than as a help to movements?—No.

2492. Which is a retarding body rather than a progressing body. My question is, if you had a popular body, not of an obstructive kind, but of a kind to let in daylight—would you care for a body of that kind?—If you could be sure that those who would have the power of expressing opinions upon those points in an influential manner would always take up a progressive or liberal view I should say?—Yes, but they might not always do that.

2493. You do not think Convocation, as now existing, is that kind of body?—Convocation as now existing is not the body which could do that.

2494. It would not, in your opinion, exercise that judgment in the kind of way which you say might be desirable?—I think it might but for the circumstance that Convocation is so scattered that you cannot bring it together in such a way as to hear the pros and cons of any question, and come to a reasoned judgment upon that question.

2495. Supposing, then, it were desirable to extract the opinion of Convocation in a better way, can you suggest any other way in which their opinion or their knowledge can be brought to bear upon the University?—Yes, I think the mode you have already suggested. That would appear to be the practice of the Scotch Universities of having a certain number of fixed meetings twice or three times a year; if necessary, oftener; but if you had them oftener you would not get much attendance. Say perhaps twice or three times a year there were special meetings for which agenda should be prepared, matters debated, and the results of the debates formally transmitted to the governing body of the University, and properly considered and dealt with, I think that would be a very useful and proper function for Convocation.

2496. You would not wish to increase the number of their representatives on the Senate with a view to meet that want?—No, I think they should have a spokesman on the Senate—somebody to represent them—but I should not be inclined to add to their representatives.

2497. The difficulty about Convocation is that a few speak for the whole number?—A few speak for the whole number.

2498. And those few are on the spot?—Yes, those few are on the spot.

2499. Has it ever occurred to you as a possibility that there might be a body specially chosen by Convocation with some definite powers, with a view to expressing the views of Convocation in a more steady and permanent way than can be done at general meetings?—They have that in the shape of an Annual Committee.

2500. That Annual Committee has no functions. It merely exists from one half-yearly meeting to another?—I do not know that it has any very special functions.

2501. Would not the steam of Convocation be let off if it had a representative body through which its opinions might be brought in a less fluctuating way to the knowledge of the Senate?—Yes, if a possible scheme could be devised of having a true representative election of that character. I think there would be some difficulty in devising a scheme to bring about election in a proper way, so that the members of Convocation who would have the vote, would know what it was they were voting upon, or in respect of what particular qualification or of the particular man who had put up for membership of the body. Nearly all my objection to Convocation and their influence in University affairs, lies in what I call the material difficulties of the situation, that it practically, so to speak, concentrates the whole power of the 3,000 odd graduates in Convocation in the 50 or 60 persons who are more or less interested in education and who, I have no doubt, are animated by the best intentions who happen to reside in London.

2501*a*. That could hardly conciliate the two bodies. They would naturally desire to choose their own representatives. Could you not see a way to embodying the powers of the Convocation in a small body elected by the whole which would have a somewhat permanent and responsible character, and therefore be able to represent a continuous policy or stream of opinion?—Yes, I should be quite willing to accept that. Of course, I am only speaking for myself. I do not think that question was put to Professor Carey Foster or to Professor Weldon. I am sorry it was not. I should

think it is a very valuable suggestion and I shall mention it to those who are acting with me.

2502. The main reason for which Convocation rejected the proposal was the fear that the degrees would be lowered?—Yes, I think so.

2503. Is there any other reason that you could name?—I think they objected also, and in a subordinate way, to the delegation by the Senate of a great deal of its power relating to the examinations, including degree examinations to the two colleges.

2504. Was it a kind of jealousy that the two colleges were getting too much?—Yes, that the colleges would be practically the masters of the situation. In fact, in a very short time they would have absorbed the whole of the University into their own body, in my opinion.

2505. Is it not the case that there has been for some time past a certain amount of friction between Convocation and the Senate?—Well, I do not know. I am not personally aware of anything more than the kind of friction that I suppose always goes on between a body that can only recommend and cannot act, and a body that has to act; because a body that recommends and does not act makes all sorts of recommendations for which it incurs no responsibility, but a body which has to act of course has to consider the responsibility attached to action, and there would be some sort of natural friction in that the body which has no responsibility always wants more than the body which has responsibility is willing to do. Something of that kind always has existed, and always must exist, I think.

2506. Do you think that it was the case that the mere fact of the scheme having been proposed by the Senate, was pretty sure to raise a certain amount of opposition?—I can hardly think that, because the scheme was accepted by a committee of Convocation specially appointed for that purpose.

2507. But Convocation as a whole?—They brought up a great number of men who voted against it, but they had previously, by a special committee, chosen *ad hoc* accepted that very scheme.

2508. But the feeling towards the Senate is such, is it not, that it is a comparatively easy thing to get the Convocation to oppose a scheme recommended by the Senate? *Cæteris paribus*, a scheme of the Senate would be likely to be rejected by Convocation?—I should be sorry to say that.

2509. You think there is no foundation for that?—I am not acquainted with any foundation for it. I do not think there is any foundation in fact.

2510. Is there not a feeling on the part of Convocation that the Senate has been, on the whole, a body slow to move?—That feeling may exist in Convocation, I myself am not personally cognisant of it. I often meet members myself and talk with them, and I have not heard that opinion expressed by more than a few.

2511. It is a fact, is it not, that members of the Senate sit there for life?—Yes.

2512. And it is a fact, is it not, that in the new scheme in which it was proposed to reconstitute the Senate, future members of the Senate were to keep their office only for a short time, but all existing members of the Senate were to be life members?—Yes, that was proposed.

2513. And the mere passing of that by the Senate is a proof that there is a feeling on the part of the Senate itself that the places in the Senate should not be life places?—That is the feeling on the part of the Senate, no doubt.

2514. And that, of course, forms part of your scheme?—That is part of my scheme.

2515. According to your scheme would there be no life-places on the Senate at all? Would they be all liable to election and re-election?—I should not object to a certain number of life members being appointed by the Crown.

2516. A small proportion?—A small proportion.

2517. But the main body of representatives, the representatives of the teaching staff and so on, should all be terminable appointments?—Yes.

2518. You are not aware that there has been a feeling on the part of Convocation or the members of the Committee that the Senate keeps them at arms' length in the discussion of University questions?—No, I do not think there is anything of that kind. I think all the feeling there would be on the part of the Senate, that I myself have, and that everybody must have, is that you cannot treat with these 50 or 60 Londoners as if they represented the whole of Convocation.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

2519. Now as to the process which that Bishop Barry spoke of as the destruction of the colleges.

(*Bishop Barry.*) I said absorption.

2520. (*Professor Ramsay.*) I think your Lordship used the word "destruction" first, and then it passed into "absorption." Your scheme would not amount, would it, to the annihilation or effacement of the colleges? I apprehend that your scheme would give the colleges a higher position in the new teaching University, and a more important function than the one they now discharge?—Yes.

2521. In fact it would be the raising of a college with no University standing into being a dominant part of a great and extending new University?—This University would consist mainly of the professorial representatives and of the professors of University and King's Colleges.

2522. Must we not draw a distinction between the teaching staff in these colleges and the governing bodies of these colleges?—Yes.

2523. I understand that by your scheme you would give both a representation on the Senate?—My original scheme would have done so, because at that time, and even still to a large extent I am afraid, the more perfect absorption that I should prefer was not within the range of practical politics, but as a matter of principle I should prefer to have no collegiate representatives, as such, on the Senate at all. There would not be any college to represent if there were perfect absorption.

2524. The collegiate representation is a concession to the desire of those bodies to continue their existence?—So far as I retain that in my scheme it is rather a confession of the weakness of my own case, as a matter of practical possibility.

2525. According to your scheme are those bodies to continue to exist permanently and to be recruited permanently for the purpose, and for no other purpose, of sending representatives to the Senate?—My idea is that there should be absorption of the colleges and therefore not a continuance, except for the purpose of any special trust or trust fund.

2526. Your Senate is made up of three portions, of which one portion comes from the governing body of the colleges, as I understand. Is that to be permanently maintained?—This was drawn up when the question of the Gresham University was under discussion. It was drawn up before the Professorial Association was formed and before I became a member. I have so far qualified what I mentioned here by admitting the principle of absorption. My only doubt is as to its practical possibility.

2527. Then are there to be no representatives of the governing bodies of those colleges in your Senate as you now propose it?—No.

2528. They disappear?—They disappear. They would have no *ratio existendi*.

2529. They would have no kind of government over the colleges which they represent?—They would have no kind of government over the colleges which they now represent, which then would not exist.

2530. Would they continue to exist at all?—No, the colleges would not continue to exist at all except for some special purposes.

2531. Would it not be possible, in order to smooth matters at the beginning, to give the Councils of those colleges a share of representation which would die out gradually?—As a transitional measure?

2532. Yes?—Yes, and there is room for that under the Crown nominees.

2533. Do you not think you would be offering advantages to University College and to King's College which in their own interests they might be willing to accept?—Yes, I should certainly think so as a transitional measure, I thought, and I think the majority of members thought, that under a provision recommending that a certain number of Crown nominees should be appointed the Crown would take care that any continuing interest would be provided for and safe-guarded by providing members for that purpose who, of course, would be taken from the governing bodies.

2534–5. You spoke of the City and Guilds Institute and the Medical Schools. Are you prepared to admit other

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

colleges to similar privileges?—Yes, any college which can show it is by its equipment of professors or teachers or laboratory accommodation so far as matters of science are concerned of a certain academic rank which would have to be determined by the Senate of the new University.

2536. Would you give such a college representation upon the Senate?—No, not representation.

2537. You would not treat it in the same way that you treat King's College and University College exactly?—You mean as a transitional measure.

2538. Yes. Is your proposal, outside those colleges which exist already and have certain vested interests only to recognise individual teachers?—Only individual teachers.

2539. Not the whole of the colleges such as have been mentioned?—No.

2540. So you would draw a distinction between what might be called constituent colleges and institutions whose teachers were recognised?—There would be no constituent colleges strictly speaking. There would only be the colleges which would fuse themselves.

2541. But if you recognise the teachers of those associated bodies as professors they would come into the Faculty with precisely the same powers and privileges as the professors of University and King's Colleges?—It would depend entirely upon the rank of the associated institutions. I could not say beforehand. It would have to be determined in each special case.

2542. At any rate you provide a mode of extending the privileges?—Yes.

2543. You do not recognise medical schools at all as schools, as institutions, and you have nothing to do in your scheme with the governing bodies of those institutions, but you take the teachers in all the medical schools?—Yes.

2544. You take their teachers in the Faculty of Medicine and the Faculty of Science if they should continue to give science teaching, which you hope they will not do?—Yes.

2545. So that the professors of those colleges would be exactly in the same position as the professors of King's College or University College in their respective Faculties?—Yes.

2546. But having a very much larger number of medical teachers than arts teachers, their representation would be smaller?—Yes, in proportion to the number.

2547. Then you go upon the general principle advocated by Professor Weldon yesterday that the Faculties should be more or less equal?—Yes.

2548. You wish to see the representation on the Senate of each Faculty commensurate with that of the others?—Yes.

2549. So there would be no distinction of treatment?—No difference of treatment whatever.

2550. And the relation of the governing bodies to the medical schools, which are, I suppose the governing bodies of the hospitals, would cause no difficulty to the plan?—It would cause a less difficulty; practically speaking the governing bodies of the medical schools are the professors and teachers. The governing bodies, I think, consist in nearly all cases of the physicians and surgeons of the hospital and of the physicians attached to the hospital.

2551. Who appoint the teachers?—The teachers are appointed by a kind of committee.

2552. A committee composed of teachers?—Yes.

2553. Has that committee more than the power of recommendation?—I think it makes the appointments. The hospital does not make the appointments.

2554. Can a teacher be dismissed, or does he hold his position for life?—I think he can, it is not in a very fixed sort of way or in a very precise sort of manner.

2555. Is it the position we call in Scotland *ad vitam aut culpam*?—Yes, I think so, the fact of his being so dismissed would at once remove him from the medical professorship of the University.

2556. Would you consider it a reasonable thing that he should be capable of being dismissed by a governing body independent of the University altogether?—I think it is an anomaly, and I think the Senate of the new University would have to consider it in drawing up the regulations.

2557. That would have to be provided for?—That would be an undesirable anomaly certainly.

2558. Now there is one question I wish to ask you with regard to what Bishop Barry asked just now about one third of the total number of students in Germany taking a degree. Do you mean to say that you necessarily look upon it as an evil thing in connection with the University that one third of the total number of students, or less than one third of the total number of students, should take the degree. Is it necessarily an evil thing and contrary to the notion of a University that people should go there to study and not go simply and solely for the purpose of carrying away a marketable qualification in the shape of a degree?—What I should say about that is this, that the remaining two-thirds (supposing those figures to be accurate or nearly accurate) who did not take a degree would have nothing beyond the bare fact of having resided at a University a certain time to carry away with them.

2559. Did not you contemplate that this University should meet the wants of the young men of London—a much greater proportion of the young men of London than now go in for a University course?—I think so.

2560. And do you not think that it would be well to encourage in London the plan which has been hitherto pursued to a large extent in Scotland, by which a large number of young men who are going into business ultimately and who have not time to go in for a four years' course of study attend a certain number of classes with a view to culture only?—Yes, I think it is one of the finest features of the Scotch University system.

2561. I suppose you know that the classes at the Scotch Universities are largely composed of young men actually in business at the time?—Yes.

2562. Sometimes we surprise our southern friends by telling them that we lecture as early as 8 o'clock in the morning or as late as 5 o'clock in the evening. The reason of that is to meet the wants of young men who devote a portion of their day to attending University classes before or after their business hours?—Yes.

2563. Would it not be an impossible thing for many of such students to go through a complete University course?—It would be quite impossible.

2564. Some of them might not have received the education required to pass a matriculation examination?—Possibly.

2565. Therefore it does not deserve to be deemed a stigma on a University that only one third of its students are able to take a degree?—I did not mention it as a stigma. I simply mentioned it is a fact.

2566. And it would be rather a thing for the University of London to aim at to attract young men to attend classes who could not find time for a complete course?—Yes.

2567. We actually find that the marketable quality of the degree has, as a matter of fact, done an injury to teaching. Students are tempted to cut the teaching provided in order to cram up the books which have been prescribed for examination. Therefore I ask would you not consider that a course of instruction in a University class is a more valuable thing than a certificate that he has been able to pass an examination?—Under such conditions I should be of your opinion, certainly, but I may mention that at the University of London we have a great number of men who do not go beyond matriculation.

2568. I think that is the case at King's College. There are a great number of men there who do not go forward to take a degree?—A great many at the existing University of London do not go for the degree. They do not go beyond matriculation. They get certificates and use these certificates as a kind of degree in fact.

2569. You might institute what we call departmental certificates, attesting that a student had passed part of the degree course, in one or more subjects?—As a matter of principle I see no objection whatever to that plan being adopted.

2570. It is, as a matter of fact, considered at present as a grievance of King's College and University College that a great many of their students cannot get a degree. That is one of the objects for which this new University of London is desired?—I should think one may make a distinction between the permanent students and occasional students. I should fancy that there are very few of the permanent students at King's College or Univer-

sity College, that would find it difficult or impossible to get the degrees of the University of London even as it now exists.

2571. At any rate you would be very sorry to cut off altogether that class of partial students?—I should be very sorry to cut it off altogether. I am desirous, and I think all the members of the Professorial Association are desirous, that they should have that opportunity, and in their scheme there are certain special provisions for that purpose.

2572. (*Sir George Humphry.*) First with regard to Convocation. You speak of it as a very large and heterogeneous body?—Yes.

2573. I suppose one objection to it is that it enables persons who have any particular views to whip up, as it is called, members having the same views, and so carry them in Convocation?—Yes, it is quite easy for that to be done.

2574. That is an important and serious objection to the working of Convocation at present?—I should say that it would be.

2575. Then you would have no objection to Convocation having the power to make representations to the Senate for the consideration of the Senate?—I have no objection to that being done, but I should much prefer it being done in the way mentioned by Professor Ramsay, at meetings two or three times a year.

2576. Your objection to Convocation is that it is rather as an obstructive agency?—As far as its powers are concerned I am opposed to a power which could be used for merely obstructive purposes.

2577. And especially forasmuch as the veto can be brought about by the veto of a very few individuals?—Quite so.

2578. I think in the German Universities one point which aroused your admiration was that to a great extent they did not examine their own students?—No, I did not mention that as a point of admiration. I said they were admirably adapted for the advancement of science as distinguished from education.

2579. But another point you mentioned incidentally was that to a large extent they do not examine their own students?—I have some admiration for that, but I mentioned it simply to show that the current idea of Germany that professors do examine their own pupils is to be taken with certain explanations.

2580. And your own feeling is an objection to teachers examining their own students?—Personally I do not agree with the system of examination by means of the individual teacher.

2581. What do you feel to be the objections?—It is a matter, I think, to a certain extent of personal feeling. I myself should not care to do it if I were the professor. I would rather my students were examined by someone other than myself. I think a more unbiassed judgment would be arrived at, and, moreover, I should get, I think, a sort of assistance in my teaching in its results being assessed, not by myself, but by somebody else.

2582. You think the teaching would be very much improved by an examination by someone else?—Yes, as far as I am concerned that is my opinion.

2583. And I should think every teacher would feel the same. The examination of students by teachers is very rarely carried on in England anywhere, is it?—As far as I know a pure teacher-examiner system does not exist anywhere?

2584. In England?—I do not think it exists anywhere except at Trinity College, Dublin. There I think they have no external examiner.

2585. With regard to medical students, it is rather forbidden than practised?—It certainly is not practised.

2586. Scarcely at all?—Scarcely at all, as far as my experience goes.

2587. And an alteration which would induce medical students to be examined by their own teachers would be, in your opinion distinctly an evil?—I think, with regard to medical students it would be quite an intolerable evil. One can easily understand a man being examined in medicine by a particular doctor having a set of medical theories.

2588. Does not that apply generally?—I think more, perhaps, to matters of medicine and surgery than to other matters.

2589. Your feeling decidedly is, that it would be far better for the education of England that there should be one University in London than two?—That is my strong feeling.

2590. If there were two one would be regarded as inferior to the other?—Just so.

2591. And would be liable, perhaps, to promote an inferior kind of education?—That is what I think.

2592. You see no objection to this one University examining students from various quarters, whether those students have been educated in that University or not?—I have turned over that question a good deal in my mind, and I have spoken about it to a good many persons. I have discussed it on a variety of occasions, and I have never found any reason whatever to suppose that there would be any difficulties other than those of an administrative nature.

2593. That a good board could draw up a syllabus of such a kind as a good examiner could well examine upon, whether the students have been his own pupils or not?—I think my experience of the University of London is strongly in favour of that position.

2594. You mentioned a very good instance in which a certain professor had drawn up a syllabus in the University of London, and you said that the students of that professor did not appear at any rate to have any advantage over other students. Though the professor who drew up the syllabus had taught the students those students had no particular advantage over the other students?—I cannot call to mind that they had any particular advantage. If they had it must have been of a small kind, otherwise it would have forced itself to my notice.

2595. Any statistics of that kind would be important?—I am not quite sure that it would be possible to get any statistics. We do not always know where our students come from. The description they give of themselves on their entry form is not always complete.

2596. You mention as one good work of Trinity College, Dublin, that it does not examine students who have not been educated at that college?—Yes.

2597. And that is done, as far as you are aware, well and in an unbiassed manner?—As far as I know it is.

2598. With regard to the absorption of colleges, might not one have a feeling that the absorption, and, to some extent, the obliteration of the autonomy of colleges might be an evil. Is it not desirable that there should, in this free country of ours, be different educational institutions to a great extent acting on their own independent courses. Is it not an evil to throw all the power into one educational body?—I am rather inclined to the view that there is less evil in a University which absorbs institutions than in a University of a federal character, in which the colleges retain their autonomy principally because of the, from an educational point of view, uneconomical nature of such a position.

2599. Is not a little jealousy between colleges productive of improvement all round?—Possibly it may be, but it is not on the ground of there being any jealousy that I should object to the collegiate system being to a greater or less extent retained; but, on the other hand, that it would be an uneconomical use of educational resources.

2600. Are not both University College and King's College, the latter particularly, doing a great deal of good work irrespective of what may be called University or strictly academic education?—Yes.

2601. Are they not doing to a large extent that very work which Professor Ramsay has mentioned is done by the Universities in Scotland? They have very large classes of students in London who would not be able to go through a University course. They accommodate them by having evening classes and morning classes, and doing all that they can. Is it not a very great and important work of these colleges as affecting the education of London?—Certainly it is.

2602. If you were to do away with the autonomy of those colleges, and throw their funds and their powers into one University, would you not in that respect be doing serious injury?—I do not think so, because in the University that I contemplated that work would be continued, and I believe it would be done even better than it now is done.

2603. I do not quite know how that would be?—We make special provision in the professorial University scheme for work of that kind to be carried on under

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

University auspices, and the idea is that work carried on under University auspices would be more attractive to the students, and, to a certain extent, would be perhaps of a higher educational rank than work of that kind carried on by private institutions.

2604. But is it not on the whole well when bodies are doing good recognised work to be cautious about interfering with them?—No doubt.

2605. Let them have their own individual way of going to work to some extent?—No doubt one must be cautious.

2606. One of the great distinctions between England and Germany is that English bodies are more independent?—That is the distinction of this country, no doubt.

2607. With regard to this new University, which we will suppose to be based on the University of London or any other, you have spoken of its own teaching. Have you provided any teaching for the University of London to do itself?—No, of course if the colleges were absorbed all the work the colleges now do would be done by the University of London, including the secondary kind of educational work that you are referring to, and in addition to that, it is a part of the scheme that I am in favour of that a University should take under its auspices and manage and develop education, and the course of instruction of the type given by the University Extension, by such institutions as the Birkbeck Institution, the Working Men's College, and other institutions of that kind. In fact, the object I think of the promoters of that University is that the London University should be at the head of all education throughout the whole of the Metropolis superior to that which is merely given in schools.

2608. Is not there something further wanted, viz., that the University of London should not only be at the head of existing teaching, but that it should be the head and source of some higher teaching altogether?—Yes, and that also I specially provide for by providing for special courses of lectures by experts in particular subjects of a post-graduate order.

2609. I mean that what is really required in England is some large laboratories and a higher system of teaching, some teaching which should be above the requirements of an ordinary degree, something which should advance the science of England, and enable England to maintain its position with regard to the other nations of Europe; that there should be first class laboratories, something beyond those which are or could be produced at King's and University Colleges, something independent of that entirely. Would not that be most desirable and most important for the nation of England?—I think it would be most important that a part of the work of the proposed University should as nearly as possible be on all fours with that done by such a University as the Johns Hopkins in America.

2610. Just so. It is something beyond the requirements of ordinary examinations?—Quite beyond that.

2611. For the purposes of research and higher culture and science and knowledge of all kinds?—Yes.

2612. That is what is wanted really in England, and that would be a most important feature of this new University if it could be arranged?—I do not think that there is anything that the members of the London Professoriate with whom I have the honour to be associated in this matter have more at heart than that.

2613. Any institution of that character would necessitate considerable funds to carry it out?—Yes.

2614. Large laboratories, a good professoriate, and of course very considerable funds?—That would mean no doubt a considerable amount of money.

2615. Have you at all thought how that money could be obtained. Perhaps you have not thought of that view of the University?—I think it might be best obtained in connexion with South Kensington, not that that altogether might be the best place for a kind of Johns Hopkins University to be established, but because the Government have there got into such a habit that I think they would probably be more easily induced to furnish the money. I have some experience in that direction. They describe it as opening a new credit.

2616. The Johns Hopkins University was founded by an individual, and the Universities in America are largely contributed to by individuals. There are very large sums obtained in that way?—Yes.

2617. And in that way they obtain these large Universities. In England that is not the habit and not the way. We cannot look, I am afraid, to private contributions for anything like that amount. Then the question is whether there would be a probability that Governmental assistance would be obtained, taking it to be a National question, whether the appropriation of such a sum by Government would not be to the National advantage?—I quite think it would be, and my own hope is very considerable that the Government could be persuaded to do something of that kind if those interested in science and learning—and I look upon the advancement of learning as quite as important as the advancement of science—were united. If the authorities of both those divisions were to be united on the subject I am certain that Government would be compelled to do something.

2618. And it would be to the advantage of the nation undoubtedly?—It would be to the advantage of the nation undoubtedly.

2619. Because a nation's strength depends very much upon a nation's science?—Yes.

2620. Suppose anything of that sort to be accomplished, then the education requisite for obtaining degrees, I will not call it a lower kind of education, but the education requisite for obtaining degrees might be well carried out, do you think, much as it now is in the colleges, University College, King's College, and the medical colleges, and other colleges which might deserve and obtain recognition from this University?—I think it might be carried out. It is carried out and well carried out now, but I think it would be better carried out under such a professorial University as we contemplate owing to the greater concentration and unity of professorial work.

2621. Supposing there to be a fair representation of the professoriate upon those bodies at the University would that meet your views without interfering further to any great extent with the autonomy of those several bodies. Of course it is a very difficult and serious thing to abolish or absorb great institutions?—Yes. I feel that difficulty.

2622. If there were some way in which we could have this higher teaching conducted by the University, and have the teaching for degrees conducted in the various colleges or the various institutions throughout the country, not simply King's and University Colleges, but the medical colleges and the various colleges throughout the Empire, would not that to a considerable extent meet your views?—It would to a considerable extent meet my views. It would not wholly meet them, but it would meet them to a considerable extent. There is one point which you have perhaps not thought of in connexion with that, that is if you are to have collegiate representatives as well as professorial representatives you would have such a very unworkable governing body, so bulky, consisting of so many members, that it would be difficult from an administrative point of view to work it satisfactorily. At least I am afraid that would be the case.

2623. You need not have so many from each institution?—Each institution would probably like to have each of its Faculties represented by a professor as well as by a governing body representative or a collegiate represented, or perhaps two or three.

2624. That would be a difficulty of detail merely?—It is not a difficulty of principle, no doubt.

2625. You have spoken of the medical question with regard to the University of London, and we have already heard that Convocation would be willing to facilitate the means, but not to lower the degree. You have mentioned, I think, that it would be desirable, as it is at present at the University of London, that all graduates of all kinds should pass the matriculation examination?—I think so.

2626. That they should have a good foundation of general knowledge?—Yes.

2627. I think your idea is that the intermediate examination might, perhaps, be conducted at the several colleges by their own teachers. That might be allowed?—That might be allowed with the exception that I should prefer the preliminary scientific examination to be conducted, not at the medical colleges, but at one of the great colleges where science and arts are specially taught. I should make a distinction between the preliminary scientific or intermediate science and the intermediate examination in medicine. The intermediate

examination in medicine, I think, might be left to the medical colleges to conduct, but the intermediate examination in preliminary science should be left to those colleges which have a complete equipment.

2628. By those colleges you mean—— ?—At present University College and King's College.

2629. Do you see a difficulty about that, that it would draw the medical students from the other schools to those two?—Would it necessarily draw them as medical students? According to our system now, and according to the new regulations of the General Medical Council, the student has five years of medical life before he gets his diploma or his degree, and he is not supposed to commence the purer medical instruction; he is not suppose to become a medical student until after he has finished his preliminary scientific course. That is our system.

2630. But where a student commences he acquires, as he ought to do, an attachment?—That is a difficulty. That is one of the serious difficulties, no doubt.

2631. I do not think any plan of that sort would easily be accepted by the other medical schools?—There is also a further difficulty, that is that the medical schools in London are so very different in their equipment. Some like Guy's, and others, I daresay, would be perfectly able to conduct even their own preliminary scientific examinations, but at the smaller schools there is no such equipment.

2632. They are gradually becoming more equipped?—They are becoming more so.

2633. And a University might refuse their examination unless they did, of course?—I think Professor Huxley is greatly in favour of the grouping of medical schools so that there should be four great medical schools and the smaller schools grouped together.

2634. In a great city like London, as you have already said, there is a great waste of time owing to students be required to go to different institutions?—Yes; there is that.

2635. (*Mr. Palmer.*) You mentioned the City and Guilds Institute in connexion with the process of absorption or taking over. Have you any reason to think that they would voluntarily come in?—What I know of the City and Guilds I derive entirely from consultation with their professors. Two of their professors are on the Committee of this Professorial Association. From what they say, and from what I have heard other members of the Professoriate of the City Guilds say, as far as the professors are concerned, there would be a willingness, but what the governing body would say, or what views they may have, I have no means of knowing. I do not think it has ever been mooted to them yet.

2636. Your view would be that it would increase their usefulness and importance, but assuming them to be taken over, you did not say quite what you would give them in return. I mean that these are three colleges of applied science; would you treat them as three colleges or as one institution? Assuming that they asked for a special Faculty in applied science, which is a thing that I apprehend they would ask, would you be inclined to grant it?—Yes.

2637. Supposing other schools asked for a theological Faculty, would you be inclined to grant that?—That is a difficult question to give an answer to. One cannot go beyond one's own personal preferences and opinions, but for my own part, the only objection I see myself to the creation of a theological Faculty is that if you created one you might have to create half a dozen.

2638. But you would not find that difficulty in the way of the City and Guilds Institute, because they have but one specific object?—No.

2639. And you would give facilities for that partial teaching and education spoken of just now. You would in some way give advantages to that partial learning and teaching which has been spoken of in connexion with evening classes?—Yes; and I would even go a good deal further. I forgot to state when Professor Ramsay was good enough to ask me on that point that it is part of the contemplated system that even independent private lecturers should be able to hold such classes, men more or less of the character of the *privat-docent* in the German Universities, and we should consider the institution of such classes and modes of instruction would be an avenue for many men to approach the more purely academical work of the University.

2640. For instance, would you be prepared to consider favourably such work as is done by the Working Men's College and the Graham lectures as far as they give evening classes. You would be disposed to assist such institutions as those?—Yes; it would be entirely a question of the character of the instruction they give. If they came up to a certain excellence they would be admitted to such share as they might claim in the advantages of the University.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

2641. Just one word with regard to the City and Guilds Institute. In considering the difficulties of these things you are aware that the funds of the City and Guilds Institute consist entirely of annual donations, and that there are no permanent funds?—I think, no doubt, there would be certain difficulties of a financial nature.

2642. Difficulties that might be outweighed by the general benefits you would confer on these institutions?—Yes.

(*Witness.*) In one point I was not as clear as I should like to have been with regard to Convocation. I was stating that the Scotch system with regard to Convocation might be properly introduced into the London University, but it was in reference rather to this. We already have the stated annual meetings of Convocation similar to those in the Scotch Universities, but we also have a number of subordinate meetings of the annual committees and the other committees. What I meant was that it would be well if the University had the Scotch system and the Scotch system only. That is to say, nothing but the general meetings of convocation at which matters might be properly discussed before a considerable number of members of Convocations, and that these intervening meetings of portions of Convocation which furnish the greater part of the representatives and propositions which are put before the Senate are of an irregular and really unauthorised character, and if they could be abolished or diminished it would be an improvement, and the real business of Convocation transacted almost exclusively at these statutory general meetings.

2643. (*Sir Lyon Playfair.*) And by adjournment?—Yes, and by adjournment where necessary.

2644. (*Mr. Anstie.*) The statement you have just made leads me to ask you this question. I do not know whether you are familiar with the outline of the suggestion made by the late Mr. Justice Quain before he was on the Bench for the formation of committees divided into faculties?—I only have a general knowledge that that was his proposal.

2645. There was a proposal of that kind which was rejected by Convocation. Are you aware of that fact?—I do not remember whether it was rejected or not. It was never carried into effect anyhow.

2646. At that date there was no proposal before the Convocation or before the Senate or before anybody else of Boards of Studies?—No.

2647. Having regard to the fact that Boards of Studies have now been introduced at any rate into the Universities of Oxford and Cambridge, and that a proposal for the introduction of them into the London University has been sanctioned by the Senate, would the functions of standing committees of that kind divided among the faculties be to a great extent superseded?—I should think they would be.

2648. In fact, the business which Mr. Justice Quain intended to be brought before the standing committees divided into faculties would now be the very same business as is brought before the committees of the special faculties under the scheme of the Senate or any analogous proposal?—Just so.

2649. Having regard to that fact, do you consider the preservation of an annual committee of general and unregulated powers appointed from year to year by Convocation would be in respect of any questions, except those which involve the prosperity and well-being of the University at large, of any great importance?—I do not.

2650. That might still, however, be of value as embodying the opinion of Convocation with respect to what may be called external questions, that is to say, questions arising as between the University and the public at large or other bodies of the same kind?—Possibly.

2651. Would that then in a general way indicate the proper limit of their activity?—I should think

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

it would be a very fortunate thing if their activity could be so limited.

2652. But the activity in ordinary matters of a body consisting of a vast number of persons whose determining vote depends upon casual circumstances bringing them together in a particular room could not in your judgment be of any very great real importance?—No.

2653. I observe that in the scheme that has been proposed by Convocation, and also by the Senate, the principle has been accepted of allowing the representation on the Senate to be determined by faculties or by departments, whatever term is used. Would that in your opinion be a good or a bad plan supposing that any such representation is to be allowed?—I think there are some objections to it.

2654. To which?—To having the representation by faculties.

2655. I should like to know what the objections are which you feel towards the faculties or departmental representation as against a general representation with regard to the fact that as a rule people may be supposed to understand best who is most competent to give an opinion in matters in which they are themselves interested?—The faculties are so unequal in number that there is a considerable inequality in the representation so affected.

2656. It has been sometimes expressed that the object of representation is the representation rather of educational interests than that of individuals. Assuming that were the basis of representation to which would your opinion incline, the representation of the departments or the faculties, or the representation of the whole body mixed?—In that case I suppose representation by faculties would become a necessity if it is to represent educational interests only.

2657. May we not assume that a University ought to represent chiefly educational interests rather than special personal or vested interests?—I think so.

2658. Your view of this whole subject is dominated by the idea that it is an educational question and not a question of personal or vested interests?—Yes, but I think Convocation looks upon it from the point of view of personal representation rather than educational representation.

2659. But which point of view in your opinion would be the more correct?—Certainly the educational point of view.

2660. And if it were possible to conciliate the two it would be desirable to do it, saving always, as of the first consequence, the educational interest?—Certainly.

2661. Before I leave this question of the representation of Convocation I ought to put one or two questions to you. Are you not aware that the movement for the constitution of Boards of Studies, that is to say, the educational regulation of the curricula of the examinations for degrees commenced with Convocation?—I am not quite certain, it may have been so. I think a thing is very often in the air, and it is easier to commence a discussion in a general way on a subject in Convocation very often than it is in the Senate.

2662. Then your view would be that the value of Convocation would be rather to ventilate a question which is in the air, and to give it emphasis and importance than to come to any definite conclusions upon it?—I think so, and I say that in the absence of proper faculties and other representatives of educational interests.

2663. With regard to such a question as that which has been referred to already, the expression of opinion by Lord Sherbrooke of what he regarded as the educational basis of the University of London, would you think that a matter that might be safely dealt with if you had an adequately constituted Senate?—With the help of the faculties I think it would.

2664. Meaning by the faculties of course the teachers?—Yes, the teachers.

2665. Now pursuing the constitutional question a little further. I am not quite certain whether I understood the degree to which you would admit or recognise a collegiate representation upon the proposed governing body. I use the term "governing body" as a general term. I will put the question in this way. Am I right in supposing that you intended the collegiate representation to be only transitional?—That was my evidence. I stated at the end of the first paragraph on page 2 of my document, "In what follows, the new University is "regarded as made up of existing University and "collegiate elements, so amalgamated and ordered as "to constitute one University, mainly or largely of a "professorial, only subordinately, and perhaps by way "of transition, of a federal character."

2666. Disengaging ourselves as far as we can from any terms of art such as federal professorial, and the like, do you see any fundamental objection to a permanent representation of the collegiate element, the institutional element I ought to call it rather, on the Senate of the University provided that representation were limited in its character?—If the colleges continued to have a separate and independent existence I think that representation would be a necessity.

2667. Now let me call your attention to the scheme which you are no doubt familiar with which was prepared and submitted to Convocation which was commonly known as Lord Justice Fry's scheme. It appears on page 239 of the blue book. That provides for a representative element, one by University College, one by King's College, one by the Royal College of Physicians, one by the Royal College of Surgeons, one by the Council of Legal Education, and one by the Incorporated Law Society—six in all. Suppose you could keep the thing within those limits would you find the introduction of that element injurious?—No, but of course it all turns on the preservation of the autonomy of the colleges. If the autonomy of the colleges is preserved they must have representation.

2668. I do not say this is the right thing but supposing we start with the datum of the preservation of the colleges as autonomous for their own purposes but not for University purposes, you would not, I understand, see any objection so much to collegiate representation as is contained in that clause?—No, I should not. I should look upon the representatives as spokesmen of the respective Colleges.

2669. And would you conceive it as a possible thing that the institutions so represented might be made centres round which there might be grouped, or to which there might be attacked, other institutions of a like kind?—There might be, but I should prefer that the institutions should be attracted directly to the University and not through the mediation of the colleges.

2670. Supposing such an institution, for instance, as the City Guilds, possessed, as one might judge from public documents, of larger resources than either University College or King's College, should become a portion in the same sense as the other two colleges of the new system, would you be prepared to allow them within due limits a collegiate representation?—Yes, I think they would have a right to require it.

2671. For the purpose of enabling them to take that position I suppose you would require something like a permanent foundation. You would not admit any institution depending to such an extent as the City Guilds at this moment does upon an annual grant which might be revoked?—Some permanency would no doubt have to be attached.

2672. Assuming that a permanency should be given to the existing grant you would be prepared to put them in a similar position to that occupied by University College and King's College?—Yes.

2673. Then your proposition is not one of hostility to the collegiate element but a preference rather for a system which would absorb the colleges entirely, into the University?—Yes, based largely upon considerations of economy. I do not mean financial economy only, but economy of resources generally,—of time, educational appliances, and apparatus.

2674. You think those would be better served by complete absorption of the colleges than by co-ordination of them?—Yes, because you might have a more perfect distribution.

2675. Is that purely an economical question with you?—Not purely, but it is in large measure. I use the word "economy," but I do not mean it in reference to financial matters only or even principally.

2676. What others then?—You could distribute your professors, you could distribute your educational means of all kinds in accordance with what might be best for education generally among the various centres at which instruction would be given. You could do it better, I think, by having a single concentrated University than by having a number of different colleges each of which would require to have a complete equipment all round.

If I may illustrate it in this kind of way there is just a possibility that under such a system instruction in arts, or at all events the higher instruction in arts, might be given at King's College and instruction in science at University College, speaking broadly. You could not do that with separate colleges it appears to me.

2677. Not so fully?—Not so well.

2678. But still I suppose you would not desire that no arts education should be given at University College or scientific education at King's College?—No, I mean a higher arts education. The ordinary pass education perhaps in all subjects might be given both at University and King's; but the higher classical research, for instance, I think King's College is better adapted for than University College. I think for higher research in science University College is better adapted than King's.

2679. I do not know whether you know as a matter of fact that the only really higher classical Chair which exists in London was that lately held by Professor Newton at University College?—Yes, but I do not think that University College has developed it as much as might have been expected. I think if those classical appurtenances had been removed to King's College they would have developed more there.

2680. Without going into details are not those matters which might be fairly left to a properly constituted governing body?—Yes, that is my object in having a supreme centralised governing body.

2681. The great point is to keep your governing body properly constituted?—That is the principal point of all.

2682. You were here yesterday when Professor Carey Foster and Professor Weldon were examined. Professor Ramsay put this point, that in the Scottish Universities there was a *Senatus Academicus*, which consisted entirely of the professorial element. There was another body which consisted of the professorial element coupled with elements of a different kind representing public authority and perhaps public endowment, and those two bodies dealing with their respective functions in their own proper way might furnish a good governing body to the University. Would you agree to that possibility, as a next best if not a best?—I should not like it.

2683. Why would you not like it?—Because I think full responsibility should accompany every act of authority, and I think it would weaken the responsibility if the decision was likely to be reviewed by a superior body.

2684. Does responsibility mean the responsibility of unlimited and autocratic power. Does not responsibility exist if the decision of the body in question is necessary although it may not be conclusive?—That is not my experience. I have often had to consult professors about University matters, but in a way which did not in the least engage their responsibility and I found that the attention they gave to the matter was usually more or less of an amateur description.

2685. No doubt, but that is not the case I am putting. I am putting a case in which the decision of the professors would be essential to the validity of the decree, but yet would not be conclusive upon it, but would be subject to the ratification of another authority. Let me put this case to you, we have two Houses of Parliament, neither of which decides conclusively, but only decides subject to the concurrence of the other and the consent of the Crown. Is the sense of responsibility wanting because the decree of the one is not in itself conclusive?—I would not say so with regard to the Houses of Parliament.

2686. Then why should not the same principle apply to other forms of human action?—The action of the Houses of Parliament is more before the public, which after all is the final Court of Appeal. They act with the knowledge of that Court of Appeal being always ready to reverse their decisions or otherwise.

2687. But is there no educated public before whose view the determinations of the governing body of an institution of this kind would come for consideration, comment, and criticism?—Ultimately, but it would be simply the resolutions, not the arguments by which those resolutions would be arrived at. The discussion would not come before the public. It would be simply the resolution arrived at.

2688. Why would not the grounds of decision also come before the public?—I think there would be difficulty unless you had the debates recorded in some way. Then they might; but that would be a very different thing.

2689. So far as it is material for the educated public to discuss, would there be anything to prevent the interested public, say the graduates of the University, discussing it?—Only a very small portion of the graduates of the University would ever know. These matters would be recorded in the Minutes of the Senate and they would only come under the eyes of a very few persons.

2690. I must not carry you too far into this discussion, but I suppose a broad distinction would admit of being drawn between questions of general academic interest and detailed questions such as whether one particular point of a syllabus ought to be changed or not?—The latter kind of question would come probably before the faculties. Points of general educational interest would be better discussed by a company of professors in the presence of a certain number of lay members acting as moderators than in any other way.

2691. Then you do not attach any value to the comments of educated opinion upon broad questions of University procedure?—Yes, I do attach great value to expressions of opinion of that kind, but I think there are many ways in which those expressions of opinion might be made, and made to reach the professors, and I think they would be more likely to have an influence upon the professors, who would be *au fait* with these matters, than upon a body of persons who would be only partially *au fait* with them.

2692. Then you would not be favourable to allowing any weight to the discussion or opinion of lay people, by whom, I understand you to mean, those who are not actually engaged in teaching but only educated men?—No; but I say that a certain number of persons of that description may, I apprehend, be among the Crown nominees. They would be present at the discussions of the governing body, and be able to make themselves heard.

2693. Then you would limit it to the degree to which, under the Crown nomination, such persons were appointed?—Yes, I think I should. If it should be found that the Crown made bad appointments, and did not provide for the interests of educationists or did not provide for their presence, some alteration might be necessary in the Constitution. I think that could be done. There would be 15 or 16 Crown nominees at least, perhaps 20.

2694. May I take it then that your view is that the Crown nominees on any such governing body as this would be large, and that you would commit to the Crown nominees the representation of what you call lay opinion; that is to say, the opinion of educated men not professionally engaged?—I think the Crown would nominate very much in accordance with what I state ought to be the case with regard to collegiate representatives in section 10 of my document, "It "might be enacted that the collegiate representatives "should be men of recognised eminence in science or "learning, or as educationalists or administrators." I had thought over the matter, and that is the reason I inserted that.

2695. You say you considered this matter rather carefully?—Yes.

2696. I should be very glad if you would give me a comment on section 10: "It might be enacted that the "collegiate representatives should be men of recognised "eminence in science or learning, or as educationalists "or administrators"?—Not necessarily professors.

2697. How would you secure that; have you any idea? What sort of provision in the Charter or Act of Parliament, or whatever it was, that constituted this body?—I think it might be sufficient that among the collegiate representatives, say a certain number of men or Crown nominees, should be men of that character.

2698. There would be no means of testing or appealing against a decision by the Crown on the part of the college authority, would there?—No. Perhaps the word "enacted" ought not to be used; it is rather too strong a word. It would, perhaps, be sufficient to signify that it would be desirable that that should be the case.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

2699. Would it not, as a matter of fact, inevitably happen that the collegiate representative would be one who was sent to maintain the general interests of the collegiate institution?—Yes, I think it would.

2700. That might be a very good ground for limiting the collegiate representatives within narrow compass, but it would carry you no further, would it?—I think he might be both. He might be an eminent man, and at the same time a member of the college.

2701. But that would be only a pious wish, so far as expressed in the Charter?—I think one might fairly depend upon the colleges sending a man of that sort.

2702. Then if you depend upon it you do not require to limit it by Charter. You would be prepared to trust a college to send a man who would do it credit on the governing body?—Yes. I think the word "enacted" is too strong a word.

2703. Assuming you were careful in the selection of colleges, you think you might rely upon the collegiate authority to send a man who would not be a discredit on the Council or the governing body?—I quite think that.

2704. Then if you had a governing body constituted in the way Professor Ramsay indicated, which did admit of these collegiate or institutional elements, do you not think there would be some advantage to be obtained by the system he suggested, that all matters relating to the University curricula, University examinations—what one might call the University system of education, properly speaking—should first come before the *Senatus Academicus* consisting of professors, and that it would require the ratification or the sanction of the other branch of the governing body?—I think it would be a waste of power to have the thing debated three times over.

2705. Twice?—All these matters would be first debated by the faculties acting singly or jointly, or together; after being debated by the faculties they would come before the professorial senate. I do not think it is necessary to carry it further.

2706. It might not be necessary to carry it further, but might there not be an advantage in the fact that upon that ultimate body would depend, unless absorption is contemplated, the pecuniary and other means of carrying out the professorial desires?—In the event of absorption not taking place and the colleges retaining their autonomy, I would much rather collegiate representatives in sufficient number were placed upon the Senate.

2707. Then would you prefer a single body to the two-fold body suggested by Professor Ramsay?—Yes, certainly. I should very much prefer it.

2708. Then you do not like the idea of a *Senatus Academicus* whose decrees have to be sanctioned?—I do not know how far in the Scotch Universities they have a system of faculties and how far the faculties could debate matters of this kind. I am not competent to give a particular opinion upon the matter, but without special experience I should say that a third assembly is unnecessary. I should object to it as being a waste of power and as doing away more or less with the responsibility of the other bodies.

2709. Then if collegiate representation is to be admitted at all it ought to be admitted upon one single governing body rather than be admitted on one branch of a duplicate governing body?—Yes, I do not want to see the supreme authority cut up and divided.

2710. I did not quite follow you in the suggestion you made as to the necessity of excluding medical schools from the arrangement. On what ground do you suggest that the medical schools should be left out of the proposed new constitution?—I do not so much propose that they should be excluded by any action of the new University but that they should be left to do that which they might think most advantageous for the medical profession and for medical legislation. Medical matters are so different from others. A medical education is a thing so much *sui generis* that—I am talking of a pure medical education not of education as ancillary to medicine—I do not think the general body of professors ought to meddle with it.

2711. I do not quite follow this. Why do you say medical education is so very different from every other kind of education that it ought to be left out of any scheme which this Commission may propose or recommend and be put to shift for itself?—The education in science for instance is education of the library and of the laboratory, but the education in medicine is largely and principally education in the hospital, which is a matter of art and practice.

2712. Is not the laboratory a matter of art and practice?—Well, it is to some extent, but anyhow it is not a matter of art and practice among human beings.

2713. What is the difference from an educational point of view between an experimental training which is carried on among human beings as subjects and an experimental training which is carried on with instruments and lifeless matter?—One lends itself to definite courses of instruction much more rapidly than the other does. You can experiment one day in chemistry, another day in physics, and so on, but you cannot get your patients when you like and get your particular disease or medical subject to study the moment you require to do so.

2714. There may be a reason why the regulation of the experimental courses should be left more fully in the professorial authorities, but I do not see why the schools of one kind should be excluded from that which you propose to apply to schools of another kind?—They would not be excluded if they choose to come in. They would be welcome if they chose to become more and more a part of the University. But where you have to deal with 10 or 11 different bodies of very different rank and quality as educational institutions I think at this stage, as I said before, it would be difficult for those who promote the foundation of the Professorial University to solve the many and complicated questions that would arise and therefore we propose, as it were, to leave the medical schools to settle medical matters primarily among themselves. Afterwards they will come more or less under the superintendence of the University.

2715. You referred amongst other things to the mode in which the preliminary scientific education which is demanded for all medical students should be conducted, and you referred to the possibility of a joint school, or joint schools being founded by the various medical hospitals and medical schools acting in a conjoint way. If that suggestion is made, how is it possible for us to leave out from any scheme or proposal we may make the question of the London Medical Schools?—So far as that portion of the preliminary preparatory medical education is concerned it ought to come under the general rule of the University, and to that extent the medical schools would become part of the Faculty of Science. I am only referring to special medical training.

2716. Then if to that extent we are to deal with the great scientific medical schools, if I may so call them, St. Bartholomew's, Guy's, and I believe one or two other of the London Hospitals, can you deal with them in a separate way and take no account of the rest of their medical training?—I think you can deal with them in a separate way. The teachers of pure science in most of the medical schools are not even medical men. They are as much professors as the professors of King's College and University College, some of them.

2717. I want to look at this from a practical point of view with regard to your view that they are scientific men as distinguished from medical men. They are in connexion with medical schools, and if you had a joint school, or joint schools, for the various science classes in London connected with the various medical schools of London, would you not interfere with the management of the medical schools to which they are attached?—Yes, I think to some extent you can do so, because the scientific professors and teachers of pure science are generally paid by the schools, whereas the other members of the school may be paid also, but they are usually part of the proprietary body.

2718. To refer to the question put by Sir George Humphry, can you touch the purely scientific side of medical education without at once bringing yourself into conflict with the authorities of the medical schools at large?—It is in favour of the professorial University, I suppose, that the medical schools will be willing to abandon the pure science section of their work retaining more or less—so much more, or so much less as they think advisable—their control of the purely medical work.

2719. The difficulty is this: Assuming they could abandon the whole of their scientific training to the University, and assuming them not to occupy any position themselves in the University, the difficulty which they apparently feel is that they would be practically

abandoning themselves to the power of the two colleges which will be represented?—Pardon me for a moment. In the first place, all the medical schools will be represented in the Medical Faculty. Their scientific teachers will be also represented in the Faculty of Science. Then in addition to that, a certain number of medical professors would form part of the Professorial Senate; so they would by no means be excluded, nor would they be altogether excluded from University control.

2720. Assuming that sort of arrangement to take place, would you contemplate, as a reasonable possibility, that the other medical schools might, by some joint arrangement among themselves, constitute a joint scientific school or schools, which should have a similar position in the University to that occupied by the existing colleges?—Yes. I think that is possible. It has been mooted several times, and I think that with the prospect of a greater share in the University, that prospect will be a stimulus to such grouping of the schools.

2721. Then you contemplate it as a possibility that the existing medical schools should unite in creating a scientific school, or schools, common to the hospitals either altogether or grouped in sections which might avoid the difficulty suggested by Sir George Humphry?—Yes, I believe that is perfectly possible and I think it would be advisable if it could be done.

2722. And if done, I suppose, you would admit them to a kind of collegiate position in the University?—Certainly.

2723. Now to come down from constitutional questions to faculty questions, I understood you to make some answer with regard to a Theological Faculty. There are some considerations, of course, that are peculiar to that subject. It is not one that would merely involve knowledge, I suppose, or do you regard it as merely involving knowledge?—I think that would entirely depend upon the views of those who would establish, or wish to see, a Theological Faculty. I think it would be very difficult to have a Theological Faculty if that involved any expression of faith.

2724. And assuming that people might have some difficulty in granting a theological degree without some general adherence to some generally understood forms of faith would you consider it a solution of the question that there might be bodies constituted with a power to superadd theological degrees to art qualifications?—I do not see how the University could very well superadd.

2725. I am not talking of the University. But supposing the University were limited in the way in which you seem inclined to limit it, would there be any difficulty in other bodies being constituted which would have the power of adding theological qualifications and degrees to those who had already shown their competence in general subjects by taking an arts degree?—I do not think there would be any opposition on the part of the Professorial University to that being done.

2726. And might that provide for the various divisions of view upon such contested questions as those relating to theology by different sections of the human race?—Yes.

2727. Such a body or bodies would require then for a theological degree the previous attainment of a status in more general learning indicated by an arts degree, and would superadd to that such credentials as would show the possession of theological attainments?—I should think the University would have no objection to that.

2728. It would be, in fact, outside its limits?—I should think from the necessities of the case it must lie outside the province of the University.

2729. Now to come finally to the question of examinations, I understand you to say that you would be prepared to accept the attendance, coupled with collegiate examinations, as a substitute for the earlier and intermediate stages of the University examination, but you would desire that the final test should be one of common character, is that so?—That is so.

2730. And in that course you see no difficulty?—I personally see no difficulty.

2731. The suggestion has been made, sometimes on one side and sometimes on the other, that a great deal depends upon the peculiar character and bias of the professorial course, and it is sometimes suggested to us that that has more effect in the pass, and it is sometimes suggested to us that it has more effect in the honours. Comparing the two, in respect of which do you think it is of the most consequence, if you think it of consequence in either?—With a good examiner I do not really think it is of consequence in either.

2732. After that answer I ought not to carry it much further. A good deal of emphasis has been laid—I speak entirely with reference to evidence which has been given either here or before Lord Selborne's Commission recorded in the Blue Book—and a good deal of evidence has been given upon one particular branch of learning—I mean that relating to arts and literature, and it has been pointed out with considerable force and stress that between Oxford and Cambridge, for instance, a very great difference has been created by the traditions of long periods of years between the methods of approaching and dealing with those subjects. You are aware of that?—Yes; I am aware of that.

2733. Are you aware of any similar tradition or method which has grown up or become inveterate, or which is in course of becoming inveterate in, say the two leading London colleges—University College and King's College?—You mean with regard to science?

2734. No, with regard to literature?—I do not know of any, but I cannot give any competent evidence on that matter. I am not sufficiently acquainted with the work.

2735. You do not know of any tradition of the kind?—I do not know of any tradition of the kind.

2736. Suppose for a moment that the two methods prevailed in different colleges, what is your suggestion for reconciling the difference. For instance, one knows very well that University College for a long time had a distinguished Grecian, Professor Malden, who came from Cambridge, and a distinguished Latin scholar, Professor Newman, who came from Oxford. Have you any provision for reconciling the different methods of examination?—I am inclined to think that if those two professors representing, perhaps, certain extreme objects of classical study, had to prepare a paper between them, they would prepare a paper that the students of either would be able to answer. But if that should not be so I should be inclined to view with very great favour the plan proposed by Professor Rücker, and, I think, given in his evidence, of having alternative questions. We adopt the system of alternative questions to a very large extent in the University of London, and we find it answers very well. There is no difficulty whatever caused by it, and I think it might answer very well under circumstances such as you refer to.

2737. I believe that, as a matter of fact, in the intermediate M.B. examination in the University of London, you have actually put upon the same paper the pass questions, and the honours questions which may be taken optionally by the candidates at their discretion?—Just so.

2738. A man may take the honours or pass according as he thinks that he comes up to the requisite standard?—He may choose his questions pretty well as he likes, and he takes pass or honours in accordance with his performance.

2739. Do you find any difficulty accrues from that system?—No difficulty whatever.

2740. Would the difficulty be less if you had alternative papers which might be taken by the candidates according as they came from one or the other method of instruction?—I should almost prefer to have the questions on the same paper and let the man exercise his choice.

2741. But, one way or the other, you think the difficulty might be met?—Yes, I think so.

2742. And that the extreme example which has been put to us on several occasions—say, the Oxford and Cambridge system of treatment of classical subjects—might have justice done to it on both sides?—Perfect justice might be done in that way. In papers dealing with classical subjects, for instance, there would be one difficulty, perhaps, but not an insurmountable one, that is where the system of prescribing particular portions of particular books for translation might induce some difficulty, but in my opinion that system ought to be entirely abolished. I know, from information which candidates have often given me, that they leave these prescribed and set portions very often till the last moment—very often till the last week or fortnight—then they get up the translations by means of a crib, and trust to their memory to reproduce them. Another proof of that is, that you often find so startling an amount of similarity between translations given by different can-

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

didates that you are tempted to jump to the conclusion that they have been copying from each other when they have been in totally different rooms.

2743. Then I may take it that, on general grounds, and totally independent of any question now before us, you would prefer an examination of a more open character than an examination which was limited to particular books?—Yes, I should.

2744. You would rest upon unseen translation rather than the dexterous manipulation of a given author?—Yes.

2745. Which, as you say, might be done by crib and cramming?—Yes. I might name particular authors. I may say, take a translation from Virgil and Cæsar, so that a man would not think that for elementary examinations he need read Tacitus or Suetonius. But in this way of examination the candidate gets a crib a few weeks beforehand, and works it up as well as he can.

2746. In the more elementary examinations those schedules are limited by an exact and minute determination, and to that extent you think an evil system prevails?—Yes.

2747. You would be in favour of a more open system?—Yes, much more.

2748. And the more open the method the more in your judgment, I gather, it would be suitable to the various methods and schools of teaching?—Yes, and certainly proof of that is afforded by our medical examinations. Our medical examinations are not based upon syllabuses at all. They are perfectly open. A man is examined in anatomy, medicine, surgery, or *materia medica*, and there is no syllabus whatever, and they give the best results.

2749. Then may I take it that your answer is an answer which is, in your judgment, generally applicable, and not applicable only to that particular branch on which I just put the question to you?—I think it is generally applicable. In some subjects, of course, you must indicate the limits of your examination but not in detail.

2750. You must indicate limits, but the limits must have a certain reasonable elasticity about them, and in proportion to their reasonable elasticity they will be valuable?—There is nothing the examiners complain of so much as being over fettered by a syllabus, and there is nothing that teachers complain of so much either—with certain exceptions.

2751. I do not know whether you have had any particular experience in the examination of the Law faculty in the London University?—I have taken a good deal of interest in that, because I consider that that is not a satisfactory part of our system.

2752. I do not know whether you have had any complaints made by those who have examined for the University of the operation of the clause which provides for special subjects in a particular year?—I think the general sense of the examiners is against it.

2753. You would prefer that in law, as in other subjects, the examination should be left more open?—Yes.

2754. And that less opportunity should be given for special coaching or cramming, or grinding, whatever the proper term may be, in one narrow limited branch?—There is very strong proof of that in this—that much the greater number of the rejections in the law examinations are in Roman law, and that is peculiarly a subject in which a particular portion of Roman law is given beforehand, and one in which the candidates usually prepare themselves by direct coaching or cribbing, with very unsatisfactory results. In fact, I am quite sure that there are more rejections in that one subject on which they are induced to coach, cram, and crib, than any of the others.

2755. (*Sir William Savory.*) Do I understand you to say that in your scheme for a new University you would have some of the preliminary examinations conducten at some of the colleges and not at others?—You mean the preliminary examination in medicine—the preliminary scientific examinations.

2756. Yes?—I think they might be conducted at such medical colleges, for instance, as, say, Guy's or St. Bartholomew's, where they have a proper suite of laboratories, and professors of scientific eminence and power; but in some of the smaller schools such as—it is, perhaps, better not to indicate them by name—where this educational equipment and apparatus does not exist I should not like to see the preliminary examinations conducted there.

2757. You would limit it to the medical side. You would limit it to medicine?—I would allow the preliminary scientific examination also to be conducted at those schools which had a sufficient scientific apparatus and equipment.

2758. Would there not be some inconvenience about that? Would it not create a little jealousy and suspicion of partiality? Would it not be better upon the whole that those examinations should be conducted like the rest at the University?—I should not force it upon the schools. I should only allow it if the schools themselves desired it.

2759. But the difficulty would be with the other schools?—That was part of one of the schemes proposed, and there was some objection taken by other schools.

2760. The probability is that the objection would not be taken by the school where the examination is allowed, but it would be taken by other schools which had not the same supposed privilege?—But then those other schools would have full power of making their objections known, and if their objections were strong and reasonable they would, I am sure, be listened to.

2761. Would it not be better and simpler to have the whole at the University? There would be no great advantage in having these examinations at particular schools. They might be conducted at the University?—Yes. I do not know that there would be any particular advantage. It would be a concession that I, for my part, would be willing to make to the medical schools, if the medical schools themselves—not this school, or that school, but the body of medical schools themselves—desired it, I do not recommend it, nor would I press it upon them.

2762. You are aware that to the scheme in which that was proposed objection was taken on the ground that it would be partial?—Yes, I know objection was taken to it on that ground; it fell through on that ground. If the medical schools consulting on the matter together should reverse that decision, then I think the University might accept it.

2763. But only on the ground of a concession to the schools?—Only on the ground of a concession to the schools.

2764. Of course you are aware that the examinations of the London University are held in very high repute, particularly upon the medical side?—I believe they are.

2765. Would you say that this was due to the character of the examinations?—I think that is due to the impartiality and high character of the examinations.

2766. And their independence?—And their independence.

2767. Supposing the plan were adopted of introducing the teachers of particular candidates as examiners of those candidates, do you think that would affect the character or reputation of the examination?—The examiners practically, in a large majority, have been chosen from London teachers.

2768. Excuse me, I mean the pupils' own teachers. I expressed myself badly. If the plan were adopted of having pupils or candidates examined each by his own teacher, would that affect the character and reputation of the examinations?—I think it would. I am opposed to that.

2769. You think it would materially affect for the worse the character of the examinations?—I think it would.

2770. I observe in the scheme which you put forward the idea that certain preliminary, or, as you have called them, scientific subjects should not be taught at the several hospitals, but should be taught either at the University, or at some central institute?—Yes.

2771. And that the hospitals should be allowed to teach only what may be called the clinical subjects such as medicine and surgery?—Yes.

2772. You conceive that this would have great advantages?—I think it would, because I think the student would have a very much better opportunity of learning his work. I see very closely the work of medical preliminary candidates for the University of London, and I am sure that a very large porportion of the rejections is due, not to any want of intelligence,

or even industry, on the part of the student, but to the fact that he has not really had the opportunity of learning his subject. I have seen men come to the University who have never been shown how to read a barometer.

2773. What do you think that is due to?—It is due to a want at some of the medical schools of proper equipment and proper teachers on pure scientific subjects.

2774. Some of the larger medical schools are well equipped and teach very well?—Yes, they are.

2775. But the smaller ones do not teach so well as a rule, and they are not well equipped?—That is so.

2776. And probably you are aware that in some of the smaller schools the classes are very small indeed?—Very small.

2777. That must act prejudicially on the enthusiasm of the teacher?—It does.

2778. If a teacher has only to address some 8 or 10 men it is difficult for him to throw as much life and force into his teaching as if he addressed 70, or 100, or 150?—A return was made by the medical schools some time since which I think affords a fair proof of the position involved in your question. This is a return made up by the medical schools themselves, and it shows among other things the number of students who during the past five years (this was in 1889) have passed London University examinations. St. Bartholomew's passed 299 in those five years; Guy's, 324; St. Thomas', 127. Then among the other medical schools some passed eight in five years, some 10, some 15, and one 80. Thus was shown the very large difference in numbers of well-educated and ambitious students at the different medical schools.

2779 (*Professor Ramsay.*) How many did King's College pass?—The returns from King's College and University College are not contained in this list. The list was made up by King's College and University College, and their own numbers they do not give, but University College passed a very large number, King's College very few comparatively speaking.

2780. (*Sir William Savory.*) There is another point that at the smaller schools it is very difficult, if not impracticable, to make it worth the while of the better men to teach these preliminary subjects?—It is because at the small ones there is nothing in the way of fees hardly, and there is want of space and proper apparatus.

2781. The larger schools can offer inducements which smaller schools have not the power to present?—They can so far as the pure scientific portion of the career is concerned.

2782. Then the inefficiency which arises from that would be met if the pupils from the several schools attended at some central institute where these subjects could be taught in common?—Yes, it would be quite met.

2783. In that way there would be a concentration of force?—There would.

2784. And you might employ the best teachers in the world. It would be worth the while of the best men in the world to teach these several subjects under those circumstances?—Quite so.

2785. The Chairs would be worth holding?—Quite so.

2786. This is no new view. It was put forward many years ago, I think; but it would have that great advantage of rendering the teaching of the scientific or preliminary subjects much more efficient?—It would.

2787. And it would set numbers free to devote their attention to the teaching of clinical subjects proper at the hospitals where only they could be taught because there only is material for the teaching?—Yes, it would do so, and it would very much improve both the clinical and pathological teaching.

2788. (*Professor Sanderson.*) I think you are a member of the medical profession or you are a graduate in medicine?—I am a very incompetent one, I am afraid.

2789. What do you mean by preliminary scientific knowledge, I mean what subjects do you include in preliminary scientific knowledge?—I include chemistry, physics, and biology. I should like to include physiology, but I am afraid that is not practicable.

2790. Why is it not practicable to include physiology?—I do not think there is time during the preliminary year for the student to work at other subjects than the three I have mentioned.

2791. (*Mr. Rendall.*) Does biology include botany?—Yes, biology includes botany.

2792. (*Professor Sanderson.*) You admit that physiology and anatomy are both preliminary subjects—both scientific subjects?—Yes, I do.

2793. Assuming improvement of teaching to be the chief object which we have in view, those two subjects would be included in any measures which were taken to improve the teaching of science in London?—Most certainly; but I should like to make a reservation with regard to anatomy. I think anatomy as at present taught in the schools is very inefficiently taught. It is a mere topography of the human body. It is not scientific anatomy. If it were taught as a science it would be an improvement.

2794. If it were taught as a science it would be included among the preliminary scientific subjects?—Most certainly so.

2795. That being understood, would you also include medicine, surgery, midwifery, and the other technical subjects?—Not as sciences.

2796. The question I wish to ask is this: Again assuming that our object is to improve education, would it at all be necessary that we should take those subjects in?—Yes, I think so, certainly.

2797. But why?—For the purpose of co-ordinating and developing the higher instruction in those subjects especially in clinical medicine and in pathology.

2798. What I want to get at is this: Is there any very clear evidence that the teaching in these practical subjects is not nearly as perfect as it is likely to be? Does it not come up to the academic standard already?—To my mind I do not think it quite does. I do not think, for instance, that pathology is sufficiently taught.

2799. Pathology is again a preliminary subject, clearly a scientific subject, which of course the University would provide for. I want to exclude scientific subjects, and ask you whether it is in any way a part of our business, considering our business to be to improve teaching, to meddle with the present teaching of medicine, surgery, and midwifery?—I think it might be supplemented to a certain extent. I think a student who goes in for such a degree as that of a doctor of medicine of the University of London should know something of the history of medicine. He ought to know something of the history of epidemics, and I think he ought to have some knowledge of what you might call the geographical distribution of disease.

2800. I quite agree, but those three subjects are all scientific, and therefore they would be included in a scientific preparation for the practice of medicine; but what I want to get at is whether the mere technical teaching of the practical subjects is not very well provided for already?—Yes, I think it is.

2801. And is not examination in those subjects also extremely well provided for?—Yes, I should say that it is well provided for.

2802. The examination of the conjoint board for example?—I should not myself rate the examination of the conjoint board very high.

2803. Not in practical subjects?—Not in practical subjects.

2804. You are very well aware, of course, that the conjoint board has improved its system of examination in the present year to a very great extent?—I know it has. I cannot say to what extent. I am talking of it a few years ago when I knew more about it.

2805. It has added another year to its period of study?—Yes, it has done that I know.

2806. And it has made other improvements in the arrangement of examinations. Is it not the case that the State sees after those subjects, so to speak, that is to say, that the Medical Council exercises a statutory vigilance over the conduct of the examinations in medicine, surgery, midwifery, and the other practical subjects, which it does not over other subjects?—Yes, it provides for a minimum of knowledge.

2807. But is it a minimum? Is it not limited by the requirements; that is to say, is not the provision of the statute that the knowledge must be such as to enable a man, advantageously for the public, to exercise the profession of medicine. This is far from being a minimum?—What I mean is, that the State enacts a standard below which it will not admit a man to practice, and, therefore, that is the minimum of knowledge—

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

not the minimum of attainable knowledge by any means, but the minimum of knowledge on which it will allow a man to go forth into the world and say that he is a doctor. In that sense I mean that it is a minimum.

2808. The purpose being to ensure that there shall be reliable practitioners; such an amount of knowledge as is sufficient to enable them to practise efficiently for the benefit of the public?—Yes, that is the aim.

2809. As regards all other branches of medical education, the State takes no cognizance?—No.

2810. Have you evidence as regards those Universities which examine in science on the principle which is opposed to that of Lord Sherbrooke, namely, the kind of examination which consists in dividing the work between the internal examiner and an external examiner—the system which prevails in Edinburgh, and at Cambridge and Oxford, as regards all scientific subjects?—I have no evidence at command.

2811. No evidence against it?—No, I have no evidence against it.

2812. And no reason for supposing that the effect is injurious or unfair to the candidate?—No, I have no reason to suppose that.

2813. Is it not the case as regards the University of London, that the operation of that principle is limited to the written parts of the examination, I mean Lord Sherbrooke's principle, that no man examines his own pupils?—It is not even limited with regard to that.

2814. I mean limited as regards its operation?—Yes.

2815. From the moment that you begin to examine a man *viva voce* the thing falls to the ground altogether?—Yes.

2816. Then is it not altogether futile as regards honours examinations?—Entirely so.

2817. For example, my own experience is that when I was examiner I was professor at University College. My colleague was teacher of physiology at Guy's. We had both Guy's men and University College men. We knew perfectly well who they were, and we had to determine who was to receive the scholarship and who was to receive the medal. In that case the principle fell to the ground altogether, did it not?—Entirely—completely.

2818. And is not that a very important failure of the principle as regards the University for London. If it is only useful in pass examinations and examinations in which the written part is the most important, that means that it is inoperative as regards all honours examinations in science?—Yes, it is inoperative.

2819. You suggested that there should be a future commission of experts, not for the purpose of organising, I think, but with a view to the preparation of a scheme?—With a view to effecting the transition from the present state of things to the new state of things and providing for the various vested interests, and so on.

2820. If that were the case, would there be any objection in your mind to that commission being somewhat permanent?—No, there would not be. I think a commission of that kind to act somewhat in the way that the commissioners of the Scotch University acted would be a very good thing.

2821. Then if we could have a commission extending its functions for half a dozen years it might take measures either for the absorption of the colleges, or for co-operation with them, or to act in respect of absorption, or co-operation, in any way that seemed to them best, provided that they had discretionary powers?—Yes, certainly.

2822. And also to administer any Government funds that might be placed at their disposal?—That also too might be relegated to them.

2823. That would be the most effectual way of initiating a change, and bringing about the transition from the present state of things to the intended future state of things?—Yes, I think so. I think that is what is contemplated in the scheme of the association, clause 14.

2824. I understood you to mean that a commission sitting for a very short time could not be an organizing commission?—It says at the end generally. I would make such arrangements as would be necessary for the establishment of the University on the foregoing lines. I suppose a certain amount of organisation would be necessary—organisation of details of a financial nature, and with regard to buildings, and so on. I should think the commission probably, from the nature of its work, would have to remain in existence for several years.

2825. Then in your view that would be the easiest way of solving the obvious difficulty of creating any system which would depend upon co-operation, or upon absorption, without waiting until it is ascertained whether absorption, or co-operation is possible?—Yes. I can see no reason why it should not.

2826. Such a commission might at once proceed to act, whether success ultimately followed its endeavours or not. It would be the best way of initiating the effort which would have to be made to bring about either co-operation or absorption?—I think it would. I think if the present Commission, for instance, were to determine the general lines of a scheme, it would be better to put that at once into the hands of some such commission as that contemplated in clause 14 for the purpose of working it out.

2827. (*Mr. Rendall.*) Could you tell me exactly the relation between section 1 of the paper you put in, and section 2? Were they both drawn up as representing your views at the present time?—Yes, I should think so generally, with the modifications that I have given in my evidence upon the German system.

2828. And from what time do they date?—This was written just after the Gresham Charter came out.

2829. In paragraph 4, page 1, you say without enforcement of attendance. By a teaching university then you understand a university that provides, but does not compel students to take instruction?—That is the university that I should look to.

2830. That is not in accordance with the Berlin practice, is it, or the Scotch practice?—It is in a certain sense, because you may take your degree at the University of Berlin without passing more than a portion of your time at that University.

2831. But some sort of residence or attendance is always required, is it not, by every University?—Yes. I used the expression "founded on the lines of the "Berlin University" in a very general way, and rather with reference to professorial government than anything else.

2832. Now would you kindly turn to page 6, and tell me how you reconcile the words "without enforcement of attendance" with the words at the end of page 6, where you seem to contemplate collegiate residence: "attendance upon collegiate courses coupled with "periodical collegiate examinations," and so forth?—That is at the option of the student.

2833. Entirely at the option of the student?—Yes, entirely at the option of the student. I contemplated the possibility of there being students who follow out particular courses of instruction ordered by the University, and to them I give certain privileges, and I contemplated unattached, or external, students who do not follow such courses, and do not possess those privileges.

2834. Then is this purely a part of collegiate discipline; not University?—That would be University discipline. That would be *the* condition upon which the University would grant its degrees.

2835. To a certain class of students?—To any class of students who keep the terms, and they would keep the terms in one of three ways.

2836. What is the difference between a degree given to those who keep terms and those who do not keep terms?—I would not give any degree to those who did not keep terms.

2837. When you come to enforcing attendance surely?—No. We generally give certificates at the London University to men as having kept terms for the purpose of the Inns of Court and other matters, if after having matriculated at the University they have come forward to any of the subsequent examinations.

2838. Are you distinguishing between certificates and degrees?—No, I am not. What I mean by keeping terms is this. I thought I had explained it: "The "private student would keep his terms by passing, as "at present, an intermediate University examination."

2839. In that case, why should not a person passing an intermediate examination call himself a private student?—He may do so if he likes, at his option.

2840. Does it not reduce keeping terms and residence to a nullity?—Keeping terms is a technical term as used by the University of London.

2841. It merely means keeping examinations?—What it means is that the person who is supposed to have kept terms has been employed in educating himself, or has been employed in study, and a proof of it is that he has come up for examination.

2842. I will not press that further. Would you object to powers being left by charter in the hands of the Senate or governing body to prescribe courses, and to enforce attendance?—I think they ought to have the power to do that if they choose to do it.

2843. Do you apprehend that Convocation would be likely to take exception to such a provision?—I must guard myself in saying that I think the Senate of the proposed University ought to have that power. I think it ought to have that power, but it ought not to have the power of excluding unattached students, the external students.

2844. That should be excluded in your view by charter?—It certainly ought not to have that power. The professors themselves do not want to have that power. Some did; but anyhow, those who belong to the Association say it is desirable that there should, if possible, be one University in London, and that the University should have power to grant degrees and institute examinations which might, if found necessary, be different for those who follow prescribed courses from those who have not.

2845. One other point, and that is as to a dual examination, with distinct papers for the extra-collegiate and for the collegiate or metropolitan student—I understand that you are not favourable to it?—I am not favourable to it. I do not absolutely object to it if it should be found necessary.

2846. You would not object to leaving free powers there to the newly constituted Senate or governing body?—No, perfectly free power there. If it had to be done I should prefer it as indicated by Professor Rücker.

2847. If it is perfectly free, I understand you would withdraw the last section in your draft on page 2?—This was drawn under the supposition that there would be no likelihood of absorption.

2848. But now you would be desirous to withdraw a provision of that kind, would you not?—I should withdraw that, and I should use the words that we do use in the scheme of the Professorial Association:—"Each "professor of the University to be *ex officio* an examiner "in the subject of his chair, but not necessarily to take "part in every examination of that subject." That is simply to prevent his being overwhelmed with work. "Examiners who would not be professors to be appointed "by the Senate to take part in all examinations."

2849. You said you would have a personal antipathy rather than a predilection for examining your own students?—I should personally.

2850. Then it would be hardly well to introduce an enactment of that sort as a compulsory part of the constitution in a charter. Would it not be better to leave the whole matter entirely free?—I agree with you. I have signed this document and to a certain extent I am bound by its assertions.

2851. (*Mr. Anstie.*) Supposing a professor were *ex officio* an examiner it would not therefore follow that he must examine his own pupils?—No.

2852. He might be only one of several and he might decline the examination of his own pupils or by an arrangement between the various examiners that examination might devolve upon others?—Just so.

2853. And as a matter of fact that course has been followed by medical examinations which Sir William Savory knows about more than I do?—It is not a rule of the University for the examiners to do so. That is what I meant. The examiner may or may not, but it is a matter of tradition.

2854. With more examiners in the conjoint examination it may be completely avoided?—Completely avoided without any difficulty whatever.

2855. (*Professor Sidgwick.*) You stated in your circular that you wished to have a University founded upon the lines of the University of Berlin. You are decidedly in favour of the German type of University?—Subject to such modifications as I have mentioned in the course of my evidence.

2856. In the German type of University the graduation is entirely in the hands of the teaching body?—Yes.

2857. But your view is that in the new University it should be not entirely in the hands of the teaching body, but in the hands of a body in which the teaching body have a preponderating influence?—Just so.

2858. You alluded to the fact that the courses in the German University are largely a preparation for a State examination, and not for their own degree?—Just so.

2859. That is no doubt a very important point; but you are probably aware that the University degree is taken by the *élite* of the students in arts and sciences; because it is taken by those students who wish to devote themselves to the profession of University work?—I do not know it of my own knowledge, but I believe that that is so.

2860. Therefore, although their numbers may be small, the quality of the students who take the degree would be very high?—Yes, but if I may be allowed to interpolate a word the graduate upon the strength of his degree cannot even become a *privat docent*. He must pass a separate and very searching examination, although he has the highest University rank, to step upon the lowest rung of the professorial ladder.

2861. But still the *privat docent* is normally a man who has taken a doctor's degree?—I do not know that he is; at some time in his career he takes it, but I do not know that he has before he takes the *privat docent*. I am not familiar with that.

2862. Then with regard to coercion to attend University lectures, do not you think that as in the German system there is coercion to attend some University, and in fact, normally a man studies where he will be examined so far as he aims at the University degree, that indirectly comes to nearly the same thing as enforcement. Will it not be necessary, in order to have the nearest approximation that we can to the German system, that we should apply some strong inducement to attend professorial lectures?—I think the inducement would be sufficiently strong if the control of the teaching and of the examination lay in the same corporate hands.

2863. I gathered from your answers to Mr. Rendall that you would agree that if the preponderate influence on the governing body is secured to the teachers it would be well to leave the details of the graduation to be determined by the new University?—I quite think that.

2864. Then with regard to another point. You seem to hold that it was probable that the Royal College of Science at South Kensington might be introduced into the new University?—I think so.

2865. Are you acquainted with the nature of the evidence that Dr. Thorpe and Professor Rücker gave us on that point?—Only very generally from conversation that I have had with them.

2866. You are aware probably that they hold that there would be serious difficulties to overcome on the part of the Department?—I think they were obliged to say that because they had no mandate to appear for the Department.

2867. There was one difficulty that was presented to us which it occurred to me might be somewhat serious. The students taught by the Royal College of Science pass no examination which secures general culture before they enter the college. They have to show, as I understand, such preliminary knowledge of elementary mathematics as will enable them to profit by the lectures; but as regards general culture they pass no test at all. Dr. Thorpe and I think Professor Rücker appeared to be in favour of that. Do you not think that would create a serious difficulty in the way of introducing them into a University of London?—I think it would so far as students of that calibre are concerned, but the students who would come in for a University degree would, I think, be of a somewhat higher quality to whom the matriculation would not present a formidable obstacle.

2868. With regard to the veto of Convocation are you really of opinion that Convocation could be induced to abandon its veto of its own free will?—I think as its veto now stands it can only say yes or no; it cannot discuss a question or propose an amendment in any scheme submitted to it, or, in fact, do anything more than say a bare yes or no. If they had a proper power of appeal, I am inclined to think that they would prefer that power of appeal, which would be a thing that they could use more conveniently and much more efficiently. The power of appeal would extend to all University matters, the veto only concerns one particular feature

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

of University life, the amendment of the Charter or the procurement of a new Charter. That is the only point on which they have any power whatever at present.

2869. You are aware that there has been a grievance expressed in the press by certain members of the London Convocation which feel that they have not the same complete ultimate control over the whole management of the University which Convocation at Oxford and the Senate Cambridge have. They claim more power than they have now, and they regard the denial of it as a breach of the understanding on which the University was originally founded?—I do not think they have any foundation for that claim, and I do not think that that sentiment is entertained by any large number.

2870. You have seen it expressed?—Yes.

2871. Now you have referred to the University of Dublin, and to the proportion of residents and non-residents: are you acquainted with the proportion of non-residents who take honours?—No, I cannot say.

2872. I have been informed that it is exceedingly rare for a non-resident to take rooms so much so that a man who has resided at Dublin for some years said, that he did not remember an instance himself; but that may be an exceptional thing. You may not know about that?—I do not know about that.

2873. One important aspect of this scheme is its bearing on the provincial colleges. Have you any knowledge of the manner in which they would regard a scheme which gave to the London teachers a preponderate influence over the body determining the examinations?—I do not think that they could reasonably make any objection to it.

2874. That is not exactly my question. It is not what they reasonably could do, but what they are likely to do. Do you know at all?—I have no knowledge of what the governing bodies of the provincial colleges may think of the matter, but I have of what the professors think, and I do not think the professors would raise any such ground of complaint. In regard to that there is something I have forgotten to state. What I should like to state, to show what little ground of complaint the provincial colleges could have is this: I took out from the degree examinations of last year the number of those who entered from provincial colleges, not being colleges of some University, therefore excluding of course Cambridge, Oxford, and also Victoria. At the Bachelor of Medicine examination, in 1891, out of 109 candidates there were only six from provincial colleges of that character.

2875. (*Mr. Rendall.*) May I ask why you exclude the Victoria group?—Because being already provided with a University, they would not, I suppose (I have not heard), have any intention of claiming a share in the government of the London University. I should not myself be at all disinclined to allow them a share if they chose to wish for it, but I have never heard that they entertained that wish. Then at the Bachelor of Arts examination there were 409 candidates, and of these 46 were wholly educated at provincial colleges, and 14 were partially educated, making 60 out of 409 altogether. Of these, 10 were partly or wholly educated at a college of the Victoria University, leaving 50 out of 409 in Arts as having been more or less educated at a provincial college; not Cambridge, not Oxford, and not Victoria. Then with regard to the Bachelor of Science, I find there were 30 out of 160 candidates who were educated wholly at the provincial colleges, and 27 who were educated partially at the provincial colleges. This word "partial" often, not invariably, means that they took out one or two courses only. Of the total of 57, 15 were educated at colleges belonging to Victoria University, 10 came from Cambridge, and two from Oxford; 27 in all. So that 30 candidates in all out of 160 represents the total of those who were educated wholly or partially, at provincial colleges not belonging to Victoria, Cambridge, or Oxford. That shows, I think, that the provincial colleges would have a comparatively small ground of complaint to go upon, if they were excluded from the government of the proposed University. Then again, one has to remember that there is already a movement on foot—in fact, it has proceeded some considerable way—for a Midland University, and there can be no doubt that before very long there will be a Welsh University. Now it is precisely from Birmingham and the Welsh Universities that we get nearly all these students. I corrected my draft of this and added to clause 21—"It might be possible to "give to certain provincial colleges, for a time, the "same privileges as to keeping terms as are accorded "to the London colleges." I think myself, as a personal opinion, that the provincial colleges, until they are incorporated, might be allowed a voice at all events in the Faculties, perhaps upon the governing body, of the new University. I do not see any insuperable objection to it.

2876. (*Professor Sidgwick.*) I think there were certain other institutions which you have not included, which might raise an objection. For instance, as far as the education of women is concerned, there are one or two institutions that give advanced preparation for the University of London?—Yes.

2877. I believe that the principal of one of these colleges objected strongly to the scheme of the Senate on account of the advantage the proposed scheme would give to the London colleges. I suppose that the objection of these other institutions would have to be taken into account as well as those provincial colleges referred to by you?—I think there are only one or two institutions, the Ladies' College, Cheltenham, I suppose is the one you refer to?

2878. Yes?—I do not know any other provincial college of great importance. I suppose they would be afraid of being on unfair terms with regard to London.

2879. The objection is that by a scheme which gives to the teachers of London a preponderate influence over the examinations, the impartiality between different institutions is inevitably lost. That you admit to be an objection?—I think myself it is an objection on the face of it rather than an objection in reality. I do not think it is a practical objection.

2880. May I suggest an analogy. The teachers at the Universities of Oxford and Cambridge now undertake to some extent preparation for the Indian Civil Service and in that way they are led to learn what it is to prepare for an external examination. I imagine what would be the feeling at Cambridge if we learnt that Oxford and not Cambridge was intended to have a preponderant weight in the body determining that examination. There would be an unanimous protest of the strongest kind, based partly on the blow to our prestige and partly on the conviction that the students would go to Oxford; and I should have thought the two motives would equally operate in the case of all provincial colleges. It is partly that they would feel themselves placed in a position of inferiority and partly because they would fear to lose the ablest students. Do not you think there would be some feeling of that sort?—No, I do not think so. I do not think the analogy is quite perfect enough, because in London you have a number of different institutions who would send their professors to the London University. In the case of the Cheltenham College you have simply one institution, and I think sending not very many students; only a very small proportion of the women who come to our examinations. It does not seem to me that they can expect that the new University of London can be ordered in such a matter to meet their views at the risk of offending every collegiate institution in London itself.

2881. But would not their preference for the existing state of things be a conservative force? Would it not add to the difficulty of passing any scheme?—I do not think the position of the Cheltenham College would add to the difficulty.

2882. I was not thinking of any one institution; I was considering the whole number of the provincial colleges who would feel this inferiority?—I do not think we should get the opposition of the staffs of the provincial colleges. I think they would favour our proposal. Some of them are on the committee of this proposed professorial University.

2883. Who are those?—Mr. Heath is one.

2884. Where is he from?—Mason College. He is the principal of Mason College, Birmingham. Professor Tilden is in favour of it. He is professor at Mason College. I do not now recollect, but I have met with several others who are also in favour of it. I do not think the London Colleges have any kind of jealousy with regard to provincial colleges, or would give themselves any advantage with regard to provincial colleges. I think it is different with Oxford and Cambridge because they have a long history behind them and a series of traditions from which they cannot break loose. Cambridge is thus different from Oxford, and the difference might come into play with respect to examinations.

2885. (*Mr. Anstie.*) The Cheltenham college which has been referred to is in substance a school for girls?—Yes, sending us a few candidates.

2886. Only the top stratum?—Yes.

2887. (*Professor Ramsay.*) Did you hear the evidence, or have you seen the evidence, of Dr. Collins with regard to the examination for medical degrees in Scotch Universities?—No, I did not hear it, and I have not had an opportunity of seeing it.

2888. You are acquainted with your own examinations thoroughly?—Yes.

2889. Have you any desire to make any comparisons between the examinations for the medical degrees of the London University or the other Universities of England and those of Scotland?—No, I have no desire whatever to make any comparisons, and I do not join in the cry which is often raised in England against the Scotch Universities.

F. V. Dickins, Esq., M.B., B.Sc.

16 June 1892.

Adjourned to to-morrow at 11 o'clock.

Sixth Day.

Friday, 17th June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., M.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

FREDERICK VICTOR DICKINS, Esq., M.B., B.Sc., further examined.

F. V. Dickins, Esq., M.B., B.Sc.

17 June 1892.

2890. (*Chairman.*) I understand you wish to supplement the evidence you gave yesterday on one or two points?—On one or two points only; I was a little fatigued at the end of my examination, and I did not quite remember to put the points before the Commissioners. With your Lordship's permission, I will do so now; the first is this, in reply to Professor Burdon Sanderson I forgot to say as follows. At the Medical Examinations of the University it is the practice of the examiners in purely medical subjects to refrain from examining personally, that is orally practically, those candidates who come from their own hospitals, so that up to the time of the oral or practical examination the examiner does not know the candidates, because the written examination is conducted entirely by numbers which are assigned to the candidates. But when it comes up to the oral or practical examination then, of course, he may recognise a candidate as coming from his own hospital, and in that case it is the practice of the medical examiner to refrain from personal examination of that candidate himself. This is not obligatory upon the examiner; it is not the rule or law of the University, but it is a practice which has grown up spontaneously among them.

2891. (*Professor Sanderson.*) As regards the bestowal of honours and the determination of the position of candidates in the honours examinations, you would admit that the principle fails in accomplishing its object. It cannot be carried out in such a way as to be effectual?—In the examinations in honours in medicine and surgery and so on, there is no practical examination whatever, therefore the examiner does not know who the candidates in honours are; he only knows them by numbers, he does not know who they are, where they come from, or anything about them.

2892. Do you mean to say that in an honours examination the examiners do not know who the individuals are at the time they, the candidates, are examined?—No.

2893. For instance, when the question is, who is to receive the scholarship or who is to receive the medal the examiners do not know who the individuals are?—No, they do not unless by some accident. I am talking of the examiners in special professional medical subjects, even in physiology they do not know it. They may know it in future, because we are going to have a practical examination for honours in physiology; I think that will take place for the first time this year. At that practical examination they will see the candidates and know them, but so far as the original examination is concerned they do not know them and have no idea who they are except by accident.

2894. Is that actually the fact?—Yes. They have no means of knowing the candidate. The candidate only puts his number on the paper.

2895. (*Chairman.*) What influence would he be likely to have in drawing up the questions?—If he refrained from examining the candidate himself, he would be consulted by his brother examiner, and he would be present while the examination was conducted by his brother examiner.

2896. I suppose in the paper questions, the danger of the pupils being examined by their own teachers, is that the questions would be so framed, that the answers would be answers which the teacher had already taught in his lectures, and that is the way in which his pupils would get an advantage more than in any other way?—In the first place, the questions are set by both examiners, and they must be approved by both examiners, and both examiners are equally responsible for each question, although, as a matter of practice, one of the examiners draws up a certain number of questions, and the other draws up the remainder. They submit these questions to each other, and they more or less very often criticise these questions so as to bring them into harmony with the traditions of the University. Then the answers to these questions are contained in books, and on these books the number of the candidates is put. Thus when the examiners have the competitors before them, except by some accident, they do not know who the candidate is whose papers are before them.

F. V. Dickins, Esq., M.B., B.Sc.

17 June 189

2897. There would be very little temptation to favour a pupil in that way to make his answers come to more than they are worth. The danger would be in framing the questions so as to draw out the knowledge in a certain branch, and to ignore the other parts of the subject which he himself had not taught. That would be the real danger, would it not?—That might be a danger, but for the fact that the two examiners criticise and confirm each others questions.

2898. There would not be any danger of giving unfair weight to answers to given questions, and giving one man more marks than another. That is a very imaginary danger, is it not?—It is a very imaginary danger, indeed, and wherever a candidate is rejected, all his papers are again in most cases looked at and revised by both examiners.

2899. And the other danger to which I have alluded is obviated by there being an external examiner, who has a large share in framing the questions which are set, and it cannot be obviated in any other way?—It cannot be obviated in any other way.

2900. (*Professor Sanderson*). Are we to understand that it is the case that the University of London is in the habit of giving honours in scientific subjects on paper work only?—Not in scientific subjects—not now.

2901. It is scientific subjects that we are discussing, is it not?—As I was saying, it was the case in physiology. Honours were given in physiology at the Bachelor of Science Examination without any practical examination whatever, but that has been altered, and this year a new system comes into operation at the instance of the examiners themselves, under which the candidates for honours in physiology will be examined practically, as well as by written papers.

2902. But in other subjects than physiology, as for example, physics and chemistry, are honours given by the University on paper work only?—In anatomy they are.

2903. On paper work only?—Yes.

2904. But in physics and chemistry?—No, not in physics and chemistry.

2905. In that case there is a practical examination?—There is a practical examination now.

2906. So that in that case the system would be ineffectual. The precautions used to prevent men knowing their own students would be ineffectual?—The practical examinations would take place after the examiners had read the written papers. At most of the practical examinations, even in honours, there are a considerable number of candidates, and unless the examiner made a very distinct effort it would be difficult for him to give any special advantage, or any particular advantage to any student who might have been his own pupil. He might do it, but it would be a difficult thing for him to do without making a special effort.

2907. (*Professor Ramsay.*) It is the case, as a rule, is it not, that there are always two examiners for each student?—Yes.

2908. Is it the case that both examiners read the papers of all the candidates?—No; it is not the case that both examiners read the papers of all the candidates, but they read the papers of all the candidates who are rejected in that particular subject.

2909. Or only of all those candidates about whom one of the examiners has a doubt?—When I say they read the papers of all the candidates who are rejected, it is going a little too far; they arrange that among themselves, and one examiner trusts to the other that in any doubtful case an appeal will be laid between them.

2910. You are, no doubt, aware that in one of the last reports of the inspectors of the examinations, it was commented upon that in a great majority of the cases the papers were only read by one examiner; that it was only doubtful cases that came under the view of both examiners; and that was pointed to as being an arrangement which it was probably not desirable to continue?—I suppose that would refer principally to the lower examinations, where, owing to the large number of candidates it is not practically possible—it would be too enormous a labour to throw upon the shoulders of the examiners-in-chief—to require both of them to read every paper.

2911. It refers to the practical examinations in medicine and surgery?—My impression is that the practice for the examiners is to settle among themselves what papers both should read together. They trust to each other for that mainly.

2912. Has any change been made in consequence of that suggestion by the inspectors?—As far as the examinations are concerned, both the examiners are jointly responsible both for the passing and the rejecting of candidates.

2913. It was also pointed out that sufficient pains were not taken to secure that the students had not seen the cases submitted to them at the clinical examinations. A number of skin cases were taken from University College Hospital, and these cases were individually known to a certain number of the candidates. Does not that come under the same head as that of an examiner examining his own students in a matter specially taught to them?—That is a difficulty that is inherent in the character of the examination. Through the inadvertence of a particular examiner, a case in a particular hospital might be seen by some candidate who is a student at that hospital, but I am sure it is an uncommon occurence.

2914. The point is this:—there were a certain number of University College students; some half dozen skin cases were brought in, which, as a matter of fact, had been seen by those students, and by those students alone. All they were asked to do was to write down the name of the disease which the patients were suffering from. Obviously those students had a very great advantage?—Yes, no doubt; but that never came to the ears of the authorities of the University. Had that came to our knowledge, we should have communicated with the examiners on the subject.

2915. It would be quite easy to make arrangements to prevent that, would it not?—We are obliged to leave that in a great measure to the examiners.

2916. There was another point noticed: that in the written examination the inspectors did not consider that there was sufficient supervision to prevent communication among the candidates. I suppose that was a matter that was probably accidental, and it would be perfectly easy to remedy it?—No facts have ever come to my knowledge that would warrant that statement.

2917. Have you not seen that paragraph in the report?—Yes, I have seen that paragraph in the report, but I do not think it has any foundation whatever. There is always, in my opinion, quite sufficient and more than sufficient supervision of the candidates, and it can only be by some very cunning fraud on their part that copying or communication was possible.

2918. The actual statement in the report was that there was so much business and talking going on in the room after the tests had been demanded that the examiners were unable to superintend things properly?—The examiners usually from time to time perambulate the room while the examination is going on. There are generally University assistants in the room as well, and at all large examinations there are four or five assistants in the room. At the medical examinations the number of candidates is not sufficiently great to render that necessary, but I really do not think there is any want of supervision; and during the whole of my 10 years' experience, I have never had my attention called to a single case of that kind so far as medical candidates are concerned. In fact, out of the 5,000 candidates whom we examine yearly, I do not think we have more than two or three who are ever detected in, or even suspected of, copying, or any kind of improper conduct. Such cases do occur from time to time, but they are treated summarily, and the candidate is at once dismissed from the examination on the spot.

2919. Is he allowed to compete again upon another occasion?—Not without the permission of the Senate.

2920. (*Chairman.*) Is there any other thing you wanted to mention?—I wanted to add to my replies to Professor Sidgwick, what I think I did not clearly state, namely, that according to Dr. Schaible, the German maturity examination, which was almost on a par with an ordinary degree of the British Universities, was only in a slight measure under the control of the teachers, and that in all the State examinations, beyond and after the University course the examinations were wholly in the hands of Government officials, and altogether out of those of the University professors. I also wanted to supplement that by the following observation. Referring to the teacher examination system, even under the existing system—by which I refer to the system practised at the University of London—it is scarcely credible that the ordinary graduate in science, for instance, who at three separate periods, Matriculation, Intermediate Examina-

tion, and in the examination for the degree has satisfied some 20 or 30 examiners after altogether some 70 hours of written examination, and 20 to 30 hours of practical and oral examination, should not have been sufficiently tested for all practical purposes in relation to any career. Much more would this be the case in such a professorial body as is contemplated, and with much greater justice both to teacher and student. And upon this among other grounds the establishment of separate examinations or *a fortiori* of a separate University for the sole purpose of carrying the individual teacher examiner theory to its utmost development does not commend itself to my judgment.

2921. (*Professor Sidgwick.*) I think your answer was addressed to me?—Yes, it was.

2922. In order to avoid a misapprehension, let me put this. The maturity, to which you refer, is at the end of a school course?—Yes.

2923. It is before the entrance into the University?—Yes, before the entrance into the University.

2924. But, though Dr. Schaible may have a high idea of that examination, and a low idea of our own degree, it is extremely misleading to compare an examination at the end of a school course to the examination at the end of a University course. There is no resemblance between the two, as regards the place at which they come in the studies. The examination comes before instead of during or after the University course?—Yes.

2925. (*Professor Ramsay.*) Did not you express an opinion that that examination was equivalent to an ordinary English examination for a degree?—I did not express that as my opinion. I think that is Dr. Schaible's opinion. I am not quite certain about that, but I have heard that opinion from various German professors.

2926. You do not mean to support it yourself?—I cannot say what it may be now, but many years ago, when I knew something of Bonn, I think the examinations that the students had then to pass were equal or nearly equal say to a second class B.A.

2927. (*Mr. Anstie.*) Did you understand the comparison to be with a Pass Degree examination?—Yes.

2928. Not with an honours' degree examination?—No.

F. V. Dickins, Esq., M.B., B.Sc.

17 June 1892.

2929. (*Chairman.*) Is there anything else you wish to lay before us?—I wish to add also that, as far as I know, the teacher examiner principle in this country is chiefly advocated in connexion with the higher teaching of a specialised character, and the professorial University would doubtless provide as fully as, or more fully than, the existing University does by its degrees of Doctor of Science, and Doctor of Literature for the testing of teaching of this advanced character. Lastly, I ask permission to draw the attention of the Commissioners, with regard to the question of the relation, between the provincial colleges and the private students on the one hand, and the professorial University on the other, to paragraphs Nos. 16, 17, and 18 in the paper which I ventured to lay before the Commission the other day, replacing the expression "Collegiate" by the word "Professorial."

2930. (*Bishop Barry.*) You remember a statement you made with regard to the condition of professors at King's College, which I ventured to question?—Yes.

2931. I have since written on the subject to the Principal; and I understand from him that no paper whatever is signed by professors on accepting office; and the only rules under which they are bound, are contained in this printed paper (*handing document to witness*). The mistake, I think, may have arisen from this: "Gentlemen elected to any office in King's College, "London, are not permitted to engage in public duty "of any kind outside the college, without permission "from the Council." Of course that means to take any other office. Probably you may like to modify your evidence?—I should be glad to be permitted to apologise for having made that statement without sufficient authority. I did not know it of my own personal knowledge. Would the Commission allow that part of my evidence to be expunged?

(*Chairman.*) If you wish to do so, you may strike it out of the proof.

(*Witness.*) I shall be glad to have the opportunity of doing so.

The witness withdrew.

J. G. Fitch, Esq., examined.

J. G. Fitch, Esq.

2932. (*Chairman.*) I think you are connected with London University. What is your position now?—In the University I am a member of the Senate. I am a graduate of the University, and was for 10 years one of the examiners, but my official positionis that of Inspector of Training Colleges under the Education Department.

2933. You have given a good deal of attention to the question of establishing a teaching University for London?—Yes, I have thought about it a good deal.

2934. And you contributed a paper which is contained in the Appendix to the report of the last Commission?—Yes. Will your Lordship permit me to say at the outset, that I have no title to be considered in anyway representative of the Senate; that I have no authority or qualifications which justify my appearing in that capacity, and that I am merely here in obedience to the request of the Commissioners to give my personal testimony.

2935. You have been kind enough to give me a rough note of the evidence you are inclined to give. In the first place you have formed views of the kind of teaching University which is impossible in London. You begin by putting aside all those which are not possible; for instance, a single college of the Scotch or German type. You have objections to that idea. Perhaps you will tell us why?—Because there is no one institution in London of such commanding authority or influence that it could occupy a position at all analogous to that of the Universities of Edinburgh, Glasgow, or Berlin; secondly, because there are no funds or material that I know of, on which to found such an institution; and, thirdly, because if a new one were created of suitable character and magnitude, it would do very great injury to existing institutions.

2936. Then with regard to the plan adopted in France, that requires a State organisation. I believe there is only one University for the whole of France?—The University of France has all the provincial and local academies in connexion with it, and they are all brought into relation with the Minister of Public Instruction for the time being, who is *ex officio* Grand Master of the University of France, and Rector of the Academy of Paris. It seems to me that that kind of subordination of all the teaching to a minister of State, to a great central authority, would be opposed to the genius of the English people, and extremely undesirable in itself.

2937. Then, coming to what is possible, I will take first your views as to the co-ordination of existing institutions. What have you to say about that?—I ventured to put that consideration first, as showing that we cannot hope to find any very close analogy between our own circumstances, and those of any foreign or existing University. The problem has to be solved on its own merits, and, having regard to the existing agencies which are already at work, it seems to me that what should be done is to co-ordinate existing institutions; to bring them into harmonious relations and to enable them to take an effective share in the advancement of learning with as little dislocation of the machinery, which is now working well, as is possible. The very nature of that problem shows how misleading the analogy of institutions under other conditions may easily be. London is not a *tabula rasa* upon which you can impose a brand new academical constitution, but it is a place containing great resources and many institutions which have very honourable traditions, and it seems to me that they only want organisation, and to be brought into helpful mutual relations. The establishment of a second University is, in my opinion, wholly unnecessary.

2938. What existing institutions would you bring together in this way?—I think the great teaching institutions of London, those that are concerned with the higher education, beginning, of course, with King's and University Colleges and the University of London itself, and the various and very numerous institutions which are more or less concerned with the higher education in different departments, some in medicine, some in arts only, and some in science.

2939. You have looked through the draft Gresham Charter, I presume?—Yes, I have, with very great interest.

J. G. Fitch, Esq.

17 June 1892.

2940. That was framed with the intention of doing rather what you suggest—of making a beginning which might be pushed further, beginning with the two colleges—University and King's—and the medical schools with power to receive other institutions when they have found any that were willing to come in and of sufficient importance to justify their being admitted. That was rather the intention of the Gresham Charter, was it not—to carry out what you suggest?—Yes, I think it was a very honourable attempt to solve the problem, but it was a very narrow and inadequate scheme. It left out of view a good many important institutions. It gave too large powers to the professors of two particular institutions; and yet it was not a teaching University in the sense of giving to the authorities of the University power to appoint or to remove professors or to divide the labour between the different institutions that existed. It did not seem to me to organise the teaching or to bring new teaching resources or machinery into working order at all; it did not make adequate provision for the maintenance of a high standard in its examinations, and it restricted the privilege of graduation to persons who had been educated in one particular way.

2941. I suppose you could hardly embody the standard of examination in a Charter, could you, whatever Charter you drew. You must leave that to the University itself?—Yes; but the conditions under which the scheme was framed seemed to me to be such as to make it extremely probable that the standard of the degrees would be lowered.

2942. What conditions do you refer to which seem to have that tendency?—The examinations were to be, in my judgment, too much in the hands of the teachers in the colleges.

2943. Would it have been the object of the teachers in the colleges to lower the examinations?—I do not know that it would, but there would have been a great temptation to them to do it, because it would have been their interest to attract students when they were competing with another examining body.

2944. Would they attract students if they got a bad name. That would counterbalance it, would it not?—I am not sure that it would.

2945. You object to the teachers being specially appointed by the governing bodies of the colleges but not by the University itself?—I do not object to it, but I say that that very fact shows that it could not be a teaching University in the sense which is generally understood, that, I mean, in which the governing body and the teachers, and the examiners are all connected with the same institution.

2946. You arrive at that if you make the teachers into the governing body or enable them to have a position on the governing body and give them an influence on the examinations. You arrive at that union between the two just as well in that way as by starting from above and working downwards, do you not?—The proposal was that the teachers should continue to carry on their own methods in the several colleges and then unite to have a common examination. I do not think that was a disadvantage, but at the same time it seems to me impossible that University College and King's College, having regard to their traditions, their history, and the conditions under which their friends gave them their money, could have parted properly with the power of appointing their professors and keeping up their own methods. What they were really establishing was not a University in which the teaching and the examining would be carried on by the same body, but, was in fact, a federation of colleges and a system of graduation which would be common to several different institutions.

2947. I do not see that what you said last would prevent their establishing harmony between the teaching and the examinations. How would you arrive at the harmony between the teaching and the examining in any way which would be more complete?—If there were one professor, say, of Greek, who was appointed by the University, then the examination of Greek would follow the teaching of that one professor; but if you have several colleges and each with a professor of Greek and each at liberty to carry out his own methods according to the principles that he approves, then I do not see how you can have an examination which can be said to follow the teaching of any one of them. Then you fall back upon the principle of a common examination applicable to all the various teaching bodies and that principle it seems to me with some modifications could be carried out better by a comparatively independent institution like the present University of London than by a confederation of several colleges in the way suggested in the Gresham Charter.

2948. You would only have one professor for each subject?—I do not mean to say that I think that a desirable arrangement, but unless there is such a division of duty as makes the teaching of any one subject in the hands of one body of persons, and the examinations follow the method adopted by that one person or persons I do not see how you get the principle that examinations should follow the teaching thoroughly carried out. If that be a right principle my only observation on it is that the Gresham University Charter did not carry it out.

2949. But either you must have one professor for one subject, or you must have two or three professors. If the latter you cannot insure that they will take exactly the same course or adopt exactly the same system in teaching. There is no chance that the teaching of every one of these professors will be exactly in accordance with the examination?—Then the examinations must be common examinations applicable to different and varied methods of teaching, and that is what I believe the University of London provides at present.

2950. Your point is that the Gresham University does not give a closer connexion between the examination and the teaching than the London University does at present?—Or than the London University might do if it were brought into closer relation with the teaching bodies. That is a further question. But the point upon which I desire to dwell is that the Gresham scheme was a compromise between the two, that it did not give to the professors that which most professors desire, an examination that should distinctly follow their own course of teaching, and, on the other hand, of course, it did not recognise so large a variety of teaching machinery and test it in so comprehensive and impartial a way as the existing University of London does.

2951. Does the existing University of London provide a greater teaching staff than these colleges do?—It has no teaching staff at all.

2952. Then I do not understand you?—I mean it adapts its examinations to students who have been taught in very different ways and under very different conditions. The Gresham University would no doubt have had a narrow range, because it would have adapted its examinations to the teachings of some three or four chosen privileged institutions, but still it would have failed to give the professors what I understand professors always want, that is to say, an examination that shall follow their own course of instruction.

2953. It would give it to a certain extent. It was intended to increase the connexion between the teaching and examination to some extent. It is a compromise?—Yes. I may add that if it had contemplated an arrangement by which colleges should be so federated as that they should divide the work between them, and that a student might go from one to the other, for instance, if King's College taught classics better than University College, and University College taught mathematics better than King's College that the student might go to either and still be recognised as an undergraduate of the University and come up for the examination; I think then a real teaching university would have been established.

2954. You object to anything that may be called a scheme of federation, or confederated colleges, however many they might be. You object to the scheme of confederating different colleges together and forming a university out of them?—I must not be thought to object to that scheme, but I think the provision that was made for it in this scheme was an unsatisfactory one. The very fact that they proposed to federate the colleges for the purpose of examination shows that they were not in the true sense of the word a professorial or a teaching university.

2955. The professors ought to be appointed by the university and not by the colleges?—Unless the colleges consented to this arrangement, I do not see how you can have a really professorial or teaching university at all.

2956. That objection you make to this scheme. Then you would prefer what I may call the melting-pot scheme—throwing it all into the melting pot—and all the colleges being absorbed into this new university whatever it might be?—Under certain improved conditions I should think that a more satisfactory solution of the difficulty.

2957. You have thought that over in its details. Could you tell us shortly how you propose that that should be done?—I think the general object to be maintained is first to systematise the existing agencies and encourage them to do their best work. Second, to establish the right relations between teaching and examination. Third, to meet all the reasonable requirements of teachers without imperilling the larger and imperial work of the present University.

2958. You take the present University as the starting point?—The London University.

2959. You make use of that as the new University?—Yes, under the modifications which I will venture to suggest afterwards. Then I should think the great point you have to keep in view is to promote the interests of learning and not to promote the interests of particular institutions, and I think it necessary in order to carry out that view that first of all large liberty should be left to teachers. There should be a very high standard, but still a uniform standard in regard to graduation. The University should be so constituted as to encourage what may be called post-graduate courses —courses of lectures and of instruction of a higher kind having no bearing on examinations but to be taken up after the students have graduated.

2960. This would be done by the appointment of a strong staff of professors?—Yes; but professors rather as a sort of Regius Professors whose special duty it should be to advance learning and to carry the academic education of London to a higher point than it is represented by mere degrees. I would not have such professors interfere materially with the ordinary work of the professorial staff in the colleges, that work I mean which is mainly devoted to the preparation of students.

2961. You would preserve the colleges with their autonomy as they are now?—Certainly, and their freedom to develop themselves in their own way seems to me a very important matter to be secured.

2962. In addition to the college professors you would have University professors to give instruction of a rather higher kind. How would you separate the functions of the college professors and the University professors?—In the first place the college professors would continue to be appointed as at present by the governing bodies of the various colleges; I think it would be unreasonable to ask those institutions to part with their autonomy to that extent, but the Regius Professors, or the professors of a higher kind, might with advantage be selected by the University itself.

2963. (*Bishop Barry.*) And carry on a parallel course of instruction. Is that your meaning?—No, an advanced course, what the Americans call a post-graduate course.

2964. (*Chairman.*) Then up to the taking of the degree the instruction would be given by the college professors?—Yes. If I may be allowed to add one other condition, I think it very important that the scheme should have so much elasticity in it as to encourage future donors and teachers and to leave room for future expansion.

2965. These professors would require a considerable sum of money. They would have to be first-rate men and would have to receive high salaries?—Yes.

2966. Where would the money come from?—I am afraid that question is hardly one on which I could express a useful opinion, but I gather that a very important step was made when this whole business was under discussion, and that the Gresham Committee expressed a desire to co-operate with the Univerisity and not merely to give it its name, but something more substantial. If that means that not only the great traditions but the resources of the Gresham trust can be absorbed into the University and that the governing body will be prepared after, of course, securing certain representatives to hand over their present powers to the new University, I think that step would give means of beginning with the establishment of Regius Professorships. It might also be taken as a very good omen and as a proof that the great wealth and resources of London might be made available, and that other great city corporations would take an interest in either the founding of professorships or otherwise in bringing the influence of the City within the sphere of an organisation of this kind; so that I should not regard the problem of how to get the money as by any means hopeless; and considering the liberality that the Government has of late shown in its grants to various colleges, both London and provincial, it is not too much to hope that a sufficient sum might be obtained in a grant from the Treasury to establish certain professorships of this kind.

2967. Then you would allow the colleges still to conduct most of the education up to the stage of taking degrees. Would you object to these colleges being represented on the governing body of the University. Would you think it is advisable that they should be to any great extent?—I think it is very desirable that they should be represented on the Senate; and very largely represented, of course, on the Boards of Studies.

2968. And that they should have a voice in fixing the curricula of the examinations?—Yes.

2969. Then that part of the Gresham scheme you think a good one?—Yes. The Senate of the University, have already shown a very great willingness to make such modifications as would in the main meet the views of the colleges, and at the same time leave the existing usefulness of the University in regard to the general education of the country unaffected and undisturbed. The scheme which the Senate drew after a great deal of labour, and, which, of course, the Commissioners have before them, was an attempt to solve the problem in that way. We know it failed.

2970. Perhaps you will tell us what you think were the chief merits of that scheme, and what were its defects?—I think its main merits were that it sought to conciliate the views of the great teaching bodies of London, by giving them a large influence, by assigning a definite value to collegiate instruction, and also by securing that the existing work of the University in regard to places which could not be called constituent colleges, and in regard to private students all over the country, should continue unimpaired. Your Lordship asked me if I thought there were any defects in this scheme.

2971. Yes.—I think there were several rather serious faults in this scheme. I am expressing, of course, my own private opinion only. It seems to me that it was too complicated; that it brought into existence a great many very different bodies, standing committees, Faculties, and Boards of Studies, some for London, some for the provinces, and some for what you may call the extra-mural students. It divided the responsibility, among too many conflicting bodies, whose relations to the University and to one another were rather ill-defined. It assumed, too, that the several institutions had interests of their own to be protected, and did not credit the professors in them with an interest in the larger academic work of England and the metropolis. It seemed to me also that the Senate was a great deal too large and cumbersome. It proposed 52 members; whereas I consider a much smaller number would have sufficed for the purpose. It made too great concessions to the London teachers, and practically allowed them to confer degrees on their own pupils.

2972. I think 12 out of 52 were elected by the Faculties, were they not?—Yes.

2973. Was that too large a proportion?—Yes, you will observe that there were six from the colleges, and then there were from the London Faculties 12, and the provincial Faculties four.

2974. How were the representatives of the colleges to be chosen, by the governing bodies, I suppose?—Yes.

2975. Which would not consist entirely of teachers?—But the Faculties would, and the Faculties were to choose 12.

2976. The Faculties chose 12 among them, but the ones chosen from the two colleges, the three from each would not be chosen by the teachers, would they?—No, they would not be chosen by the teachers, they would be nominated by the governing body, at any rate 18 is a very large collegiate representation.

2977. Yes, if you count the six as chosen by the teachers, but that is not quite fair, is it?—I said, I thought it made too great concessions to the London Colleges and teachers. Taking the whole scheme together. May I be permitted to mention one other point. The scheme seemed to me to introduce some confusion, for it made two London degrees of very different values, the one to be given on the Collegiate or London side, and the other the open degree. It went beyond the recommendation of the former Commission which distinctly resolved (I refer now to paragraph 35 in their Report) that the final examination for degrees ought to be the same for all candidates whether taught in constituent or associated

J. G. Fitch, Esq.

17 June 1892.

colleges in the University or elsewhere, so that it made a greater concession to the wishes of the London Colleges than even the former Commission had recommended.

2978. I suppose part of the complication which you complain of came from trying to combine the two separate functions, one giving degrees to all comers from the whole of the United Kingdom, and the other forming a teaching University for London?—Yes.

2979. One body carrying on these two things would necessarily have to have a very complicated scheme?—I think one body might carry on both with a less complicated scheme.

2980. You think one body might carry on both these things without difficulty?—Yes; and I think a compromise of a simpler kind is possible and would meet all the reasonable demands of the London Colleges, would give them greatly increased influence, would help their work, and give them considerable liberty of teaching, and at the same time enable them to co-operate with the existing University in regard to its larger work.

2981. But any scheme that the Senate might adopt would be in danger of being overthrown by Convocation?—There is that difficulty, it is true. I think the real reasons why Convocation threw it out were that they did not like the localisation of the University, they did not like to see the University too closely limited to London, and moreover they objected to the constitution of the governing body, and particularly to the conferring of two kinds of degree. I think if it were not for those three objections, Convocation would very willingly have assented to a scheme founded mainly on the recommendations of the former Commission.

2982. You think Convocation thought they gave too much power to the teachers, and not enough to Convocation?—Yes.

2983. And that there ought only to be one kind of degree for everybody instead of two kinds?—Yes. The main objection undoubtedly was the double or ambiguous degree.

2984. Then you think there might be some compromise between the views of the Senate and Convocation on the one hand, supposing them to agree together, which they have not yet done, and the promoters of the Gresham scheme on the other. You think that the Senate of the University, the Convocation of the University, and the promoters of the Gresham scheme, might agree among themselves on some compromise or other which would work?—Yes. I think all parties have learnt a great deal in the discussions of the last few months, and that a compromise will be easier now than it was in the earlier stages of the controversy. I have no fear at all that Convocation would withhold its assent to a modified scheme. I suppose the advocates of the Gresham scheme would think that the teachers had not enough representation on the Senate, and that Convocation had too much, and that the Senate would think they had about the right amount. I may say personally, that I do not think Convocation ought to have more power than at present. It is not a very satisfactory legislative body. The people who attend it, attend it rather casually; they happen to be just those out of the 3,000 or 4,000 graduates who live near London; they have no representative character, and from their very constitution they have little sense of responsibility. I for one have always regretted that the present constitution of the University gives them a veto upon the reception of a new Charter.

2985. Until these different bodies do agree upon a compromise, do you not think it would be very difficult to move in the matter?—No, I do not think it will be difficult. I think the terms of such a compromise as this Commission in its wisdom might probably suggest, made in the light of late discussions, and of the difficulties that have arisen in carrying out other schemes, would find very general acceptance not only with the colleges but also with the provincial people at a distance and with Convocation.

2986. The essence of your plan would be that the London University should remain at the head, and should undertake the work of a teaching University?—And should seek to incorporate with itself all the principal teaching agencies in London.

2987. And that there should be a relation of examining to teaching, which would mean that the same body which directs the teaching should direct the examining?—Well, a body to direct the teaching in any formal way I do not think desirable. I think the direction of the teaching should come from the authorities of the various teaching institutions. I do not think there is any feasible plan by which the central body could direct the teaching.

2988. A very good teacher would wish to be left to himself and not be hampered?—Yes.

2989. Then with regard to the recognition of academic study?—First of all, if your Lordship would permit me, I should like to mention the modifications in the Senate, then the Faculties, and then the Board of Studies, which seem to me desirable. A governing body formed in accordance with the recommendations of the former Commission in Clause 25 would, with very slight modification, be a good one. That would give three members each, or 12 members in all to be elected by the four Faculties; it would put on the President of University College, the Principal of King's College, and the nominees of other great Corporations besides nominees of the Crown and of Convocation. It seems to me that that would be on the whole a very good governing body, and that the Senate if re-cast on that basis would be likely to have the confidence of the great teaching bodies of London.

2990. Nothing else but the representatives of the teaching bodies and the principals of the colleges?—The question of the number is not very important, but it is to be observed that the scheme suggested by the Senate of the University of London gave a rather larger number, as I have already pointed out to University and King's Colleges. I see no particular objection to that, except it is not desirable to have too large a Senate.

2991. Then you strike out the nomination by Convocation, do you?—No, I do not think it would be quite fair to deprive Convocation of the power that it has of nominating members. At present they have the right to nominate one fourth, and though Convocation is not a very good legislative or administrative body it is a very good body indeed to elect representatives of learning such as are suitable to be put upon the Senate. I think if one looks back and considers who the men are who have been placed upon the Senate by Convocation, one feels that they have been generally a very valuable contingent; and it does not seem to me desirable to diminish the representative power of Convocation. But I should be very willing to see additional influence given to the great colleges of London. On the whole the governing body suggested by the late Royal Commission appears to me better and simpler, and to have a better number of members than that suggested by the Senate. I should like to add that in any constitution of the Senate that the Lord President of the Council, or whoever is Minister of Public Instruction for the time, might be with very great advantage placed *ex officio* upon the Senate. It is very desirable that the higher education should be, as far as possible, brought into touch and into relation with the general system of education in the country, and as the Lord President, or whoever may succeed him as Minister of Public Instruction, when we have one, will necessarily be cognisant of the primary and a good deal of the secondary education of the country, I think it would be a very great advantage that he should have a seat upon the Senate as a matter of course. Then, with regard to the Faculties, both schemes—the scheme of the Gresham University and that suggested by the Senate—assume, very properly, that the Faculties shall be merely electoral bodies, not consultative or legislative at all, that they should be composed of teachers and professors in the constituent colleges, and that they should act in separate faculties. For instance, King's College and University College would naturally appoint members to all the three Faculties; an institution like the City and Guilds' Institute of Science would appoint to the Faculty of Science only; the training colleges for teachers, if they were found to give adequate provision for training in the Department of Arts, might have very properly representation upon the Faculties in the Department of Arts, the same regulations would prevail with regard to the women's colleges. I would let the Faculties represent in their various sections all the best teaching institutions of London, and then would confide to them the duty of electing Boards of Studies. The Board of Studies after all will represent most fully the true connexion between teaching and the governing or examining body of the University. I think the functions of the Boards of Studies are admirably set forth in the 13th clause of the Gresham scheme. But I do not think it would be desirable that

the Boards of Studies should be entirely nominated by the Faculties, because the Faculties would be composed of teachers alone, and the Board of Studies would be the general consultative body to whom programmes and syllabuses of instruction and many questions of that kind would necessarily be referred by the Senate. I think it important that the Boards of Studies should in each case have some other ingredients in it besides teachers. Suppose, for instance, in the Department of Arts there were 12 members of the Board of Studies, if six were nominated by the Faculty of Arts, that is to say by the teachers, if three were past and present examiners, and if the Senate were permitted to nominate three persons in addition, you would have a body of 12 who would represent rather more varied interests and experience than a body composed of teachers alone.

2992. (*Bishop Barry.*) I think the Gresham scheme does not seem to provide that there shall be teachers alone. It includes also the examiners; therefore your addition would probably be the three outsiders as independent?—Yes, the three outsiders.

2993. These examiners might very easily be outsiders?—Yes, I think the constitution of Boards of Studies should be elastic enough to allow of the Senate putting on, for instance, a professor of some provincial college, because I am not proposing that the provincial colleges should come into the Faculties. If they do not nominate directly members of the Boards of Studies, it seems desirable that there should be some opening left for adding to those Boards eminent teachers, or experts who were not necessarily teachers.

2994. Or examiners?—Or examiners. A scheme of that kind would, it seems to me, give us all the advantages that were contemplated by the Senate's scheme, in a simpler way. You would not, for instance, have two or three different Boards of Studies, one to deal with London colleges, another to deal with provincial colleges, and another to deal with the extra-mural or outside students, but you would have one Board of Studies advising the Senate in regard to the whole of the scheme of instruction and the examinations in a particular Faculty.

2995. (*Chairman.*) The provincial colleges would not be represented at all then in that scheme?—Well, I do not see any objection in principle to the admission of two or three on to the Boards of Studies from the provincial colleges. But it is to be observed that the provincial colleges have never expressed a strong opinion in favour of such representation; they have been on the whole very well satisfied to send their students to an independent examining body like that of London University. I have no reason to suppose they would be less satisfied if they knew that the University had recourse to the most eminent London teachers when it was framing its regulations. They did, no doubt, express a great dissatisfaction with the Gresham scheme, because it seemed to put overwhelming power into the hands of London teachers as such. But if the London teachers are called in rather because of their eminence in their own profession than because they are to represent the interests of particular institutions, I have no reason to suppose that the provincial colleges who send their students up would have less confidence in the University than they have now. It must be remembered, too, that we could not hope for the presence in London of gentlemen engaged in professorial work throughout the country. Moreover, two or three of the most important Colleges are already associated in the North of England, and have a University of their own. It is extremely likely that there will be some day a Midland University which will take Mason's College, Birmingham, and also the College at Nottingham; and the Welsh Colleges will not improbably be put together, and constitute a Welsh University. Then the very few remaining Colleges, such, for instance, as the Roman Catholic College at Stonyhurst, and others, which send very accomplished students often up to the University, and whose professors would no doubt be able to render us considerable service as members of Boards of Studies, I think would hardly desire, even if it were offered to them, to be formally represented on such Boards. It seems to me that if you once get a Board of Studies sufficiently influential and highly qualified to obtain the confidence of the teaching bodies as a class, the necessity for any direct representation of provincial Colleges would disappear.

2996. Then what is the next point with which you wish to deal?—I had set down the question of the relation of examination to teaching as being the point which I know lies at the bottom of a great many of these discussions, and one which is not at all free from difficulty. On that point it seems to me most important to secure the uniformity and the excellence of the final standard for a degree, and at the same time to deal perfectly fairly with the unattached or non-collegiate students, to give large freedom to professors and teachers in colleges, and to admit recognition of collegiate study and attendance as a part of the qualification for a degree. With that view I think the suggestion made by the former Commission was a very right one; that there should be this difference between the students in an associated college, and the students who are not in colleges, that the early stages of graduation should in the former case be left in the hands of the authorities of the college. Of course, the Commissioners are aware that there was a time when the condition of obtaining the degree of the London University was that a person should have attended a certain time at an affiliated college. I remember when I graduated in 1850, having matriculated in 1848, I went up from University College at one step at the end of two years to the Bachelor's Degree, and at the end of two more years to the Master's Degree. There was no Intermediate Examination at all. The guarantee of continuous study was supplied, or supposed to be supplied in those days by the testimony of the colleges that the student had been in regular attendance during the time. When in 1858 the collegiate system was given up and the examinations were thrown open, the Senate introduced the system of an Intermediate Examination expressly as a compensation for the attendance and regular collegiate training which were no longer indispensable. It was the only means the Senate had for securing something like continuity of study during the interval between Matriculation and graduation. Now, therefore, if the University of London is partly to revive the collegiate system it seems to me very reasonable that all the students who are in recognised colleges should be released altogether from the Intermediate Examinations and that the governing bodies of the colleges should be asked in every case to give their testimony that the student had been under regular instruction and had undergone during his undergraduate career such examinations as they thought appropriate and as were adapted to their own teaching. But at the end of the undergraduate period I should wish to see all students, whether they came from colleges or not, subjected to the same final examination. After all, the grievance which has been felt by professors has not been felt so much with regard to the standard for a degree, as in regard to the steps which lead up to it. They said "Here, for instance, in Arts "is an Intermediate Examination which prescribes "certain books in Greek and Latin and certain "English classics. All our students are forced to "go through that course, and we ourselves have "no liberty to frame an academic course according to "our own views of what is right." They felt, and I should have sympathised with them very much if I had been a professor in a college, that the requirements of the University hampered them a good deal. Now it seems to me that this objection would be largely removed first of all by leaving them full liberty in regard to the earlier stages of the academic career, and secondly by giving them, as they would have under the scheme proposed, a very substantial influence on the character of the final examination. Of course there would then be this difference, that every unattached or extra-mural student would have to go through the Matriculation, the Preliminary or Intermediate Examination, and at the end of the two years come up for his degree. The others would simply have to satisfy their own professors in the interval, would then come up for the same degree, and would compete with the others for honours and distinctions, which I think would have all the greater value because they would be gained in competition with people who had been very differently trained. That, though I have expressed it perhaps with needless fulness, is practically what the former Commissioners recommended. They also recommended that in the case of collegiate students the Matriculation should be dispensed with. I must say I should part with the Matriculation Examination with some regret, but at the same time if that were felt to be indispensable for giving full freedom to the professors I do not see any objection in principle to their matriculating their own students as the colleges at Oxford and Cambridge do. There is no examination at Matriculation imposed by those Universities, the colleges are left to prescribe their own form of admission examination.

J. G. Fitch, Esq.

17 June 1892.

2997. You would keep the Matriculation for non-collegiate students?—I should insist upon it in the case of all non-collegiate students.

2998. The question of provincial colleges I think you have already dealt with. Is there anything more you wish to say about the provincial colleges?—No. It seems to be taken for granted by all concerned that there should be a certain limitation of this collegiate system to London, and if that be decided I think it would needlessly complicate matters if we invite the provincial colleges to take a definite share in the Government, or to enjoy the special privileges of substituting their own course of instruction for the Intermediate Examinations of the University. Personally, I should be rather glad, however, to see one or two provincial colleges, if they had given sufficient evidence of their importance, and the thoroughness of their equipment and their teaching, permitted to receive the same privileges. However, it is not indispensable, and I do not think the provincial colleges care very much about it.

2999. Your next heading is "external and non-collegiate work of the University." You contributed a paper to the last Commission, I think, which was full of interest, and I think you treat of this matter there. That is already before us, so I will not trouble you to go over again what you have so happily expressed there, but if there is anything you wish to add upon this point we shall be very glad to hear it?—My own special experience in life has led me to see a great deal of the work done by the University outside colleges. As one of the Assistant Commissioners under the Endowed Schools Act, and the Schools Inquiry Commission, I saw much of the working of the endowed grammar schools throughout the country. I have also had occasion to see a good many of the best and most ambitious of the high schools, both for girls and boys, throughout the country, and my special interests at present relate to the schoolmasters and mistresses and the training of teachers. I should like to speak in the strongest way as to the enormous value of the external University examinations in their influence upon high schools, upon private students, and upon many educational institutions not quite of the rank which would justify them in being called associated colleges to a University, but nevertheless doing extremely good work. I feel this particularly in regard to the teachers. The Education Department has, of late, taken measures to encourage our elementary teachers to go further in their instruction than the mere requirements of the Department itself, in regard to what is called the "certificate examination." This examination for certificates of merit, which the Department has established, is an indispensable preliminary in the case of all who teach in public elementary schools. The requirements of that certificate examination have been modified from time to time, and are well known, as are set forth in a Syllabus. But we have of late in the Education Department permitted persons who have passed certain University examinations to come into the profession and be recognised as assistants without necessarily passing through the course prescribed by the Department. The requirements for certificates have accordingly been recast. We have put all the purely professional part of the examination—school management, the art of teaching, the practice in schools, and the special business of school keeping—into what we call Part I. of the Syllabus. We keep the examination of that in the case of all students alike in our own hands. But in Part II. of the Syllabus we have put together all which may be called the academic or general part of the requirements for certificates—history, literature, mathematics, and Latin, French, or other language. And a special provision has been put into the Syllabus to this effect: "Students in training colleges, who in their first year "pass in any British University a preliminary or "other examination approved by the Department, "will not be required to present themselves for "examination in those portions of Part II. of this "Syllabus, which were included in that University "examination." Then in the second year for our course of instruction in the training colleges occupies two years; there is a similar division of the professional and the general part, and a like permission to candidates to offer a University examination as a substitute for that prescribed by the Department. Now the Matriculation of the University of London has been accepted as the equivalent to Part II. in the first year of training, and the Intermediate Examination in Arts or Science has been accepted by the Department as an equivalent for Part II. in the second year. So that at the end of the second year a student will obtain the certificate of merit qualifying him to become an elementary teacher, but he will also have obtained, if he has taken advantage of this permission, two-thirds of a degree, and he will have the strongest motive for going on by some effort or by getting proper teaching to take the degree in his third year. What I want to point out to the Commissioners, is, first of all, that a provision of that kind contemplates a very important improvement in the character and qualifications of our elementary teachers, and secondly, that it would be utterly impossible to work a method of that kind if anything like collegiate residence was absolutely required as a condition of examination. Some of these students are in our training colleges, and many of them are acting as assistants in schools.

3000. I do not think there has ever been any scheme which would wish to do away with the open examinations of the London University, so that practically there is no danger of these influences being interfered with as far as I can see?—I am sorry if I have gone into needless detail, but it happening to be the particular business in which I am most interested I desire especially to say that under the new regulations of the Education Department the open examinations of the University of London are of more consequence to us than they have ever been before, and are likely to exercise very much greater influence on the whole teaching profession than heretofore.

3001. You would be very sorry to see them interfered with?—Yes.

3002. Do you wish to say anything more about the University professors. I think you began by stating your views about those?—I think I have said all I have to say about the importance of University professors as distinguished from college professors.

3003. Particularly as regards the post-graduate course?—Yes.

3004. Your last head is the provision for future expansion, and adaptation of changed circumstances. I suppose you mean that in any charter which should be drawn up there should be power for it to expand and adapt itself to future circumstances?—Yes.

3005. Have you anything more to add?—Nothing else occurs to me just now.

3006. (*Lord Reay.*) Would not one of the results of the Gresham Charter have been to obtain that co-ordination of the Colleges to which you alluded?—It might have obtained it. It would have been restricted then to a Collegiate University; the University would have been essentially collegiate, and would have been a second institution existing side by side with the existing one.

3007. I refer to your objection to the Gresham Charter that it did not provide for the co-ordination of the colleges, and the distribution of work between them. The question I put was whether co-operation would not have led to intercollegiate arrangements?—It did not seem to me framed with that view. It seemed to me to be too obviously framed in the interest of two or three existing colleges, and not with a view to the general academic organisation of London.

3008. Your opinion seems to be that the colleges would have combined to lower the degree, but may we not assume another hypothesis that the colleges would have higher education and attract the better class of students?—My reason for supposing that the degree might be lowered was mainly founded, I am bound to say, upon the opinion expressed by certain of the chief promoters of the plan in regard to medical education. I thought that very ominous. I am referring chiefly to the utterances of Sir George Young and Mr. Erichsen.

3009. You spoke of a syllabus of instruction laid down by the Board of Studies; would that syllabus of instruction be imposed upon the colleges?—The syllabus of examination by a Board of Studies in a comprehensive institution such as I contemplate would, so far as the final degree was concerned apply to all collegiate and non-collegiate students alike.

3010. In the comprehensive institution which you contemplate?—The syllabus of instruction would merely indicate the character of the subjects on which the University should examine, and that would be largely framed no doubt by the Board of Studies. But I do not

see that any power is either possible or desirable on the part of the Senate to impose on the colleges a scheme of instruction. It seems to me that freedom of teaching is one of the great objects we have to secure.

3011. Would not such a syllabus of instruction cripple the professors and imperil scientific progress?—A good deal depends in regard to that upon the nature of the syllabus, whether it descends to minute details, or whether it is so general as to allow the professors a large margin in regard to the treatment of their various subjects.

3012. Would you attach great importance to a syllabus of such a general character?—Yes.

3013. Why?—Because it is the only way to secure such a high uniform standard of learning as entitles persons to hold degrees.

3014. On the Board of Studies you contemplated a minority of outsiders. I call outsiders those who would not be teachers?—Yes.

3015. Would not that minority in most cases, where a difference of opinion should arise, be outvoted by the majority of the teachers?—No, I can hardly conceive their having separate interests. If the teachers nominate, say, six or seven, out of twelve and three or four others were past examiners, the probability is they would be persons of exactly the same class and would have the same general interest in the promotion of learning.

3016. Do you propose to have University professors for the post-graduate lectures?—Yes.

3017. But not University professors for the teaching up to the degree?—No.

3018. Is not that rather an anomaly?—Yes, it may be theoretically, but it is rendered necessary by the fact that we have institutions that have been established on different principles, and have been accustomed for 40 or 50 years to exercise a responsibility of their own, and have exercised that responsibility very honourably and well. I think it is very important that they should retain their present powers of appointing their own professors. I refer especially to King's College, University College, and the principal Medical Schools.

3019. But if an arrangement could be arrived at between the colleges and the University, so as to give the University some control over the appointments of these professors, would not such a course be preferable?—I think it would. But I have only heard of one college which has expressed the least wish to part with its own independent authority in that matter, and that is the Bedford College for Ladies. I believe they passed a resolution saying, that if a University was formed founded upon a collegiate system, they would be very glad to hand over to a central body the whole appointment of their professors and the whole management of their institution. But so far as I know, neither King's College, University College, nor any medical school, has ever expressed willingness to part with its own independent authority in that matter.

3020. You have not heard that University College might come to an understanding with the new University?—No, that is a new fact to me. There is no evidence of it in the documents that I have read.

3021. With regard to the examinations, you seem to consider that the Entrance and Intermediate Examinations might very well be left to the college authorities?—Yes.

3022. For the higher examinations you contemplate University examiners?—Yes, the Central Board or Senate.

3023. Is it not the fact that as you advance in a science, the mode of examination which is most calculated to bring out that higher knowledge (I do not mean to say in all sciences, but at all events in some) is that which relies on by the teacher assisted by an outsider?—That is true to a very great extent, and in order to meet it, I would add more alternative and possible courses open to those who wish to graduate in higher departments, and to take the higher degrees. I think if those alternatives themselves were the product of the deliberations of such Board of Studies as are proposed, they would fully meet the requirements of the teaching bodies.

3024. There is only one further question that I want to put with regard to the University of France. You are aware that a Bill has been introduced proposing an entire revolution of the existing arrangements, and aiming at a considerable decentralisation of the University of France by providing local Universities where a sufficient number of Faculties justify such a step, and by giving those Universities control of their own teaching and examining?—Yes, the provincial academies.

3025. They would be virtually provincial Universities assimilated to the German Universities and more or less self-governing?—Yes. At the same time I think I am right in thinking that it is not even proposed that the central Government should part with its power of nominating the professors, especially the rectors of academies.

3026. (*Professor Sidgwick.*) Are you acquainted with the working of other Universities besides the University of London?—I have a general acquaintance with the working of a good many.

3027. Then, I suppose, you would assent to the view that has been expressed by more than one witness, that in what we may call the normal type of University, such as has been founded on the continent and in Scotland, the body of University teachers have a practically complete control over the graduation?—Yes, but in very different ways. For instance, in Scotland there is the professor of the subject who is the one teacher recognised.

3028. I admit that the result is obtained in different ways?—In very different ways.

3029. So again in the chief English Universities in quite a different way, the main control of the examinations is practically in the hands of the body of teachers?—Not the teachers of particular subjects or of particular pupils.

3030. Yes, to a great extent, through the Boards of Studies it is in the hands of the teachers of the particular subjects. The question then that your evidence suggested to me to ask is this, constitute a University for London in which the London teachers exercise a control over the examinations broadly similar to that exercised in various ways both in England and in Scotland, and in the German Universities generally. Do you think that to confide to such a body the duty at present fulfilled by the London University as an impartial examining board for the empire would be really wise or equitable?—Yes, I think so; I see no reason why the same governing body should not control both.

3031. I think an opposite opinion was expressed in an able article in the "Quarterly Review" in 1888, but you may not have read the article to which I refer?—I do not remember the passage.

3032. Do you think that the provincial colleges, which you say have been very well satisfied so far with having no formal control over the examinations, would be equally well satisfied with the scheme under which such control as I have indicated was allotted to the London teachers. You seem to think that the fact that they had not complained before was a ground for inferring that they would not complain under the new scheme; but would it not be a very different thing to have a system under which a control was given to special colleges: not that it would necessarily make the examination worse but that it would offer so strong an inducement to go to the teachers who possessed the University control and would also place the teachers of the provincial colleges in a position of marked inferiority?—I am not afraid of that. I think the control of the London teachers over teaching would be limited mainly to their own pupils. They would be no doubt an advising body in regard to the larger and imperial work or the University, but they would be a body to represent not so much the interests of their own college as to represent the general interests of learning and the latest improvements in teaching and the best experience to be had in modern education generally. My impression is that the provincial colleges who are satisfied now with an independent and detached body such as the existing University would be no less satisfied if they knew that while retaining its full powers it called into its councils the ablest teachers of London to advise them in regard to the general and what may be called the imperial work of the University. And I should say that the professors of the London colleges might well be compensated for any want of exact harmony between the examinations and their own schemes of instruction by the knowledge that over and above

J. G. Fitch, Esq.

11 June 1892.

the regulation of the work of their own students they were invited to take a hand in the general work of controlling the education of the country so far as it is affected by the extra-mural examinations of the University.

3033. Are you acquainted with the University of Oxford at all?—Yes, only in a general way. I have not the advantage of being a graduate of Oxford.

3034. Supposing the University of Oxford had been preparing for the examinations of the University of London, which of course is quite conceivable, do you think that if a change were made by which distinguished teachers from Cambridge and from Cambridge alone, were placed on Boards of Studies and allowed a large share in the determination of the examinations, such change would be received with equanimity in the University of Oxford, as you are acquainted with it?—I do not think it would. But I do not think the two cases are at all analogous.

3035. Why do you not think the two cases are analogous?—Because Oxford has its own system of teaching and its own set of traditions and plans, and the single institutions which now form the very miscellaneous body of provincial colleges have no such definite plans or history, or tradition, or unity of method as a University like that of Oxford.

3036. But there would be this general analogy that institutions which had previously been on a par in relation to an external examining body designed to be impartial would suddenly find themselves reduced to a position of relative inferiority?—Pardon me I can hardly assent to that. I do no see where the inferiority would lie. Their relations to the University would be pretty much as they are now.

3037. But they would not be the same relatively to the London institutions?—No, not quite.

3038. That is the relative inferiority to which I refer. You think that would be received with equanimity?—Yes, I think so, provided the University maintained as it has hitherto done, its perfectly impartial system of examination; provided it continued to nominate its examiners, and provided it continued also to lay out courses of instruction with a sufficient number of options to meet the wishes and circumstances of very different places of education.

3039. All these functions being performed by bodies in which the London teachers had a preponderating control?—Not a preponderating control.

3040. At any rate a very large share of control which was denied to the provincial teachers?—Yes, I should like the London Colleges to be influential but not dominant.

3041. (*Professor Sanderson.*) I understand it to be your opinion that it would be unnecessary for the University of London if constituted as you propose to appoint professors in examination subjects?—I think as an ideal state of things it would be very desirable, but having regard to the fact that these institutions exist, and that they have their own work to do, and are doing it in their own way, I think it unnecessary to disturb them. It does not seem to me indispensable that the professor for the ordinary purposes of graduation should be appointed by the University, having regard to the present state of circumstances in the Colleges.

3042. Is that opinion founded upon the belief that the teaching of science and literature in the colleges is adequate?—I am hardly in a position to say that it is. We all know that they have very eminent professors at each of the principal colleges in London.

3043. We have evidence before us as regards science that it is very inadequate and that it cannot be compared with academical teaching in other places and in other countries. Would you state whether you would express a corresponding opinion or an opposite opinion with regard to literature?—In the department of arts there are very eminent professors. I should think, however, that if better resources existed we could very materially add to the teaching power in the department of arts in London with great advantage.

3044. And that would be in examination subjects, would it not, not in the special subjects to which you refer with regard to post-graduate lectures?—Yes.

3045. Then in point of fact your view would be that this Commission is only to co-ordinate the teaching which already exists, and not to create new agencies for teaching?—No. I should be very glad to see new agencies created, only I do not see the material for creating them. I do not see where it is to come from; and the existing agencies are rather in excess unfortunately of the demand for them, one might easily judge this, for instance, if one looks at the number of students in the department of arts, either at King's or University Colleges, notwithstanding the great eminence of the professors.

3046. Then is it your view that if we had, as we have, the improvement of teaching as our main purpose and object, the only means by which we can hope to accomplish that object is by improving the system of examinations of the University of London the completeness, of which we all admit. Is it your view that the only way in which we can act so as to promote that object is still further to improve the system of examinations?—And to bring them into closer harmony with the best methods of teaching.

3047. As they exist?—Yes, and as they might be improved.

3048. Then do you think the co-operation which you propose in fact the re-adoption of what you call the collegiate system by the University of London would lead to any improvement in teaching?—I think it would, and that the professors would feel more at liberty to carry out their own methods. Whether it would increase the demand for higher education in London or the means of meeting that demand I cannot tell.

3049. I suppose there is no doubt that it would lead to improvement in the system of examinations in certain respects?—Yes, and in the relations between examination and teaching.

3050. But it is admitted, is it not, generally that the system of examinations in the University of London is extremely satisfactory?—Yes, it has been I hope, but it has always been subject to this defect that the principle of independence and of detachment from the teaching bodies has been carried a little too far. I think there is great danger, on the one hand in letting examinations so completely follow the teaching that the teachers have the means of assessing the value of their own work. And there is an equal danger of having the examining body so completely out of *rapport* that the teaching bodies themselves are able to complain of their being controlled by an external body in which they have no confidence. It seems to me that it is a case for compromise, one wants to bring the teachers into relations with the examiners; and at the same time to secure a certain reasonable amount of independence on the part of the examining body.

3051. There is no doubt that it would be a very great advantage if it could be accomplished, but is that the highest end you think we can place before us in our efforts to improve the teaching?—I think it is the highest object that can be contemplated by a re-organised University in London. The other objects the development of an appetite for higher teaching and the supply of higher teachers, seem to be unattainable by any machinery whatever. One would hope that other influences may tend to improve and elevate the character of teaching generally.

3052. Is it simply because money is not forthcoming that you entertain that opinion?—Not only that, but I am sorry to say I think the demand for higher teaching is less prevalent and less earnest than one could desire, and you cannot create that by machinery.

3053. But you could create it by providing very much better teaching than at present exists?—No doubt.

3054. (*Mr. Rendall.*) One of the general objections you had to the Gresham University scheme was that it failed to give the full authority that you desire to the University?—Yes.

3055. In giving powers to the University you seemed to consider as one of the most essential the appointment of University professors by the University?—Yes.

3056. And I suppose under appointment, you would include tenure and removability?—Power to dismiss, certainly.

3057. And power to regulate work?—Yes.

3058. Do you think of these University professors that you speak of as attached to particular colleges or as

quite dissociated from them?—It is a point of detail that I have not thought of, but I should think they would not be necessarily attached to any particular college. They would either lecture in some central building or might lecture in different colleges by turns so that they might be entrusted by the University with higher work more or less related to the ordinary college work, but not necessarily attached to any particular college.

3059. Not to limit it to particular colleges, but to include the City and Guilds' Institute and other institutions. If colleges were willing to set apart a certain portion of their funds for endowments you would not see any objection to professors being appointed in that way to such institutions?—No, certainly not. Then I understand that in that case the professors would be chosen entirely by the governing body of the several colleges and not by the University.

3060. But would it not be possible to elect professors by the central authority, though they had an attachment in that form to the several colleges?—It would be quite possible, but it would require assent and compromise between the two bodies.

3061. Of course it is a common thing at Cambridge that contributions to the University should take the form of endowing particular professorships, administered by the University. That would seem to you suitable and unobjectionable?—Entirely.

3062. The important thing, I suppose, would be that the professor should have independence?—Yes.

3063. And, I suppose, that independence of collegiate influence, would be a valuable guarantee for impartiality and securing the confidence of the external bodies like the provincial colleges?—Yes, but the independence that I desire is the independence of teaching—independence in regard to methods of instruction, choice of books, the framing of schemes of study during the whole undergraduate period—and it is this that I am anxious to secure for the professors by relieving them of the intermediate and lower examinations. But, it is only, of course, in an indirect way that the professors would influence the final examinations. They would have to share that responsibility with others.

3064. That would be entirely in the hands of the central body?—Yes.

3065. On which teaching in the person of the professors would find a place?—Certainly. It is proposed that they should not only have a direct representation upon the Senate, but that they should have a very substantial influence upon the Board of Studies.

3066. Professor Sidgwick, in asking his question, had some apprehension of there being jealousy on the part of provincial colleges, if the examinations were entrusted wholly or largely to the London colleges; but I imagine any fear of such jealousy would be very largely diminished if it were put in the hands of the University as distinguished from the colleges?—Of course.

3067. In independence you would probably include financial independence of the professors?—Yes.

3068. It was a point that occurred to me when you spoke of this limitation of the province of University professors entirely to the research or the post-graduate work. You would think of them as mainly depending upon some fixed endowment?—Yes, and on the central body, and it is in that connexion that I spoke as welcoming so warmly the proposal of the Gresham Committee. It seems to me that is the beginning of what ought to develop into a fine system for organising and encouraging higher or post-graduate education.

3069. That would be independent of fees from students?—Yes. But in Paris, as we know, one can go into many of the lectures at the College de France or the Sorbonne without paying anything. The lectures are absolutely open, as I have very good reason to know, and even when the subjects are of a most abstruse kind I have often found the lecture room crowded with diligent students with their notebooks—students who had no relation whatever to the University and who were not reading for any examinations.

3070. And even apart from free lectures you would leave the distribution of fees and such questions in the hands of the central authority, and not in the hands of the professor. You would relieve him from that?—Yes.

3071. We had one interesting piece of evidence regarding Professor Michael Foster's work at Cambridge. I suppose no professor has been more successful in founding a high school of research, which probably stands first in Europe in its Faculty. We were, however, told that the only part of the work which he himself systematically undertook was to deliver elementary courses of physiology to first year students. Were you aware of that?—Yes.

3072. Would you wish to exclude that kind of professorial work of the University?—No, I would not exclude it, but I think it would have to be a matter of arrangement with the colleges. I am rather unwilling to see the University step in and take the ordinary work of the undergraduate out of the hands of the colleges. If they themselves said with regard to a particular department of the work, "We shall be glad of the assistance of a University professor," so much the better; but, as a general rule, I think that would have to be done entirely with the consent of all parties and not by prescription in a Charter.

3073. In the main undergraduates go to the teacher from whom they gain most?—Yes.

3074. And you would not surely exclude either professor or undergraduate from coming in contact with one another where he was a gifted teacher in the elementary stages?—No, it is the one thing which we need to encourage most, to bring the student into personal contact with the gifted and accomplished professor.

3075. Your next point was that the University should have control, distribution, and co-ordination of the University work. That would rest wholly with the University and not with the colleges, I presume. You mentioned, for instance, the approval of training college courses?—Yes.

3076. And the approval of particular courses given at other institutions which, perhaps, only take some fragment of a field of science. You would put such approval of courses in the hands of the University entirely?—If they were accepted from constituent colleges.

3077. Supposing they were not?—Then I should leave the thing open. Persons not members of constituent colleges could simply come up at proper intervals to the ordinary open examinations.

3078. The Gresham Charter seems rather to exclude colleges that have not got buildings and appliances. That was commented upon, of course, by the University extension advocates and organisers. Is that a kind of work that you would leave in the hands of the University to accept if they thought proper?—To begin with, I think the case of the University extension student is amply met by a system of open examinations. There is, I know, a demand made upon the part of the friends of that movement that their courses of instruction and such discipline as they are able to enforce should be recognised as part of the qualification for a degree. Until the University extension movement shall have become far better systematised than it has yet been, I do not think that is a reasonable demand. I think the case of all the more ambitious and thoughtful students is thoroughly well met by having a good system of open examinations accessible to them; but that the recognition of their courses of instruction at all sorts of town halls and schoolrooms, with attendance often of a very loose and irregular kind as any part of the qualification for an academical degree could justify the central body in remitting, in their case, the ordinary intermediate examinations, appears extremely undesirable at present. I do not think they have advanced far enough to justify such a recognition.

3079. I will pass from that to the system of examination. Assuming the comprehensive University that you have sketched for us, you would think of the double kind of examination continuing—I mean the open examination for the unattached students, and the separate examination for the collegiate students, or those within the Metropolitan University. I understand that you think that such a double system could be wisely and equitably administered by a single body. There it would be extremely necessary that the central University authority should be strong as opposed to the collegiate authority?—Yes, and such a governing body as I venture to propose would be strong.

J. G. Fitch, Esq.

17 June 1892

3080. Yourself you were inclined to prefer the retention of the Matriculation definitely in the hands of the University, but it is a point you would concede if necessary?—It is a point I would concede if necessary, but not with regard to the outside students, because I hold our Matriculation Examination to be extremely valuable, not merely as a terminus of the ordinary school course, but as the terminus *a quo* relatively to the University course. I think the principle on which the University has gone in regard to its Matriculation is most important in its bearing with regard to the education of the country. But if you have colleges giving you all needful proofs of their own efficiency and the thoroughness of their equipment, and of their course, I should be disposed, if the professors desired it, to leave the Matriculation entirely in their hands.

3081. But the final examination you would retain in the hands of the University?—Yes. The degree should be conferred by the University on all students, collegiate and non-collegiate, on the same examination.

3082. There was one point which did not seem to me clear—that was your objection to the Senate's scheme. That was that it created two different degrees of different value?—Yes.

3083. You then went on to express your approval of the Commissioners' solution which left the final examination in the hands of the University, but handed over the Intermediate to the colleges. Did not that, in a great measure, tend to give degrees of two different values in the Senate's scheme. It was objected to very much on that ground by the provincial colleges, who said that if Matriculation, and if Intermediate Examination were handed over to different provincial colleges about the country, that would result in very various degrees of acquirement?—That objection is partly met by the fact that I should not propose to give this power to colleges scattered all over the country, but only to those institutions in London which fulfil conditions justifying them in being associated with the University, and I hope those conditions will be strict. Then a second answer to that objection is that the final examination which gave the man his degree would be in the hands of the Senate. It is only in regard to the steps that lead up to it that I should like to have this freedom granted to the professors of associated colleges.

3084. Would not outside opinion and Convocation take more exception to a system of Intermediate, and, perhaps, Matriculation Examinations administered by separate and favoured colleges, than to a complete system of examinations administered by the one central University body?—They would take a little exception, but I do not think it would be a serious one under the conditions prescribed.

3085. They might be content with either?—I think they would very much prefer an arrangement which at any rate secured the uniformity of the degree itself—the final examination, I do not think they would think it a grievance if the London colleges under the special eye, as they would be, of the Senate and governing body of the University, and fulfilling all the conditions which, as I have said before, I hope would be stringent, were allowed to substitute their own course of instruction for the scheme of progressive examination prescribed by the University.

3086. But would not the conduct and organisation of examinations of the central University body be the best guarantee for securing parity of standards for degrees throughout?—No doubt it would be so.

3087. But it would not satisfy the London colleges?—It would not satisfy the London colleges, and I should be prepared to satisfy them, and think it might be done without disadvantage. I think their contention is a reasonable one.

3088. There is only one other point, and it is quite a leap to take, that is, as to the position of the Senate in the Gresham University scheme to which you referred. In regard to the Boards of Studies you made a suggestion for adding nominees of the Senate?—Yes.

3089. I do not quite attach all the importance to that that you seem to attach. You named some possible representation of the provincial colleges which I think they would be rather slow to accept?—I think that over and above the teachers who would be nominated by the Faculties and the past or present examiners, there often are persons of eminence who fulfilled neither of those conditions although known to be experts in their separate lines, and whom it would be very valuable to have on the Boards of Studies. I should like to leave a margin to the Senate that within a certain limit they should be able to put a person of eminence in a particular line on to the Board of Studies to co-operate with the representatives of the teachers and examiners. Incidentally, no doubt, that would give the opportunity to the Senate to call up a distinguished provincial professor from time to time.

3090. What struck me on looking at the scheme as a weak point, and I should be glad to have your opinion upon it, was that there was no organ of collective opinion between the Faculties and the final authority of the Council. In most Universities there is some collective organisation of the separate Faculties or Boards of Studies; so that in one form or another the collection of Faculties could bring a medical opinion, a law opinion, and a science opinion, to bear upon arts; similarly the Faculties of arts, science, and law, could bring to bear an opinion upon medicine and the like. Have you given any attention to that?—I think that is most important, but I should provide for that by such an arrangement as was contemplated by the Senate. I should do it not by the Faculties. The Faculties should only meet for electoral purposes. They would be too large bodies to be consultative or legislative in any sense. I think they should elect members to the Senate, and they should elect their share of the Boards of Studies. But some provision for uniting the several Boards of Studies in different Faculties and enabling them to consult together on the whole system and work of the University seems to me most important. I hope that would be provided in any scheme. It is specified that the Boards of Studies shall, and may, if they think fit, meet and act concurrently on particular subjects, if they think desirable. This plan gives the initiative to either body.

3091. And they might act as a representative board?—Yes, I think that would be most important.

3092. (*Mr. Anstie.*) First with regard to the Senate's scheme. Without going through that matter in detail—it is to some extent a matter of ancient history now, I may, perhaps, assume that the scheme in its ultimate form was a scheme arrived at in the way you have described by negotiation, and cannot be considered as embodying the decisive views of the Senate?—Certainly.

3093. It was a scheme, perhaps, I might suggest which was arrived at under certain conditions of pressure of time, and of other circumstances which do not make it a conclusive expression of the deliberate opinion of the Senate?—No, certainly not.

3094. I understand you to say that, speaking for yourself, you do not see any substantial difficulty in a governing body—to use a general phrase—founded upon the principle of a large representation of London teaching continuing the open examination which still exists?—No, I see no difficulty in it.

3095. You are, of course, aware that that is precisely what is actually done now, and has been done for a considerable time, with great success by the Dublin University?—Yes.

3096. To the extent, I believe, of about three-eighths of the whole of the graduates?—Non-resident students?

3097. Those who are described as keeping terms by examination simply?—Yes.

3098. And you, I understand, would be prepared to accept that method of substituting for collegiate attendance and examination a system of continued examination, or, put it whichever way you like, substituting for the open examination at the University collegiate attendance and examination?—I should look upon them as educationally equivalent.

3099. Now with respect to this point of collegiate attendance, you gave evidence, or at least sent a paper, which has been referred to by the Chairman to the former Commission in which, among other things, you give as a reason why the affiliation was discontinued in the University—I refer to page 292 of the Blue Book—that the certificates of attendance from the affiliated institutions were very unsatisfactory?—Very. I have good reason to know it.

3100. Being on the Senate at the time?—No, but being a student at the time. That was still more to the purpose.

3101. At that date nothing was required beyond the certificate of attendance?—No.

3102. Nothing was required in the nature of collegiate examination?—The College made it a condition that at the end of each term, the student should present himself to the professor for examination. That was the rule at University College.

3103. I gather this from your evidence. I see you say: "I knew many men who obtained the necessary "permission to go up to the University for graduation "by merely attending lectures in that college for two "evenings in the week during two sessions. The "lectures were not catechetical. The students came "into no personal contact with the professor and into "very little with each other." That appears to exclude the idea of any collegiate examination as being an essential requisite?—I do not know that it was essential. But I knew a good many of that class of students at that time, and the condition they have required to fulfil was to come up to the examination—not at all to pass.

3104. Which examination?—They had collegiate examinations to which these young men were expected to come up, but I do not believe it was enforced. I never heard of the certificate for the University being refused by the college on the ground that the student had not come up to the examination, or had not reached any standard of proficiency. It was a very nominal thing.

3105. But you conceive that, with proper regulations as to collegiate examination, whether sessional, terminal, or arranged as the governing body might see fit, with class lists which would show the actual position of a man's attainments, and the degree to which he had profited by collegiate instruction, such a scheme as that would be a satisfactory one, and one in which collegiate attendance might be reckoned as equivalent to Intermediate Examiaation?—Certainly, if accompanied as it was intended to be, under the Gresham Charter, and as it would be, I hope, under any scheme, with the right of the Senate to know something about the arrangements which the college made, and to criticise those arrangements. The old London University had no control whatever over the conditions which the colleges chose to lay down for giving their certificates.

3106. Then you would prefer, as a condition for admitting collegiate attendance and examination, some degree of control on the part of the central authority over the college?—Control to the extent that they would know all about the arrangements of the college, and that they should have the power to decline to allow any college to remain on the list which did not fulfil the conditions satisfactorily.

3107. Control for graduation purposes if I may say so?—Yes.

3108. And if control for graduation purposes were maintained, you would see no objection to a very wide freedom being given to the colleges for any purposes they thought it desirable to further?—The larger the freedom you could have consistently with uniformity and with the maintenance of the standard the better.

3109. But what you demand is, that for the purpose of giving the University stamp of graduation to any man, the central body should have the power of making due requirements on the collegiate institution?—Yes, that should be the condition of accepting the collegiate scheme of discipline as a substitute for the Intermediate Examination.

3110. Would it not be, as put to you by Principal Rendall, a great advantage to a scheme of that kind, that the collegiate professors should hold the position of University professors?—Undoubtedly it would, if we should start fair and arrange an ideal system, but I proceeded on the principle that the professors are there, and that there are certain advantages in the maintenance of the right of existing governing bodies to appoint their own teachers.

3111. But would you see any objection in principle to the term being imposed upon the colleges that the occupants of their Chairs should receive the sanction of the University?—Yes, I should, because that would be *pro tanto* a limitation of their freedom. That particular limitation would be inconsistent with what I hold to be the position of the existing governing bodies of two colleges so dissimilar as King's and University Colleges.

3112. Why, if they are to meet on common ground, should not their professors with reference to that common ground receive a common sanction?—I do not understand in what sense that would be meeting on common ground and needing a common sanction.

3113. The common ground is that their teaching and their examination would pass their students through in lieu of a central examination, that is the common ground. Is it not desirable that meeting on that common ground they should have the common sanction, that is, the sanction of the body on whose responsibility the degree is conferred?—Pardon me, but I do not think it would be quite common ground, because, as I understand it, each college would submit to the Senate its own scheme of undergraduate discipline and instruction, and would receive a sanction for it. It does not at all follow that professors of Latin in University College and King's College would both submit the same scheme, therefore I do not see any necessity on that ground, at any rate for calling those professors University professors, or for limiting the choice of the governing body in regard to their own teachers to persons approved by an external body.

3114. Of course all these questions are questions of more and less, but there may be such a thing as a syllabus inadequately taught?—Yes.

3115. If the University is to allow weight to the teaching of a professor and to his view of a student's proficiency, would it not be reasonable that beyond having a syllabus which he professes to teach, there should also be some antecedent guarantee that he is competent to teach it?—I should doubt the necessity of it, considering how public opinion is brought to bear upon these colleges and the sort of appointments the governing bodies of the colleges have been accustomed to make.

3116. What is the public opinion that you say is brought to bear upon the colleges?—Academical opinion with regard to an incompetent professor soon makes itself heard.

3117. But does it displace the professor?—No, not necessarily, but it gives to the governing body a strong motive for displacing him.

3118. Always?—Well, not always.

3119. If he still, however incompetent, passes his students through his own attendance and through his own nominal examinations with equal weight, I do not understand exactly what is the method in which public opinion or academical opinion or any opinion is to be brought to bear upon a man who has that position?—I think the governing body of the University should be acquainted with the details. They would have submitted to them the details of the proposed course and syllabus, and they would know who the professor was. And if they had any reason to believe that the whole scheme was insufficient they would have two means of remedy open to them: first, it would be in their power to represent to the governing body that they were not satisfied with the provision made for the undergraduate instruction, and secondly, it would be in their power, if those representations were not listened to, to say, "In these circumstances we shall take your name off the list of associated colleges."

3120. Then you would wish to introduce in a different way and in a more circuitous way, the degree of control which I am suggesting might be exercised in a more direct way by the central governing body?—Certainly, because I hold that the necessity for that kind of interference would be so exceptional that it would be far better to deal with the exception when it arises than to lay down a definite rule so seriously limiting the choice of the professor by the governing body of his college.

3121. Then what I understood you to say, in substance, is this. You agree to the principle that the central governing body, which has to accept the certificate of attendance and examination as final for certain purposes, should, in one way or another have some control over his tenure of office, but in what particular way they are to exercise that control is a matter which is one of detail?—Yes. I think that is a very accurate statement of my view.

3122. There is one point upon this question of the professoriate which I should like to ask you about. You have referred to the University of Paris. I daresay you have seen a pamphlet issued by Professor William Ramsay containing letters written by him to the "Times" in which the methods of the French University are stated?—No. I have not seen that particular pamphlet.

J. G. Fitch, Esq.

17 June 1892.

3123. It is a reprint of the two articles?—I did not know by whom they were written. I read them with great care, and I know their contents.

3124. You spoke of the University of Paris as being in a high degree centralised, and no doubt it is so in certain directions. Are you aware that, as appears from pamphlet, the appointment of professor is practically entirely in the hands of the professors themselves?—Indirectly.

3125. No, not indirectly. Excuse me. At page 5 of this pamphlet there is this statement:—"If the Chair to "be filled is not a newly created one" (which, of course, is the ordinary case), "the titular professors of the "Faculty—the Council of the Faculty—after adver-"tisement examine the claims of the candidates, and "select from the list two names giving preference to "one. These names are submitted to the General "Council of the Faculties," (which General Council, as appears by the preceding page, consists of all the teachers practically speaking in the local centre:) "which almost invariably," (that is to say, which Council almost invariably,) "ratifies the choice, and are then transmitted "to the minister who consults a permanent committee "sitting in Paris. The Committee consists of eminent "scientific and literary men. They generally confirm "the recommendation of the Faculty." So that not indirectly, but in a most immediate way directly, the new professor is appointed by the choice of those who are already professors in that local centre, and it appears to be only in the power of the minister to disallow a name presented to him?—I am not aware that anything of that sort applies to the appointment of the rectors of the Academy. The rectors of the Academy are absolutely appointed by the minister.

3126. I understand that the Deans of Faculties are also selected out of names submitted. But still as far as regards the appointment to Chairs, the appointment in France is by the professors of the local centres?—No doubt.

3127. So that in a very high sense the University of Paris may be described as being a professorial University, all the Chairs in fact being Chairs which are held by persons nominated by professors?—In that sense, certainly.

3128. There is one question that I should like to ask you upon another subject which you referred to—training colleges. I have heard it stated by Lord Sandford that in Scotland it has been the constant practice for a very large number of the teachers in the parish schools, which answer to our elementary schools, to be graduates of some Scottish University?—Yes, an increasing number of them.

3129. In Scotland that is so?—Yes.

3130. Is it your view that it would be very desirable if that state of things could be in a much larger degree introduced in England?—Yes, and all the efforts that we are making in the Education Department are in that direction.

3131. Would it also conduce to that end if in addition to their taking degrees facilities could be provided by which they could not only prove a certain standard of attainment, but also should be brought into contact with students engaged in other pursuits, and whose life will afterwards be turned in a different direction?—No doubt, and that is the whole object of the arrangements that we have only recently made with all the great provincial University colleges of England for establishing what we call normal departments. These provide specially for the instruction of the student in the art of teaching, but at the same time admit him to all ordinary classes of the college, and teach him such subjects as history, mathematics, and literature in common with other young people who are not going to be teachers. We hold that to be a movement of the greatest importance as tending to broaden and liberalise the training of our elementary teachers, which hitherto, although it has been accurate and conscientious in a certain way has been somewhat limited and narrow.

3132. In fact, to apply it to the matter immediately before us, if in University College and King's College, or in similar institutions those who are intending themselves for schoolmasters in the elementary schools could be brought to sit upon the same bench as those in other pursuits you think it would be of advantage to the general education of the country?—Yes, and that has already been done. King's and University Colleges are co-operating with us at this moment. They have their normal classes and the students also attend the ordinary classes of the professors.

3133. Now, another point. You assigned a reason why the affiliation system in the imperfect manner in which it existed did not answer, and I think you have denied that it did not answer in consequence of any difficulty being found by experience to arise between examinations internal and external students?—No, it did not; it arose from another source.

3134. Was another reason why that system was discontinued the one given in evidence by Dr. Wood, the late Chairman of Convocation, I believe one of the oldest graduates, at page 115 of the Blue Book, where he says that from time to time various institutions were admitted as affiliated institutions as was thought by some with the design of destroying the system of affiliation?—I have never been able to understand on what authority Dr. Wood said that.

3135. He was a man who was perhaps senior to all of us?—He was senior to all of us, but how he could know that I cannot tell. He could not have been on the Senate at the time, because he did not come into it until after these institutions were introduced. How he could know that the Senate deliberately allowed inferior institutions to be introduced into the list of affiliated colleges in order to make their case good for getting rid of the affiliated colleges altogether, I never could understand, and I do not think there is any extant evidence of it. I once asked him where I could find any corroboration of the statement, and he was unable to give it to me.

3136. Is any support given to that view, do you think, from examining the list of so-called affiliated institutions to be found in the Charter?—No doubt some of them were very inferior institutions.

3137. Is it not the case, whether Dr. Wood was right or wrong, that a good many institutions were admitted which were nothing more nor less than boys' schools?—Undoubtedly it is true, but I do not accept Dr. Wood's explanation of the reason for it.

3138. Whether that was the reason or not, is not the fact that institutions had been admitted of the character I have described one of the important reasons why the graduates were willing to accept the exclusion of affiliation—the opening of the degrees?—If you will allow me to say so, there was another reason much stronger, and that was that the lowering of the qualification for graduating was not so much the work of these inferior colleges as of University College itself. They began the system of giving the certificate on easy conditions, and it was because the certificates of the great colleges were found to attest so little in the way of general academic discipline that the authorities of the University felt, on the whole, that it was much better to throw up the collegiate system altogether, because it was worthless.

3139. To carry your last answer a little further, does that point to the necessity of some regulations or some conditions being made by the governing body of the University of a somewhat stringent kind, for securing the value of the collegiate certificates in respect of the intermediate course?—Certainly. Without it I think any recognition of the collegiate system would be worthless, and might be very mischievous.

3140. When you say it might be mischievous, I do not know whether you proceed upon the assumption that human nature from age to age remains very much the same?—Yes.

3141. You think that may be truly stated?—Yes. Forgive me for adding to that, that I think it an indispensable condition of any such system as this that the list of colleges recognised for this purpose should be periodically revised, and that at intervals, say of five or six years, new colleges might be admitted, and others that had failed to fulfil all the necessary conditions should be excluded.

3142. (*Sir William Savory.*) I will only trouble you with one question with reference to an answer which you gave to Mr. Anstie just now. That scheme which the Senate submitted to Convocation was approved by the Senate, was it not?—Yes.

3143. You spoke of it as being under the pressure of time?—That remark was Mr. Anstie's.

3144. But you assented to that, did you not? Have you any reason to believe that the opinion of the Senate as a Senate has altered on the matter?—We were a good deal divided; and no doubt it was not only under the pressure of time, but with the extreme desire to make concessions to the colleges. Many of the members of the Senate regretted the need for those concessions. On the whole the scheme was resolved upon as the best working compromise which they were in a position to adopt.

(*Mr. Anstie.*) "Time and circumstances," I think, was the phrase I used.

3145. (*Sir William Savory.*) But you have no reason to believe that the attitude of the Senate towards that scheme is different now to what it was then?—No; I think they would be very glad to accept modifications which would remove the very numerous objections urged by Convocation and others against it. But I have not the least right to speak for the Senate.

3146. (*Sir George Humphry.*) There is one point of some importance, and also of some difficulty, which has been scarcely alluded to in your evidence, or in the examination of you by the different members of the Commission, that is, the relation of medicine to the proposed University. Do you propose that the several schools of London should be constituent colleges in this new University?—Yes, after giving the necessary evidence of their being properly equipped both with appliances for teaching and with professors.

3147. You perhaps have no knowledge of whether they are at present sufficiently equipped?—No, I have no such knowledge.

3148. You are, no doubt, aware that there is a feeling in the medical profession that although London is so large a place, has so many and such great medical schools, and such a large number of medical students, more perhaps than there are in any place in the world, yet, nevertheless, the opportunities for obtaining a degree in medicine are not afforded in a corresponding degree?—Yes, I am quite aware of the feeling of the rank and file of the profession, that the London degree is practically unattainable by them, because it is in effect an honour's degree.

3149. And that is, perhaps, a just ground of complaint?—Possibly. For my part I think it is most important that the degree of M.D. should connote something more than a mere professional diploma, and that if a University gives a degree in medicine at all, it should only be given to a man who has had a liberal education as well as a professional education.

3150. And you are also, probably, aware that there is complaint from another quarter that owing to this difficulty of obtaining a degree in London, a very considerable body (I do not know what proportion) of their students pass to other places, such as Scotland, we will say?—No doubt.

3151. They feel that to be a considerable grievance, so that there is a grievance, stated both by the profession in England at large, and by the schools in London?—Yes.

3152. Have you any suggestion to make with regard to removing those grievances?—I think it is quite possible that our degree has been fixed at rather too high a standard, and that it is too much of an "honour" distinction, and not, therefore, available for an ordinary well-qualified medical man, and it is very probable that when we get a good medical Board of Studies, and are brought into proper relations with the great Medical Corporations, means may be devised for meeting the views of the best of the members of the profession and for making the standard of medical degrees not quite so high and unattainable as it is now. But I hope it will always be high, and people who are not able to come up to such a standard as I have described—I mean one which includes a liberal as well as a professional education—ought not to want a doctor's degree. A professional diploma, or a mere licence to practice, is enough for them.

3153. There have been three methods proposed here already. It is said that the University of London, even Convocation would be willing to promote facilities for passing through the examinations—facilities in the way of arrangement of time, and so on, for passing through the examinations. Your own feeling now mentioned is that possibly some arrangements might be made by which the examination might be rendered a little less rigid, a little more available to a larger number of the medical profession, at the same time maintaining a high standard?—Yes.

3154. And especially a very good standard of general education?—Yes.

3155. It is especially important that that should not be lowered?—Yes.

3156. That means that the practical examination at any rate should be maintained for them all?—Yes, but I think that the general principle I ventured to lay down as before as to the possible action of the associated colleges in controlling the intermediate and the lower step before the M.D. degree was reached might be made after due deliberation to apply to the medical side as well as to the arts side. I had, of course, the arts side of the University in my mind in making the various proposals I submitted before.

3157. By that you mean the Preliminary Scientific Examinations?—Yes.

3158. And possibly the certificate of the recognised schools as to the subject of the Preliminary Examination might be recognised as satisfactory?—I think that is quite possible, but I ought to add that my opinion upon that point is hardly worth the attention of the Commissioners, because I am not well acquainted with the needs of the medical profession.

3159. One can see objections to it clearly?—There are objections, but on the other hand, I think the existence of such an arrangement as you refer to would remove a good many of the objections to the existing system.

3160. Then there has been a third proposal, viz., that the examinations of a conjoint board, and possibly other licensing bodies, might be accepted in part lieu of the medical examination of the University?—Of some of them—not the degree conferring examinations, but the lower examinations. I understand that to have been the intention of the Senate in their proposal. I daresay you know what that proposal was. It was that arrangements might be made with the medical institutions:—"The Senate shall have power to enter "into arrangements," clause 47. It appears to me that that is a direction in which a useful modification might be made on the existing system.

3161. Those are degree giving examinations. Those would be examinations in anatomy, physiology, medicine, and surgery?—Yes.

3162. Those would be degree giving examinations?—Not the degree of Doctor of Medicine, I think.

3163. But the degree of Bachelor of Medicine?—Yes. For the reason I gave with regard to Bachelor of Arts that seems to me to be going a little too far. I had rather the University gave the degree, though I should like to leave great liberty as to the steps leading up to the degree.

3164. You feel that it is possible for some kind of arrangement to be made in one or other of these ways which to some extent might satisfy the medical profession, and also the Medical School of London?—Yes, I think so.

3165. To some extent?—Yes.

3166. You have mentioned the very important point of the University undertaking what may be called post-graduate instruction. That means instruction of a higher character than that usually required for degrees?—Yes.

3167. Instruction in the various subjects to the very highest degree to which they can be carried?—Yes.

3168. That would necessitate, of course, an entirely new professoriate, and new laboratories, and would involve, in order that it may be placed upon a high standard, such a standard as is worthy of the English nation, and which is worthy to promote the scientific knowledge of the English nation, very considerable expense?—Yes, new resources. But may I say that there is one very modest precedent established in that direction already. The University of London, as you are aware, has been made the trustee and governing body of what is called the Brown Sanatory Institute, and in connexion with it lectures are given at the University of London itself, a course every year, I think, by some distinguished professor on some special department of medical science having no relations to examinations. I think there is a precedent which, if resources were found, might be followed to very great public advantage.

J. G. Fitch, Esq.

17 June 1892.

3169. But it would require a very large extension of that to promote research and high teaching in the various branches of science, as well as literature, art, and so on?—Yes, eventually; but there is no reason why the thing should be done gradually.

3170. And gradually develop?—Yes.

3171. I think you mentioned a Government grant with reference to a point of that sort?—Yes.

3172. That would have a fair claim on the Government of the country to give a subsidy to an institution of that kind which would be really to promote the welfare of the nations?—Yes; and I also mentioned that if if the Gresham professorships, for instance, could be utilised that would be just the sort of purpose which they might admirably fulfil.

3173. But it might possibly be that the Gresham trustees might feel that they had another vocation?—Yes, certainly.

3174. They might feel that their vocation might be to open upen up in the City of London some college perhaps corresponding to University College and King's College, because the City of London is without anything of that sort?—Exactly.

3175. They might feel that there should be one such college where University College is situated, and one where King's College is situated, and a third more central in the city. They might feel that there would be quite room for something of that kind, and that might possibly be as advantageous an application of their funds as their subsidising a University in a matter which really concerned the country at large?—Yes.

3176. It is really a great national point that there should be such national research and such scientific teaching, and for that purpose a claim might fairly be made upon the Government of the nation?—Yes.

3177. You have that feeling?—Yes. Of course it is a matter of detail as to what particular application might be found. No doubt it would be an extremely valuable application of any Gresham fund or influence if it was applied to the establishment of a third associated college in the heart of the City. The other course seemed to me a little simpler, and having regard to the resources of the Gresham trust, which, I believe, are not very large, would be quite as appropriate. It would certainly be very much more nearly akin to the original foundation of Sir Thomas Gresham which I once had the opportunity of investigating rather carefully.

3178. Would the Science Department of South Kensington at all come into that sort of work?—I think it is quite possible that if the governing body of the University were satisfied of the thoroughness of the system of the Science Department at South Kensington that institution might be recognised as one of the associated colleges *quâ* science alone.

3179. I did not mean as one of the associated colleges, but that it might be the basis of this larger post-graduate institution for higher science and higher research work?—That is a large question that I have not thought of.

3180. (*Bishop Barry.*) Before proceeding to your evidence may I ask for some information upon a point on which, I think, you would be exceptionally qualified to speak—that is whether, in your view, the great training colleges could in any way be associated with this comprehensive University of London?—I think the best of them might, so far as the Faculty of Arts is concerned, probably give very satisfactory evidence to a governing body of their fitness to be so recognised. I will take, probably the only three that would seek such affiliation, that at Battersea, that at Chelsea, and that at Isleworth, and possibly the Methodist Training College at Westminster.

3181. Dr. Rigg's?—Yes. They have all a good body of graduate lecturers and professors, and they send up a large number of students to graduate at the University of London.

3182. You are, therefore, of opinion that in some form they might be drawn within the influence of this University?—Yes, I think so.

3183. Do you know at all whether that view is likely to be put before the Commission by the colleges in any way?—I do not know. If it were in the least degree desirable one could easily formulate a scheme, and to assure the Commission that it had received the assent of the bodies chiefly concerned.

3184. I only speak personally but I think we should feel very much interested to know whether any such scheme could be framed. Then, coming to your evidence—as far as I understand, your plan is the co-ordination of all existing institutions, and not what has been euphemistically called their absorption?—Yes.

3185. I think you contemplated absorption as ideally desirable but practically impossible?—Yes. If we could make a clear sweep of everything and start fair I should prefer absorption.

3186. In the existing institutions it is important in your view to include the present University of London as a principal factor?—Yes.

3187. One objection that you have to the Gresham Charter is that there is no such inclusion there?—No.

3188. You are, of course, aware of the circumstances under which that Charter was framed?—Yes.

3189. You know that the promoters of that Charter had communications with the University?—Yes.

3190. And agreed upon a scheme of a simpler character and were willing to abide by that?—Well the evidence of their absolute willingness to accept that scheme may be on record, but I have not seen it.

3191. I did not mean what is called the revised "scheme" because that is a larger scheme. It was a narrower scheme, somewhat of the same type, so that the exclusion of the University of London from the Gresham Charter was in some sense due to the action of Convocation?—No doubt, but the Gresham Charter is very little more than a reproduction of Albert Charter which was put forth long before Convocation expressed any opinion at all.

3192. Is that so?—Yes.

3193. Are you sure?—Yes.

3194. I do not think it was ever put forward seriously until after the negotiations with the Senate of the University of London failed?—I cannot commit myself exactly to details, but here is the simple fact. The whole draft scheme of the Albert Charter is in the Appendix to the Commissioners' Report of 1889, and the action of Convocation was later.

3195. I think I am referring to a later Charter altogether. You are referring to an earlier one. The later Albert or Gresham Charter (because they merely changed the name) was posterior to those communications, was it not?—Well I am afraid I am not quite clear as to the chronology, but the earlier and the later schemes are substantially the same.

3196. Then the chief objections to the Gresham Charter, which you were good enought to give us, stand thus. The first was that it left out institutions which ought to have been included. May I ask if your attention was called to the provision in that Charter for admitting all colleges that proved themselves worthy?—Yes.

3197. And you are aware that, if a College applied and was refused by the governing body of the proposed Gresham University, it had an appeal to the Privy Council?—Yes.

3198. Is there then any want of elasticity with regard to the admission of Institutions? If so, where does it lie?—Perhaps you will just refresh your memory by looking at the provision made for inclusion. You will find it in Section 24?—This limited the operation of the proposed University to those colleges which could be admitted in a Faculty, and possessed a sufficient staff, buildings, and appliances with adequate arrangements for teaching and study in that Faculty.

3199. And that is the limitation to which you object?—Yes, I think it was too narrow.

3200. Then, may I ask, what kind of Institution you would contemplate? You would not have admitted those that had no adequate arrangements for teaching and study?—No.

3201. Would you have admitted those that had no buildings and appliances?—No, certainly not.

3202. Then I fail to see what want of elasticity there is here, especially with the provision of appeal?—The very fact that the list of colleges named at the outset did not include more than two or three seemed to me to indicate that institutions, for instance, like the

Technical Institute at South Kensington and others would be excluded,

3203. Do you mean the Royal College of Science?—The City and Guilds' Institute. The fact of the omission of those in the college scheme seemed to indicate that this was intended to be so interpreted as to include only colleges of the same rank as University College and King's College. Had there been a serious intention to include others, some of them would have been named.

3204. But you will observe there was an appeal to Her Majesty in Council, if any injustice was done?—I was not afraid of injustice.

3205. Whether the colleges originally named should have been more or fewer is another question, but the provision for the admission of colleges seems to me very elastic, and I fail to see in what respect this elasticeity is defective?—It would have been a matter of practice rather than a matter of legal interpretation, but I should certainly judge from the manner in which the whole Scheme was drawn that it was on a very narrow basis.

3206. Then you judge from something rather outside the Charter than in it?—No, I judged from the fact that these were the only colleges mentioned in Section II. of the draft.

3207. Was that sufficient to interfere with the provision made here for admitting any number of colleges hereafter?—It was a matter rather of inference.

3208. Let us pass to another matter. The University of London gave up its collegiate system in former days on the ground, as I understood from you, that many unworthy institutions, if I may use the phrase, were admitted?—That was probably one reason.

3209. And one important reason, was it not?—Yes.

3210. That objection would not apply to such a provision as we have in this Charter, which is rather carefully guarded?—Yes, very carefully guarded.

3211. But at the same time with this provision of appeal if injustice was done?—Yes.

3212. Therefore the giving up of the collegiate system by the University of London in days gone by would be no argument against such provision as is contained in this clause?—No.

3213. I notice next your objection that there was no provision for a high standard of degrees. I have looked at the Charter, and I am at a loss to understand how there could be a provision for a high standard of degrees inserted in a Charter. How would you have put that provision in? Is there anything for instance in the Charter of the University of London to insist upon a high standard for its degrees?—No.

3214. Then I am at a loss to understand how this Charter is more defective in that respect than the Charter of the University of London?—The reasons which led me to that conclusion were these. In the first instance, the regulations with regard to a degree were made to be mainly dependent upon the attendances of the students at the colleges.

3215. May I ask where this appears?—In Section III. of the Draft Charter the only persons admissible to examinations are those who have attended. That implies that the attendances at lectures should become an important factor in the award of the degree, and that in that proportion the mere examination test might be lowered.

3216. I am at a loss to understand this. I should have thought attendance on a well-arranged course of lectures would have had rather a tendency to increase the power of good performance in examination than diminish it?—But it does not necessarily tend to increase the severity of the examination.

3217. Does it tend to diminish it? Why should it?—It was intended evidently to make the "regular course of study in a college" as part of the qualification.

3218. There, again, I fail to see that in the Charter?—I forgot the language of the Charter, but it is set forth in Section III.

3219. It excludes the private student, but how it can possibly interfere with the high standard of the degree, I am at a loss to understand?—That, again, is a matter of inference, and the inference was partly from the fact that the proposed University would be a second examining body competing for students, and in a condition to establish its own standard of degrees, founded upon its own methods of teaching and would not be subject to such external influence as was necessary to keep that standard high; and partly from the public utterances of persons who had had a large share in the framing of the scheme and in promoting it.

3220. With regard to the first point it would merely be in the same position as the Universities of Oxford and Cambridge?—No doubt to some extent.

3221. With regard to the second I think you are once more importing into the Charter an impression which you derive from outside the Charter?—No doubt.

3222. I think I have observed this in several points of your evidence to-day. Then, again, I think you are dissatisfied with the amount of federation of colleges which was provided for, and you seemed to think that it would be more satisfactory if there were provision for what might be called inter-collegiate lectures?—Yes.

3223. Is there anything in the Charter which is inconsistent with that?—No, except the fact that the existing governing bodies continue to appoint all their own professors.

3224. Certainly; but would inter-collegiate lectures be impossible under those circumstances? It is not so at Oxford and Cambridge?—As Oxford and Cambridge are not professorial Universities of the kind contemplated here, the analogy is not very close.

3225. I am afraid I do not see the defect in the analogy?—If, for economy of teaching power inter-collegiate lectures were of any value, there is no reason to prevent King's College and University College from doing it for years past. They have never done it.

3226. I rather draw the conclusion that many of your objections to the Gresham Charter are objections not to the Charter itself, but to what you suppose to have been the intention of bringing it in?—No, that is hardly an accurate description of it.

3227. I beg your pardon if I am wrong. That is ow it seems to me?—The chief objection it seems to me is its absolute limitation to the very few colleges which might be incorporated.

3228. But why very few? I quite understand an objection to the collegiate system altogether, but I cannot see that there is the smallest difficulty in bringing in any institution in London which is worthy of introduction. However, that, of course, is a matter of opinion. I will not press it any further. I pass to another point. You gave us a very interesting suggestion as to post-graduate courses and the appointment of University professors, who might make themselves not an opportunity of preparing for a degree but an advancement of science. But I rather thought that in answer to Mr. Rendall you were rather inclined to extend the offices of those professors even to elementary teaching?—Not without the full consent of the governing bodies of the colleges. I think anything like the imposition of the University professor on the ordinary undergraduate work of the colleges would be wrong. But Mr. Rendall, as I understood him, asked whether there would be any objection to the college seeking special aid from the University professor, even with regard to the lower stages of academic work.

3229. I do not think that was precisely the question, but think this as the sense of your answer. Then, with regard to those who are nominated for these post-graduates, might they be professors at any of the institutions in London, or would the positions be incompatible?—Not necessarily incompatible. I think the only qualification for such a professorship would be distinguished eminence in a particular line of research or learning.

3230. And I suppose with regard to these lectures you would do what, for instance, is done at King's College, making a distinction between what we there call Matriculated and Occasional students; in other words, you would open these lectures to anybody under such conditions as might be laid down, whether they were Matriculation members of the University or not?—Yes.

3231. In other words, you think the University would exercise an important office of direction to the youth in London in secondary education?—It would exercise direct influence in so far as the post-graduate and Regius Professorships extended, but it would exercise indirect influence by its examinations over the general education—the education of the undergraduate.

3232. Take such a case as this. A young man is engaged in business; he has a particular taste for one branch of science; he wishes to cultivate that; he is not inclined to matriculate at the University or to follow its course, to become, what we call at King's College, an occasional

J. G. Fitch, Esq.

17 June 1892.

student. Would you exclude him?—I would not exclude anybody from the professorial University.

3233. In that way it might be very valuable to the young men of London?—Yes.

3234. Supposing the inclusion of the University of London—which is, of course, your main point—you wish it to be included with certain modifications?—Yes.

3235. But substantially to retain what would then be its twofold character, as the University of London properly so called, and what is called the Imperial University?—Yes.

3236. To affiliate colleges both in London and elsewhere, and perhaps also to examine private students?—Yes.

3237. One fault you found with the Senate's scheme was that it was too complicated?—Yes, the scheme sanctioned by the Senate.

3238. Was not the complication a consequence of that comprehensiveness of idea. It was to be a threefold University providing for London colleges, provincial colleges, and private students?—Does not that involve a large amount of complication?—I do not think it need do so under the conditions which I have ventured to submit to the Commissioners.

3239. It appears to me impossible that it should not be so, having to discharge these three functions. The other objections appear to me to be very much objections of detail. The size of the Senate—of course that is a matter of arrangement. The constitution of the Boards of Studies, on which you gave us what I think was a most valuable suggestion—that, again, is a point of detail. But, speaking broadly, would you be prepared to support the scheme of the Senate of the University of London if it were revived?—Revived and modified in those particulars.

3240. Which are not, I think, essential, but points of important detail?—Yes.

3241. And you think, therefore, that some form of that scheme is the solution of our question?—I believe so.

3242. I suppose the defects of Convocation, which have been pointed out by several witnesses depend upon what I may call the Imperial character of the University having its graduates all over England?—Yes.

3243. And it would be very difficult to remedy those?—Very difficult so to localise the University as to exclude persons from Convocation who had been educated out of London.

3244. In fact impossible without a thorough reconstitution of the whole?—Yes.

3245. The result, therefore, is that, unless we alter it in the way you propose, Convocation will still be liable to be under the difficulties under which it now labours?—Yes.

3246. It will not be helped by the new scheme?—No; I think Convocation a very important means of keeping up the loyalty of students, maintaining the corporate spirit, and also interesting them in the work of the University. Occasionally some very valuable suggestions come from Convocation. But Convocation as a legislative body I think is a very unsatisfactory one. I do not want to increase its powers.

3247. The great objection you have to the Gresham Charter is the institution of two Universities in the metropolis?—Yes.

3248. Although one would be a London University and the other would be an Imperial University?—That is a question of name. One would be a University limiting its action entirely to members of particular colleges, and the other is one which includes and recognises the value of collegiate instruction, and yet at the same time encourages and rewards attainments that have been secured in other ways.

3249. You think that without undue complication or cumbrousness, one single body might be wise enough and strong enough to do the whole work?—Yes.

3250. (*Professor Ramsay.*) You have given a very strong condemnation of the Gresham Charter as a whole. May I ask whether you have issued any paper or put your name to any document upon the subject of the Gresham Charter either in the newspapers or elsewhere since it came out?—I have not put my name to anything of the kind.

3251. You have not made part of any committee which has made a manifesto on the subject?—No.

3252. The most important of your objections seems to be as to the maintenance of a high standard. You are afraid that the standard of the degrees would not be maintained. Was one of your grounds for thinking that the fact that the mere existence of two Universities side by side giving similar degrees would tend to a competition downwards between them?—Yes, no doubt that is one strong reason.

3253. Lord Reay asked you the question whether you did not think it was probable or possible that in the case of two Universities side by side, there might be a competition upwards. Do you think that is at all likely, looking at past experience?—It is possible because the conditions are altering every day, and the appreciation of higher knowledge is increasing among the people, and probably future conditions would be more favourable.

3254. What I understood you to mean was, that the Charter as a whole suggested to you the probability that in the particular case of this Charter, the competition would be a competition downwards, and not a competition upwards?—No doubt that was my inference, and it is confirmed by my experience in the United States, in which there are upwards of 500 institutions empowered by Charter to confer degrees, and in which degrees, as such, are of little or no value.

3255. Now you referred to certain extra-mural utterances by influential persons, by Sir George Young among others. May I ask were those utterances in your mind supported by the provision in the Charter which required candidates for the degree of medicine to have previously obtained elsewhere a qualifying license?—No, I was not aware that that was an essential condition taken for granted in his remarks.

3256. And that led to confirm the suspicion that the whole arrangement was based on the probability of the examination of the Colleges of Physicians and Surgeons as it now is, being taken as the type of the medical examinations for the degrees in the new University?—Yes.

3257. Did you also base what you said at all upon Clause No. 3 in the Charter, which gives an almost unlimited power to admit to honorary degrees in all the Faculties, except in medicine, and power to admit graduates of other Universities to similar and equal degrees?—Yes, but I do not see any great objection to that. If the body is worthy to have such important duties confided to them, they are worthy to exercise that discretion.

3258. Would you have any objection to what Sir William Hamilton and Sir George Young suggested in their speeches; an arrangement by which licenses of the Colleges of Physicians and Surgeons, granted on the basis of examinations held in past time, *ex-post facto* entitle the holders to degrees of the new University?—I should think that most objectionable in every way, because it would be accepting as a qualification for degrees, certain acts of the student done at a time when the University had no control over it and had no knowledge of it.

3259. And the mere fact of accepting that qualification would, as it were, be settling the standard on which the new University should work?—Yes, a low standard.

3260. And that was one of the elements that led you to think that this Charter as a whole would rather tend towards lowering the standard of the degrees?—Yes; because I inferred that what was promised in regard to medicine would probably be offered in regard to arts also. The promises held out were, that on the faith of a previous course of instruction, perhaps years ago, the student might be accepted as having shown the necessary preliminary qualification for a degree in medicine. Then I asked myself why not apply the same to arts, why not take former students of King's and University Colleges who have not taken a degree at all, and accept their previous attendance in two years as equivalent to the necessary conditions of graduation, and then give them the degree of Master of Arts by a single step? There is no reason in the world why the same thing should not have been done in arts as in medicine.

3261. Do you conceive that that possibility was not excluded by the terms of the Charter?—No.

3262. Passing by that, do you approve of the principle of one University accepting the course and examinations of another University, of which it can know nothing except by hearsay, as constituting a part of the course and examinations, for its own degrees?—It all depends on

the nature and character of the examinations and degrees supposed to be accepted as equivalents, but I think the University ought to have the power to exercise discretion on that matter; I do not see any great harm in it.

3263. Passing from those points, I apprehend that the only other way in which you could show that the Charter would tend to lower degrees would be by a criticism of the way in which the governing body of the University is constituted in Clause 9?—Yes.

3263*a*. One of the objections raised in the provinces is that this Charter gives almost unlimited powers of fixing the standards, degrees, and courses to one single body whose opinion was not subject to review?—Yes.

3264. Are there any special objections in that view in the composition of the Council as laid down in the Charter. There were to be three members nominated by University College and three by King's College. Do you apprehend that they were intended to be teachers or professors?—There is nothing on the face of it which requires either.

3265. Professors would not be excluded?—No.

3266. Supposing the whole of the six members were non-teaching members; or supposing, again, that the whole of the six members belonged to the teaching staff: would not that make a vital and important difference in the constitution of the Council?—Yes.

3267. Would not that possibility of difference add an element of uncertainty as to the sort of view which a Council constituted in that way would be likely to take upon University questions?—Certainly; but I assume that there might be six professors from the colleges besides the four members appointed by each of the Faculties, and that would give a predominant influence to the professorial class.

3268. So with the members nominated by the above-named colleges of medicine. I suppose they were intended to be teachers?—Probably.

3269. But I presume they might also be not teachers?—They might not be teachers.

3270. So that it is impossible to say what proportion of the Council was to be a teaching element, and what proportion non-teaching element?—Yes.

3271. And that uncertainty you would regard as a reason of objection?—A ground of distrust.

3272. In the next place, does it occur to you also as a ground of distrust that the medical element is over largely represented on the Council?—Certainly; but that, of course, would be easily got over by grouping the medical colleges instead of letting each medical college send its representative.

3273. That would not affect the question of the proportion of medical representatives that there might be on the Council as a whole?—It would, if, instead of each sending one, they were grouped and three sent one.

3274. Quite so. That is by altering the composition?—Yes.

3275. On page 6 it is provided that in no case shall the number of members representing the Royal Colleges and the Colleges of Medicine together exceed 11. But taking 11 as the number, and looking at the chances that even some of the other places might be filled by medical men, would you consider there was an objectionable preponderance given to medicine in the composition of the Council?—Yes.

3276. Then coming to your own objections of a more general character; you have said that the first great object should be to co-ordinate existing institutions with as little dislocation of the machinery as possible?—Yes.

3277. Does that co-ordination mean enabling one college not to overlap in its work the work of another college?—It does not imply that any authority should distinctly restrict the area of usefulness of any particular college. It only implies that the colleges should be brought by common relation to a central institution into harmony with one another.

3278. You also used the words "organisation," and "co-ordination," and I understood you to mean that the great object would be to economise the teaching resources of London so as to make them go as far as possible, and that that would be promoted by cutting off redundant courses, by concentrating certain teaching in certain places, so as to make the whole teaching arrangements dovetail into one another, as far as possible?—Yes.

3279. And with regard to your proposal as to the relations of the colleges to each other, it turns out that this is to be a matter of voluntary arrangement?—Yes.

3280. You require no kind of compulsion to be exercised upon the colleges by the University?—No.

3281. You think, therefore, that what you mean by co-ordination and organisation could be obtained by leaving the colleges as autonomous as they are now, and without giving the University any powers of control over them?—Yes, except the kind of indirect control I have described.

3282. Now I should like to ask you about two subordinate points. First, as to post-graduate courses. I understand that post-graduate courses are only to be conducted by professors of the University?—By professors nominated by the University, who would be essentially University professors.

3283. Therefore the professors of the colleges are to be prohibited from giving post-graduate courses of a high scientific character?—No, I would not prohibit them, their work should be supplementary, but there should be nothing to prevent an ambitious professor in a college from giving advanced courses in his own college.

3284. But as your scheme was one of co-ordination and organisation, was not your main idea that the colleges should do the ordinary work of preparing graduates for the degree, and that the University was to do the higher work?—Certainly; but I would not lay down any rule so rigid as to exclude the professors of any given college from giving advanced courses.

3285. Supposing it were to occur that the professors in the colleges were anxious to have high-class teaching, and were to set up competitive teaching of a similar kind to that of the University professors: you would regard that as being contrary to your principles of co-ordination and organisation?—Yes, but I think it very unlikely to arise. I think it much more likely that if a professor were to possess the necessary qualification and ambition to do work of this higher kind, the University would itself, notwithstanding that he was a college professor, invite him to fill the University Chair also. I do not see any strong reason why that should not be done.

3286. The only influence which the University could exercise upon the college if its teaching came short of the proper mark would be to exclude it altogether from the list of constituent colleges?—Eventually.

3287. Next, as to the training of teachers, in which I take a great interest in Scotland, I understood you to say that it is of great advantage that the teachers in elementary schools should be induced to obtain teaching in arts, in collegiate and University institutions, side by side with other students who are going into other professions, and that it is a good thing to make their surrounding as liberal as possible?—That is not possible in our residential colleges, because they exist for the training of students and for nothing else. I do not want to say a word against them. Nobody knows better than an Inspector of Training Colleges how good they are. But at the same time I wish to say that other facilities for training should be provided in connexion with the provincial and other colleges which give a liberal education to pupils who are not going to become schoolmasters.

3288. That King's College and University College should be open to normal students?—Yes, as they are now to the normal students who happen to belong to those colleges.

3289. I understood you to propose to include the training colleges amongst the colleges which might form parts of the University?—Yes.

3290. Would not that imply that the students trained in them would receive their general education as well as their technical professional education in those training colleges?—Yes.

3291. But would you not consider it a very much better arrangement that instead of requiring the training colleges to undertake the whole education of the schoolmaster—both his professional and his general education—they should confine themselves to that special technical work which a schoolmaster requires to know as a schoolmaster, and that the rest of his education, his literature, mathematics, science, languages, and so on, should be obtained in an institution like University College or King's College, where he would be subjected to the larger and wider influence, of a University?—That may be ideally desirable, but in England it is impracticable.

J. G. Fitch, Esq.

17 June 1892.

3292. Are you aware that it is carried out in Scotland?—Yes. There you have a narrower area. You have there University education, and you have traditions established connecting the elementary education with the Universities. Here we have an immense number of students who go through our training colleges and who receive the whole of their instruction in them and who could not, owing to the circumstances of their lives and their previous training avail themselves of the University colleges. Moreover, there are not enough of such institutions.

3293. Why not?—There are not enough of such colleges. We give certificates to 3,000 people a year.

3294. I am only taking now the London colleges, of which you have mentioned three or four. If you maintain that those training colleges are so completely equipped educationally that they are fit to be introduced into the University of London as constituent colleges, how can you assert that their students are not fitted to receive the higher education of a University?—No, because they are the picked students. These are three of the best colleges in England.

3295. What is to prevent the picked students who go to those three or four colleges receiving their special scholastic training in these institutions, and receiving the more general and liberal part of their education in the University?—There would be a good deal of difficulty in the way in connexion with the regulations which the Department lays down for residence.

3296. I suppose those regulations are all capable of modification?—They are. You must forgive me for saying that I do not like to represent the Department or to anticipate its probable policy. I feel a little misgiving as to the propriety of my answering a question as to how the training colleges might be reformed or revolutionised.

3297. You would have no objection to giving you own individual opinion of what might be desirable? I am interested in this question, because we have adopted this system in Scotland. We consider that the University cannot give the schoolmasters their technical education and ought not to undertake it; but that it is much better for such students in those colleges as are fit for higher education to receive it in the classes of the University, rather than to receive it from the several lecturers and teachers in the training colleges, where they associate only with those who are schoolmasters like themselves?—I am entirely in sympathy with that view, but I feel the utter impossibility of its application in England.

3298. What difference is there in this respect between London and Glasgow, where there are two training colleges. The students of these colleges take there their professional training, but if they show themselves fit for University they are allowed to attend University classes in literature and other subjects?—I am thinking of training colleges all over England, and you could not apply the principle you have laid down to all of them.

3299. We are only speaking now of the training colleges in London. Do I not understand you to say that you would wish those training colleges to be admitted as colleges of the University?—Yes, for the purposes described.

3300. Then there would be no difficulty in treating the London training colleges differently from those in the provinces?—No; the thing has been done in Manchester. We have normal departments there attached to the three colleges which constitute the Victoria University.

3301. At Aberdeen they have established a training college for the express purpose of getting University advantages?—I do not suppose Battersea would be prepared to use University College or King's College for its general education, and to limit itself to the purely technical part. But I see no objection in principle, although I fancy that great difficulty would be found in framing the regulations in such a way as would satisfy the Education Department.

3302. But apart from administrative difficultics you would consider it in itself desirable that the training colleges should be confined to professional purposes, and that the general culture of the students should be, so far as practicable, obtained in the University?—I think that is very desirable.

3303. (*Professor Sanderson.*) We have had an expression of opinion of yours that in the system of examinations for the degree of doctor of medicine, the scientific part of the examination might be held by the schools and colleges but that the technical part should be held by the University?—I think that is hardly the distinction I made.

3304. I wanted to clear that up?—What I meant was that the earlier stages of the professional education might be with propriety confided to the colleges, but that the final degree, which of course is partly professional and partly general, should be the work of the University.

3305. Inasmuch as the examination for medicine—the final examination—is technical, and the previous stages are scientific, does not such a system of examination constitute an exception?—The whole of the previous examinations are not scientific; they are partly technical from the first—except Matriculation.

3306. For medicine it would seem rather that the technical part as the part that could be undertaken by the colleges, and the scientific part by the University?—Yes. I am not able, I am afraid, to make that exact distinction between how much of the medical curriculum is scientific, and how much is technical. Therefore, I do not feel at liberty to lay down any rule.

3307. (*Professor Ramsay.*) There is one observation I should like to make about the students from the training colleges. You can easily imagine that the presence in the University classes of a body of picked schoolmasters might be a valuable element in the University class itself?—Very. The most gratifying evidence to that effect comes to me in my visits to the provincial colleges now. The introduction of a number of men with a very definite professional purpose amongst the ordinary students of the college has greatly helped the general tone of seriousness, and of hard work in the whole college.

I should like to say that that is our experience in Scotland. In my own classes last winter I had from 30 to 40 teachers. I regard them as a most valuable element in the class. They are not, of course, the most cultured men, but they are earnest men, and they are, without exception, hard working. The progress that some of them make in a short time is remarkable. I think the same evidence would be given by the professors in all the subjects.

3308. (*Mr. Anstie.*) As far as your answers to Professor Ramsay go, may I take it that, in your judgment, it would be an advantage if the training college element should be as far as possible united with the collegiate element in London?—Yes, and the training colleges accepted, if their staff was equivalent, as associated colleges in the Faculty of Arts.

3309. That does not quite meet the point. If the training colleges were associated in that way would you contemplate the introduction into the training college of foreign students. Otherwise you do not meet the point which I understand Professor Ramsay to make. You still keep the training men by themselves?—Training colleges are of two kinds, residential and general—residential colleges which exist for the training of teachers only, and general colleges, such as King's College and University College, which exist for other purposes, but which have their Normal departments or classes. It is rather difficult to make the same answer applicable to both kinds of those institutions. As to the general principle I agree Professor Ramsay.

3310. You would desire to see the schoolmaster in training sitting on the same bench, and subject to the same educational influences as his fellow students who are going to different careers?—Yes.

The witness withdrew.

Adjourned to Wednesday next at 11 o'clock.

Seventh Day.

Wednesday, June 22, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.

JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

WILLIAM JAS. RUSSELL, Esq., PH.D., F.R.S., examined.

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

3311. (*Chairman.*) You are, I believe, Chairman of the Council of Bedford College (for Women)?—I am.

3312. You wished to appear before us to give evidence?—Yes.

3313. Perhaps you will let me know what particular points you would wish to be examined upon?—I think the general status of our college. I should like to indicate to you the kind of work which is going on at Bedford College.

3314. With a view to being joined to any new University that might be formed?—Certainly.

3315. Will you give us a short statement of the position of your college, and the work you are doing?—The college, of course, is open only to women. It was founded as long ago as 1849, and the special work I think I should say that our college is doing, is preparing women for taking degrees at the University of London. As soon as the degrees were thrown open we sent up from the very first a very considerable number of students for Matriculation, and since then a very large number of women who have taken degrees have come from our college; in fact, about one-third of the total number of women who have taken degrees at the University of London have been at Bedford College. I should like to point out also that our teaching has been of a very satisfactory kind. I think the number of women who have passed since the opening of the degrees to women is 248.

3316. In what space of time?—Since the degrees of the University of London were thrown open to women.

3317. (*Bishop Barry.*) When was that?—In 1879. We have sent up about 248, and of that 248, 200 have passed and 70 have taken honours.

3318. (*Chairman.*) Do you send up to any other University for examination?—No. Ours go only to the University of London. That 248 applies entirely to the University of London. At the present time we have a proportionately large number of girls who are preparing for these degrees.

3319. What do they take degrees in?—One of our students who is present here, Mrs. Bryant, took the D.Sc. degree. We have, at the present time, for instance, two preparing for the M.A.; we have 10 preparing for the B.A., and during the last year we have sent up as many as 17 for Matriculation.

3320. What is the whole number of students at the college?—At the present moment we have 112.

3321. Perhaps you might give us a few more particulars of the institution itself. What does the staff consist of?—The staff consists of 14 professors, and three assistant professors, giving instruction in both arts and science.

3322. Then how are they appointed?—By the Council.

3323. What does your Council consist of?—13 members—partly women, partly men.

3324. Who appoints the Council?—The general body of the college—the general members of the college.

3325. In other words, what would be called Convocation?—They are only associated together. They have not taken any degree at all.

3326. (*Bishop Barry.*) Might I ask if it is incorporated?—Yes.

3327. By charter?—Yes, by a charter of association.

3328. (*Chairman.*) What do the members consist of?—People who are elected become members of the college.

3329. Anybody?—Anybody. The Council ask people to become members, and if they accede we put them on the list.

3330. Subscribers?—Only they do not subscribe.

3331. Are subscribers up to a certain amount invited?—No, they do not subscribe any money.

3332. Then where do you get your funds from?—From the students' fees, and we have funds that are devoted to scholarships.

3333. Endowments?—For certain scholarships, but not for other purposes.

3334. Is there anything more you wish to say about the constitution of the college, or about the work that it is doing?—I think I have described to you what is the principal work. Besides this teaching for the degrees, we encourage, as far as possible, general education. We are very desirous that besides merely teaching or preparing students for degrees, there should be a thoroughly good general education given by the lectures and by the teaching going on in the college both in science and in arts. I should like to call your attention to what we have lately done for the advancement of physical science in building very admirable laboratories—especially the physical and chemical laboratories. They are the best that exist in London for women. We have a physical laboratory, a chemical laboratory, a botanical laboratory, a biological laboratory, and all these are open solely to women.

3335. Are you satisfied with your connexion with the University of London as it now is, or do you see a necessity for there being greater connexion between the teaching and the examination?—I think so. I think there would be very considerable advantage if there were more connexion. That is my impression.

3336. That is to say, if your teachers could be more consulted, and have a greater voice in settling the curricula?—That is exactly my feeling, and I think it is the feeling generally of the college.

3337. Have you seen the draft Charter of the Gresham University?—The former Charter? Yes, I have seen it.

3338. Do you feel that if you were associated with that, it would meet your wants, and you would like that as much as going, as you do now, for your degrees to the London University?—I think not altogether.

3339. You prefer the University of London, do you?—I should prefer another charter of a rather different character from that of the Gresham.

3340. In which the London University would take a part?—Yes, in which the London University would take a part.

3341. In fact, what you would prefer would be rather a modification of the present London Universiy?—Yes, a re-modelling of that, and having a single University—not two. I think that is a very important point.

3342. Have you looked at the scheme drawn up by the Senate and rejected by the Convocation of the University?—I am afraid I am not so conversant with that as I, perhaps, ought to be.

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

3343. But as a general rule, you would wish to be associated with some University of which the present University of London should form part?—Yes, should form part.

3344. Form part and be the head?—Yes.

3345. Do you wish to make any remarks about the draft Charter of the Gresham University?—I think it might save time, perhaps, if I were to put in this document. (*For this document see Appendix No.* 6.) These are suggestions that were drawn up by a mixed committee of the Council and of the professors. At that early time I felt very strongly, and I think we all felt very strongly, that the first step was really to see what was the kind of University we should like, and we have embodied there, after a considerable amount of discussion, the general outline of what the committee thought would be the most advantageous.

3346. As we have not had an opportunity of reading this document, perhaps you would give very shortly what the suggestions are that it contains?—The suggestions it contains are very much, perhaps what have been followed by others since, a suggestion that it should be rather, as has been termed now, a professorial University than a federal University.

3347. I think you appeared before the Committee of the Privy Council, and at that time you were anxious to be affiliated to the Gresham University. Was not that the case?—Yes, we appeared before it. We felt very strongly at that time that we were of equal standing to the other federated colleges, and if the University was to be founded on a federation of those, we, at all events, ought to have been asked in the first instance to join that federation. We felt that if we did not put in an appearance, we should rather be acknowledging that we were not of equal standing with the other colleges.

3348. Therefore I may take it, that, though you would prefer some scheme of which the University of London formed part, you would not have any insuperable objection to be joined to a scheme such as the Gresham University, of which the London University did not form part?—I think we should not have any insuperable objection. I think at that time if it had been offered, in all probability we should have been inclined to join; but I think our strongest point was, that we felt we were bound to assert our position, and that if we did not, we should be admitting that we were a college of a lower standing than that of the other federated colleges.

3349. Your chief fear is, lest you should be left out of any scheme which might be adopted?—That was one point that we felt strongly upon.

3350. The Gresham University scheme, and I should think any scheme that would be passed, would contain power, whatever University was appointed, to join other colleges to itself afterwards?—Yes.

3351. Therefore it would alway be open to you to join any University that might be established even if you were not a member of it from its commencement?—We might have been, but still, there was a considerable doubt about that, and we rather felt that we ought to have been one of those who were asked to federate in the first instance, to form the nucleus of the University. They were to have the opportunity afterwards of either accepting or declining our joining.

3352. Is there any other point you wish to put before us?—I think those are the principal points. I do not want to go further into detail than is necessary. If any other point suggests itself, perhaps that can be brought out afterwards. I wish very much to impress upon the Commission the general character of the work that we are doing at Bedford College. Of course it is only on a small scale, and it deals only with women, not with men, but the work is of an exceedingly high character.

3353. Is it increasingly good work?—Increasingly good work, certainly. We have kept abreast of the times, and our teaching has altered with the requirements of the times, as we have shown by these laboratories that we have just built. They have cost 6,000*l.*, and we are not under any debt in respect of them. And we have now admirable laboratories for the study of chemistry, physics, biology, and botany.

3354. Have your numbers increased?—For the last two or three years they have not much increased. The teaching, of course, is expensive

3355. Then you do not increase in numbers? Do you increase year by year in the number of women who go up for degrees?—Yes. I think we have never had so many as we have at the present moment. We have a very large proportion indeed. Out of the 112, 50 are going up for University degrees, and two of those, allow me to emphasize again, are going up for their M.A.

3356. Then I take it that your chief wish is to be recognised in any future scheme, and that you do feel, to a certain degree, the want of connexion between the teaching and the examination?—That, I think, exactly expresses our opinion, and we have called attention to this in the document I have put in. We should be prepared to give and take in the matter; and if we are called upon to resign certain of our powers for an equivalent we should be willing to do so. May I just read one sentence?

3357. Yes?—This was agreed to almost unanimously by the Council and staff:—"The Council and staff of the "Bedford College would view with favour the esta- "blishment of a University, consisting of a supreme "governing body, on which the teaching staff should "be largely represented, together with Faculties com- "posed, in each case, of a Regius Professor, and of "other professors and lecturers appointed by the "University. The teaching might, at first be carried "on in the laboratories and lecture rooms of the existing "London colleges. The Council would be prepared "to surrender many of its rights of control over the "teaching and funds of the Bedford College, to a "central body constituted on such lines, provided that "other institutions were willing to act in the same "spirit."

3358. You would be prepared to be, to a certain degree, absorbed in the new University?—Yes, in return for proportional advantages. We are not a body which is at the last gasp. We do not offer that merely to save our lives, but if the University could give us certain advantages, we should be quite prepared to enter into negotiations of that sort.

3359. One of your objections to the Gresham Charter was that you thought it too much a matter of the colleges, and that the University element was not strong enough?—Yes, that we really should not gain much by such a federation.

3360. (*Bishop Barry.*) As I understand, Dr. Russell, you are aware that there are three schemes practically under consideration. First, that of the Gresham Charter in principle, with whatever modifications may be agreed upon. Secondly, that of what is called a Professorial University which has been strongly urged upon us, in which the colleges as independent bodies are to cease to exist—by what is, I understand, called "absorption." The third is a scheme intermediate between the two, proposed by the University of London—by the Senate, that is, although as yet rejected by Convocation—which provides for a central body, and also for constituent colleges which have certain privileges. May I ask which of those three schemes is the one which Bedford College would be prepared most to support?—I think the second scheme, the Professorial University.

3361. And you are willing to be absorbed?—Well we are willing to be absorbed under certain conditions of course.

3362. Your phrase is rather vague: "The Council "would be prepared to surrender many of its rights of "control." As far as I understand, you would have to surrender your Charter, and as an independent body to cease to be, under the scheme that has been pressed upon us. Is that your wish?—Something like this we might assent to—yes.

3363. It really comes to this that these colleges were all to form a portion of the University and be worked from the central body; and, excepting as far as trust funds were concerned, I think their separate existence was to come to an end. That is what was called the scheme of absorption. Is that to which you think your Council would agree?—I think my Council would agree more nearly with that general scheme than the others, and that we should be prepared to be (to use your term) absorbed at least to a very considerable extent.

3364. But the extent, so far as I can make out, is complete—with the single exception of the charge of trust funds of which people could not divest themselves. All control of teaching and all arrangements would pass into the central hands. Is that your scheme?—Added to that is this, that there might be a partial absorption. Say, possibly, not the whole of the college, but a certain portion of it would be absolutely absorbed and become part of the University.

3365. I am afraid that without a little more definition I do not understand what partial absorption would mean?—Some of the classes absorbed and some not.

3366. Which classes would you retain, the higher or the lower classes?—I should retain, if any, the lower classes.

3367. Then I understand that you would retain the lower classes and you would be willing that the others should pass into the hands of the University altogether?—Yes; that at least a certain portion of the college might pass altogether into the hands of the University.

3368. How about the property of the college?—I am sorry to say we have not much property.

3369. You have your buildings?—We have our buildings, and we have certain funds which have been left entirely for scholarships.

3370. Those are what I mean by trust funds; but of your buildings and your property, which are valuable, and to which you have lately added, you would be willing to divest yourselves?—I think the feeling of the Council would be that they would be willing, as I said before, to give up those buildings. It is a little difficult for me to answer for them and to what extent. But that is the kind of feeling they have. If they felt that this new University would be of importance and advantage to Bedford College they would be quite prepared to make certain sacrifices, and to give up certain buildings and trusts funds, to a new University, with the scheme of which they were satisfied.

3371. I think that is implied, though in somewhat vague terms, by the resolution which you have read to us. Then I pass to the Gresham Charter. You did wish, I think, to be included in that Charter. I mean when you were before the Privy Council?—Yes, we wished for the opportunity at all events of being asked to join; but we did point out in our petition to Parliament that these points in the Charter we objected to.

3372. And one objection you had to the Gresham Charter was that Bedford College was not included in the original scheme. You are of course aware that there was a very large power of subsequently including institutions in that Charter?—I am aware of that.

3373. And have you noticed that, in case of there being any narrow spirit of injustice in the Council there was an appeal to Her Majesty in Council?—Yes, I think I noticed that.

3374. So no wrong could be done to an institution of such a character as Bedford College?—No absolute wrong.

3375. Therefore the objection seems to me to be that the dignity of the College was not sufficiently consulted by being included in the original Charter?—Certainly, I think that is quite true, and I think if we had not taken notice of that it might have been considered as rather an assent to this less dignified position.

3376. Then it was a question more of dignity than of principle in the matter?—Well, I do not quite admit that. I think it was a matter of principle. We felt that we were on an equal footing with these other colleges, and if they were going to be federated we ought to have been asked to join them, especially as representing teaching of this high class for women. As I have pointed out, our teaching has been more successful than even that of University College or King's College. I mean the per-centage of students that we have passed at the University of London is really higher.

3377. I agree that every institution is bound to consider its dignity, but what I meant was that if you had been included in the Gresham Charter, you probably would not have appeared before the Privy Council to oppose it?—I cannot say absolutely, but probably not; I believe I can honestly say that.

3378. You tell me you have not looked at all at the very important scheme of the Senate of the London University?—I said I was not acquainted intimately with that. I am sorry to say I am not.

3379. That is a very important element in our consideration. It holds an intermediate position. It allows for the existence of colleges, such as Bedford College and others as constituent colleges, with certain privileges in regard of the studies at the University and the examinations, while it maintains control in the central body. Would that be a scheme, do you think, which your Council would view with favour?—I think it is the kind of thing which they would view with favour, as I have indicated before.

3380. Although you think they would prefer the more drastic scheme?—I think so, decidedly.

3381. Do you think they would acquiesce in the scheme of the Senate of the University of London, as I have roughly indicated it to you, if they could not get the other?—I think it is probable. It is very difficult to speak for a large Council.

3382. Of course your answer is only a matter of opinion?—I think it is very possible that they might.

3383. To come then to a conclusion, I gather that while you prefer the scheme which would lead to a partial or complete absorption of the colleges, yet to the Gresham Charter you would probably not be opposed. You cannot say, but you probably would not be opposed, if the Bedford College had been included in it?—I think it is very likely that we should not have opposed it.

3384. The University of London scheme you have not yet had the opportunity of considering, but you think it would not be viewed unfavourably by your Council?—I should not like to say that it would be viewed unfavourably.

3385. I think I understood that out of your present students nearly half prepare for the University of London?—Nearly half; 50 out of 112.

3386. May I ask what becomes of the other students who do not pass through the University of London?—They come for general education. Very many of them are women of means who are completing their education, taking up particular subjects, following languages, or, as is the case with a good many, science.

3387. I suppose the college itself grants certificates of proficiency, which are, no doubt, of very great value?—Yes.

3388. Chiefly to those who do not pass through the University?—A good many take these certificates, especially those who are going to teach.

3389. (*Professor Ramsay.*) I wish to ask you one or two questions with regard to the equipment of the college. I was not here at the beginning of your evidence, and perhaps you have already stated them. You have 14 professors?—Yes.

3390. In how many different Faculties or branches?—We have only arts and science.

3391. Are they complete?—They are complete. All the teaching for all these women who are going to the University of London is completely done within the walls of the college.

3392. And you have all the subjects that are included in the syllabus of the University of London?—Yes, in arts and science.

3393. You have nothing to do with medical education?—No, nothing.

3394. How long has the college been established?—It was first established in 1849.

3395. You say that for some years the numbers have been stationary. It grew up to its present numbers about what date?—I am speaking of the last four years.

3396. You have had over 100 students for what period of time?—I should think for 20 years.

3397. You say you have no endowments except those that have been left for scholarships?—Yes.

3398. Your only endowment is your building?—Yes.

3399. What sort of sum was spent upon it?—The new laboratories we have built lately, within the last two years, a physical laboratory and a chemical laboratory, and rooms for residence for the students; they have cost us 6,000*l.* That has come entirely from outside, from subscriptions. We have met the whole of that expense. There is not a halfpenny of debt upon that building or any part of the college.

3400. Was all the original building paid for by subscriptions in the same way?—In the same way. The college was founded by a Mrs. Reid, who gave money originally for the purpose of founding this college for women.

3401. A large sum?—Not a large sum, 1,500*l.* or something like that.

3402. I understand you have resident as well as day students?—Yes.

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

3403. What proportion of residents?—The residence is not part of the college. There is a separate body that is responsible for that.

3404. Under a separate government?—Under a separate government, and left with funds by this Mrs. Reid.

3405. How many are there at present in the resident college?—28 is the exact number.

3406. May I take it that the whole of those 28 are going forward for degrees?—They are all attending the college. The majority of those are going up for degrees.

3407. And the majority of the day students are not going up for degrees?—No, but out of 112 50 are going up. We have besides this an arts school, and in the 112 I am including the arts students. So if I take those off you may say exactly half the students are going up for degrees.

3408. How many art students are there?—12.

3409. They are purely amateur art students?—Yes.

3410. Of those who reside in the college are a considerable proportion intending to be teachers?—It is a little difficult to follow, but I should think yes; a considerable number are going to be teachers.

3411. Have you any in the college who are actually in teaching situations, and who attend the college for a portion of the day?—We do not know of such.

3412. Could your arrangements be made to suit a pupil in circumstances of that kind?—Certainly; she could attend the lectures there supposing the time did not clash with her other engagements.

3413. But, on the whole, something like half of your students are, so to speak, professional students. I mean studying with a view to the profession of teaching?—No, I did not say that. One half are studying with the view to taking degrees at the University of London.

3414. I should rather have said a large proportion of those studying to take degrees are intending to become teachers?—I think so.

3415. By whom are the professors appointed?—By the Council.

3416. What is the number of the Council?—13.

3417. Have the professors any representation upon that Council?—They have upon an intermediate Council, that is to say, there is a body consisting partly of the teachers and partly of the Council and outsiders.

3418. And the Council takes their opinion upon questions?—Yes, it takes their opinions on questions, and in the case of the appointment of a professor the question is first referred to the Educational Committee, as it is called, and they recommend to the Council.

3419. As a matter of fact do they follow the recommendations of the committee?—Usually. If they make a definite representation to the Council, it is usually followed, unless there is some very good reason to the contrary.

3420. Are those 14 professors all men?—No.

3421. What proportion of them are ladies?—We have at the present time, that is during the last session, two lady professors.

3422. The remuneration of the teachers comes entirely from fees?—Yes.

3423. What sort of salaries do you give to the professors?—Exceedingly small—distressingly small. I should like to say, that the College is exceedingly indebted to a great number of men of very high standing, who could demand a much greater pecuniary recompense, for the way they have come forward and given their time and labour to the college.

3424. How are they paid?—They are paid by a class fee and a capitation fee.

3425. Would you mind stating what is the real value of a professorship?—Of course that varies very much; when you have a comparatively large class it is about 200*l.* a year. On the other hand, I heard of one case lately in which a professor got 3*l.* for a term.

3426. Then, I take it, the professors have mostly occupations of their own, and only give a part of their time to the College?—Yes. There are two lectures a week in most cases. I have a list of professors here which I might put in.

3427. Is tutorial work done by any class of teachers? We have essentially no coaching or very little. We have discouraged that, and, as far as I know, does not go on, but the whole of the teaching is done by the professors.

3428. Do the lecturers give an amount of teaching which is sufficient to prepare for the degrees of the University of London?—Yes.

3429. Do you expect students to have passed the Matriculation before they come to you?—No.

3430. Then you prepare students for Matriculation?—We have sent up this year 17.

3431. Are they amongst your junior students?—Well, yes, rather amongst the junior students. Of course we have many going on to the higher degree.

3432. Have you an age limit?—For them to enter do you mean?

3433. Yes?—No. For if they like to pass a preliminary examination they can enter at any age, otherwise they must be 16 years of age.

3434. (*Chairman.*) Then there is a preliminary examination?—Not necessarily, but if a young student comes we should put her through a preliminary examination. But after the age of 16 they can enter the college without examination.

3435. (*Professor Ramsay.*) Do you consider your teaching to be entirely of a University stamp, or to some extent of a school stamp?—Not a school stamp. We had a school at one time attached to the college, but we gave that up, so as to have teaching only of University stamp.

3436. But if you take pupils of the age of 16 that is a very young age for women to begin a University education?—Yes, but they would then only take the elementary classes. We do not at all encourage that sort of thing.

3437. That is not the average age, I suppose, as a matter of fact?—No, they are almost all older than that.

3438. Then the bulk of your teaching is of the University stamp?—It is.

3439. Now with regard to the relation of your college to the other colleges. In any scheme of absorption, I understand, you are quite prepared to give up funds which practically do not exist?—Those that do not exist we should be very happy to give up undoubtedly. I do not think that would lead to much discussion.

3440. Would you give up your building?—Yes, under certain conditions.

3441. Now what exactly are the conditions which in your opinion would make it worth your while to give up your building to the new University?—If this new University could give us help of a sufficiently important character to develop this college.

3442. You mean financial help?—No, I mean rather tutorial and professorial help and advice.

3443. Do you mean sending new teachers and paying them?—Sending us teachers certainly of the highest class.

3444. And paying them?—Paying them, or to a certain extent paying them. The University certainly must give us increased facilities for teaching. I mean that is the kind of thing we should be inclined to give up anything for.

3445. You want your staff to be strengthened?—We want our staff to be strengthened. We want to have the higher and best kind of teaching for women.

3446. Would you regard it as essential that your governing body should be represented to some extent on the governing body of the University?—Yes.

3447. Is that a *sine quâ non?*—Yes, I think it is a *sine quâ non.*

3448. The University of London scheme provides for constituent colleges, which should form part of the governing body by sending representatives, and also for associated colleges, which should have the privilege of preparing students for degrees under particular arrangements, but would not be represented. You would contemplate both privileges?—Yes, we should not be satisfied merely with the association.

3449. You would expect to be a constituent college of the University?—Yes.

3450. And to send representatives to the governing body of the University?—Certainly.

3451. Those representatives would be sent by the Council?—By the Council.

3452. The professors would have no voice in the electing of those representatives?—I do not say that. I think the Council would consult with them before they determined upon the representatives.

3453. But the body to be represented in your opinion would be the Council?—The Council are the supreme body.

3454. Your supreme body?—Yes, our supreme body.

3455. And it is the Council you would wish to see represented if you are to form part of a professorial University?—People appointed by the Council.

3456. The Council would naturally appoint members of their own body?—I do not know, and I do not think they would do so.

3457. Your great point is that it is to be a teaching University?—Yes.

3458. Is not that to be done by appointing teachers to be members of the governing body?—I think so.

3459. But if the Council only sent people who were not teachers you would be depriving it of that character of a teaching University?—Yes. I do not think the Council would appoint necessarily merely members of the Council, but those who were to be elected would be determined by the Council.

3460. If you give definite rights to a definite body you must take what they choose to give you?—I personally should be inclined to prefer that some of the teachers should be representatives, that not only that the Council should be represented, but also the professors.

3461. And you would wish something of this kind to be put into the Charter; that there should be so many representatives, of which, say one half, should be teachers upon the staff?—Yes.

3462. Then would you expect all your professors and lecturers to be recognised as belonging to the University, and as being University professors or lecturers?—I think not.

3463. Would you be disposed to approve of a scheme by which there should be two bodies in the University, one of them like an Assembly of Faculties representing the whole teaching staff, and the other a supreme administrative body in which there were other elements besides teachers. Have you considered that possibility?—Yes. I think it would be very important that in the supreme body there should be others than professors and teachers; decidedly. I am, personally, very strongly of that opinion.

3464. Would it meet your view if your teachers were represented upon whatever assembly was constituted of teachers?—And not the Council, you mean.

3465. Of course not the Council, because the Council does not consist of teachers. You suggested just now that half the Senate might be teachers: I am asking would the other plan meet your approval whereby teaching should be represented in one body, a *senatus academicus*, whilst the Council, and the Council alone, should be represented on the supreme governing body?—I think so.

3466. At any rate you desire that the professors should have some University standing as well as the Council?—Quite so, that is exactly the point.

3467. Do you contemplate that the supreme body of the University should appoint your teachers and professors?—Not necessarily.

3468. But would you agree to such an arrangement if it turned out that that was the only practicable arrangement?—If it was the only practicable arrangement, yes.

3469. Perhaps that is rather begging the question. May I put it this way: is that one of the arrangements which you might consider suitable?—It is one of the arrangements which I might consider suitable.

3470. If other colleges did the same thing?—Quite so.

3471. Then the University would undertake all the responsibility for the buildings?—I suppose so.

3472. Keeping them up?—Yes, keeping them up; I think it would come in this way: that they would be obliged to take possession of our laboratories for their teaching, and hence they would have to keep up the building.

3473. Then for what purpose would the Council exist after that?—Of course a great portion of their duties would have passed away, I am not quite clear whether all their duties would have passed away, but the most important of them would then have passed away; whether they would be required to look after this particular college or not, I really do not know at present.

3474. I was taking the case of complete absorption. If the management and responsibility for the buildings, for the finance, and for the appointment of teachers were taken away from the Council what would remain for the Council to do?—If complete absorption took place I am not clear that there would be any duties for the Council.

3475. Then if they had no duties?—Then they would cease; but what I indicated before was that there very possibly might not be complete absorption, at all events at first.

3476. If there was complete absorption there would be no need for having any representatives of the Council upon the governing body of the University. It is only in the event of partial absorption that there would be necessity for any representative of the Council?—In the main I agree with you, but I am not prepared altogether at the moment to assent to the absolute and entire disappearance of the Council in spirit and in kind. If there were complete absorption of the college it seems to me that the greater portions of the functions of the Council would cease.

3477. (*Chairman.*) There would be no Council at all. The Council would disappear?—Yes, if there were complete absorption.

3478. (*Professor Ramsay.*) Supposing there was another process to be called gradual absorption, would there be any difficulty in providing that the Council should be represented at the start, and, as its duties disappeared, the representation should cease also?—That is the rational way, I should think.

3479. Would that facilitate the transfer?—Very much.

3480. Have you considered that the University of London will continue to be an examining body as well as a teaching body? No one has suggested that it should be deprived of the function of examining students from the provinces or empire generally. Do you see any special difficulty in the University combining the two functions, having one set of examinations for its own students, and another set of examination for outsiders?—No, I see no *primâ facie* objection to that.

3481. You see no inequality or unfairness in such an arrangement?—No, I do not know. Difficulties there would be of course, but I do not see that there must necessarily be any absolute unfairness.

3482. Would you recommend the same set of papers for both sets, or different papers? Unfairness, of course, could only come in when you had one set of papers for which one set of students had been prepared, and the others had not. Do you look upon that as a formidable difficulty?—I think not.

3483. (*Sir George Humphry.*) Have you any difficulty in obtaining professors and teachers?—No, if we advertise, we have always a good many applicants, and, as you will see by our present list, we have very able men.

3484. Really the work they do is to a considerable extent voluntary work?—Really that is putting the same thing in another form. Their pecuniary remuneration is very small.

3485. So you have the good fortune to obtain first rate teachers for very low remuneration?—That is what we do.

3486. The laboratories which you have mentioned are new?—They are new. The chemical and physical laboratories are entirely new.

3487. Are there any biological laboratories?—Biological. Both biological and botanical.

3488. That is to say, zoological, botanical, physical, and chemical?—Yes.

3489. Those are efficient laboratories?—Very efficient.

3490. With a professor superintending, and demonstrators under him?—Yes.

3491. If you compare those laboratories with the laboratories in the other colleges with which you are perhaps familiar, such as King's College and University College, do they compare well with those laboratories?—They compare very well with those laboratories.

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

3492. There are not, of course, so many students?—No, but our new physical laboratory is, I was going to say, perfect. It is an admirable laboratory. The chemical laboratory is at the top of the house. Is a thoroughly efficient and admirable laboratory.

3493. And well equipped with instruments?—Yes. Of course we have taken care all the laboratories are in thoroughly good working order. We want more money for other purposes, butall the laboratories are thoroughly equipped.

3494. Supposing the number of students increased would there be the means of increasing the laboratories accordingly?—Yes.

3495. The funds for doing so would be derived from?—The students.

3496. The students would hardly enable you to increase the laboratories, would they?—To some extent, and if we had them we should hope to get, as we have done already, donations to increase the amount of apparatus, I have very good reason for saying so, because of the large donations that we have already received, 6,000*l.* for building and equipping the present laboratories.

3497. You hope to increase it mainly by private subscriptions?—Mainly, almost entirely by private subscriptions.

3498. Your great object is that whatever University is formed you should have your share in it in some way or other?—Yes.

3499. And you are really not very particular whether it is by a professorial University or a University on the principle of Gresham College or a University on the plan mentioned to you as the plan of the present University of London?—I think that is the idea of the Council, they really want to do good.

3500. You would concede a great deal to belong to any one?—Yes, if we saw there would be any distinct advantage to our college.

3501. And if your saw that there might be sufficient advantage to induce you to give up independence altogether?—I think we might do so.

3502. Independence is a very serious point to sacrifice?—It is, and without we had considerable return for it I do not think that we should be inclined to give it up.

3503. Do you think it would be worth while to sacrifice it for any possible return?—I think so.

3504. That is to say, such a return as having the affair taken over entirely by another University, funds supplied, teachers appointed, and the examinations conducted?—If that was likely to lead to a considerable and decided improvement in female education I think the Council would very seriously consider even going so far.

3505. Do you think it very probable that a new professorial University would have funds to enable it to carry on the works of your laboratory and pay your professors?—I do not think that at first at all events they would, but such as a thing might grow up in time.

3506. Then, at first, you would not be connected with it?—That depends upon the circumstances. I do not know how I can answer that without knowing the circumstances.

3507. You would only be connected with it if the circumstances were so favourable as is scarcely to be anticipated?—Well I do not know what they would offer us in return.

3508. Are you not now really doing very good work?—Certainly, we are doing very good work.

3509. And is it not rather dangerous to sacrifice entirely your present constitution and plans for the unknown and uncertain?—But before we sacrificed it I imagine it would not be unknown. We should have a definite plan and scheme before us and we should know what we were giving up our independence for. To give it up blindly would be foolish.

3510. But still it would be somewhat dangerous perhaps?—I do not know.

3511. You have a foundation from Mrs. Reid—a certain sum left?—All the money which she left is in scholarships. We have about 2,000*l.*, I think, which is entirely devoted to scholarships.

3512. Were there any conditions attached to that bequest which would interfere with this suggested absorption by a University?—This money was left entirely for these scholarships.

3513. And the condition upon which those scholarships were to be obtained was that they were to be students at Bedford College?—Yes.

3514. Without there being express stipulations as to the nature of the college or the government of it?—I am afraid I do not exactly know what the wording of it is, but that is the spirit of the thing—that it was for students at the Bedford College, and they were to be women.

3515. There might be a difficulty?—There might be a difficulty.

3516. And on the whole your preference is for one University instead of two?—Yes, for one University instead of two.

3517. Of the three plans proposed you would, on the whole, prefer the one by which you would be absorbed, and your independence lost?—That is one form that has been indicated of this professorial University.

3518. You have not very much considered the intermediate scheme to which the Bishop referred you?—No.

3519. So you are scarcely enabled to say at the present time whether you might not prefer that even to the professorial University?—I do not see any objection to that, at all events.

3520. You scarcely know its provisions sufficiently to enable you to give an opinion whether you would or would not prefer that to a professorial University?—My impression is that we should prefer the professorial University.

3521. (*Mr. Palmer.*) In your resolution of the Council of the 2nd April 1892, which seems to embody your views, you say:—"The teaching might at first be carried "on in the laboratory and lecture rooms of the existing "London Colleges." Does that point to an interchange of laboratories between the different colleges, or do you mean that each should simply teach in its own laboratories. Would you consider it an advantage to have an interchange of laboratories between you and University College, for instance?—Use some laboratories for one purpose and some for others, do you mean?

3522. Would you consider it an advantage as belonging to a general University?—That some laboratories might be developed in one direction specially, do you mean?

3523. I mean this. I did not quite understand whether this phrase simply meant that the teaching of the University might be carried on for a time in each separate college separately until the whole should be absorbed (for I see that absorption is the end), or whether you meant that there would be a specific advantage in having an interchange of laboratories?—I do not think it meant that there would be advantage simply in specific interchange.

3524. You are, as you say, fully equipped in arts and science as Faculties and in none other?—None other.

3525. And you are perfectly free to be absorbed if absorption were decided upon?—Yes.

3526. Do you think that the tendency of absorption would not be to prevent private benefactions, or private benevolences, being given in the way of foundation scholarships, and so forth, to your particular institution?—I think it would. It would not stimulate gifts to the college.

3527. It would be rather a drawback?—It would be rather a drawback in that respect.

3528. (*Mr. Anstie.*) You did not tender evidence before the late Commission?—No.

3529. The part which the college took on that inquiry is shown at page 287 of the Blue Book, where there is a letter signed by yourself and the secretary, addressed to the Commissioners, and stating your views?—Yes, there was a letter sent.

3530. And that was all the part you took in it?—Yes.

3531. I will ask you on one or two points with regard to the present condition of the college. I think you said the age of admission was 16?—That is the youngest.

3532. A great deal of stress, and, I thought, very justly, was laid by Dr. Wace in his evidence before

the late Commission on the advantage of having University education commenced at a rather earlier age than that at which the old Universities commence it. Would you agree to that?—I do not quite follow that.

3533. A great deal of stress was laid by Dr. Wace, and also by Sir George Young, on the importance of having in London the opportunity of University education commencing at an earlier age than is usual in the old Universities. Would you agree to that?—I would; and I should like to say that why we gave up our preliminary teaching was that we found that elementary education was very much improving in London in the schools.

3534. You mean, therefore, that the opportunity for commencing the University course is now earlier?—Yes; that these students at 16 come to us comparatively well trained.

3535. Are you aware that the entrance age at King's College, and, I believe, also at University College, is 16?—Yes.

3536. I had the pleasure of being at King's College in company with the present Principal, Dr. Wace, at that age, so that you would not perhaps think that too young for University education?—I think not.

3537. Women are quicker than we are?—Yes, I think so; and that increase in their quickness and ability has very much increased in the last few years.

3538. With respect to the point put to you with regard to the inclusion of the Bedford College in any proposed University, whether the existing University re-modelled or a new one, I hear you desire rather to have that matter settled at the outset than left for later discussion?—To have general arrangements made?

3539. No; to have the question of the position with regard to the inclusion of the Bedford College in the new University, or re-modelled University, settled at the outset rather than leave the question for later settlement?—Yes.

3540. Then would it, in your judgment, be a better course to have these questions settled by a Statutory Commission such as not long ago regulated the affairs of Oxford and Cambridge, than have it left to the decision of a body constituted, in the first instance, without that guarantee for impartial consideration?—I think so.

3541. I gather that your view, as expressed in this paper, is decidedly in favour of absorption, and I think in answer to a question put by Professor Ramsay you point out that the view of yourself and those who signed this paper is that the representation of the existing institutions should be what has been called before us once or twice transitional merely?—Yes.

3542. And that when the fusion you desire is once accomplished there should be no longer any independent authority?—That is the kind of thing—it might come to that.

3543. At the same time, on page 4, you contemplate the two modes of absorption, complete and partial?—Yes.

3544. And you work out your idea to some extent there. Now supposing difficulties of the kind suggested by Sir George Humphry to exist in carrying out that idea of a single professorial University, you would then be thrown back upon considering the matter from the point of view adopted in the other schemes that have been under our attention. Speaking broadly, and not troubling ourselves with the Crown representation, those schemes were founded, I think, upon the idea that there should be both a Faculty representation and an institutional representation on the governing body of the University?—Yes.

3545. That was so with the Senate's scheme, and it is so with the present Gresham Scheme, is it not?—Yes.

3546. You desire, I understand, from this paper that all University and professorial appointments should be made directly and immediately by the Senate and by nobody else?—By the governing body.

3547. But supposing that were impracticable, would you think it an advantage that, so far as concerned University Chairs, they should obtain the ratification of the governing body?—Yes.

3548. Although the appointment might rest with the institution?—Yes.

3549. That would, you think, be an advantage?—Decidedly.

3550. Now, assuming that were the case, and that the Chairs in Bedford College were included in that arrangement, the teachers in Bedford College would constitute a part of the two Faculties of Arts and Science respectively in the University?—Yes.

3551. In such an arrangement as that would you adhere to the view which has been generally accepted, that each University professor should sit and act in his own Faculty?—Yes.

3552. The Arts professor in the Arts Faculty, and the science professor in the Science Faculty?—Yes.

3553. So that in this manner of grouping Chairs by Faculties you would have all the arts professors, say, for instance, in all the colleges united in one Faculty?—Yes.

3554. And similarly the science professors?—Yes.

3555. They would not sit there as representatives of the institution so much as representatives of the branch of learning for which they were responsible?—Certainly.

3556. I do not know whether you have considered at all whether any such principle as that could be applied to the representation of institutions. Perhaps you have not considered that?—No.

3557. I understand that you object to Bedford College not being included, but I do not understand you to say that you think that Bedford College, if it were included, would come in with the same fulness of power as the two great colleges, University College and King's College?—Certainly not as far as numbers go.

3558. You would recognise that there was a difference not only in the number of Chairs—I will not say anything about the distinction of the holders of them—but also in the general resources of the institutions?—Yes.

3559. Their power to establish new work and to carry on existing work?—Yes.

3560. Therefore you would think it not unreasonable that those institutions which had greater power, from whatever circumstance, and which played the greatest part—whether from existing resources or claim upon the attention of the public or otherwise—should have the greatest power. That you would think equitable?—Yes. I should think something of that kind would be equitable.

3561. Supposing it were possible by means of a Statutory Commission, or otherwise, to make an arrangement by which all institutions fit to enter into this new arrangement should unite together on the basis of distinct branches of teaching, would that, in your view, be a possible thing. Perhaps I had better explain myself a little further. As I have pointed out, the Faculties would be all the teachers of all the recognised institutions united in one body in each branch?—Yes; all the arts together.

3562. And all the science, and all the law, and all the medicine?—Yes.

3563. And those Faculties, so constituted, would, by any existing proposed scheme be bodies which would send representatives to the governing body of the University. That would be so?—Yes.

3564. The professors, being dissociated from their institutions and united in their Faculties, would send representatives chosen from among themselves to the governing body of the University?—Yes.

3565. Now supposing you had institutions varying in size and resources, more or less divided in purposes, some serving one, some serving two, and some serving more, would it be, in your judgment, a practicable thing that those institutions should be grouped in a similar manner to that in which the Faculties are grouped; say that all the arts colleges in London should be united into one body which might, in that way, send its institutional representatives to the governing body of the University. Have you considered that as a possibility?—I have not considered it from that point of view, but such an arrangement as that seems practicable.

3566. You see the difficulty is this. We have two very large and important colleges: we have also, perhaps standing next in rank—I do not know how that may be—Bedford College, in arts and science conjoined; we have the City and Guilds in science; we have the Royal School of Science in science again; and there may be other institutions to come, representing one or both of those branches. They are of very different extent and

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

power. If each of those institutions claims to have a specific representation on the governing body, you would see that the governing body might easily become very large and unwieldly?—Yes.

3567. Do you see a possibility of a solution of this kind, that they should all be united on a certain scale to be determined by a Statutory Commission, or otherwise, in a single body, and that that body should send its representatives to the governing body. In that way, although each institution would not be separately represented, they would have the opportunity of making their claims heard, with an occasional chance of representation by individual members on the governing body. Does that seem to you a possible and practicable method?—It seems to me possible, certainly. Their representation would be somewhat indirect.

3568. It would?—That is a practical form of getting rid of these very large numbers.

3569. Yes, quite so, and is a way of giving some degree of influence on the governing body to the institution as such, without giving it a direct and separate representation?—Yes. I was merely going to remark, in addition, that we stand, to a certain extent, in a different position, because ours is a college for women.

3570. For the purpose of the question I have just been putting, I do not know what the difference is?—For your purposes, perhaps, it is the same; but it might happen that we should want some different representation from all the others.

3571. Holloway College is going to make a claim, I understand, and so is Queen's College?—I think it is a matter which will have to be considered.

3572. You understand that I am not supposing that on this view the separate institutions will sacrifice their individuality, or will lose any portion of their control over the conduct of their own business within their own walls, or their power to serve any purposes that might be distinct from the University?—That they would keep their individuality?—Yes.

3573. (*Mr. Rendall.*) In the paper with which you have provided us there is a twofold suggestion of complete absorption and partial absorption. The complete absorption is, of course, intelligible. I think there are no questions to ask upon that, but I wish to understand a little more fully the scheme of partial absorption, which I understand you and your governing body, on the whole, prefer?—I think the partial absorption was not meant to apply solely to our college, but it was part of the general plan that we indicated.

3574. Referring to your own college, there is a tendency to distinguish (although it is not very firmly adhered to) between educational administration and financial administration?—Yes.

3575. At the foot of page 4 you say, "The governing "body would keep financial control over part of its "resources." I rather wish to work out that distinction. The governing body, I suppose I may assume, would be willing to retain and administer all trust funds. Then we come to more debatable ground—maintenance and extension of buildings, equipment, laboratories, lecture rooms, and the like. Would you be prepared to retain that amount of responsibility?—I think if the University took over the laboratories, which I think they must do, my impression is that they will have to take over not only the keeping of them equipped but also the keeping of them in repair.

3576. Would it be impossible for the Universities to take over the educational administration of the laboratories without becoming responsible for the maintenance, repair, equipment, apparatus, and the like?—That would be simply a matter of arrangement.

3577. Can you tell me whether your governing body would prefer to retain that responsibility or divest themselves of it, I refer to financial, and not educational, requirements?—I do not know that I can answer that question exactly till things are a little more definitely arranged.

3578. A separate governing body tends no doubt to encourage private benefactions. I rather wish to know whether your governing body feels sufficiently strong and sanguine to be glad to retain that responsibility, or whether they would be willing to hand it over?—I think they would be glad to retain that. I do not think that particular point has been discussed before the Council, and, of course, I have therefore rather a difficulty in answering the question. I think a great disadvantage is this, prevention of private benefactions if it were absorbed altogether.

3579. Then, still adhering to finance and remuneration of teachers, there are two alternatives suggested in your paper—one is remuneration of teachers by the governing body, and another is that of some sort of equivalent contribution to the University chest. Are you then able to tell me on which side the preference of the governing body would lie? Can you tell me whether they would be responsible for the remuneration of the individual teachers, or whether they would pay a net annual sum, to be determined by agreement, into the University chest, and leave the University to do it?—You put me in rather an awkward position. I do not think I can answer that.

3580. Both alternatives are suggested?—Yes, both alternatives are suggested, but which they would prefer I do not think I can say at the present moment.

3581. I have dealt with finance with regard to buildings, and finance with regard to teachers, the third point is with regard to students. Have they a strong feeling about the determination of the fees of students—whether that should remain in the hands of the independent governing body, or should be transferred to the University authorities?—I think they would be willing for that to be transferred to the University authorities.

3582. Would they prefer that it should transferred, or do they feel that that would be a point where they should exercise their own jurisdiction?—There has been no feeling that I am aware of expressed to that extent. I think they would be quite willing in discussing the plan as a whole to give up that authority to the University.

3583. I want to know whether they would wish to do that. That you cannot state?—No, too much hangs upon collateral matters, and as it is not a point that has been really discussed, I hardly think I can state how far the Council would be inclined to go in such a matter.

3584. Now coming to the educational point, your governing body would surrender all the organisation of teaching in the sense, I presume, that the Council would adapt college courses to the requirements of the curricula of the University?—All higher college courses?

3585. Perhaps you would limit it to college courses training for degrees, and except a subsidiary college course?—Yes, that is what I had in my mind for higher educational purposes.

3586. For University purposes you would be glad that the entire direction of studies should rest with the University body?—Yes.

3587. Now about the appointment of teachers which is another important point. I suppose, if your governing body remained responsible for remuneration, they would wish to retain the power of appointment?—Certainly.

3588. If, on the other hand, remuneration were undertaken from the central University funds, they would naturally think that the appointment likewise should rest with the University?—Yes.

3589. There is an objection stated at the outset of the paper. It is there stated rather strongly that any sort of University in which the colleges are merely federated would be useless. Can you tell me on what ground that statement is made? What are the particular points that invalidate the usefulness of the federated University?—I think it is that it would stereotype the present form of teaching too much. There would still be these two colleges in very much the same position, and doing the same kind of work that they are at the present time.

3590. And there would not be likely to be a new body of teachers?—No.

3591. One point was, that the scheme did not contemplate any distinctly new University professors?—Exactly.

3592. Would you prefer a strong central organisation of professors appointed by the University and not merely teaching members of a college staff?—Yes.

3593. I should like to know why that is. Is it that you would feel it would strengthen the position of the University?—It would act certainly in that way.

3594. It would be more likely, I suppose, to secure support from public funds?—Yes.

3595. By public funds, I mean not only parliamentary but municipal?—Certainly.

3596. Would it be more likely, do you think, to give an acceptable form of educational administration?—If properly carried out, I think it would.

3597. Would such an organisation give better guarantees against the prevalence of any sectional interest, any interest in a particular institution or college?—In what form interest?

3598. I do not know whether that was what led you to fear, when you spoke of a merely federated University, that the interest of the federated institutions might tend to prevail over the general welfare of London education?—Yes.

3599. That is rather your feeling, is it?—That is my feeling.

3600. Would a professorial University, do you think, give more effectual guarantees for the recognition or admission of outside institutions?—I think it should, if properly constituted.

3601. You do not think there are sufficient securities for that in the Gresham scheme?—No.

3602. You would want representation of teachers on the Senatus or academical body, and upon the governing body of the University as well?—Yes.

3603. You would wish to have representation on both?—I think so.

3604. And that you would make a conditional absorption, whether partial or complete?—Yes.

3605. There is one provision in the Gresham Charter to which Bishop Barry called attention. The 24th section is a proviso for appeal to the Privy Council in the event of a college such as your own being refused admission. Have you much confidence in that provision as likely ever to over-rule the decision of the governing body?—It is very doubtful if it ever would.

3606. You do not think it would be very likely to prove effective against the decision of the body constituted as in this Charter?—I cannot help thinking that it would be doubtful; but I express a very modified opinion, because I am not acquainted much with the working of the Privy Council.

3607. (*Lord Reay.*) Do any of your students attend lectures at other institutions?—Yes, a few.

3608. In the Science Faculty?—Yes.

3609. Where do they attend lectures?—At University College.

3610. Which the more advanced lectures or the less advanced?—Some are the more advanced; but I think the total number of students who go to other colleges is very small. I think out of the whole number there are only about three who attend other institutions than our own.

3611. And they attend advanced lectures?—Yes, fairly advanced.

3612. Do any of your teachers teach at other institutions?—Yes. We have one of them present here.

3613. How many of them teach at other institutions?—Professor Heath tells me four.

3614. Do they devote the greater part of the time to your college or to other institutions?—I am afraid I cannot answer that, but they give the whole of the time that we require from them fully to our college. Most of them give two lectures a week, and there are demonstrations in addition. Those times are fully given to the college, and it is rather difficult for me to say what they do out of those hours.

3615. Is your course of lectures mainly influenced by the examinations of the University of London?—Yes, it is.

3616. And one reason why you wish for the reform of higher education in London, and why you are in favour of a professorial University, is that the influence of those examinations should be less great and more independence secured to the individual teachers?—That is strongly my own opinion.

3617. On page 3 of this paper you say: "If no college "were willing to be united to the University in one or "other of the ways described below;" then one of the ways out of the difficulty would be to authorise the existing University of London to absorbe other bodies. Which are the other bodies?—That was suggested, I understand, as an extreme case

3618. The "teaching bodies" of these would probably be inferior to the teaching of the colleges?—Yes.

3619. But the process of absorption of would be first applied to the weakest?—Supposing that this ulterior way was adopted.

3620. Then, might I ask, what is meant by the "latent "teaching powers of the existing University of London"?—The expression appears in the paragraph "If "no college were willing to be united to the University "in one or other of the ways described below, the "Government might either accept this fact as a final "proof that a teaching University for London is im"practicable, or might proceed to develop the latent "teaching powers of the existing University of London, "authorising it to absorb other bodies, in the belief "that such absorption would soon follow." There you have a University which might be so far modified as to be a teaching University to some extent as well as an examining one.

3621. It is the expression "latent" of which I should like to have some explanation?—Professor Heath reminds me that it referred partly to the Brown Institute, which was one development of the University of London as a teaching institution. I think that was the specific instance which the committee had in their mind when that was written.

3622. On page 6 of this document there is a very important statement that you contemplate the appointment of a Regius Professor. Why a Regius Professor?—That was a point very much discussed, and I think that the idea, and the feeling, of the committee was very much in favour of some definite way of getting professors on the Senate from a different source, and of a different kind from those that came up from the different teaching bodies. We wanted rather a diversity of representation, and that was one way of getting it.

3623. But I see that this Regius Professor is to lecture on the chief subject in every Faculty?—Yes, that would be so according to this plan.

3624. The professors appointed by the Crown would be superior to the professors appointed by the University?—The idea here was evidently, as you say, that this Regius Professor should be the head teacher.

3625. Would this Regius Professor have any control over the other teachers in the Faculty?—I think not.

3626. The resolution contemplates one Regius Professor in each Faculty, the paper a Regius Professor in each chief subject of a Faculty; those two proposals differ?—Yes.

3627. Which do you propose?—I am not personally proposing either of those, but that was what was proposed at this meeting.

3628. Was one of the objects of that proposal to obtain salaries for these Regius Professors from the Treasury?—No, I do not think that point was considered at all. We did not go into details as to where the money was to come from.

3629. Are you aware of the importance of introducing this element of appointments made by Government?—The feeling of the committee was so far indicated by this appointment of a Regius Professor.

3630. Therefore, supposing the colleges were not entirely absorbed by the new University, and were to preserve their independent existence, you would have three grades of professors and teachers: the Regius Professor appointed by the Crown, the professor appointed by the University, and teachers not recognised by the University but appointed by the college?—That would be a partial absorption scheme of course, really it comes back to the two professors.

3631. In the partial absorption scheme the colleges retain their independent existence?—Yes.

3632. Cannot all these advantages which accrue from absorption be attained by co-ordination colleges having an independent existence, and by giving the University a supreme power of direction and control?—I am afraid such a thing as that would be very difficult to carry out, my own impression is against that.

3633. (*Chairman.*) Since I examined you, I have had an opportunity of looking through the paper which you handed in; I see that it is very strongly in favour of the principle, what we may call the professorial principle contemplating the absorption of the colleges further than I gathered from anything in your answers to my questions. I should like to ask you a few questions about this paper, and about the resolution which was passed by the Council and the staff. In the autumn, I

W. J. Russell, Esq., Ph.D., F.R.S.

22 June 1892.

forget the date, you appeared before the Privy Council, and your wish then was that you should be allowed to join Gresham University, that was your object in appearing, was it not?—Yes; we petitioned to be considered as one of the constituent colleges.

3634. And did this embody at that time the opinion of the Council and the staff?—Yes.

3635. Between that and the beginning of April the Council and the staff had reason to alter their minds and to think that the Gresham scheme would not do, and to express themselves strongly in favour of a totally different scheme?—At that time, of course, like many other people, we had not considered the matter very carefully; since then we have had this joint meeting simply honestly to consider the matter and see what we thought was the right thing for us to do.

3636. How many meetings did you hold?—Three or four.

3637. I think there are 13 members of the Council, and 14 members of the staff?—Yes.

3638. That makes 27. Did they meet together or separately?—We met at first together, and they formed a smaller committee consisting of delegates from each, and they met several times.

3639. At the present meeting which settled the principle, was there a large attendance?—Yes.

3640. How many—do you recollect at all?—All the members of council and staff except one.

3641. And were they unanimous?—They were unanimous; it was *mem. con.* Nobody voted against it, and one did not vote for it.

3642. They were all in favour of this resolution which appears here?—Yes.

3643. I wished to find out the amount of weight which was to be attached to it. It was practically unanimous?—Yes, it was practically unanimous.

The witness withdrew.

H. F. Heath, Esq., B.A., Ph.D.

H. Frank Heath, Esq., B.A., Ph.D., examined.

3644. (*Chairman.*) You heard the evidence of the last witness?—Yes.

3645. Do you agree with the opinions he expressed?—Not perhaps in every respect.

3646. Do you, on the whole, agree with the substance of it?—Yes, on the whole. I agree with the main conclusions, and more especially with the conclusions laid down in the pamphlet.

3647. We may take it that you do agree with the conclusions laid down in the pamphlet?—Yes.

3648. That is to say, that you are in favour of establishing a University on professorial principles, which will contain or gradually absorb the different existing colleges?—Yes, strongly.

3649. Perhaps you will tell us on which points you disagree with the witness who spoke last, and also on which particular points omitted by him, if any, you would wish to be heard. I should be glad if you would do that, so that I should not go over the same ground twice?—There were only one or two comparatively unimportant details, but it seemed to me that perhaps these points were not brought out sufficiently clearly. For instance, the reasons why the Gresham Charter can scarcely hope to advance higher education in London.

3650. We should be glad to hear about that?—It made no provision at all, in my opinion, for what is wanted more than anything else by the teachers in London, namely, freedom of scope in the direction of teaching; it left the Faculties practically in the position they are in now with regard to the teaching part of their educational course. It seems to me that it left them the independence which they possess, but that in the majority of cases seems to me to have nothing but evil to recommend it, for the reason that it implies financial competition to the very greatest extent, whilst it does not imply as it should imply, the greatest intellectual competition. That was one point in which it seemed to me personally that the Gresham Charter could not hope to advance the higher education in London.

3651. Freedom of scope in teaching?—Yes, freedom of scope in teaching.

3652. You think the teachers in existing colleges have not got sufficient scope in teaching?—Nothing like sufficient.

3653. What are they hampered by?—They are hampered by the curricula laid down by the present University of London, which is a University which necessarily has to take into consideration the claims of the majority of its students who are private students, and not trained students. The consequence is that subjects are set, or examination books are set to be read which the ordinary private student can easily obtain. No question can be asked in examination which the private student cannot reasonably be expected to answer, and the teacher, therefore, who presumably, if he is a good one, can add very considerably to the knowledge of the text books is bound to give that information gratuitously to his classes in the hope that they will take it, although it is not necessary for the curriculum, or to leave it out.

3654. But the object of the Gresham Charter was to free the colleges from being hampered by the University of London, was it not?—It was, my Lord; but it seemed to my colleagues, and it seems to me, that that did not allow for the creation of a University on sufficiently large lines to lead eventually to a teaching body of really the first rank whilst it kept up the financial competition in another way.

3655. I am talking at the present moment of the freedom of scope to each individual teacher. Is he hampered by any college regulation now?—No.

3656. You mentioned that which you said the object of the Charter was to get rid of. Is the teacher hampered in any way by his connexion with each particular college?—I believe not.

3657. I do not see how the Gresham Charter confines the scope of each individual teacher. It seemed to me rather to relieve him?—Yes, I was confusing, I am afraid, the Gresham Charter with the London Charter for the moment.

3658. Then we will pass on to the other points. First the competition with regard to the money, but no competition with regard to excellence. I shall be glad to hear you more fully about that. You think the two colleges, or more, which would be bound together in the University, would try to bid against one another for the number of students that they might have so as to increase their finances. Is that your opinion?—Yes, I think so.

3659. That would be the objection to any confederate scheme in which different autonomous colleges would take part?—Exactly.

3660. Do you think the emulation would entirely take the form of wishing to increase their finances, and not at all of increasing the excellence of instruction?—I think it would inevitably tend in that direction, unless very evident means were shown for increasing the financial resource.

3661. Would not excellence of instruction tend in that direction? I mean sending a number up to pass the degrees. Would not their excellence in this respect tend to bring pupils to them and increase their finances?—It seems to me that there are two kinds of excellence. There is the excellence which passes a student for a degree, and the excellence which imparts the highest and best kind of knowledge to the student, and these two kinds of excellences are not necessarily alway co-existent.

3662. You think that one single body appointing all the professors would give a higher class of teaching than different colleges, do you?—I do.

3663. And that the competition between differen. colleges instead of raising the teaching would lower it?—Yes, so far as that competition is financial.

3664. Are there any other objections to the Gresham Charter which you would wish to urge as we are touching on it now?—I think the Gresham Charter gave very little scope for development in the future; it seemed to me to be a scheme intended to benefit the two large colleges in London, but with very little real hope made out of development in the future.

3665. There is a clause which gives power to receive another college if any such college should desire to enter. Do you think that clause would not work? Do you think they would not be willing to admit other colleges?—I am afraid not, unless those colleges brought what is the great need of the two great colleges at present, money.

3666. Now with respect of the power to appeal to the Queen in Council. Would not that enable the college to force its way in if it is a fit college?—I am not closely acquainted with the constitution of the Queen in Council, or that body, but I cannot personally hope that the Privy Council would reverse the skilled, or presumably, skilled, judgment of a University Senate upon a question of that kind.

3667. Besides that, taking the Gresham scheme as a starting point—it would be quite competent to us to put in any other college which we thought in a fit position. Are there any other colleges in London that you think ought to be included?—I think in the Faculty of Science, the City Guilds, and the South Kensington Colleges, at any rate, should be included in any great University.

3668. And your own college?—I think as the Gresham Charter was laid down, yes.

3669. That would not be against the idea of the Gresham Charter. The general principle is taking in existing colleges which may be of a sufficiently high standing, grouping them together and enabling them to form a University?—It is the financial competition, in my opinion, which is the essential objection.

3670. Would you like to enlarge upon that or to show how you think it is a real objection?—I think I might possibly make more clear what I mean if I were to take a concrete example. Suppose the Gresham University in existence and the necessity arising for a great laboratory for the students in some scientific subject—say a great biological laboratory—it seems inevitable to me that if that need arose the Gresham University would not be able to appeal to the public for the funds for the building of one such laboratory because the two colleges constituting the University would immediately be in competition as to which college this particular laboratory should belong to. If it belonged to neither it would presuppose the existence of a University Professor or at any rate of Professors other than the existing college ones. The professors of University College and King's College could not both preside over that laboratory and the competition would in all probability lead to a duplex application, and that would lead to the building of two laboratories of second rank instead of one of the first rank.

3671. That is a very good illustration. There would be a waste of power and overlapping?—Yes, due to the financial competition.

3672. That is your chief objection to the Gresham scheme?—Yes, that is my chief objection.

3673. Have you anything more to say about the Gresham scheme or shall we pass from that?—I do not think I have anything more in detail to say, except as I have already suggested, that the basis did not seem to me sufficiently wide—starting a University with the existing staff, when, in my individual opinion, at any rate, that staff is, in many directions, wholly inadequate, could not give promise for the higher work.

3674. In all the schemes that have yet been before us with regard to a professorial University, and I think also in your pamphlet, it is contemplated that to start with at any rate, you would appoint the existing professors of the different colleges to be the new University professors, so it would be the same men only under a different name to begin with?—Not necessarily the Regius Professor.

3675. But the University professors?—The ordinary University professor, whatever his title might be, would no doubt be part of the existing professoriate.

3676. The existing man under another name—a University professor instead of a college professor?—Yes.

3677. Do you think that after the thing had been started and got to work, you would get better men to come as University professors than are got now to come as college professors?—Yes, I think so.

3678. A good deal would depend upon the pay, would it not?—Yes, and upon prestige.

3679. Is there any hope that the pay would be greater if it were a University professorship?—I should hope that a great University would naturally attract greater support (not only municipal support, but possibly Government support), than any University based upon the existence of two colleges beginning with merely two colleges, and I cannot help thinking that apart from the financial question the prestige of belonging to such a University would amount to much.

3680. It is difficult to tell until the thing is started whether it would be sought after by the best men or not. The money would be one thing and the reputation another. In advocating one scheme more than another, one of your considerations is that you think you would get a better class of professor?—Yes.

3681. I do not think I need take you over the ground again unless you differ from anything that has been already said as to the process of absorption. I suppose you agree that the Bedford College would be willing to be absorbed, and to give up its laboratories and its buildings, and all the things that it now possesses into a common fund?—Yes, supposing other institutions were willing to act along the same lines.

3682. I think it was said you would expect to get something in return, that is that the cause you advocate, the education of women, would get something in return?—Yes.

3683. Because you yourselves would cease to exist. You would expect that the cause of the education of women would get something?—Yes.

3684. Is there any point which I have omitted which you wish to enlarge upon?—I should only like to suggest this with regard to a remark you made as to the action of the college when the Gresham University was under consideration. Your Lordship said that the college took one line of action then, and has now taken a different line of action. I think Dr. Russell did not emphasize sufficiently the fact that the college's action in this respect last year was a conditional action. The college felt that it was better to be a part of even so imperfect a scheme as the Gresham, than to remain as a small corporation with the very imperfect touch which we at present possess with the existing University of London. The appeal, as I understood at the time, did not in any way assert that the college believed the Gresham scheme to be the best possible one. In consequence when the questions was once more re-opened, it became possible for the college to reconsider the matter and to formulate the kind of scheme which seemed to it the best possible.

3685. (*Lord Reay.*) You have not contemplated that the Gresham Charter had for its object, or had for one of its objects, the express purpose of limiting that financial competition?—I have so far considered it, that it limits it within the radius of the University. I have not understood that it destroys the competition, for instance, between King's College and University College.

3686. It limits that competition?—Yes, it limits it.

3687. At all events the Gresham Charter opens the possibility of intermediate arrangements between the two colleges?—Necessarily, do you mean?

3688. Touching distribution of labour. There is nothing in the Charter to prevent University College saying to King's College, "You take chemistry, we will "take physics. Our pupils shall go to you for chemical "instruction, and you shall send your pupils to us for "physical instruction"?—I imagine there is nothing physically to prevent that, although it seems to me not to be contemplated in the Charter.

3689. Of course details of that kind are not put in the Charter, but there is nothing in the Charter to start or invigorate this financial competition?—No, there is nothing to invigorate it, but there is nothing to destroy it.

3690. Let me ask you this. Now, especially in the lower branches of the University, and especially in the lower stages of any Faculty, there will be a great number of pupils?—Yes.

3691. Different professors will have to be appointed, two or three?—Yes.

3692. Will there be any competition beween those two or three professors?—I think so.

3693. Will that competition be financial?—Yes, distinctly.

H. F. Heath, Esq., B.A., Ph.D.

22 June 1892.

3694. Therefore, in the New University, financial competition will exist, only in a different form?—Financial competitions will exist between individuals, whereas now it exists between corporations.

3695. Unless in both cases the University steps in and prevents that financial competition being disastrous to the interests of higher study?—Yes, I should imagine so.

3696. You want the University to step in in the one case as between the two colleges, and in the other as between the individuals?—I did not intend to say that I believed it would be necessarily a good thing to destroy the competition between individuals. I objected to the Gresham Charter, because it did not destroy competition between the corporations. Competition between the individuals seems to me to be good.

3697. I will take your illustration of the biological museum. Under the Gresham Charter would it not be feasible that the question of the biological museum should have been submitted to the governing body of the University. You admit that, do you not?—It would have been quite feasible.

3698. That the governing body of the University should have made the appeal to the public, not for the two biological laboratories at the two colleges, but for a University with biological laboratories attached to one college available for the students of both?—Theoretically it would be possible.

3699. Why not practically?—Because it seems to me that the governing body of the University would be the professoriate of the two colleges, and with the separate existence of the two colleges the professor of one as an *ego* could never forget that while he was a member of the Senate he was a professor at one of the colleges.

3700. But for the very purpose of his own college it would have been an advantage to have the biological laboratory at one if by an arrangement the other college could have had another laboratory. Surely that would have been an advantage to both colleges, and an advantage to the teaching of both colleges?—An appeal for two kinds of laboratories simultaneously?

3701. The laboratories of both colleges require extension, therefore, I presuppose that an arrangement should be come to between the colleges that the appeal should be simultaneous, or that there should be subsequent appeals, and you do not see any practical difficulty there, do you?—I am afraid that there would be considerable practical difficulty, because I cannot conceive how in the starting of any University arrangements should be made ahead for the distribution of those funds to that college or to another—in fact a kind of arrangement of spheres of influence, to borrow an illustration from African politics. I cannot understand that the University would be in a position to map out a sphere of influence in one college, and a sphere of influence in another, so as to prevent any fear of clashing. *Theoretically*, it is not impossible.

3702. I cannot understand where the practical difficulty comes in?—If you could be quite sure when the biological laboratory was applied for that within some definite time a physical laboratory would be applied for, and that before the biological laboratory was applied for, the colleges had arranged between themselves that one was to have the biological and the other the physical laboratory, under those conditions I think the element of competition would be got rid of, but as that is a condition which I cannot conceive as a reality, it seems to me that the question would always be fought out between the two colleges as to which should possess the particular one in question. The professor of biology in one college would naturally not wish to see the whole of his work given over to the professor of the other college.

3703. You suppose, therefore, that there would be no over-ruling power in either college to prevent a competition which would necessarily be damaging to the interests of the education given in both colleges?—I fail to see any arrangement in the Charter for such over-ruling power.

3704. You presuppose that the governing body of the two colleges would be so short-sighted in their policy that they would not make arrangements which would, as I say, be to the advantage of both colleges?—Stated in that way I do not know that I would assert that, but if I rightly understood the Charter it seems to me that the governing body of the University consisted merely of the governing bodies of the two colleges.

3705. The rights of the two colleges for that very purpose of obtaining this co-ordination of teaching between the two colleges?—It is my feeling that that composite governing body could never forget that they represented divers interests.

3706. Therefore, you do not admit that for the very purpose of a composite body these two could come to a conciliatory result?—I believe that is the purpose; I do not believe it would be the result.

3707. Therefore, you believe the governing body of the University composed according to the Gresham Charter would have been a house divided against itself?—Yes.

3708. And that it would not have attained the object in view?—I do.

3709. (*Mr. Anstie.*) These institutional difficulties, the competitive difficulties, can never be altogether removed, can they?—I believe it is possible in the future.

3710. How?—By a gradual disappearance of the college as a separate institution.

3711. Then your only solution is absolute unification?—As a final end to be aimed for.

3712. But supposing that not to be practicable, I suppose you would agree that such difficulties as that would be at least reduced to a minimum by giving the various competing institutions, as I must call them, an adequate position and power of making themselves heard in a central body?—Exactly, supposing the basis a very wide one.

3713. On those grounds, I suppose, you as representing Bedford College would desire to have some institutional representation if other people have institutional representation?—Certainly, if other people have it.

3714. But you would be content to accept what was said by Dr. Russell, that you would not require anything like an equality of position with the two great colleges, University College and King's College?—Under the supposition of institutional representation you mean?

3715. Yes?—Certainly not.

3716. I will take the numbers in a purely arbitrary way just to explain what I want to say. Suppose you had six colleges, *A*, *B*, *C*, *D*, *E*, & *F*, all having the Faculty of Arts. Then let me suppose, whether with reference to the number of University Chairs in the separate colleges, or with reference also to their resources and means, this kind of proportion in voting power were arrived at *A*—12, B—12, *C*—6, *D*—6, *E*—4, *F*—4, making a total of 44. These are purely arbitrary, you understand?—Yes.

3717. That would give to *A* & *B* respectively $\frac{12}{44}$ths, *C* & *D* $\frac{6}{44}$ths, *E* & *F* $\frac{4}{44}$ths of the voting power; and supposing that body so compounded, to send, say, for example, four institutional members to a governing body, does that seem to you a manner in which the smaller bodies, without expecting anything in the way of direct representation, might make themselves so far heard as to have their just claims fairly considered. Would that be an advantage?—It would be better than nothing.

3718. Would you like something more?—Distinctly.

3719. But it would at least do something in the direction of giving the college that position?—Yes.

3720. I should like to know what the extent is to which you desire to see what you describe as the freedom of teaching carried. Do you desire, as I have heard stated by a very eminent man of science, that each teacher should graduate his own students?—Not, perhaps, quite in that bald way, but I should like the teacher to have a very large proportion of the voice as to whether a student should graduate or not.

3721. Do you mean in the settlement of the curriculum on which the training proceeds?—In the settlement of a general curriculum no, of the main outline, no. I understood you to speak of the examination.

3722. I am not speaking of examination only. What is it that you say at present limits the freedom of teaching?—Examination.

3723. Then it is on that point that you wish to give the teacher some relief by giving the teacher some influence?—Yes.

3724. I gather that you say the bondage of the examination is felt in limiting the curriculum and method of teaching of the teacher. Is not that so?—I do not think as a matter of fact the two things are necessarily the same.

3725. How can you dissever the one from the other. You assume that the students in a class are persons who are desirous of obtaining a degree. That desire of theirs can only be gratified on some definite lines, and I understand you to say that that line, whatever it is, will limit the freedom of teaching. Does not that influence the curriculum, and is it not the freedom of the curriculum that the teacher wants?—I am not quite clear that I did mean that.

3726. But does it not necessarily import it?—I am not sure that it does necessarily import that.

3727. Then you think that the curriculum might be absolutely fixed by an external authority, and yet that the teacher might have the desired freedom?—The curriculum absolutely fixed by external authority—no.

3728. Then the teacher must necessarily influence the fixing of the curriculum?—Not necessarily by the individual teacher alone, but by the teachers as a body.

3729. Then, am I right in saying, that what you mean is freedom of the teachers as a body and not freedom of the individual teacher?—I believe that the freedom of the teachers as a body will lead to the individual freedom of the teacher.

3730. Then you think the teachers, as a body, should have a large and influential control over the course, and the results of teaching; and you think that, if they have that, sufficient freedom will be given to every individual teacher?—I believe so, at any rate at the beginning.

3731. May I take it that you think their freedom would still remain limited?—Exactly.

3732. The course would be fixed by a concurrent opinion in which all the teachers will have their say and their influence?—Exactly.

3733. And with that you would be content?—As a beginning.

3734. So far as regards this question of freedom of teaching I mean merely?—I mean at the beginning of the University, I should be content with that.

3735. But with respect to the freedom of teaching, that is what I am upon only now?—Exactly. I should be content at the beginning.

3736. On the question of freedom of teaching, you would be content that all the teachers who are connected with the University should have a share in determining the course and the results of teaching?—Exactly.

3737. And that, I understand you to say, is not, in your judgment, adequately provided for by the Charter in question?—Not at all.

3738. Now one more question about these Regius Professors, which is a matter that somewhat puzzles me. I do not understand what function is intended to be assigned to the Regius Professor?—That, I believe, was left intentionally vague by our Committee. What my own personal feeling may be, I do not know whether it is of value to hear.

3739. I should like to hear it?—It seems to me that the function of the Regius Professor would be well limited to the kind of work which, for instance, the chief University professors in a German University do.

3740. That is something that is unknown to me. What is the function of the chief professor in a German University?—A professor of a subject in a German University, as a rule, has to hold the higher tuitional work in his particular subject. That does not prevent him from also taking, when he considers it well, and when he feels drawn to it, more elementary work; but, as a general rule, his *lectures* cover the main principle of his subject. —Speaking from my own personal experience, as far as I am acquainted with the German system, the classes which are held under the name of the *Seminar* on the other hand deal with the details of those subjects whether scientific or literary, and the higher teaching is done by the chief professor.

3741. I may as well mention to you what has been stated before us by a very competent authority, that at Cambridge Professor Michael Foster, who has been described as the animating spirit of the Cambridge scientific school, takes only elementary work?—I could believe it.

3742. That is not consistent with your answer as to the Regius Professors taking only the higher work, is it?—I do not think I said only the higher work. His function is to encourage the higher work, and he would, as a rule, take the higher work, but sometimes he might feel it advisable for him not to take the higher work.

3743. Do you think the Regius Professor is to have the power of taking what work he likes and prescribing what other people shall take?—That is a point on which I cannot come to any final conclusion; but I do think he ought to have the freedom of taking any kind of work he likes. Whether he is to have the power of saying to others what they shall take I am not sure.

3744. On page 6 of the pamphlet there is this: "The "duties of a Regius Professor would be to give teach- "ing in honours and post-graduate subjects"?— "Teaching" is a broad word which does not necessarily include lecturing.

3745. Would you exclude other people from giving teaching in honours?—No.

3746. Nor would you compel him to give teaching in honours?—I would not compel him to give lectures in honours. I think he should be compelled to give teaching in honours.

3747. Is he to be a kind of roving professor doing what he likes?—A roving professor?

3748. Yes. I really can hardly describe it otherwise. He seems to be a man who is to do what he likes and when he likes?—As I conceive him he would be a man of the highest rank in his profession who would be appointed by the University with the object of encouraging the teaching of the higher subjects within his particular Faculty.

3749. Limiting it to that description, do you not know that at present there are at University College and King's College, and at the Royal Colleges of Physicians and Surgeons, lecturers of a very high kind taking what may be described as post-graduate subjects already. If such Chairs as those were taken up and incorporated in the University, would not that really answer the end desired to be answered by this proposal of a Regius Professor?—It might in certain subjects.

3750. Then all you desire is the power from time to time, where needed, to create such Chairs either in connexion with any of the colleges incorporated in the University or not in connexion with them?—Yes, exactly.

3751. (*Bishop Barry.*) I should like first to ask a question as to the contrast drawn between financial competition and intellectual competition of institutions; how it is possible for one to be separated from the other?—It seems to me to hang together to a great extent with the subject that I suggested, viz., that the success of an institution may be measured by the amount of success that its students gain in examinations or it may be measured by some higher ground than that, the amount of knowledge which those students attain.

3752. Then, I understand that the financial competition is indissolubly connected with a certain kind of intellectual competition, but not in your judgment the highest?—Not necessarily the highest.

3753. Does experience justify the idea that in colleges of high repute there will be such a marked pursuit of what I may call cramming, that the highest and most intellectual part of the work will suffer?—I fear so, unless arrangements were made to prevent it.

3754. Does experience justify that opinion?—I think so.

3755. What experience, for example?—The experience, so far as I am acquainted with it, at King's College and University College leads to that impression.

3756. Are you acquainted with that teaching?—I was a student for four years at University College, and I am a lecturer at King's College.

3757. Then you form your judgment upon this experience?—Yes.

3758. You think that those two colleges practically are so much hampered by the necessity of gaining a visible success, that they cannot give properly the highest teaching?—I do.

3759. You are aware that King's College does not send a large number of students to the University of London?—I am.

3760. You distinguish between teaching for the sake of teaching, and teaching for the sake of external success. Now, if King's College sends comparatively few students to the University of London, what is the kind of success you think it especially seeks?—I think King's College follows the Church.

3761. Of course you are aware that theological students form a very small proportion of the whole

H. F. Heath, Esq., B.A., Ph.D.

22 June 1892.

college?—I am not speaking of the medical school. If medical students are included in the number, I believe that is so.

3762. Then, if I understand you, your notion is this, I am interested to hear it, for it is a thing of which I knew nothing before—that the courses are regulated by the anxiety to provide for the Church of England?—I think the majority of students of King's College study in that direction.

3763. I was there for many years, and I should have said the number was very small comparatively?—I mean in comparison between the Faculty of Arts and the Theological Faculty.

3764. But there is the Faculty of Engineering and the Faculty of Medicine?—Of course I can only speak as a layman with regard to that. I have no direct knowledge of those Faculties.

3765. You would speak also as a layman about theology, I suppose, would you not?—Yes.

3766. I cannot see that the two things can be permanently separated. If you want to gain University distinctions you must teach in the very best possible way, and, as a matter of fact, I have reason to know that a large amount of teaching in these two colleges has no distinct reference to anything but the study of the subject for its own sake. I have perhaps a larger acquaintance with it than even your own, because I had to do with all the various Faculties in one college, and I know a good deal about the other. But, I think you said that the Gresham Charter was not constituted on sufficiently broad lines to be of any great use. Will you kindly explain that phrase? Where was the want of breadth most visible?—In the small number of colleges which were proposed as constituent parts of the University.

3767. If, therefore, this Commission were to recommend a large number of colleges to be inserted in the Gresham Charter, that objection would vanish?—Not necessarily.

3768. Then there must be some other ground?—The colleges recommended must of course be of sufficiently high rank. If the Commission were to recommend the inclusion of a number of colleges of sufficiently high rank, the objection would in so far disappear.

3769. Do you think that is impossible?—I do not think it is impossible.

3770. Then, in that case, an amendment of the Charter rather than the sweeping it away altogether, would so far meet your wishes?—It would be a distinct improvement It would in so far meet my wishes.

3771. You seemed to imply that you had very little confidence in the provision for further development in the Gresham scheme?—Yes.

3772. Have you noticed the composition of the Council of which you seem to have such great distrust? In regard I mean the impossibility of any one institution commanding any dominant power there?—I am not sure that I bear it in mind at present.

3773. I fancied that you did not from your statement?—I know my general impression was, that the greatest weight would be given to medical schools, speaking merely as to general representation.

3774. I think you have hardly studied very carefully the composition of that Council?—Yes, I am not sure that there is anything that would exactly contradict my views.

3775. Your view, as I understood it, in the first instance did not bring in the medical schools, but the two great colleges, and your fear was that they would exercise a dominant influence. Now, I think your fear is that the medical schools will exercise influence. Is not the ground a little changed?—I am speaking of course of the relation of those two colleges to each other, and I am of opinion that the medical schools would not interfere in a question in which the two colleges alone were interested.

3776. You mean in regard to the question of Arts?—In regard to the question of Arts.

3777. I think your view was, that if these colleges gained strong influence in the Council, they would be very jealous of admitting any other institutions?—I think it very likely.

3778. And you thought that the Privy Council would not be a Court of Appeal which would be of any value?—I could scarcely hope so.

3779. The Privy Council, as I understand, was named as a body which was to do justice to all. Do you think they would not set aside a decision which had been made by the experts upon the matter?—I fear they would not.

3780. The very object with which they were put in, was to deliver people from the tyranny of experts, which is a considerable tyranny?—It seems to me, and I feel now that the reversal of such a decision would lower the prestige of the University to a dangerous extent.

3781. In that case the University, of course, would be very careful not to incur the risk. Do you think it probable that if the college applying for inclusion, either one existing, or one to be founded, was really of first class rank, any council would venture to exclude it?—I think if that college were not financially strong, it might be excluded.

3782. I should have thought that the financial question was not the important point. The Council would have to see that it had proper appliances for teaching, and that of course touches a little upon finance, but, except in that way, I do not see how finance would come in at all. Now I will pass on to ask you how you would propose to get rid of competition between the various colleges?—By having a common chest.

3783. Does that involve the complete absorption of which you speak?—That involves complete absorption as far as it is carried out.

3784. How do you propose that the complete absorption should be carried out? By what process?—By what legal process do you mean?

3785. By what process, legal or other, do you propose that complete absorption be carried out?—I imagine it would be carried out by the help of some commission to be established.

3786. Under an Act of Parliament?—Probably.

3787. In other words the Act of Parliament would practically destroy the identification of these colleges in the interests of higher education?—If these colleges signified their wish in that direction.

3788. No! pardon me. I asked you how is this unification to be carried out. You tell me by a commission acting under an Act of Parliament. Is that to override the consent of the colleges, or are you to require the consent of the colleges?—To require the consent of the colleges.

3789. Then suppose that consent is withheld. Supposing that they decline to perform the happy dispatch upon themselves, what then?—Then it seems to me that the only two courses open are those suggested on the third page of the pamphlet, "If no "college were willing to be united to the University in "one or other of the ways described below, the "Government might either accept this fact as a final "proof that a teaching University for London is "impracticable, or might proceed to develop the latent "teaching powers of the existing University of London "authorising it to absorb other bodies, in the belief "that such absorption would soon follow."

3790. Do you mean other bodies than the colleges or other bodies than itself?—Than itself.

3791. Then if these colleges say No, the absorption is to take place against their will?—If they are wrong in the belief that such absorption would soon follow.

3792. If they are willing to be absorbed, it is not necessary to give any powers; they can be absorbed. But my point is this: suppose them unwilling to be absorbed do you then give up the idea of a teaching University for London altogether?—No, I am afraid I expressed myself badly. The idea in my mind was that the existing University of London should be given power which should come into action so soon as the colleges were willing, in the belief that they will soon be willing, and they would soon be willing if these powers were present.

3793. Then you believe that in process of time they would be placed in so difficult a position that they would be willing to be absorbed?—I believe they would see their true interest.

3794. Then there is one other point. Have you noticed in the Gresham Charter that the University has power to appoint independent lecturers or professors not connected with any college?—I have noticed that.

3795. If they appointed lecturers, they would also have power to appeal for that without which they could

not lecture in science, viz., museums and laboratories?—I did not understand the Charter to propose that under these lecturers they would have professors of the highest rank, of the rank of Regius Professors.

3796. Why not? They certainly have the power of appointing any lecturers they please, and there is nothing to prevent their appealing for this biological laboratory. You will find the power of the University to appoint lecturers not in connexion with any college in Section 3 of the Gresham Charter. Would not that give you the power you desire of appointing professors of the highest order?—I understand the paragraph is, "each assembly of each Faculty may elect"——

3797. No, the paragraph in question is the last paragraph of Section 3: "The University may appoint "lecturers independently of a college to give instruc- "tion in any subject, whether it be or be not included "in a Faculty." Does that not give very large powers to the governing body of the University?—Yes; if that word "lecturer" were intended to cover what, I confess, it did not cover to my mind. I thought the word "professor" was used in this Charter.

3798. Then if the word was translated in the larger sense the power you desire would be given by the Gresham Charter?—Yes, I imagine so.

3799. Now with regard to the Regius Professor. Do you attach great importance to his being Regius, that is to say, to his being appointed by the Crown?—I do.

3800. Why?—Because I believe that is the only way in which the question of vested interests could be overcome.

3801. Might not the University appoint a professor, and would not he have equal prestige. I confess I should rather have confidence in the judgment of the University than in that of the Government of the day?—I should fear the result would be that the University would appoint a man who had won honour through long service.

3802. And you think the Crown would be quite free from that temptation?—Not quite free, but more free.

3803. I do not know whether you know that at Cambridge we have a professor who is called Regius Professor of Divinity, but who is appointed nevertheless by the authorities of the University Do you suppose that on that account he loses prestige?—I am not sure that he does.

3804. There is one other point about the Regius Professor. I am not sure about your answer to Mr. Anstie. What power would he have over the Faculty? Would he necessarily be the head of the Faculty?—I am not prepared to say that he should be the head—I mean—that I would give him any power or jurisdiction.

3805. He would preside over the Faculty?—He would preside over the Faculty, I imagine.

3806. Would you give him any power over what I may call the apportionment of study, to determine after conferring with his colleagues of course how a study should be divided amongst the various professors?—I should think very likely.

3807. You would give it to him as president of the Faculty, not to his sole autocratic authority?—No.

3808. Otherwise the important point in your mind is that he should take the highest teaching in that matter in each subject?—Yes.

3809. What would this taking the highest teaching mean?—I should prefer to say encourage the highest teaching, the highest work.

3810. How would he encourage it except by taking it?—I was afraid that by "taking the highest teaching," lecturing would be implied. It does not seem to me absolutely necessary that he should lecture.

3811. How is he going to encourage except by taking it?—By working with his students in original work—original research. That is what I understood.

3812. That would be taking the highest teaching, would it not?—Yes; I was only wishing to guard myself against a misinterpretation of the phrase.

3813. (*Lord Reay.*) Did I understand you to say that the object with which students go to University College is as a rule entirely different from the objec twith which they go to King's College. We need not go into the details of this difference?—As a rule I should say, yes.

3814. Then if the objects are different, there cannot be much financial competition?—I am not sure that it would be so where the colleges together granted the degrees. King's College at present does not work so much for the degree. University College does to a large extent.

3815. Past experience has not revealed the symptoms of this financial competition, but you are afraid of it in future?—So far as I am acquainted with it, it does not, but I am much more acquainted with the Arts Faculty than the Science Faculty and other Faculties.

3816. Then are you aware that so far from each college having made an appeal for funds in competition with the other, the last appeal was a joint appeal from both colleges?—I am aware.

3817. (*Mr. Anstie.*) I am not sure whether I understand your answer to his Lordship's question. What are the views with which the students go to these two colleges?—The answer was more put into my mouth than given by me, but speaking of the colleges, so far as I am acquainted with them, and I have been an art student in one, and am a lecturer in the other, I should say the larger proportion of students at University College were reading for degrees at London, whereas that is not so with King's College students. That is all I meant.

3818. Is your answer limited entirely to the Arts Faculty?—I could not speak with any authority upon the other Faculties.

3819. Would you wish to limit your answer to the Arts Faculty, because if you do I will not ask you about the others?—I could not speak except in the most general way with regard to other Faculties, I believe it is so with regard to science, but I am not sure.

3820. You wish now to extend your answer to science, is that it?—If it is understood now that I speak without any authority, and merely as an individual.

3821. That is your impression?—Yes.

3822. You do not refer to the other Faculties?—No.

3823. The distinction is that in one college they more frequently read for degrees and the other not?—Exactly.

3824. (*Lord Reay.*) May I ask whether at your new professoral University you expect a majority of students to study on very different lines from those which now prevail at University College, viz., that they will not read with the view of taking a degree?—No, I expect them to read for degrees.

3825. Therefore you expect them to read very much on the same lines as the students at University College are reading at present?—Except so far as the curricula are different—with the same object.

3826. (*Professor Rendall.*) There is one question which I should like to ask you, I understood you to make an admission that the Gresham University scheme gave the University power to appoint professors as distinct from lecturers?—I think not; I think I said if the term "lecturer" covered "professor," but I understood that "lecturer" did not cover "professor."

3827. Are you aware that the scheme was limited to the appointment of lecturers not professors?—I thought so.

3828. College tutors bear very largely the title of "professor"?—They do.

3829. And the title of "lecturer," I think uniformly ranks inferior to that of "professor"?—Yes.

3830. You also observe that the lecturer has no statutory or constitutional right to a seat on the assemblies of Faculties?—Yes.

3831. Would not that tend to loss of status?—It would.

3832. And would tend to deter the best men in arts and science from coming forward as candidates for the position of University lecturer?—It would.

3833. (*Mr. Anstie.*) Perhaps I may draw attention to the 51st clause of the Senate's scheme, which was drawn and published previous to the Gresham scheme, and which specifically gives "power to hold real property "and to accept grants, gifts, devises and legacies for the "purposes of the University including the establishment "of professorships and lectureships"?—I know.

3834. Both words are used there, and you have drawn an inference from one being omitted?—I know some people objected to it on the very ground of it giving the University power.

The witness withdrew.

Adjourned for a short time.

Mrs. Bryant, D.Sc.

22 June 1892.

Mrs. Bryant, D.Sc., examined.

3835. (*Chairman.*) What position do you hold in Bedford College?—I am an old student at Bedford College, and I have occasionally lectured there. I am a member of the college, of the general body of the college. I am not a member of the Council, nor of the staff.

3836. Therefore you appear rather in your individual capacity, not as representative of any body?—Yes, I appear as representative. I was asked by the Council to represent Bedford College here to-day, on account of my connexion with the college as being one of its students; and also, of course, I have had a great deal to do with the education of girls in London, and I know how the question of the education of girls bears on the value of the College for Women as an institution.

3837. Of course you have read the paper which was handed in to us to-day?—Yes.

3838. Do you agree with it?—Yes, in the main. It does not appear to me that the institution of a professorial University completely absorbing the colleges is the only alternative. I do not think it is the only alternative, though it appears to me to be a very good one.

3839. What other alternative is there which you think would be preferable?—An alternative in which the colleges remain as individual institutions, as corporations, with a certain amount of local independence.

3840. Have you read the draft scheme of the Gresham University?—Yes.

3841. Do you think that could be made into a workable scheme?—The objections that were made to the Gresham University are summed up in a paper which I have here. I made a note that this was not mentioned by the previous witnesses. The paper refers to the previous Charter: it was the Albert Charter at that time. The grounds of objection of the petitioners are summed up in this way:—"(1.) To include the Bedford College "as a constituent college with due representation on "the Council. (2.) To embody the recommendations of "the Royal Commission so as to make the Charter "adequate to the present and future needs of the "metropolis. (3.) To ensure that the teaching in the "colleges be unsectarian." Those were the three grounds of opposition from the Bedford College point of view.

3842. You would object to any college being affiliated to the University that had sectarian views?—That was the opinion of the Council. I do not say that it is my individual opinion.

3843. The one about not being wide enough is rather general. Do you think there are any alterations that would meet that, or is that a fundamental objection to the whole thing?—I should think, as far as that statement goes, that it would have been quite possible to have modified the scheme so as to get over that difficulty.

3844. Then there is nothing which could not be modified except having a sectarian college?—As I understand it, the opinion with reference to Bedford College is very strongly in favour of the other type of University, of which you have already heard.

3845. You agree in the main with the paper which was handed in to us as embodying the opinion of the staff and the Council?—Yes; that is, I think the interests of women's education would be better served in that way than in the other way.

3846. (*Mr. Anstie.*) In which way?—By the establishment of a professorial University which would maintain the lower teaching in the colleges much as it is, the higher teaching to be done by the special University professors.

3847. (*Chairman.*) Have you anything to add to the evidence which we have already received from the two previous witnesses who have been examined to-day? Is there any point on which you would like to be examined on which they were not examined, or is there any opinion different from that expressed by them which you would like to record?—I think I am more specially qualified to speak on the subject of the value of maintaining and encouraging a college which is especially for women, and the value of preserving in some degree unmixed education for women.

3848. You would keep a college expressly for women?—Yes.

3849. As far as that goes you do not approve of the scheme of absorption?—The scheme of absorption, as I understand it, would still certainly mean that the college continues to exist so far as its special function of providing women's classes is concerned.

3850. And you would keep your own buildings, and your own laboratories, and so on?—Yes.

3851. You would not like those to be taken possession of by the new University?—I have not made myself clear. My idea is, and I am quite sure that I am speaking for others as well as myself, that the buildings and property generally should come into the hands of the University, but the condition to be fulfilled should be that the work which is now being done by Bedford College for women's education should be continued by the University on those lines.

3852. So, as Bedford College would cease to exist, you would wish the University to take up the education of women on the same lines?—Yes.

3853. That is keeping women separate from men and giving them separate classes and separate training?—Yes, giving them the opportunity of such separate classes.

3854. It would be rather difficult for the University to do that, would it not? Would it not be more difficult for the University than if you kept the college going?—I should have imagined that even with complete absorption—I do not express an opinion so very favourable of that—but even on that scheme the college would still preserve its existence so far as would be implied in the continued existence of our Council, whose business it would be to look after all matters of college discipline, and to carry on the domestic arrangements, in a certain wide sense of the word "domestic" of the institution much as they are carried on now. I think the Council would still be required in order to carry out that part of the work, while all the teaching passed into the hands of the University.

3855. But it would be necessary to keep up some subordinate institution for those parts of the education that are entirely confined to women?—Yes. I should like just to draw attention to another point that has not been mentioned, and that is that the college has been recognised in a very practical way already in the report of the Committee on Grants to University colleges this year. The Bedford and Queen's Colleges claimed to be included in the grant, and both of them were recommended for a grant. Bedford College was recommended to have 1,000*l.* and Queen's College 500*l.* This is the report of the Committee of the House of Commons on Grants.

3856. I suppose you feel the want of a grant very much, do you not? Do you find it a difficulty to carry on the work of the college with the present funds, or do you find a very strong necessity for the grant in addition?—It affects the question of fees in a somewhat serious way, and the question of financial competition, which has been referred to, may be put in a somewhat clearer light from that point of view. The real difficulty of financial competition is not in the competition between two different professors, or two different institutions for a larger number of students, fees, but in the fact that one institution may be able to undersell another institution; and that is not by any means a fanciful danger. That is precisely what has occurred at Bedford College. When University College got its large grant—I think three years ago—the students' fees were lowered, while Bedford College, having no grant, was not able to lower its fees. The result is that students are tempted, or their parents are tempted, even if they prefer a separate education not to send them to Bedford College, because there is a financial advantage in sending them to University College.

3857. (*Professor Ramsay.*) Were the fees lowered at King's College?—I do not know that they were lowered at King's College. I cannot answer for that. King's College would hardly enter into competition, being in such a different part of London.

3858. (*Chairman.*) Do you think under a system in which all fees were payable to a central authority, and grants made to them, and all the different buildings undertaken by them, you would gain in a financial point of view, and that the fees charged for women's

education would be less than they are now?—That I could not say, but they would, of course, in that case be equalised, or a system would be possible in which the University controlled the fees.

3859. Is there any point especially which you would like to bring before us?—I should like to say something about the advantage, as it seems to me, of preserving that system of education—classes for girls by themselves. At the beginning of the movement difficulties in connexion with mixed classes were feared by many persons. These did not occur because the women students were of a very select character—select in every respect, and of a higher intellectual average than the other students; but as it becomes more and more popular to send girls to colleges, it becomes inevitable that we shall have a class of girls going into college classes similar to the less intellectual and earnest undergraduates of Oxford and Cambridge, and under those circumstances to be able to send girls to separate classes is a very great advantage to all except the very best.

3860. Your college was founded in 1849, and at that time was the only college for the education of women, was it not?—No, Queen's College was earlier.

3861. Since that there has been the Holloway College?—And Girton and Newnham.

3862. I mean in London?—Yes, Holloway College.

3863. The establishment of Holloway College has not reduced your numbers in any way?—No.

3864. Do you think the establishment of Holloway College would be any reason for your numbers not having increased during the last few years?—Of course the students must go somewhere, and I think it probable that they would have increased a little more if it had not been for Holloway College.

3865. Is there any other point you wish to lay before us?—No; except that I ought to add that the existence of separate laboratories is especially important, and again the function of some distinct collegiate body, even though the teaching function were absorbed, is very important. It is important that these laboratories should be preserved for women. That, I understand, is the kind of condition the fulfilment of which the Council of Bedford College would have in view in giving up its corporate existence.

3866. That there should be some one laboratory—you do not care what or where—put aside for women?—Yes; that it should be possible for that to be preserved.

3867. You would make that a condition in giving up your buildings?—Yes.

3868. (*Professor Ramsay.*) You have raised two very interesting points. First, the question about the fees. May I ask what your present fees are. Are they for separate classes, or for the whole course, or both?—Both. There is a composition fee for the whole course, besides the fees for the separate classes.

3869. I see this book says that the students who wish to prepare for the Intermediate Examination pay a composition fee, Matriculation standard, 27 guineas. Does that mean giving them the whole of the tuition required from the point when they join the college to their passing the examination?—For each session the fee is 27 guineas.

3870. That does not secure the pass?—No.

3871. It is 27 guineas for a session?—Yes.

3872. What is the length of the session?—There are three terms.

3873. Like Oxford and Cambridge?—Yes, the usual thing; a little longer. It is 31 weeks instead of 24.

3874. I see it is, "Matriculation standard, 27 guineas; "Intermediate in Arts, 39 guineas; Preliminary Scien- "tific, 47 guineas; Intermediate in Science, 54 guineas." As it is a composition fee, I suppose that means that the fee for individual subjects would be proportionately higher?—Yes, I think that would certainly follow.

3875. For the most elementary teaching 27 guineas rising to 54 guineas?—Yes.

3876. And 54 guineas includes the right to use the laboratories, the materials required, and so forth?—Yes.

3877. You suggested just now that the fees might be under the control of the general University body, did you not?—Yes.

3878. But if fees were in the control of the general University body, would it not be essential that they should be equal?—They would tend to equality.

3879. Is not that rather a difficulty in the way of having a complete absorption of all the colleges under one system?—Yes. I quite see that that is a difficulty.

3880. And that your institution could not be maintained except upon the footing of high fees?—High fees, or Government grants, or endowments.

3881. You spoke about being competed with by University College. How much were their fees for women reduced in consequence of this grant? Are their corresponding fees very much lower than these?—That I am not quite sure of. I ought to have ascertained that. I am told it is less.

3882. Something considerably less?—Yes.

3883. Of course you are aware that there is a claim made by other institutions to be included in one form or other?—Yes.

3884. Would it, in your opinion, be practicable to have uniform fees for all such institutions?—No. I do not think fees could be perfectly uniform. I think the character of the institution must in some way be considered, but the central body, I should imagine, would be able so to control matters as to prevent actual "underselling."

3885. Having one college recognised as dealing with a superior class at one rate of fees, and other colleges, dealing with a lower, poorer population upon another scale of fees, both of them being in the University?—Yes. I do not see any reason why that should not be so.

3886. Now with regard to what you said about mixed classes. Have you had any experience yourself of mixed classes?—I have only experience by knowing about ex-pupils of my own. I am teaching in one of the large schools in the north of London. I know girls who go to the colleges in Wales where the classes are mixed as well as to those at Oxford and Cambridge, so I only know about it in that indirect way. My own knowledge is more particularly about the Welsh Colleges than University College. I know it is thought necessary to exercise great care and supervision. There the women students all live in a women's hall, or they nearly all do so.

3887. You are speaking of Wales?—Yes.

3888. What town in Wales are you speaking of?—All three.

3889. Are there women's colleges in all three?—There is a college in each of the three to which women are admitted. I only speak of those—Cardiff, Aberystwith, and Bangor.

3890. Do the students from those colleges go to the same classes as the male students?—Yes.

3891. Have you a strong opinion yourself that there are difficulties attending the conduct of mixed classes?—Certainly there are difficulties; but I do not think they are insurmountable.

3892. Do they increase with the size of the class? Has the size of the class much to do with it?—That I could not tell you.

3893. Is the difficulty with the nature of the subject?—No. I should think it would depend upon the character of the students more than anything else.

3894. Both male and female?—Yes, both male and female.

3895. I suppose you admit that there are certain subjects which are more difficult to teach in mixed classes than others?—Yes.

3896. Putting aside medicine as standing by itself: would you say there are any other subjects which cause special difficulty?—I do not think I should. I do not think there are any subjects the difficulties of which present themselves in any different way to students of either sex.

3897. Are you aware of any facts tending to show that there is undue shyness on the part of either sex, which interrupts sometimes the progress of business?—The shyness seems to me to be a very real difficulty.

3898. On whose part most?—On the part of the girls. In this way:—I think one sees that wherever women are working with men they are a little apt to be too quiet, and not sufficiently to assert themselves, and put forward their difficulties, and so on. It seems to me that for quiet retiring girls who are also very young that is a

Mrs. Bryant, D.Sc.

22 June 1892.

real difficulty, and that in an institution which exists for them the backward ones are much more likely to be looked after and pushed forward and have most made of them. My own difficulty with regard to mixed classes for the most part turns upon that.

3899. Have you ever heard it said that intellectually there is a difficulty in dealing with various subjects in mixed classes?—No, I have never heard that opinion from the teachers.

3900. Is it within your experience that there is a large class of parents who, whatever the merits of the matter may be, desire their girls to have a high class education apart from male students?—Yes.

3901. Do you think it of great importance to the higher education of women in London that there should be a place in which those women who desire it could get it in classes exclusively composed of women?—Yes.

3902. Would there be less difficulty in your view with regard to honours classes than with pass classes?—I am glad to be asked that question. With regard to honours classes, I should take an exactly opposite view. With regard to honours classes and the honours type of student they ought to work together.

3903. That is to say, if there were central professorships, or central laboratories, to which students who had passed certain examinations could go, you would see no objection to women of that type, who have proved themselves capable, attending mixed classes for higher work?—I think there is a distinct advantage. As soon as you come to the exceptionally good students, or the advanced students, the advantage to them of being not only with the best teachers, but also with the best students, is very great. The advantage of collecting all the best students into one class seems to me to be very great indeed, especially to women who are more likely to be excluded, because I think a good part of the progress depends upon the students with whom one works.

3904. You mean in the case of lectures where there is no examination work—where it consists simply of lecture work with no personal intercourse between the teacher and the pupils?—Yes, even in that case.

3905. Your view is that, to secure suitable arrangements, it would be necessary that there should be a managing committee or council, or whatever you may call it, to make from term to term special arrangements for the order and discipline of the women students?—Yes.

3906. And you could not expect the central University body, who had charge of the whole University teaching in London, to enter into all those details?—No; and I may again refer to the experience of the Welsh colleges, because that is exactly what they found it necessary to do.

3907. I understand you have no objection to the teachers being appointed by the University?—No.

3908. So long as the separate management is maintained?—Yes.

3909. Then with regard to the representation upon the central body; would you regard it as more important that the council should be represented, or the professors or both?—I should say that it is much more important that the professors should be represented. It seems to me that this question about having opportunities for women apart, has nothing to do with the University. I think all that matters in the University councils is that the teaching should be represented. Therefore I do not see that the other is necessary.

3910. Could you expect a Council to take the trouble of managing these minor points if it had no share in the government of the whole institution?—Probably as a practical point the Council should be represented in some way either as a whole or a portion.

3911. Then do you contemplate that ladies should be eligible to be professors?—Certainly. I should have thought they would be eligible to be professors in the new University.

3912. But you do not necessarily imply that all the teachers in the college should be professors?—By no means.

3913. But that they should all have the University status?—Yes.

3914. (*Mr. Anstie.*) On the question of the fees being lowered by the grant I understand you to say that it has become a practical question with Bedford College in consequence of the fees being large and grants having been made to other institutions. Do you know that the Birkbeck Institution and the City of London College, asked for recognition and assistance under the City of London Parochial Charities Act, on the ground that assistance being given to other and similar institutions they would put at a disadvantage. Are you aware of that fact?—No, I did not know it.

3915. And are you aware that as a matter of fact in consequence of grants being made to them their fees have been lowered?—No, I did not know that.

3916. Perhaps it may be almost impossible, having regard to the course of human affairs, to avoid some differences and difficulties of that sort however honest and well-intentioned the managers of the institutions may be?—I quite admit that my point is that a central control over fees would minimise these difficulties the existence of which is probably a necessary feature of the case.

3917. Still, as I believe, you admit your plan involves the absolute control by the central governing body over the absorbed institutions?—I cannot see that it is necessary to control all the affairs.

3918. Can you suppose that an institution could retain its financial responsibility if it were liable to be interfered with in respect of its receipts?—Yes. The endowed schools are in that position. The North London Collegiate School with which I am connected is in that position. The Charity Commissioners can interfere with us in some respects. Our control over our fees is within limits allowed by them.

3919. With great deference, I speak from experience in this matter I must be compelled to differ from you there. The fees are limited by the scheme within certain fixed points, but within those limits they are left to the absolute control of the governing body?—That is analogous to what I had in view. Without holding that the University should absolutely prescribe what each college should do with its finances, it would be quite possible for the University to have at least as much control as the Charity Commissioners have over the schools.

3920. Do you suggest that it would be all the same to an institution if some external body determined what the amount should be within the assigned limits, say 5*l.* or 10*l.*? I think I may state to you with great confidence that the Charity Commissioners never think of doing any such thing. They perfectly recognise that the financial conduct of the undertaking must be left in the hands of the responsible body?—I believe that in the minds of the governing bodies of the schools the influence of the Charity Commissioners is a very real influence determining what they actually decide to do.

3921. I think it is a mistake on your part, and if that is an analogy on which you are relying, I think it only right to say that it is an analogy which must wholly fail. However it remains a fact that the relative financial position of different institutions may be in a most material way affected by the existence of grants given by an external body, whether that external body be the government of the country or whether it be some other body external to the institution. That is so, is it not?—Yes.

(*Professor Ramsay.*) May I ask a question here, is there no audit by the Charity Commissioners?

(*Mr. Anstie.*) Not necessarily; the accounts from all charities must to be sent up to the Commissioners; but there is no regular audit nor any power on the part of the Charity Commissioners to determine within the limits prescribed by the scheme which of the limits or what point between the limits shall be observed.

(*Professor Ramsay.*) In the case of the Scotch endowments there is an audit by the Scotch Education Department which seriously controls the action of the governors.

(*Mr. Anstie.*) In England the Charity Commissioners have a real control in this sense, that they can question any payment that is not within the legal competence of the body governing the charity; but, supposing it to be within the legal competence of the body governing the charity, they would have no power to interfere and do not seek to assume it.

3922. These questions in a very essential way then are practical questions?—Yes.

3923. When you describe the question of the representation of the institution as distinct from the

representation of the teachers as a practical question, I may assume that you are giving it really a position of very great deal of importance; we are here to deal with practical matters?—Certainly; but I do not understand exactly in what sense you understand them.

3924. In relation to that which has been indicated by the previous witnesses, and I think also dwelt upon by yourself, the competition which will almost inevitably arise between different educational establishments; therefore by calling it a practical question you do not mean to call it an immaterial question?—No, by no means, quite the contrary.

3925. Now, one more question on the more strictly educational matter. I think you have said that Bedford College applies itself to education of a University standard, and largely prepares its students for University examinations, and that on that ground you think it proper that it should be associated with any University which is to be established for teaching in London?—Yes.

3926. May I ask you whether it would not be desirable that, so far as possible, the separation between what I may call preparatory teaching or school teaching, and University teaching should be observed?—You mean in the college?

3927. In different institutions; that upon the whole it is desirable that a college, whether for women or men, or men and women jointly, should be, as Bedford College is, a college exclusively devoted to University purposes, and that, on the other hand, colleges devoted to school purposes should confine themselves to school purposes?—I certainly think that, as a general rule, it is very desirable. It seems to me that it is very desirable for a student, we will say a girl who has been for a large number of years at one of our high schools to, at some period, change from a place like that and go to a college where she meets with new competitors and a wider area generally, wider, of course, in one sense though not in another.

3928. Is it a difficulty at present existing in consequence of the undeveloped condition of the education of women? At present you find a difficulty in separating those two classes of education?—No, I do not think it is difficult at all. At present there are more than a sufficient number of establishments for women.

3929. For University teaching?—Yes.

3930. Then do you say that it is an undesirable thing for girls' schools, I mean under the present circumstances, to have facilities which would enable girls to continue on for the purpose of the University degree?—Perhaps I may state what I think is desirable. I think it would be very much better if, under almost all circumstances, the Matriculation was done at school.

3931. The Matriculation, of course, is the entrance examination?—Yes, and that, generally speaking, after that the girls should pass on to the colleges. That seems to me to be most economical; but in a large school for certain students it may be, and I know in my own experience it is frequently desirable, to keep them for some time longer. I may illustrate that by reference to the North London Collegiate Schools. We have eight girls reading for the Intermediate Arts Examination. You may compare that with 29 reading for Matriculation. Of these 29 there are a certain number who will leave and go to collegiate institutions, and there are a certain number who will remain. It works in this way. There are some girls who are young and undeveloped, and who are really better for staying a year longer under school discipline. Some we encourage to stay; others we do not encourage to stay, so some pass away and others remain. There is also a class who work for scholarships, and that tends to become an increasing class, of those who remain in school to prepare for the various scholarship examinations.

3932. I suppose that in respect of girls who, through some peculiarity of disposition, ought to remain longer at school, or for girls who desire to remain in school for the purpose of winning a scholarship for colleges you would not think it reasonable that by giving facilities to enable them to do that institutions should entitle them to representation as institutions of University rank?—No, certainly not.

3933. (*Mr. Rendall.*) The total number of your students is 120?—112.

3934. 12 of those, I understand, are art students?—I think I made a mistake. It came from me. It is 16 on an average.

3935. The remaining Faculties are about 100?—100, two years ago.

3936. Could you inform me roughly how they compare with regard to arts and science?—Yes, I have here an analysis which was prepared last February, stating all that has happened since the opening of degrees in 1879. I think that would answer the question. In Matriculation, 17; Intermediate in Arts, 9; Preliminary Science, 4; B.A., 10; and B.Sc., 4.

3937. Does that proportion hold generally throughout amongst those now in training for degrees?—That I hardly know.

3938. Roughly, art students are to science students as two to one or three to one—about?—The total numbers, I see, are 17, who have taken their B.Sc. degree in one case to 62 in the other.

3939. Something like three to one we may say, in favour of arts?—Except that the science students have increased.

3940. Do you think that proportion is at all affected by the system of separate classes as opposed to mixed classes?—That I can hardly give an opinion about. I do not know what the cause would be.

3941. In intercourse with those students to whom you chiefly appealed, do you find any difference of view as regards attendance at the mixed classes in arts and the mixed classes in science?—I do not think I can say that I have ever collected facts or opinion on the subject.

3942. You have not carried away a definite impression?—No. I should say this more *à priori* than anything else: the mixed classes in arts are less objectionable than mixed classes in science. Just now the laboratories are very excellent.

3943. You are in favour of the mixed class system in honours?—Yes.

3944. I understand that you feel that the stimulus gained, really outweighs the objections and disadvantages of shyness to which you alluded?—Yes, greater stimulus and greater knowledge of the work that can be done is gained. A student sees what other good students do in a subject like mathematics, for instance.

3945. I suppose in honours classes as well as pass classes shyness depends very largely upon the difference of attainments, and I suppose the shy student is more apt to feel inferiority to a really brilliant student in honours classes than in pass classes?—I should think it is very likely; but on the other hand, the advantage of knowing the best work that has been done by the most successful student of the year outweighs it.

3946. Do you think the objection to mixed classes arises chiefly among the parents of the pupils?—I think a very large number of parents distinctly send their daughters to Bedford College as a preference.

3947. It is a feeling among parents rather than among students themselves?—I should hope that the students do not think much about it one way or the other.

3948. Have you any instances of migration from University College or mixed classes elsewhere, to Bedford College?—I do not know how that would be.

3949. The tendency is rather to migrate from Bedford College to University College on the part of the students, is it not?—No. They go to Cambridge or Newnham.

3950. Do you find Cambridge students coming to Bedford College?—No, that would necessarily not happen, because if they have gone to Cambridge they have stayed there for the Tripos.

3951. The number of students attending University College, I suppose, is larger than the number attending Bedford College?—I should think not of women students.

3952. You do not think there are more than 100 at University College?—I have not the numbers. I do not know, but I think not.

3953. At King's College the number is very considerably larger than that, is it not?

(*Mr. Anstie.*) There are no women students at King's College. There is a separate college at Kensington. They do not attend the college in the Strand.

3954. (*Mr. Rendall.*) At University College there are mixed classes?—Yes.

Mrs. Bryant, D.Sc.

22 June 1892.

3955. You attribute the migration to which you alluded mainly to the lowering of fees?—It was not a migration, but the fact that the fees are lowered is a difficulty.

3956. But you thought that kept some students away from you?—Yes, it may have done. It is a possible cause.

3957. Now, suppose a professorial or central University authority were created, should the University, do you think, legalise and require the free admission to lectures of both classes of students, both men and women?—That would depend on the classes, would it not?

3958. Would you foresee the University having University classes controlled by them from which they might exclude women students?—I should have certainly thought not University classes, because, as I take it (it is only the idea in my mind), the University classes, as distinguished from the college classes, would be for the most part higher classes.

3959. Would you rather insist upon their remaining open to women as well as men in all cases?—I think it is important that the University classes should remain open to everybody.

3960. Supposing there was this central University with professorial classes open alike to women and to men, and supposing there was some recognition of an intercollegiate scheme by which students might attend in any one of the colleges, do you think it would tend to deplete Bedford College classes?—No, I do not think so. It was mentioned that there are three students at Bedford College now who go to University College, two for botany and one for moral science. Similar facts have come within my experience several times. The reason is very simple. They go to hear some particular professor. In the case of moral science the attraction of going to attend the classes at University College is going to hear Professor Robertson. That, it seems to me, is quite parallel to the University professorships. It would be to the University professors' classes that the student would go, not to the intercollegiate ones.

3961. There is one subject that has not been touched upon yet. Your degree students train for the London degree?—Yes.

3962. No other is open, I suppose?—I suppose they could take Oxford examinations.

3963. That is to say, they could reside with you and compete for Oxford honour examinations?—Yes, and of course they could take the local examinations.

3964. That is not a degree. For degrees they are limited to London?—Yes.

3965. As between a single University for London, and the creation in some form of another University, do you think a new degree, a Gresham University degree, would be welcomed and acceptable to women, or do you think they would cling to the London University degrees?—I think the same conditions exactly would apply to women as to men. The fact that the London University is known and understood everywhere would, for a long time, give it an advantage over any new degree. The new degree would have to win its way.

3966. Judging from my own college there is rather a difference between men and women. The men on the whole are far more favourable to the Victoria than to the London degree, but there seem to be influences which operate in the case of women in favour of the London degree. Are you aware at all of what those influences are?—No, but I can see how that would come about. In the high schools the London degree is so much better understood, and it has almost a claim on the gratitude of women; and head mistresses, I should imagine would attach more importance to the London degree than to others.

3967. A large proportion of the head mistresses have taken London degrees, I suppose?—Yes, and even where they have not taken degrees themselves, many of them being older women, they understand the London degree better, and have a certain attachment almost to it, in the same way as people have attachments to the older Universities of Oxford and Cambridge.

3968. At present, I suppose, the present University degrees furnish the most convenient criterion for comparing the candidates?—The most convenient from the point of view of knowledge, unless it is for the purpose of specialising in mathematics or science, when most persons would prefer the Cambridge Triposes.

3969. I think the high schools for girls are very largely influenced by London University degrees in conferring appointments, are they not?—Yes, I think all public schools are.

3970. Do you think that the Gresham degree as soon as it became established would tend to win such an acceptance?—I think the Gresham degree would probably tend to labour under less difficulties than the Victoria, because being in London, and so much public attention having been drawn to it, it would probably get to be known and understood at an earlier period. I think that is likely.

3971. Speaking from what you know of the influences prevalent in women's education both as regards students and teachers, would you prefer there should be a single degree called the London degree, or the two-fold degree?—I should very much prefer if it were possible to have it, that there should be a single University. I should prefer that from every point of view.

3972. And that would be the current opinion, you think, among the leading women educationalists?—Probably, so far as they have thought about it.

3973. (*Lord Reay.*) The high schools would teach up to the Matriculation stage, but they would not go beyond?—Not generally.

3974. Therefore, the natural course would be for girls to leave the high schools, and then join Bedford College?—Yes.

3975. Bedford College has reaped all the benefits and advantages accruing from the good preparatory education of the high schools for girls?—Yes, and from the fact, which, I think, is of fundamental importance, that at the very beginning of the opening of the London degrees for women, Bedford College was ready at once to do the work, and therefore, it was first in the field in the way of doing it efficiently.

3976. Is your opinion that the organisation of secondary education for girls in London is more perfect than that of secondary education for boys?—Yes, I believe so.

3977. Is there a great want of similar high schools for boys?—Yes.

3978. Do you attach very great importance to this preparatory teaching which girls have enjoyed before they join Bedford College?—Yes.

3979. May I ask whether you think that any evil results have been detected to University College from the mixed system?—I have no personal knowledge of anything of the kind, and I am quite sure that nothing serious has ever happened, or else one would have heard of it. But they take precautions at University College, they have all arrangements made.

3980. There is a lady superintendent?—Yes, there is a lady superintendent.

3981. Students only mix in the lecture rooms; they do not mix in any amusements?—I believe Professor Heath would know a good deal more about that. That was attempted, I believe, but it was not found to be very desirable or to work very well.

3982. Then with regard to the lowering of fees you would only object to it from the point of view of competition, you do not object to it in so far as it makes higher education more accessible?—No, it is only with regard to making one place undersell another.

3983. You would be pleased if Bedford College could also afford to lower its fees?—Yes.

3984. I was very glad to hear your statement that you attach great importance to the association of the girls amongst themselves and to collegiate education, in so far that it gives a local home to girls?—Certainly. I think the *esprit de corps* that arises in that way is one of the most valuable parts of the education.

3985. And to promote the *esprit de corps* it would be difficult to substitute anything for the colleges?—If they were to disappear altogether.

3986. Therefore by absorption of the colleges you do not mean extinction of the colleges?—No, I have not meant that. I can only answer for myself, of course.

3987. Is there any competition between Bedford College and Queen's College?—Well, I hardly know. I think Queen's College has taken very little part, so far as I know, in connexion with the London University degrees, and that is really what the work of Bedford College now turns upon.

3988. What is the main object of Queen's College?—Queen's College is a Church of England college, and that makes a very great deal of difference between the two. The two colleges differ in their *clientèle*.

3989. Where do the Queen's College students obtain their degrees?—They do not obtain them.

3990. Then what is the object of Queen's College?—It ought, of course, to be remembered that Queen's College was the first institution in London to provide higher education for girls, and has gone on since furnishing some education of that sort. Students attend classes and so on, but I really do not know what they do in particular.

3991. Then it is intended for an entirely different class, and with different aims?—Yes, I think so. There is a school. They pass from the school into college at 14, and the college is managed largely by the professors.

3992. From your evidence I gather that besides the attraction of the lower fees at University College there was also the attraction of the excellent teaching of Professor Robertson?—Yes.

3993. And that is an attraction which must always make itself felt?—Yes, but I imagine that these are the men who would be in the position of University professors, and would be doing rather a different work than that of merely preparing for the degrees.

3994. (*Professor Ramsay.*) One question with regard to the length of courses. Would you be ready to submit to any length of course prescribed by the University?—Yes.

3995. It has been mentioned this morning, that some colleges suggested that they should conduct examinations themselves in lieu of the Matriculation and Intermediate Examination for their own students, leaving the Final Examination for the degree to be conducted by the University. You contemplate no arrangement of that kind?—I believe the Council of Bedford College do contemplate that, and have that in view in recommending that the teachers should all be appointed by the University, because if the teachers are to have any power of that kind, it would seem that it ought to follow logically that they were University officials, and not college officials—not appointed by the colleges. Personally, I have a different opinion. Personally, I think it would be very much better to keep the lower grades of examination, at any rate, in the hands of the University, and, as I understand this freedom of teaching, I think it is rather in the higher grades than the lower grades, that it is desirable to secure it.

3996. Can you explain what is meant by freedom of teaching?—Well, I do not believe so much in freedom of teaching myself as many of my friends do. I think most teachers are human to the extent of having fads of their own, and also having anti-fads or antipathies to certain parts of the subject taught for which they do not care, and I think it is always better for a teacher to have some external influence behind, in order to prevent that sort of idiosyncrasy having too much effect. But I certainly do think that in connexion with some of the higher work (I think it is more in connexion with higher work than the lower work), it would be probably be a good thing if teachers were able to branch out more on their own individual lines. Absolute freedom of teaching would leave them free. I am engaged in teaching mathematics, and I know there are some parts of the subject to which I always go back—parts of the subject which always attract me—and there are parts which would be sure to be neglected but for some external reminder.

3997. Then you think that even for the lower grades a common examination ought to be maintained?—I think more especially for the lower grades. I think the pupils get the advantage of the originality of the teachers rather in the higher grades than the lower. That is my personal opinion. It is always possible for an institution to make it own arrangements. I believe Bedford College takes an opposite view to me on that subject.

3998. (*Mr. Anstie.*) If I may follow up that question of Professor Ramsay's a little further I understand you to desire the University to take the control of the lower grades. Do I understand that you also think that the higher grades should be in the hands of the colleges?—No. Of course I was supposing all along that the higher grades are in the hands also of the University through the University professors.

3999. I understood you to base that upon the greater specialisation. Perhaps I was wrong in inferring that that would lead your mind to the conclusion that the higher grades ought to be tested by the teacher. I was wrong, perhaps, in that?—I do not wish to be misunderstood or to seem to attach too much importance to the point. My position is this: if freedom of teaching has such a great value, as so many persons think, it seems to me that it is in the higher grades rather than in the lower grades. I think myself that any good student is able to go through the University mill, and is not hurt by it, but on the whole improved.

4000. (*Professor Ramsay.*) And that any good teacher ought to be able to prepare them?—Yes.

4001. But clearly your opinion is that in the higher grades there ought to be a closer connexion between teaching and examining than in the lower?—I think that sums it up.

4002. (*Mr. Anstie.*) Then I should like to hear your opinion a little further, if you would permit me, upon this question of the lower grades. By what kind of authority do you think those lower grades ought to be determined in respect of their subject-matter and range and standard of examination? Do you think they ought to be determined by an authority which is in close connexion with, and to a large extent ruled by, teaching influence and experience, or by an authority which has not that advantage?—Certainly by a teaching authority, not by individual teachers, but by the authority of persons who know the work of teaching.

4003. Then with regard to the importance of the experience of teachers in determining the subject-matter and the range and the standard of the lower examinations, your opinion in favour of that is not less decided than your opinion in favour of a similar influence in the higher stages?—Yes, only taking place in a different way.

4004. You wish the teacher to have an influence in one way or another throughout?—Yes.

4005. And do you think that influence is one which ought to be constant and regulative?—I should say that it was better that it should be constant and regulative.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Eighth Day.

Thursday, 23rd June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt. D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

N. C. MACNAMARA, Esq., F.R.S., F.R.C.S.I.

4006. I think your association, the British Medical Association, were not examined by the last Commission?—No, they were not.

4007. But you sent in a paper?—Yes.

4008. And you take the same view, I understand, that was taken by the Association at that time?—Yes, precisely.

4009. One of the principal subjects has reference to the unsatisfactory state of the medical profession in London now with regard to facilities for taking a degree in London?—Yes.

4010. You have taken some pains to ascertain the general opinion of the medical profession in and about London?—Yes, we have.

4011. Perhaps you will tell us what steps you took to ascertain that?—I wish to say that this Association at the present time numbers about 14,000 general practitioners. The Association is composed almost entirely of gentlemen who are practising in all parts of England, Wales, and Scotland. This is a list of the members (*handing same to the Chairman*). The Association has, within the past 13 years, appointed two committees to examine into the subject of medical education. A committee was appointed in 1879, of which Sir Andrew Clark was chairman, and on his leaving for Canada I was asked to take the office. Another committee was appointed in 1883, of which I was also chairman. Dr. Bristowe, who will be here presently, was one of the members. I have prepared a statement which, with the permission of the Commissioners, I will read: "The work of the Committee of "1879 was carried on by means of meetings held by "the branches of the Association throughout the "country, and by questions sent to all the members of "the Association regarding the efficiency, or otherwise, of the medical education through which they "had passed, judged by their own experiences, and by "the qualifications of young men who had served them "as assistants within a recent period. A vast amount "of information was collected by the secretaries of the "64 branches into which the Association is divided; "and it appeared that there was a strong feeling in the "profession in favour of improving the examination in "Arts which intending medical students had to pass. "The Association insisted on the fact that the standard "of such examinations in Arts must not only be raised, "but that the number of subjects a student should be "compelled to take up for examination ought to be "limited."

4012. (*Bishop Barry.*) Is that the examination in Arts for the University of London?—No.

4013. (*Mr. Rendall.*) This refers to the entrance examination?—Yes: "And that they should have a "thorough knowledge of these subjects. Beyond this "there was an almost unanimous expression of opinion "that the examinations of the London University, and "of other licensing authorities had come to occupy the "leading place in the minds of students, to the exclusion "of a desire on their part to gain that kind of knowledge which would be most useful to them in their "professional career, and which can only be acquired "by patient study in a hospital." I say this opinion was expressed very strongly over and over again, and they also affirmed, in their experience, "that the "majority of students from the time of entering a "medical school passed into the hands of comparatively "young men, whose work is to cram their pupils so as "to force them through one examination after another; "in this way examinations in place of supplementing "teaching, have come to rule the course of education. "The general practitioners throughout the country "affirm that the greater portion of the matter thus forced "into the brain of students disappears soon after the "examinations are passed, and that they are too often "left with a very imperfect knowledge of the work of "their profession. These views were endorsed by "gentlemen holding high positions in the profession. "Thus, Sir Thomas Longmore, in reply to the Committee of 1878, wrote 'We see at Netley how little "'qualified in practical professional matters some of "'young men are at starting who have passed the "'examinations for their license to practise.' He adds, "'In only a few exceptions I find young surgeons "'coming to Netley acquainted with the manipulation "'of the ophthalmoscope, or knowing how to determine "'errors of refraction of the eye." Then he goes on to remark "and so on, in numerous practical matters." These are points with regard to medical education which affect the general practitioners throughout the country to a very large extent. "Considerations of this "kind led the metropolitan branch of the Association, "in the words of their resolution of 1884, to endeavour "to influence the University of London 'to modify its "'regulations and procedure, so as to adapt them to "'the requirements of the medical profession in Eng"'land.'"

4014. (*Chairman.*) That is, to induce them to alter the subjects which the London University required to be brought up—to make them less in number, and to insist upon more practical knowledge at the same time?—Precisely.

4015. (*Bishop Barry.*) Would that be the Matriculation examination?—The Matriculation examination, and the science examination—the whole course of examinations.

4016. (*Chairman.*) Did the evil that you complained of—the cramming, and the number of subjects to be taken up—refer chiefly to the matriculation examination?—No, to the whole of the examinations. "Seven years "have now elapsed since we had interviews with the "Senate of the University on this subject." I may say that we approached the Senate of the University of London, and we had a very long interview with them on one occasion. A sub-committee was then formed of the branch of the Association of which I was chairman, and we met the Senate on several occasions, but practically nothing whatever came of it. "On careful consideration of all that has in the meantime "taken place, the metropolitan branch at their annual "meeting held on the 14th instant, under the presidency of Dr. Cleveland, approved in general terms "of the provisions in the Charter now before you for a "new University in London."

4017. That is the Gresham University Charter?—Yes, the Gresham University Charter. "I wish particularly "to emphasize the fact that the primary idea which "the Association had in taking up this subject was a "desire to improve medical education, especially in "London; it has frequently been stated that our "motive was to secure cheap and inferior degrees for "our students; this is an incorrect statement, and is "not consistent with the action we have taken from "1879 up to the present time."

4018. On the contrary, in some respects you want the degrees to be more severe than they are now?—Precisely, we want it to be more directed to practical work—less cramming for examinations, that is the essence of the whole matter. We want more real teaching in place of preparation for frequent examinations. "The subject "of providing means by which London medical "students may obtain University degrees occupied "the attention of another and later committee of the "Metropolitan Branch of the Association that of "1883. In the report drawn up by this committee "(a copy of which I beg to place before you dated "January 1885) a series of returns will be found, com-"piled for the most part from figures contained in "the report of a Royal Commission, from the Medical "Directory, and from the office of the General Medical "Council. (*For these returns see Appendix No.* 7.) "These returns are, I believe, sufficiently accurate for "all practical purposes, but I do not put them forward "as absolutely exact. In our report of 1885 the returns "were made up to 1880, and some to 1884. In a further "series of tables, which I also beg to hand in, the "returns have been completed for the five years ending "1891. It appears from the first series of tables, that "of the 16,192 gentlemen practising in England, 32 "per cent. possessed M.D. or M.B. degrees; and of "these 20 per cent. derived their degrees from English "Universities, while no less than 62 per cent. obtained "degrees from Scotch Universities. In Scotland, 70 "per cent. of the practitioners possessed degrees, of "which 95 per cent. were obtained from Scotch Uni-"versities. Of the gentlemen possessing medical "degrees in England, Scotland, Ireland, and the "medical services, only 7 per cent. had obtained "degrees from the London University, as many as 64 "per cent. were graduates of Scotch Universities. In "London 18 per cent. of men holding degrees in "medicine obtained them from the London University, "50 per cent. were granted by Scotch, and 10 per cent. "by foreign Universities. In the provinces there "were 8 per cent. of University of London men, and "68 per cent. of gentlemen holding Scotch degrees. "Our tables, carried on to 1892, are to much the same "effect; the average number of degrees per annum "granted by the University of Cambridge has, however, "risen from 17 to 59. In the University of London "from 39 to 67; at the same time the average number "of degrees per annum granted by the University of "Edinburgh has increased from 136 to 223, and of "Glasgow from 78 to 114; Durham from 15 to 59, and "Manchester from 0 to 11. From these tables it is "evident that in Scotland most of the medical students "are educated at National Universities, while in "England only a small proportion enter the profession "through the Universities. This difference is important "in its bearing on medical education, and is adverse to "professional status in England, is anomalous, for it "cannot be desirable that London alone, of all places, "should deny to the industrious and intelligent alumni "of its medical schools the crowning evidence of their "medical curriculum."

4019. With regard to the Scotch degrees, is it the case that they are not only easier, but that they also require a more useful kind of knowledge?—As contrasted with the London University do you mean, my Lord.

4020. Yes?—The degrees of Edinburgh are more easily obtained than the degrees of the London University.

4021. Do you find that those who are anxious to take a degree, go as a rule to those places where they can take it with less trouble?—Yes.

4022. They are not guided so much by the kind of information which they have to acquire? — No. I think the two following paragraphs in my statement refer to this point: "The figures in Tables 8 and "9 of our report show that whilst the total num-"ber of qualifications registered in Scotland in the "years 1876 to 1880 was 1,059, the number of degrees "granted by Scotch Universities in the same period "was 1,536, so that 477, or one third of the gra-"duates did not originally register in Scotland, or, "in other words, they were medical students arriving "in Scotland from elsewhere for their degrees." With regard to the second part of the question put to me with reference to the kind of education, this paragraph throws light upon that matter. "It cannot "be under the idea that the education received by "London students is inferior to that provided by other "medical schools that they leave London, for, as is shown "in the 13th Table of our report, when students from the "three divisions of the United Kingdom meet on equal "terms in a competitive examination, as is the case for "appointments for the Army, Navy, and Indian Medical "Services, the per-centage of rejected candidates educated "in England amounts to 37 per cent., whereas 51 per "cent. of those educated in Scotland, and 67 per cent. "of Irish students are rejected." Nevertheless our London men cannot get degrees

4023. It looks as if London men were better educated?—Yes.

4024. That would point to the fact that it would be on account of its easiness that they go?—Yes, on account of the easiness of obtaining degrees.

4025. And not on account of the better education to be obtained there?—No. That is what I think. "From "considerations of this kind our Committee in 1885 "determined, that 'every effort should be made in the "'interests of students educated in London, of the "'London Schools of Medicine and of the profession, "'to secure for metropolitan students educated as they "'are, at schools of medicine where unrivalled oppor-"'tunities exist for clinical instruction, facilities for "'obtaining degrees in Medicine such as are enjoyed "'by graduates in the Universities of Oxford, Cam-"'bridge, Manchester, and Durham; in the four Scotch "'University towns, and in Dublin, Belfast, Cork, and "'Galway.' The Royal Commission of 1889 concurred "in this opinion and remark that they 'were satisfied "that a great demand exists for medical degrees attain-"'able in London more easily than at present, and "'that it may be desirable to provide for that want in "'some proper manner.' This end might, we think be "gained if a University was established in London on "the lines laid down in the Charter of the Gresham Uni-"versity with the object of (in the words of the Special "Committee of Convocation of the University of London) "'affording the necessary relief from the too rigid "'fetters of a centrally directed examination system.' "It appears to us, however, that the colleges and "schools affiliated with the proposed University must, "in a vast city like London be widely dispersed; the "instruction given in these various institutions differs "in value and varies considerably from time to time; "the appliances needed for proper education in many "branches of science are costly and require to be "frequently renewed. To keep all this complicated "machinery up to the requisite standard powers much "more stringent than those it is proposed to give the "University under section 26 of the Charter are abso-"lutely necessary. According to our idea the new "University should not only simplify examination, but "raise the standard of education of our students, and "at the same time secure for them the advantages of "graduation. In this way we hope to see a University "established in which our students will take a real "interest and pride; this can only come from its "graduates gaining high positions in arts, science, and "literature, and from a sense of the benefits, educational "and social, which they individually receive in their "University. For this purpose we hold that the work "done in the constituent London colleges and schools "will require to be controlled by the Council, and this "should be, in our opinion, one of its most important "functions. The Council must, we think, provide for "inspection, and by examinations conducted in our "classes, and the general supervision of the education "given in its colleges, keep them all up to an efficient "standard of work. Weak colleges should be led to "combine for educational purposes, for it will be almost "impossible to exterminate, and even more difficult to "improve them under section 26 of this Charter."

4026. You would give the Council more power than it possesses in the draft Charter to regulate the education in the colleges?—It seems to us that it is absolutely necessary to do that. If this University is to run on the lines that we hope it may, you must do that. You cannot expect the colleges to find out their own faults

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

or to come to the Council and say, "We cannot do this," or "We cannot do that;" and if the Council are to wait till they find out where the imperfect education exists by those who are educating the students telling them, they will wait for a very long time.

4027. You think that by giving the Council more power in this way, and by some other alterations making the colleges more dependent upon the Council, you may establish a powerful University just as well as might be done by beginning at the other end, starting the University first and making the colleges altogether subordinate?—Exactly. "We heartily concur in the "opinion expressed in pages 31 and 32 of the report of "the Royal Commission of 1889, that 'a definite value "'should be given to the training and teaching which "'those students will obtain who go through the pre-"'scribed courses of constituent colleges and teaching "'institutions associated with the University. This may "'properly be done in those stages of the academical "'course which precedes the final examinations for "'degrees.' We trust this principle will be conceded, "and provision made for it in the Charter of the new "University, for it is in this way alone that sound "education can flourish in a place like London." It seems to us that we cannot lay too much stress upon that principle. It is by the power which the University would have of inspecting schools, examining schools, and of keeping the schools up to work, that we hope to see education improved.

4028. The medical schools, you mean?—Yes. I am talking of medical schools. It seems to us that it would be just as unlikely that the Board Schools, for instance, could flourish without proper inspection, as the colleges and schools of a very large disseminated community like London, where one may not know in the least who one's neighbour is, or anything about him. We cannot expect a University in London to flourish, unless there is efficient and thorough inspection; it should extend to examinations.

4029. I suppose those schools are most of them now in a very good condition, and are performing very efficient work?—I have not the least doubt about that.

4030. You think they would be better for the general supervision?—There is unquestionably a strong opinion in the profession in that direction. "We believe that "the Council of the University under the Charter "is too large, and should not contain more than 30 "members at the outside. Its members, we think, "should, as a rule, hold office for from seven to ten "years, if possible."

4031. You think the Council is too large?—Yes, that is our opinion. I do not know what the length of time is now, but we think it would be better that the members of the Council should hold their appointments for from seven to ten years in order that they might become thoroughly acquainted with the work.

4032. You would have to considerably reduce the Medical Faculty?—There is no reason why that should not be done. In the evidence given by Dr. Allchin on this subject on behalf of certain medical schools, it will be found that he distinctly says that there could be no difficulty whatever in doing that. May I refer to his evidence at page 144 of the Blue Book, question 1492. "(*Q.*) The number of medical schools we heard was 13, "I think?—(*A.*) There are 11 medical schools. (*Sir "William Thompson.*) Including King's College and "University College?—(*A.*) Yes. (*Chairman.*) Your "proposal is that they should have 11 representatives "upon any body that might be constituted?—(*A.*) Yes, "in effect that is so. (*Q.*) Supposing that were not "thought reasonable or convenient, could they not, if "a less number were appointed, meet together and "elect amongst themselves those who should represent "the medical schools in the aggregate?—(*A.*) Certainly."

4033. And he spoke with full knowledge of the subject and of the opinion of the medical schools, you think?—It seems to me, my Lord, that if the larger schools, say St. Bartholomew's, Guy's, and St. Thomas's, had each a representative, London and University one, King's and Middlesex another, and the four smaller schools one, that would bring the total up to six representatives.

4034. Is there any very great advantage to be gained by reducing the number from 52 to 30?—It seems to us to be more workable.

4035. Is it more easy to work 52 than 30?—Yes, in my experience.

4036. I think it is much easier to work half-a-dozen, or ten or twelve, but I should not have thought there would be much difference between 52 and 30?—I should think you would get 20 to attend, which would be a workable body. "It would, doubtless, be an advan-"tage to all concerned if the Universities through-"out the kingdom would abandon the licensing powers "which their degree confers, making the M.B. and "M.D. purely academic distinctions. They are, "however, not at all likely to do this, since the "pecuniary interests involved have grown to great "dimensions, and it is these interests which, to a large "extent, govern the situation and make the question "under consideration such a difficult one to deal "with."

4037. All the Universities, not only this new University?—Quite right.

4038. This University is only to give degrees to those who have already qualified. It does not confer a license?—No. "Nevertheless, those whom I represent urge that "London students should in this matter, as in others, "have an opportunity of gaining University degrees "upon terms similar to those enjoyed by graduates in "other Universities."

4039. By that you mean that the degrees should confer a license?—You see at present there is this difference. Men under this Charter, the majority of them, will have to take a license from the College of Physicians and Surgeons. That license in medical fees costs the greater number of students not less than 40*l.*, many of them 50*l.* These fees for the license must be paid before they can approach the University at all. It is true that they might go through the Society of Apothecaries, and that would be cheaper; but the chances are that the majority of students would wish to go through the College of Physicians and Surgeons rather than through the Society of Apothecaries; they always have done so.

4040. Do most of the London practitioners who have taken degrees in Scotland and other places also obtain a license from the Royal colleges?—No, they do not. The majority, I think, of the Cambridgemen go up to the Colleges of Physicians and Surgeons in addition to their degree; I merely say that from having been examiner there. I am not speaking from accurate knowledge, but I think most of the men examined there had a license from the Colleges of Physicians and Surgeons.

4041. You think that, partly in order to save expense, the degree given by this proposed new University ought to confer a license?—I have no doubt that a great number of the men go from England to Scotland not only because they can get degrees, but because the education in Scotland is a very good one, and it is cheaper. The degree in Scotland is to be obtained for less money. "In conclusion, I "have to observe that there is a strong feeling among "the past London medical students that they should "be able to obtain a medical degree after passing an "examination in arts, and in medicine, surgery, and "midwifery. I would therefore beg to bring the "following resolution of the Committee of the metro-"politan branch before the members of this Commission: "'That every practitioner who has been educated at a "'London medical school for at least the final two "'years of the curriculum, and obtained complete "'qualifications to practise before the foundation of "'the proposed University, shall be allowed to proceed "'for a degree in the University after passing such "'examinations in Arts as may be determined on by "'the University and in the final examination for the "'M.B.'"

4042. That is a temporary arrangement?—Yes. "These gentlemen when London students could not "obtain degrees, and the arguments in their favour "are much the same as those advanced for facilities to "be granted to our present students in obtaining "degrees in medicine. When the University has been "established graduates requiring degrees must pass "through the course which it prescribes; and it is on "behalf of those who have finished their education in "London before the erection of the University that "this favour is solicited. Dr. Cleveland, the late "President of the Metropolitan Branch of the Associa-"tion, a well-known general practitioner in London, "will be able to speak more fully on this subject. "Dr. Bristowe has worked for many years upon "matters connected with medical education and degrees "for London students, and will, I hope, elucidate some

" of the points I have referred to on behalf of a very " large number of members of the British Medical " Association."

4043. That, then, is the substance of what you wish to say?—Yes. I have been rather tedious, I am afraid, but I felt extremely anxious not to express so much my own views as the views of a large number of men who I am here to represent. Therefore, I do not wish to make any statement which might not be in accord with what I believe to be their feeling and their views upon this matter.

4044. And this, you say, on their behalf as well as on your own?—Yes.

4045. Is there anything on your own behalf that you would like to say independent of what you have to say on behalf of the body that you represent?—My wish is that we may be able to get rid of a considerable portion of what I consider the most objectionable system of constant examinations, and that we may get into something like what I hope and what I conceive to be sound education. For instance, my Lord, take it in this way: you have perhaps 50 men entering a medical school. Of these 12 men in the course of the first year perhaps ten will pass the science examinations of London University. Another 30 will go up for that examination and be rejected. They are rejected in perhaps the first, second, or third parts, or it may be in all. They are thrown back upon their school, five of them taking up one subject, five of them another, and so on. Whilst they are preparing for this second examination there are a number of fresh students coming on, and so you have the school broken up into sections all striving for some subject, but all in various directions. The examinations are the whole thing they have in view. They neglect their hospital, and to a great extent are doing so more and more every year. They care very little about practical work because it does not tell in the examinations; and so, as the practitioners say, a lot of matter is crammed into their heads, and the subject they have been sent to the hospital to learn many of them know little about. Under the old system (which I do not wish to commend) of apprenticeship men learnt the rudiments of their profession. They did not cram so much science as at present, but a great number of them turned out better general practitioners.

4046. Do most of the men who fail in passing the examination try for it again?—Yes; how very small a proportion pass through the examinations of the London University. The London University claims to have raised the whole standing and status of medical education. Why, they do not receive 5 per cent. of the students in London. Where are the other 95 per cent.? Their education cannot be raised if they do not approach the University, or come near the University.

4047. A certain number of those who went to the Gresham University would have to go back in the same position?—Then I hope they would have to go back for a year. You ought to teach them honestly and not to have them scattered about in batches in our medical schools striving to force their way through examinations through means of their tutors brains.

4048. You would wish it to be done in a more organised manner?—Yes, education can only properly be done in an organised manner. That is the pith, and I should say the whole substance, of the thing so far as the opinion of the general practitioners throughout the country are concerned.

4049. As you are favorable to the plan of the Gresham University on the whole would you care to make any other remarks about it?—We are in favour of the scheme, or by far the greater number of the men I have spoken to are. The tendency of those who have taken the trouble to go into the matter is favourable to the scheme. Modifications of course there may be, but they think it a good working scheme to start with.

4050. Do you think there is any other college can be brought in to start with?—From reading what passed at the House of Commons and elsewhere one cannot help feeling that there is a desire on the part of other colleges and schools to enter the University, and surely it must be advisable to make it as broad as possible, because education is spreading to such a great extent that what was applicable to older Universities may not be applicable to the present time. One cannot help feeling sympathy with those who are anxious to come into a University of this sort.

4051. The chief alteration you would wish would be to give greater power to the Council than it has now of regulating the teaching in the colleges?—Yes.

4052. (*Lord Reay.*) Your opinion is that medical education in London requires organisation?—Precisely.

4053. That instead of each medical school in London being absolutely independent as it is now there should be some authority which should co-ordinate the schools and distribute the scientific and practical teaching among them?—That, I think, must be distinctly the ultimate aim and will be accomplished under a University scheme of this kind in the course of time.

4054. You wish the academic degree to be granted by the University and the license to practise by other corporations?—I do.

4055. You are opposed, therefore, to what now prevails in all Universities that the degrees imply licenses?—Yes, I think so.

4056. What is your object?—Because there would be less competition between the Universities. I look upon it that a great deal of the competition that goes on between Universities is largely a pecuniary interest, and there may be this striving on the part of this University which is created now, or some other University, to lower its degrees in order to obtain more students—that is, more fees, more money. If there was no influence of that kind at work, then I think the Universities would give themselves entirely to education. Education would be their primary object. There is another very important element now which some of them consider, and that is making money.

4057. The degree would represent a higher qualification than the qualification which confers the license?—Certainly.

4058. Why is it necessary to oblige persons who obtain the higher qualification also to obtain this lower qualification—I cannot see at all why there is any necessity for that, there is a necessity for it if you take it from the view of the College of Physicians and Surgeons, because you will notice that the College of Surgeons at the present moment are making nearly 20,000*l.* a year by medical fees, how are they to give them up? That is the great difficulty in this question.

4059. It is a practical difficulty, the result of existing circumstances?—Very practical; after all you will find that that is the great difficulty.

4060. You desire that if a new University is created giving degrees, those of your practitioners who have hitherto been debarred from obtaining degrees should then be able to obtain them?—Yes.

4061. And would have the same advantages which the Scotch medical students have hitherto enjoyed?—Yes.

4062. Is the Scotch system one which you would like to see introduced in the new University, also with regard to the extra mural teaching with which I suppose you are acquainted?—I am not sufficiently acquainted with the Scotch system to be able to reply to that.

4063. Do you think that the medical degrees of the new University should be of a higher character than the Scotch degrees, and should therefore occupy an intermediate place between the degree given by the London University and that given by the Scotch Universities, or would you be satisfied if they were on a level with those now given by the Scotch University?—I should consider, from all I know of the Scotch Universities, that the Edinburgh degree is an exceedingly good degree.

4064. Do you think the fees paid to the colleges could be lowered, the fees to which you allude of 40*l.* in some cases, and 50*l.* in others?—I do not think so; London students would be able to go through the Apothecaries' Society, which is distinctly cheaper. Under the Gresham Charter they must have a qualification for registration, that qualification for registration can be obtained from the Apothecaries' Society and therefore there is that course open to them. But a student under the conditions of the Gresham University will have to pass through a course of medical education of five years, whether he goes up to the College of Physicians and Surgeons or whether he goes up to the Apothecaries' Society. He will have to go through a course of five years' study in order to qualify before he can approach the University at all, that is very different from what takes place at Edinburgh or at Cambridge, or at other places.

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

4065. Has the license of the Apothecaries' Society the same value as the license given by the Royal Colleges?—No.

4066. The examination is easier, is it?—Yes, the examination is easier.

4067. You referred to the examination in arts as a preliminary examination?—Yes.

4068. Do you require an examination in arts as well as a preliminary examination in science?—I should wish distinctly an examination in arts. That is quite necessary.

4069. The examination in arts might be included in the Matriculation or in the entrance examination?—In the entrance examination—the Matriculation.

4070. You would not require your medical students to attend in the Faculty of Arts in order to obtain the degree of B.A. or M.A.?—I think not.

4071. You would be satisfied with the degree of B.Sc.?—Yes.

4072. You would not object to the medical professors examining their own pupils, especially in the practical part, with an outside examiner added?—Certainly not. It is most desirable.

4073. You would not desire the teacher to be excluded?—No.

4074. And you would, in the arrangements for the new University, lay great stress on the practical part?—Yes.

4075. That, I understand you to say, is the great deficiency in the examinations of the University of London?—I think the examinations have taken the place of that practical work. I do not think I am using a strong expression in saying that it is growing into an abuse.

4076. Would you be in favour of a reconstruction of the existing University of London, or are you decidedly in favour of the new teaching University being a separate body?—I am decidedly in favour of its being a separate body. There are a number of extremely able men who state, that the London University has done a great work, and is doing a great work. Why should you interfere with it? Why not allow it to go on doing this work unimpeded by the Gresham or any other University. I cannot see the advantage of interference. There is plenty of room for both. The same class of men who have gone up to the London University will still go up to the London University, and it will have the whole Empire to supply it with graduates. Therefore, I think it would be a great pity to interfere with the London University.

4077. What would be the influence on the existing University of London and on its degrees if there were another University giving degrees in London?—I do not think it would influence it one bit. I think the men who go up to the London University now would go up to it then, at any rate until such time as this new University gained for itself a very high position.

4078. You think there would always remain the demand for the high scientific qualification which the degree of the London University confers?—I think so.

4079. (*Professor Sanderson.*) You said just now that you thought, or rather that it was the opinion of your association, that the practitioners of the present day were, on the whole, less capable than they were some 30 years ago on entering upon practical duties at the close of their medical education?—I think I hardly said "less capable." My opinion is that, on the whole, they are not certainly improving in that direction.

4080. So that you think the general practitioner now is not, on the whole, so practically capable a man in the exercise of his practical duties as he was formerly?—My opinion is that 30 years ago the men who passed the College of Surgeons and Apothecaries' Society were better able to deal with the work which they have to perform as general practitioners than the men who are sent to the work from London at the present time.

4081. With reference to the examinations of the University of London does the opinion which you have expressed relate exclusively to the practical part of the examination?—No.

4082. For medicine, I mean?—No. The great objection which has been raised to the examinations of the University of London have distinctly been in the Matriculation Examination and in the Preliminary Science Examination.

4083. That is to say, it is thought that these examinations in science are of a very much too high a standard?—They appear to be too high, and they are very complicated.

4084. Does this apply to examinations elsewhere as, for example, to the examinations of the University of Cambridge?—No, certainly not. I have heard no complaint of that sort at all.

4085. Then do you think that the examinations in science and for medicine at Cambridge (because those at Oxford are modelled on those at Cambridge), are what they ought to be?—They are what they ought to be. My opinion, if I may add it, is that it is in consequence of the education being thorough and complete at Cambridge that their men are prepared for their examinations.

4086. And do you attach importance to there being only one system of education for medicine being carried on at the same time at Cambridge?—Yes, very much, indeed. The organisation is so much better and the whole thing is carried out in a way which enable the students to get through their examinations without cramming.

4087. Do you think that in practical matters, that is in clinical subjects, the education at present in London is really as good as it ought to be?—I think it is neglected in the wild rush for examinations. Clinical material is admirable. The clinical teachers are anxious to teach, but they cannot get students to learn.

4088. What I want to ask is whether the means of education in practical matters in London is as good as one would like to see it?—Quite; the means are abundant.

4089. Have you any reason to suppose that the men who passed the conjoint only are less instructed in practical matters than those who pass the examination of the University?—No.

4090. Do you think the examinations of the Conjoint Board are adequate, so far as an examination can be, in testing men's proficiency in practical matters?—I think it is a very good examination. I do not say that it may not be improved; I think it may be improved in one department, of which I have special knowledge, and that is, with reference to ophthalmic surgery, and so on.

4091. You referred just now to the powers of the council of the new University as being likely to be beneficial as regards education, particularly in practical matters. Is it not the case that the general Medical Council already exercises a very complete supervision of education in those subjects?—I have never seen anything like an inspector or any member of the general Medical Council about our medical schools or hospitals, or anywhere else. The Medical Council issue orders, but what is the use of that? Bodies concerned attend to them or not as they please.

4092. Then you think the discharge of this duty by the general Medical Council is quite inadequate?—I think it is quite inadequate. There is no supervision at all that I am aware of beyond passing orders and regulations. As for the supervision that I wish to see, there is none of it.

4093–4. But the powers which the general Medical Council enjoys for inspection are quite sufficient?—That I do not know.

(*Sir George Humphry.*) I think they have no power for inspecting schools. They have never undertaken it. Any inspector sent by the Medical Council might be refused at a medical school. It does not lie in their province; they have no power beyond making recommendations with reference to study and examinations.

4095. (*Professor Sanderson.*) So that you would say that the inspection of examinations in any particular subject has been useless, but inspection of teaching would be very valuable?—I do not say that the inspection of examinations useless.

4096. It has failed in its object, I should rather say?—I think the inspections of examinations that have been made, have been distinctly useful, but they come about once every five years if I am not far wrong, and I am not sure that they have done very much to influence the examining bodies. The recommendations that these inspectors have made have been extremely useful, but I do not think they have been carried out, as far as I know, certainly not by all the examining bodies if by any of them.

4097. You mentioned just now an evil which we are all very sensible of, namely, the confusion of studies, the mixture of the scientific and the practical courses of study?—Yes.

4098. Is that not completely overcome by the method which is pursued by students of the Universities, who accomplish their scientific course of study before beginning with their practical?—It is to some extent, but still there is overlapping in the medical schools where they are not going in for the same kind of examination. There is still an overlapping of the men who are going in for the University course with the men who are going in for the College of Physicians and Surgeons and the Apothecaries' Society, and so a regular jumble.

4099. But would not that jumble be quite overcome if the system were such that a man should complete his scientific studies before he begins his practical ones?—Yes; if they were all going for the same course of examination and so on it would be, but there are so many different examining authorities that they do overlap one another in that kind of way. If you could get them all to go in for examinations at a University such as the Gresham. I think you would get organisation of teaching. That is an important object. I think this University could organise teaching to a large extent.

4100. Are not the evils to which you have referred dependent rather on the want of regulation with regard to times of study than upon exaggeration of the requirements of the University of London with regard to science. Is it not rather that the two things are mixed than that the scientific requirements of the University of London are too high?—I think the scientific requirements of the University of London are too high, and, that in consequence of there being only a limited number going on into that body, the students who are rejected come back and they press upon those who are going on for the College of Physicians and Surgeons. So, as I say, there is a mingling together of the students in medical schools which materially affects the whole course of teaching. There is no organisation. I want the men to be taught in blocks, and to feel that the teachers have some influence upon them, whereas now every man has to get a tutor who coaches him in some subject which he is specially weak in. He leaves all the rest, and he cannot go back and make it up.

4101. I think you stated that Edinburgh students on the whole were rejected in larger percentage for Government examinations—for the Army especially?—I mentioned Scotch students.

4102. Not Edinburgh particularly?—No.

4103. Is that in practical subjects or in scientific subjects?—The examination embraces anatomy, physiology, chemistry, medicine, surgery, and so on.

4104. Does that apply to the present time or to the past?—The present time. I have carried on the returns up to the last year, and I think of the men who passed into the services not more than 5 per cent. have got degrees, so there cannot be very many Edinburgh men.

4105. (*Mr. Rendall.*) Do I understand that you adhere to the memorandum that was presented by your association to the late Royal Commission? Does that in the main state your position?—That in the main states our position.

4106. I will refer to it:—"We are of opinion that it "should be within the power of all well-educated me- "dical students to obtain degrees in medicine and "surgery." Is that opinion still held by the association?—Yes.

4107. The Association numbers how many?—About 14,000.

4108. Might all those 14,000 on the whole be described as well-educated medical students?—Well, it depends upon where they come from. You will find that in this return from the army and navy, that of the Irish students 68 per cent. are rejected. I have no doubt that they would consider themselves well-educated medical students.

4109. Would it be true of the majority of the 14,000 that they would come under that description?—I should think it would be true of a great number of them.

4110. And your association would favour that extension of the medical degree?—I should say to the extent that they have it in Scotland.

4111. Your association would rely mainly on good knowledge in the theory and practice of surgery and medicine?—Yes.

4112. That would tend, of course, to obliterate what has been regarded as the characteristic distinction of the University degree as contrasted with the Conjoint Board diploma?—I did not claim it in that way. You will remember I said distinctly that we laid great stress upon the examination in arts. We think that ought to be raised. It would certainly be a very important element in the University degree. The examination which is now the examination in arts, for instance, for the diploma of the College of Physicians and Surgeons, we do not think would be a sufficient examination for the degree.

4113. I will come to that examination in arts. The General Medical Council approves at present or accepts a large number of various examinations?—Yes.

4114. For instance, one may say all University Preliminary Examinations, the Oxford and Cambridge senior and junior locals, the higher local, and so forth; the examinations in science of the Apothecaries' Society, and others. Are you favourable or unfavourable to such acceptance of examinations?—No, certainly not, I brought a young friend of mine from a school, a boy of 15 years of age, and not a particularly clever boy, and he passed the examination which is required for the College of Physicians and Surgeons in arts.

4115. Which particular one?—There are 20 or 30.

(*Sir George Humphry.*) There is no especial one required by the College of Physicians and Surgeons.

4116. (*Mr. Rendall.*) Was it the College of Preceptors?—Yes.

4117. He was entered for the College of Preceptors' examination?—Yes, and he passed without any difficulty.

4118. Do you think wisely or unwisely?—Distinctly unwisely.

4119. What should be the substitute for this examination?—I should say the Matriculation Examination of the Universities, such as Oxford and Cambridge, and so on.

4120. There is no Matriculation Examination for Oxford and Cambridge — are not various of the local examinations accepted?

(*Sir George Humphry.*) The previous examination.

4121. (*Mr. Rendall.*) You would then very much limit the number of entrance examinations accepted?—Yes.

4122. Then, on the whole, you would support the policy, or the general direction of the policy, of the University of London in that particular?—Yes.

4123. Now I come from the entrance in arts to the examination in science. You laid some emphasis on the examination in science. There would it be your wish to reduce or to increase the amount required?—To reduce the amount required.

4124. Would you assimilate the degree courses in the main, to the courses and conditions of the Conjoint Board?—Yes, to some extent.

4125. Are you acquainted with the new regulations of the College of Physicians and Surgeons?—Yes.

4126. The new ones just published this year?—Yes.

4127. You know that those regulations have increased the element of science?—Yes, in biology.

4128. And you think that represents a retrogade and mischievous tendency in medicine?—Yes, if carried too far.

4129. You would put the element of science required for the University degree rather lower than higher than that demanded by the new regulation of the Conjoint Board?—No. In the first place those new regulations have not been enforced, but what the outcome of that may be you cannot tell.

4130. It represents the present opinion of the conjoint colleges?—Yes.

4131. You have every reason to suppose that they will be put in force?—Yes, I daresay they will.

4132. But you disagree with their general tendency?—In what way?

4133. In increasing the amount of science that is required, for instance, chemistry, physics, and elementary biology are all introduced, whereas before only a very limited amount of attendance on chemistry, and

N. C Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

I think, no examination on chemistry was required?—There has always been an examination in chemistry up to the present time, and so there was in physiology. There is the substitution of biology for elementary physiology. That is the only alteration I think.

4134. But hitherto there has been no biology?—No.

4135. And in future if these results are carried out, there will be elementary biology?—Yes.

4136. And students for that conjoint board diploma will be required to attend, as well as to pass, examinations in elementary biology?—Any course?

4137. A course, I understand, is prescribed? I know it is being taken practically at the new colleges?—I think they pass it immediately after registering, or at the time of registration.

4138. The note is not very clear. They say subjects may be studied before registration at institutions recognised for the purpose by the examining board. That implies a course in every case?—I do not know that there is a recognised course.

4139. Then what does it mean by "institution recognised for the purpose." It would imply a course, would it not?—It might imply a course.

4140. And to that introduction of an extended amount of science would you take exception?—No, I would not to that amount of science. What I do take exception to, is the science which is demanded of men going up for the Preliminary Science Examination in the University of London, which is a very different thing from the science demands which are made by the curriculum you refer to.

4141. Then you would prefer, I understand now, the introduction of this increased amount of science?—By increase you mean to say over that of the present scientific examination?

4142. Over that of the present regulations of the Conjoint Board?—I think for a degree you would certainly demand more than is contained in the elementary kind of work to which you have referred.

4143. That seems to me rather to contradict your previous contention that you desire to reduce rather than to increase?—What I mean is this, that you cannot compare the first examination in science of the colleges with the examination in science which is demanded by the University of London. They are not comparable; the one is an elementary course which young fellows of a very moderate amount of school education might be able to pass, whereas that demanded by the University of London——

4144. Do preparation schools teach elementary biology?—Yes.

4145. I thought it was unusual in the curricula of schools?—I know a school which teaches it.

4146. I know a good many schools, where I do not remember it being introduced?—I do not think it should be a very severe examination in biology.

4147. You do not object to the introduction of science so long as it is kept elementary, and roughly speaking, at school standards where it is taken at schools?—As long as it is kept at such standards that men of ordinary capacity can pass it after real careful study. The fault of the examination in science at the University of London has been that it has stopped so many men, they never got beyond it.

4148. To pass on; you have spoken of the course of the medical schools in London, as in the main a cramming for successive examinations; to what do you attribute that state of things?—Because there are so many examinations to pass, and each one is broken up into several parts, the first examination if I mistake not is broken up into four parts.

4149. You are alluding now to the examination for the diploma, not for the degree?—For the diploma, a man may be ploughed in any one of those examinations, or he may be ploughed in more than one, so that he may pass any one and have three other parts to get through. In the next examination he passes in another part; he comes back to his school again for the second time, and so on.

4150. This grievance depends upon the existing courses and arrangements for examination for the Conjoint Board only?—Yes.

4151. It does not apply to the University degree?—For the University degree, I do not think it matters so much, for there are so few candidates.

4152. The examination for the London University degree cannot be broken up in the same way as those for the diploma?—That I do not know, but I think it can.

4153. With regard to the diploma, if I understand it correctly, at present the first examination can be taken in two parts, and is ordinarily taken in two parts, one at the end of the winter session and the other at the end of the summer session?—Yes.

4154. The other can be taken in two parts?—Yes, I think you can take it in more parts than that.

4155. The final examination in one, two or three parts?—Yes.

4156. The new regulations allow, if I read them correctly, of still further breaking up?—You are talking of the new regulations, are you not?

4157. No?—The new regulations are in force from the 1st of January.

4158. For students who commence after the 1st of January, not for students who commenced their study prior to the 1st of January?—No; the first examination is broken up into four parts in the new regulations.

4159. The second is entire, and the third separable into three parts?—Yes.

4160. And the final examinations apparently can be broken up under certain limitations with regard to the number of marks gained, into two or more parts?—Three parts, "clinical medicine, clinical surgery, and midwifery."

4161. You will see there is a limitation in section 21, on page 13, of the new regulations, that at least half the number of marks required must be obtained in each part?—Yes.

4162. How does the Gresham University Charter tend to relieve that excessive multiplication of examinations?—It will not tend to relieve it. If the men have to pass through this conjoint scheme they will have to pass through all these parts.

4163. And over and above that you require University examinations if there should be distinct University examinations?—Yes.

4164. I suppose you would feel that the University degree ought to entail some amount of extra examination?—Yes.

4165. And do you think any further multiplication of examination and duplication of courses would be in any sense practicable?—It must be so if they are to obtain degrees under the present Charter.

4166. It has to be done, but you view it as disadvantageous in medical examinations. They would have to take the whole course required for the medical qualification under the Conjoint Board, and in addition to that any examination or examinations imposed distinctly by the University?—Yes.

4167. And that you look upon as undesirable?—Under the Charter you will see that they may register anywhere.

4168. And the alternative would be to register with the Society of Apothecaries?—Why not outside? Why not with the College of Surgeons conjoint examinations in Scotland. There is the College of Surgeons and Physicians, Edinburgh; I think they are amalgamated now with Glasgow.

4169. Do you think they would be likely to be driven to that course to avoid the difficulties that we have entered into?—I am not quite sure about it. It is impossible to say.

4170. Do you think it would be preferable that they should connect themselves with the London University, supposing London University to consent to reduce in some form or another the standard of its degrees?—I object altogether to the system of the London University. I think it is not an educational body at all, it is a body purely for examination.

4171. I do not wish to enter into that?—I would object.

4172. Would you think the University degree, as the simplest expedient, ought to carry with it the registrable qualification?—Certainly. They are registered practitioners before they can approach the Gresham University.

4173. They have to be, according to the scheme?—Yes.

4174. But in every other University the degree is valid as a registrable qualification?—Yes.

4175. And would you wish that to be introduced into the Gresham University Charter?—Yes.

4176. Would your association support an amendment to the existing Medical Acts in that direction—the Act of 1886? Do you think it would be likely to receive the favour and assent of Parliament?—I think so. I am only speaking for myself.

4177. It is a very important point, of course, to know whether it would have the support or opposition of the medical profession?—It is so important a point that one does not wish to give a positive opinion without consulting the Association.

4178. You can only give your opinion from what you know of the opinion in the profession?—Yes.

4179. You are aware that the provision in the Medical Charter which insists upon the independent registrable qualification indirectly relieves the University from inspection by the General Medical Council?—No, I was not aware of that.

(*Mr. Rendall.*) Sir George Humphry will correct me if I am wrong. I believe the General Medical Council has the power of inspection of all bodies whose degree or diploma carries a registrable qualification.

(*Sir George Humphry.*) Yes.

(*Mr. Rendall.*) So that the General Medical Council inspects all Universities in the Kingdom who grant medical degrees.

(*Sir George Humphry.*) Yes.

4180. (*Mr. Rendall.*) That will somewhat explain what you said—that you were unaware that there was any visit or inspection of the London Medical Schools by the General Medical Council?—Yes.

(*Sir George Humphry.*) I am speaking of examinations in schools. The General Medical Council does not inspect schools.

(*Mr. Rendall.*) Has it no power of inspection of schools?

(*Sir George Humphry.*) No real power of inspection of schools.

(*Mr. Rendall.*) I understand that an inspector of the General Medical Council not infrequently visits Manchester, Liverpool, and such schools and bodies as are empowered to give a University degree carrying a registerable qualification.

(*Sir George Humphry.*) I do not think there is any inspection of schools at all.

(*Mr. Rendall.*) Only of examinations?

(*Sir George Humphry.*) Only of examinations.

4181. (*Mr. Rendall.*) But does not that imply inspection of laboratories and provision for teaching and so on?—Certainly not.

4182. Now another point with regard to the Gresham University Charter. You said the Council was too large and you would wish to reduce it to 30. What portion of that 30 does your association hold should be medical?—The same proportion as at present, or very nearly the same proportion.

4183. About the same as out of the existing total?—Yes. I take it that we shall have 12 school representatives.

4184. Instead of the existing 11 or 12?—Yes; I think the proportions are about right.

4185. And you think the whole of the members should be reduced?—Yes.

4186. And you would effect that by combining the medical schools and allowing them to elect joint representatives?—Yes.

4187. You would give the retrospective effect to which Lord Reay alluded, and I suppose you would be in favour of Mr. Erichsen's policy of extending the degree to present holders of M.R.C.S. and L.R.C.P. diplomas?—Under examinations.

4188. With final examinations, but not entrance or preliminary science?—Yes, I think there should be an examination in arts. It should be adapted to the status and position of the men.

4189. Imposed even on the present holders of the diplomas?—Yes; they are perfectly willing to have that themselves.

4190. And all the examinations in medical and surgical subjects as well?—Yes.

4191. (*Professor Sanderson.*) May I ask one other question. The preliminary examination in science in the University of London implies a devotion of something like a year and a half completely to the study of the subject to which it relates. Would you think that too much for an intending medical man to devote entirely to scientific studies, say a year and a half or two years?—What would those subjects be?

4192. Physics, chemistry, and biology?—I think a year and a half is not too much to give to subjects of that kind.

4193. That would enable him to pass the Preliminary Examination in Science?—Yes, it might.

4194. (*Mr. Anstie.*) I am not quite clear whether I follow your evidence on one or two points. I understand you to say, in the first place, that you have a desire that some authority should be constituted, which would be able to exercise a controlling supervision over the London medical schools. Am I right?—Yes.

4195. Is your objection on one point of this Charter that no such provision is contained in it?—I think powers of that kind ought to be added to the Charter. The only power I think you will see under that Charter is that schools under certain circumstances may be blotted out.

4196. The 25th clause says this with regard to the authority over colleges:—"A college in the University "shall not in any way be under the jurisdiction or "control of the councils except as regards the regula- "tions for the duration and nature of the studies to be "required of the students of the college as a qualifica- "tion for University degrees or distinctions." Would you agree with some who have given evidence here that there ought to be supervision or control?—I think there ought to be.

4197. Are you prepared to say that the schools are at this moment ready to consent to have that supervision and control exercised over them?—No, not in the least.

4198. Or would agree to it?—Not in the least.

4199. Then you would require that they should give their adhesion to that view in order to give effect to your desires on this point?—If the Charter of the Gresham University laid down that as one of their provisions, the schools would be at liberty to enter the University or not as they pleased. If they objected to any such clause or arrangement they would simply stay outside.

4200. Or they might enter into some arrangement with the London University, which, in your view, would continue to exist?—Yes.

4201. This might create some confusion in the controlling supervision, might it not?—Supposing some of the most influential schools declined to accept this control and came to terms with the London University, it might interfere a good deal with the control and supervision which you desire?—I think each school would have to take its own course. If the thing is right and proper and ought to be done, it had better be done.

4202. What is right and proper is what is practicable, is it not?—Yes, it is.

4203. You would not desire to make a theoretical scheme which would not have practical effect?—No.

4204. In the next place, I understand you to say that you think that all medical men who are qualified to obtain a license to practice at all should have a degree, subject to what you superadd about some arts examination?—They would have to pass whatever examination the University imposed.

4205. But I understood you to say, in answer I think to Principal Rendall, that you thought all existing licentiates should be at liberty to obtain degrees without further medical examinations?—No, I beg your pardon. I said that all those who were licentiates at the present time would have to pass some examination in arts and an examination in surgery and medicine.

4206. Additional?—Yes, additional.

4207. They would have to go, in fact, through a complete medical examination?—Yes, a complete examination. They would have to go through a complete medical course.

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

4208. You think that license and graduation ought in all cases to go together?—If this scheme is to be put upon the same level as that of other Universities which is what we contend for it must be so, because in all other Universities it is so.

4209. But if license and graduation ought to go together why should not the two Royal Colleges have the power of graduation?—I do not know why they should not have the power of graduation.

4210. Would it not be rather difficult on your view to refuse them the power?—I do not know why they should not have the power, but that power has not been conceded to them.

4211. If they have the power of license, and the license ought to carry graduation, why should they not have the power of graduation?—And granting degrees.

4212. Yes?—Yes, that is what they tried for.

4213. Would you not be introducing rather a complicated system by this method. We should have the Gresham University granting its degree; we should have the London University, which you suppose still to exist, granting its degrees; and we should have the Royal Colleges granting their degrees, all in London. Do you think that would be the way to promote the advance of medical science?—I do not think the Royal Colleges are likely to get the power. It certainly has not been conceded. They asked for those powers, but they were put on one side, and they were told that it was impossible.

4214. To take the thing on your view of what is right, as far as I can understand your view, they ought to have the power?—Not if you are going to create another University.

4215. But why should you create another University if they are to be competent still to grant the licenses and nothing is required of them but that they should superadd an arts test?—There is something more in a University than the mere matter of granting degrees. We look upon the University as something more than that. It should have great influence in other ways besides the mere giving of degrees.

4216. In what other ways do you mean?—I think the mere bringing of the men together, the position and the status, and altogether the conditions of education in a University are important.

4217. I have a difficulty in seeing how you reconcile the view that licensed medical men ought to be entitled to a degree with your present view that the Royal Colleges ought not to have the power of graduation?—I have said nothing of the kind. I have laid down that London medical students who are licensed now and have not had opportunities of obtaining degrees should be enabled to obtain degrees after passing examinations in arts and various medical subjects. I have stated that when this University is created that power shall cease.

4218. I do not see why that power should not continue?—Because the men should enter and go through the University course.

4219. Why would not the men who might by licensed hereafter by the Royal Colleges have an equal claim with those who now exist as licensed practitioners?—Because they have not had an opportunity of going through the University. They have had no opportunity of obtaining degrees up to the present time. It is because those men who are licensed now have not had a chance of obtaining degrees that we ask that they should have the opportunity.

4220. Then your demand is founded on the just desire as you think of allowing the licensed practitioners to obtain a degree?—Yes, those who have not been able to obtain a degree under the old system.

4221. That seems rather a narrow basis for constructing a new University upon, is it not?—No. I have not claimed that for one instant.

4222. I gather that to be your chief ground?—No, certainly not.

4223. On this point?—No.

4224. Then what is the other ground?—Certainly the better education of students, to raise the tone and condition of men in my profession.

4225. Then I am a little in a difficulty, because I rather gathered that you thought the tone of medical education was already too high on what we are accustomed to regard as the scientific side?—I think I have already explained that I consider that the present arrangements for examination, and so on, are extremely complicated and extremely varied. I believe they want to be organised and brought into more uniform condition, and that is the object of forming a University in London.

4226. I agree as to the organisation, but I understood you to say that the standard was unduly high?—The standard of the present University of London in science is what I objected to.

4227. A pamphlet has been put in by one of the previous witnesses in which, at page 51, this paragraph occurs, in a statement made by the Senate which accompanied their proposed scheme:—"In the course "of the communications which took place between the "Senate and the representatives of the Royal Col- "leges and of the Medical Schools, the opinion was "unanimously expressed by those representatives, and "was indeed strongly urged upon the Senate that "nothing should be done which would lower the "standard or lessen the value of the medical degrees "of the University, or impair their scientific character, "and, in particular, the necessity was pressed upon "the Senate of retaining the entire control of the "Preliminary Scientific Examination." You dissent from the view so expressed by the Royal Colleges?—Yes.

4228. And I understand you also to dissent from the new regulations which the Royal Colleges are now making for their conjoint examination?—No.

4229. Then I misunderstood your answer perhaps, was it the regulations of the Medical Council that you dissented from?—The regulations of the University of London.

4230. But a further question was put to you with respect to a regulation lately issued, I understand by the Conjoint Board examination?—No, I objected to the Science examination of the University of London.

4231. But some reference was made to a syllabus which has been lately put out?—That syllabus, I think, is a perfectly good one as far as I know.

4232. You think that is right?—Yes.

4233. That goes in the direction of increasing the scientific requirements?—Does it; have you examined it?

4234. No, I think you said so?—No, I think biology is substituted for physiology in the entrance.

4235. (*Mr. Rendall.*) Do you mean that physiology is reduced?—No, but in the former scheme you will see that physiology was there, physiology has been taken out and biology put in.

4236. You do not mean that physiology has been reduced in the new scheme?—No, its place has been occupied in the Preliminary Examinations by biology.

4237. (*Mr. Anstie.*) I understood you to say that you do not object to the amount of scientific examination or test that is used in the Universities of Oxford and Cambridge on the ground, I think, I am right in saying, that you say provision is made for the teaching of this subject there?—Yes.

4238. Is it your view then that that amount of science ought not to be required in other places or that it ought?—Really, I cannot speak exactly to what the amount of science required by Cambridge is. I have never been to the examination; all I know is that the students there pass in a very large proportion; whereas the students who go up to the London University are rejected in a very very large proportion.

4239. Then you express no opinion now, I understand, as to whether the amount of science, required at Cambridge is in excess of what ought to be required or not?—I was speaking exactly upon the results of the examinations.

4240. But you gave a reason, you said you did not object to the amount of science required by the Cambridge examinations, because there was an adequate provision made for the purpose of teaching?—The result of that is that a great number of men pass the examinations, the majority of men pass the examinations.

4241. What I want to know is whether you desire what the London degree should be obtained on less scientific attainments than the Cambridge degree, or whether, on the other hand, what you desire is that they should be not less scientific than Cambridge degrees,

but that there should be greater provision made for instruction? — I think they should be about the same standard as Cambridge, in fact Cambridge is about the same as Edinburgh, as far as I know.

4242. Then the substance of your objection, as I understand it, is that in London, owing to its existing circumstances, there is an inadequate provision made for the teaching of those scientific subjects which are easily dealt with at Cambridge?—That may have a good deal to do with it, but practically the men who go to the scientific examinations at London University are plucked in very large numbers.

4243. Then you have no opinion on that?—No.

4244. That does not fall at all within the views you have expressed with respect to the desirability of co-ordination, control, and supervision over the London schools?—If those schools were co-ordinated and supervised and controlled it is very possible that the defects of the scientific side would be discovered and they would be remedied.

4245. Then, as a matter of fact, your desire would be, I take it, that some such co-ordination including supervision and control should take place among the London schools as should secure that scientific teaching should be given which would ensure the acquirement with reasonable facility by intending graduates of a standard not less than that which is required at Cambridge?—That expresses my opinion.

4246. In fact that is really what you want?—Quite so.

4247. Then I should be wrong if I supposed you to desire in any degree to reverse the tendency which has been shown of late years by the Royal Colleges, by the Medical Council, and by others who have interested themselves in the reform of medical education—the tendency to make that education more scientific than it has formerly appeared?—It certainly should not be lowered.

4248. (*Sir William Savory.*) Are these opinions your own individual opinions, or do they represent those of the association for whom you appear?—I believe you were not here when I read my statement.

4249. No, I was not?—I read my statement, because I wished it to be distinctly understood that I was speaking on behalf of the association, and I am giving my answers as far as I possibly can upon those lines.

4250. Then we take it that what you have said here is the opinion of the association?—I believe so.

4251. How was that opinion arrived at?—It was arrived at by questions, by circulars which were sent to the whole of the members of the association, and by meetings which were held in all the branches of the association, and by subsequent meetings which have been frequently held in London and elsewhere to consider this subject.

4252. I presume you would not represent it as the unanimous opinion?—No, certainly not.

4253. There is a very great difference of opinion, is there not?—Yes.

4254. Can you give us any idea of the majority that were in favour of the opinions you have expressed?—Out of the 14,000, I suppose I should not be far wrong in saying that 8,000 is the number who expressed that opinion.

4255. May we take it that 8,000 have expressed the opinions you have delivered to-day?—I should think as many as that. That is my written statement to that effect.

4256. Were all these questions sent to the whole of the 8,000?—Yes, questions bearing upon these various points, and it is from the answers to those questions, that I have largely drawn up my statement.

4257. You have stated nothing of importance to-day that 8,000 of these members would not endorse?—That is my opinion, and I think it is broadly the opinion of Dr. Cleveland who is here.

4258. I think the main objection you have taken to the London University, is that the examinations are too high?—The examinations in science are too high.

4259. That is to say, out of the reach you think of the average medical student?—Yes.

4260. You formed an opinion mainly, I presume, on the number who are rejected?—Yes.

4261. Have you compared the numbers rejected at the London University with the rejections in other institutions?—I believe you will find a statement to that effect in that report.

4262. But can you speak with precision on the subject?—No.

4263. Is it not a very important element in the inquiry? Are you sure that the rejections of the London University greatly exceed, for instance, rejections at the colleges in the conjoint scheme?—I am not quite sure about that.

4264. Are you aware of the proportion of rejections that occur at the two colleges under the conjoint scheme?—About 37 per cent., is it not?

4265. You mean taking it all the way round?—Yes.

4266. Do you know what the rejections at the London University are?—I should have thought about 50 per cent.?—They are about half, are they not?

4267. There is no very great difference then?—No.

4268. Is not that an important matter?—If you found your objections to the London University on the severity of the examinations represented by the number of rejections, when you come to compare it with the great qualifying bodies of the kingdom you find a very small difference?—Practically the men for the conjoint scheme go up again, they must go up again to obtain their qualification to practise; whereas in the London University there is no necessity for that. Therefore they do not go on for the other examinations. No doubt the other examinations are also extremely difficult, and that prevents them from following up their courses at the London University.

4269. One hardly sees how that bears upon the objection to the London University on the ground of the severity of its examinations?—The severity of the examinations prevents the men from obtaining degrees from the London University. That is the only thing that does prevent them.

4270. But on what evidence is that opinion founded. You have just told us that as far as you know (and your knowledge, I understand, is by no means certain) the difference in the per-centage of rejections in the London University and of the conjoint colleges is not very considerable. Therefore, I still fail to see upon what grounds you take that strong objection to the London University?—A great number of the London men are sent back to the Preliminary Examination. They cannot go up for six months. Then they find considerable difficulty in passing the other examination. The scientific does stop a large number of them. Consequently we do not get more than 10 per cent. of all the practitioners in England who are University men. These men, on the contrary, are members of the Colleges of Physicians and Surgeons. There is nothing but the examination at the London University which does prevent them.

4271. Are you quite sure of the facts upon which that opinion is founded? Have you gone carefully into the number of rejections of the several examinations of the London University and the conjoint scheme?—I have to some extent.

4272. To what extent?—I have gone into it in this way. We got out some tables——

4273. But, if you will excuse me for saying so, I do not think you have yet given us an accurate representation of the per-centage of rejections?—No, I do not pretend to.

4274. But is not that the very ground on which you have taken your objection—the number of rejections of the London University?—No. I say it is because men are rejected at the London University that they do not go on and proceed to take their M.D. Degrees. The numbers I cannot give you, because I have not got them.

4275. But surely it is an important factor?—Well, it may be, but I cannot give them to you.

4276. Is it not the fact upon which your conclusions are based?—This is the report of the association. The statement made is this:—"Does the improvement of "medical education demand the exclusion of 90 per "cent. of the students of metropolitan and other medical "schools from the advantages of medical degrees "bestowed by a University specially chartered and "fostered by State aid for the promotion of such "improvement." There is that fact. The men do not go on. They go up to the University, and they do not

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

get degrees. Why do they not? Because the examinations are such as to prevent them.

4277. Excuse me, that hardly answers the question I put to you which is concerning the relative severity of the examination at the London University and other institutions as represented for instance at the conjoint colleges. I am not suggesting to you that the examinations at the University of London are not more difficult, but I am asking you if you can tell us more precisely in what degree they exceed the conjoint examination in difficulty, because I presume that if you would give a man a degree you would enforce some extra examination upon him, would you not?—Yes.

4278. You would not be prepared to say that a man should have a degree outright who passes the examination of the conjoint colleges?—That is not desirable, but you would have an extra examination.

4279. May I ask why it is not desirable?—The former Commission examined the subject, and they came to the conclusion that it was not desirable.

4280. No, that was another question; it was the question of giving the power to the colleges as colleges, not being a University, of granting a degree, I will put the question in another way. Do you think the examination which the student passes at the conjoint colleges is sufficient to entitle him to the degree outright as far as the examinations are concerned?—I do not think it is matter of examination, I think the degree should be a matter of education. It is something more than an examination. That is what we contended so strongly for. That is why I complain of the London University.

4281. If you will excuse me you are going away to another subject which we may come to presently. I ask you now as far as examinations are concerned, if in your opinion the examination of the conjoint colleges is sufficient to enable a man in our profession to have a degree?—I do not think the examination, if you exclude the arts examination, is sufficient.

4282. That is to say, you would add something more?—Yes.

4283. What would you add more?—I should certainly add a higher standard, I think the number of the subjects may be all very well, but the standard is not sufficiently high.

4284. Tell me what you would add to make the standard higher?—I stated not very long ago that a youth of 15 with average ability could pass the examination at present for the standard of the College of Preceptors required by the Colleges.

4285. You are speaking of the arts?—Yes.

4286. Then may I take it as an inference from what you said, that you would raise the standard of the arts examination?—Yes.

4287. Would you raise the standard of the scientific examination?—The present standard?

4288. Yes, as carried on at the two colleges. Do you think it is enough, or would you raise the standard?—I think it might be raised somewhat.

4289. Then, if you will allow me to say so, if you grant as much as that, and taking that with your previous statement about the comparative examinations of the London University and the colleges, I do not see exactly what your position in the matter is. Granting that the London University Scientific Examination is somewhat more difficult than the conjoint examination, which you think desirable in order to entitle the men to a degree, I do not see the force of your objection to the examination of the London University?—I say distinctly and clearly that it is not examination. You are pushing and turning about this wretched examination question. It is not the examination that I am complaining of so much as the education that I want to see raised.

4290. I am sorry that I cannot perceive that they are wretched, but we will pass that by. You must let me press you on the subject of examination, because it is an important part of a University. I am not in the least ignoring education, but I am asking you now on the subject of examinations, and I shall be glad to have a satisfactory answer to the question I put to you. I want to know what objection there is to the scientific part of the London University examination, if it is in some degree only more difficult than the conjoint examination, you yourself admitting that the scientific examination should be raised for a degree?—My objection is that the scientific examinations of the London University stops men from obtaining a degree. Whatever the proportion may be, it may be 90 per cent. for all I know, it is such as to stop men from going on and obtaining degrees.

4291. That is all you are disposed to say, is it?—That is all I am disposed to say.

4292. Then may I take it that your object would be to have such examinations as would allow men to pass through on easier terms?—Yes, to pass through on easier terms.

4293. Then, supposing the new University were established, it would be a University to facilitate granting degrees and to allow men to pass through on easier terms?—Yes, to allow men to pass through on easier terms.

4294. Then it would be a lower standard of examination?—I do not know whether it would be correct to say that it would be a lower standard of examination. In some subjects the standard might be exactly the same. I am not sufficiently acquainted myself to say exactly what it is. All I say is that it stops men from going on. There are no doubt some subjects in which the standard is not too high. I have not passed through the examination myself, so I cannot speak to it.

4295. May I take it that it is the scientific examination of the London University that you principally object to?—Very largely.

4296. Then I take it that in the new University you would have a lower examination on the scientific side?—I cannot say that I should have it lower. I do not think that expresses my opinion. I should have it in such a form that it would not stop such a large proportion of men getting through it.

4297. Can you say how the examination can be put in a form in which it would not stop so many getting through, unless it were an easier one, or do you take the objection that there is something faulty in the London University examinations apart from their severity?—I should think there might be something faulty.

4298. Have you ever examined there?—No.

4299. Are you prepared to say from any evidence which is within your reach that the examinations are faulty?—I am not prepared to say whether they are or not. I have heard that in certain subjects it is extremely difficult for men to pass through unless they have attended certain classes of lectures delivered by certain people.

4300. Do you think there is any truth in that?—I cannot express any opinion upon that.

4301. But if you come here to speak on the subject is not that a cardinal fact worthy of your attention?—No, because I did not think a question of the kind would be asked me. You ask me if I have any evidence. I have no evidence of it. You asked me whether I had heard; I tell you what I have heard.

4302. May I go so far as to take it that in the constitution of a new University you would hope to have such examinations which, while maintaining the standard of the University, would enable men to pass much more easily?—I should say such a standard of examination in science as would fit a man to obtain a degree.

4303. You see that hardly answers the question, because fitting a man to obtain a degree would be entirely a question of opinion?—An examination similar to that of Oxford, or similar to that of Cambridge, or Edinburgh, and so on.

4304. Would you say that the examinations at Oxford and Cambridge were about equal?—I believe they are about equal in science.

4305. And would you say that the two examinations were about equal to that of the College of Physicians and Surgeons?—I should think in the subjects which they examine in they are.

4306. So that you think the conjoint examination of the college and the examinations at Oxford and Cambridge on much about the same level?—I should think they are on much about the same level.

4307. Do you think men of Oxford and Cambridge are entitled to the degree after passing their examination?—Yes.

4308. Then why are not the men who pass the conjoint examination at the two colleges?—Because I hold that the examinations are different from education. The men who pass through Oxford and Cambridge have gone through a course of education which is very very

different from that f men who pass through the colleges.

4309. May I point out that these are two distinct questions—I mean the function of the University regarding education and the function of examination. I am not raising the question of education, that is a totally different thing. I am speaking of examinations?—The fewer examinations the better.

4310. Would you lay that down for the medical profession generally?—Yes.

4311. Is that the opinion of the 8,000 general practitioners? — I do not know about that. They are certainly over-examined I think at present.

4312. (*Mr. Palmer.*) I think you said you would like the Council of any such University strengthened?—Yes.

4313. Strengthened not only by diminished numbers, which I think you thought desirable, but also to have a power over the schools?—Yes.

4314. And that with a view of encouraging teaching as well as those examinations which are necessarily incidental to teaching?—Yes.

4315. The principle of the Council in the Gresham Charter provides for a representation of the professorial element through the Faculties as well as of the administration element through the members of the Council?—Yes.

4316. You would approve of that, would you?—Yes.

4317. You would approve of the principle of the teachers in that way being more or less or equally represented on the governing body with the administrators?—Yes.

4318. Would you approve of that equally, or more or less?—I should think equally.

4319. And you and the schools you represent, with a view of obtaining greater force through reduced number would be prepared, I think you said, to be represented conjointly perhaps?—I think so from the evidence we have.

4320. If it was to facilitate the kind of University which you have in view?—Yes.

4321. And, of course, speaking for your own profession, you are not unaware that there are a great many professional people in other professions who would be very anxious to have educational facilities, especially in London?—Yes.

4322. That is strongly represented by the medical practitioners in the City of London?—Yes.

4323. They represent other professions as well as their own?—Yes.

4324. (*Sir George Humphry.*) There has been a considerable amount of matter gone over, but it appears that there are two special points: one, the desire of a large number of members of the medical profession that they should be able to obtain degrees, and that they find themselves disadvantaged in their practice from not having degrees?—Yes.

4325. They think that the man who has a degree has an advantage over the man who has not a degree, so that there is some advantage in having a degree; but it seems you would not wish that they should obtain that advantage without indicating some educational qualification for it?—No.

4326. You would not wish that the medical degree should be given freely to all members of our profession?—No, I think not.

4327. You wish that it shall indicate something higher than a mere license to practice?—Quite so.

4328. And that, therefore, there must be some elevation of education obtained by those who have it?—Quite so.

4329. And that the improvement in education should in the first place, and perhaps mainly be an improvement in the arts education?—Decidedly.

4330. By that we mean improvement in what is ommonly called school education?—Yes.

4331. That they should be required to pass an examination corresponding with that of the Matriculation of the University of London?—Exactly.

4332. That the present examination required of all medical students by the Medical Council is scarcely that which would be sufficient for those who are to have a medical degree?—Exactly.

4333. And in that way you would wish to improve, very materially, the general education of the profession?—Exactly.

4334. That, of course, means an improvement in school education?—Yes.

4335. And you think that any influence of that sort would operate largely upon our schools?—Yes.

4336. I am not speaking of medical schools?—No.

4337. But the fault in that really is in the schools of England?—Yes.

4338. And you would wish that the members of our profession should have a higher school education if they are to have a medical degree?—Quite so.

4339. Therefore you would desire that they should pass precisely such an examination as that of the University of London?—Yes.

4340. And that there is no reason why that examination should be made easier for them?—No.

4341. With regard to the Gresham University there is no provision respecting that?—No.

4342. We do not know what that might be?—No.

4343. So that with regard to the University of London we have a certainty of effecting an improvement?—Yes.

4344. With regard to the Gresham University it might or might not be an improvement?—Certainly.

4345. That is a very important point?—Yes.

4346. And probably you would feel that nothing would promote the general status of our profession, and nothing would facilitate the passing of the medical examinations, so much as having the students well grounded at their schools?—That is precisely the opinion which was expressed, and which I have tried to put so strongly before you.

4347. That lies at the root of the whole matter very much?—Yes.

4348. Then we come to the question of scientific education?—Yes.

4349. You would be glad that that also should be raised?—Yes.

4350. That their knowledge of scientific subjects, that is to say, their knowledge of the great principles of matter and of life, the knowledge of physics, chemistry, and biology, should also be raised as a preliminary to the entrance upon the special study of medicine?—Quite so.

4351. But you feel that the examination on those subjects at the University of London is somewhat too high?—Exactly.

4352. You have been questioned with respect to the rejections, and it has not come out very clearly that the rejections at the scientific examination in London are greater than those of the Conjoint Board?—No.

4353. But I think there may, perhaps, be one reason for that—that it is only the more accomplished students (if we may so call them) who present themselves to the University of London. Is not that so?—Yes, that makes all the difference.

4354. And that may be a reason why the rejections there are not so very much greater than those of the Conjoint Board?—Unquestionably.

4355. But you wish for some increase of that kind of knowledge?—Yes.

4356. Those are really the two fundamental things?—Yes.

4357. That a degree should indicate a higher knowledge in arts, and a higher knowledge in science?—Yes.

4358. Therefore you would like that there should be something a little lower than the science examination of the University of London?—Yes.

4359. You are aware perhaps that the Royal Commission reported somewhat to the same effect, and indeed suggested that the Preliminary Scientific Examination of the University of London should not be required of medical students?—Exactly.

4360. Indicating somewhat of the same feeling?—Yes.

4361. Then with regard to other subjects, the more special subjects, I do not know whether you would feel or whether the profession feels that the London

N. C. Macnamara, Esq., F.R.S., F.R.C.S.I.

23 June 1892.

University examinations are too high. I do not know what the feeling is about that, I think you have rather indicated not?—I think the feeling was, that that was not the point.

4362. Then the real point of objection to the University of London, there being no objection to those arts examinations, and there being no objection specially to the medical examinations, resolves itself into the Preliminary Scientific Examination?—Yes.

4363. If there were a modification of the Preliminary Scientific Examination or if, following the advice, as we may call it, of the first Commission, the Preliminary Scientific were not required of medical students, the objection to the University of London would cease?—As an examining body.

4364. That is all of course, that any of these bodies are. The Gresham University proposes only to be an examining body?—It would have a good deal to do with the teaching, would it not?

4365. Not very much. It is proposed that the University of London should in the same manner assimilate itself with teaching. If it did assimilate itself with teaching in the same manner as was proposed we will say by the Senate of the University of London, and which was not objected to at all by Convocation, if there were that assimilation or that connexion between teaching of the University and examination, the profession would willingly assent to the University of London?—I think so.

4366. And on the whole, if one University could be made to adapt itself to the requirements of the profession in that sort of way, it would be better that there should be one University in London than two?—I think certainly if the London University can be brought up to the lines of the Gresham.

4367. Perhaps it is down to the line; I do not know. You mean if it could meet the requirements in a somewhat similar way?—If it could be made a teaching University.

4368. Is it difficult to say what we mean by a teaching University?—As distinct from an examining University.

4369. I do not quite know what the idea of a teaching University is?—The difference between Cambridge and the London University.

4370. If it can teach, but it cannot teach medicine. It cannot be a teaching University in that sense. I believe one idea is that it should associate itself with teachers more, and so bring itself more into harmony with teaching?—Yes.

4371. That would be one mode; then of course another mode might be that it should institute on its own account some higher style of teaching which should not be in the direct line of medicine. Would that be desirable?—Yes.

4372. So that, taking those points together, seeing that there must be disadvantages in the existence of two Universities, the profession would be satisfied if the London University could meet its views on this point?—I think so on the whole.

4373. So far with regard to education. Now with regard to the degree; you remarked that you would wish the degree to be obtainable on the same lines and in the same manner as at other Universities?—Yes.

4374. Does that apply to the Scotch Universities?—Edinburgh.

4375. Then, I suppose, if the degree were obtainable very easily and very largely by medical men, it would cease to be of value?—It has not done so in Scotland, has it?

4376. They all have the degree in Scotland?—Yes, it has not lowered it at all.

4377. Has not the infusion of the large number of degrees in England lowered it in England?—I do not think so.

4378. I suppose a thing is valuable in proportion to the difficulty in obtaining it?—Yes, that is the reason men leave England and go to Scotland, I think.

4379. I will come to that in a moment. A degree is valuable in proportion to the difficulty in obtaining it, and the higher standard that it indicates?—Certainly.

4380. Then with regard to going to Scotland; you have mentioned that of the number of registered students in England, a considerable proportion obtain the degree in Scotland; but is it not that those registered English students who go to Scotland are very largely students resident in the north of England?—A good many of the north of England students go to Durham, do they not?

4381. Durham is increasing lately, but hitherto Scotland has drawn very largely from the north of England. They go there because it is nearest. Then another important point is this: Do you think that a large number of those who have commenced and gone to a certain extent in medical education in England go to Scotland?—Not a large number.

4382. That is to say, that the objection we hear so much of, that they go to Scotland during the later period of their education, just at the time when they should be entering upon clinical work, has really not so very much in it, has it?—No, I do not think there is very much in that.

4383. It is chiefly the young students who go to Scotland?—Yes.

4384. Then a large number of them go to Scotland because it is nearer, and it has been said a large number go because it is cheap?—Yes.

4385. Then also because it is good?—Yes.

4386. The Scotch University has always held a high place in the medical school, has it not?—Certainly; Edinburgh distinctly.

4387. A large number of English students are attracted there because of the high character of the teaching?—In Edinburgh distinctly.

4388. There have always been great teachers there?—Yes.

4389. And those who go to Edinburgh fall under the influence of all those great teachers?—Yes.

4390. Those who are at a particular school in London are of course only under the teachers of that particular school?—Exactly.

4391. And, furthermore, the students are brought into relation, are they not, with a hardworking hard-headed class?—Yes.

4392. And that probably exercises a considerable influence over them. So it is not quite fair to our Scotch friends to say that the students go to Edinburgh for the purpose of obtaining the degrees. We must take the other points into consideration?—Yes.

4393. Having seen a good deal of Edinburgh and Edinburgh men, and having had Edinburgh men as my assistants, I confess to having formed a rather high estimate of the education in Edinburgh?—I quite agree with you.

4394. And I do not think it is quite fair for the English to say that the students go there for the purpose of obtaining the degree. I think there are other very important reasons. You agree to that, I believe?—Yes, quite.

4395. Then with regard to the difficulty of examinations. Examinations are the great difficulty at the present time of Universities and all licensing bodies?—Yes.

4396. They must increase apparently. As subjects grow, so must examinations. You can have no other test of teaching but examinations. I am afraid you will have to assent to that?—There is the German system. They do not increase their examinations much, do they?

4397. They keep rising, and they decide things by examination very much. I am afraid it is inevitable. With regard to subdivision of examinations there are evils attending it. You have mentioned that they are examined at the end of the first year; that they are examined at the end of the second year, and so on, in London; but I believe that was in order to make men work during the first year and make them work during the second year and throughout the whole period. So that, at any rate, there is believed to be some good connected with that?—Yes.

4398. And I am afraid the crammer has existed always. In our days there was the crammer?—Yes; but he was looked upon then as a person that people ought not to resort to.

4399. I am afraid that is not a new thing. It is an inevitable attendant upon examinations. Wherever there have been examinations of any kind there has been a crammer and a good deal of cramming done?—Yes.

4400. So that whatever may be the chanses made, I am afraid those evils will go on. Now, you mentioned the number of subjects; you said that the number of subjects should be reduced?—Yes.

4401. I have no doubt that both you and I have thought over that very much?—Yes.

4402. And, probably, you have had the same difficulty with myself of determining what subjects should be omitted?—Yes.

4403. I do not know whether you could help us in that matter?—They might be more varied. You mean the examinations in science?

4404. Every examination, all the way round?—No, I do not think you can reduce them very much.

4405. You said that you thought the subjects should be reduced. I was wondering whether you had clearer ideas than I had?—In arts?

4406. All the way round, in arts, science, and medicine. They ever increase, and one of the great difficulties of those who have to regulate medical examinations is to consider and determine in what way they can be reduced?—Yes.

4407. With regard to the supervision of the medical schools, you would not regard the necessity of that as applying to all the medical schools?—No.

4408. Some medical schools in London—— ?—Are so perfect that they would not require supervision.

4409. And that we will say of the larger number?—Yes.

4410. By far the greater number of medical schools in London have good opportunities for education in scientific subjects?—Yes.

4411. So it would be only with regard to, say, two or three schools?—I will not name them, but certainly the education in London is proved by the examination to be of a high character—of the highest character.

4412. And they are improving; the schools are increasing, and the laboratories, chemical, physical, and pathological. All the way round a very great improvement has taken place in that respect of late years?—Yes.

4413. We ought to take that into account in considering any methods for further improvement?—Yes.

4414. (*Bishop Barry.*) We have had the advantage of a large amount of professional discussion and information from the Commissioners as well as from yourself upon this matter. It would hardly become me to enter upon professional subjects. I understand you that, speaking generally, your association approves of the objects of the Gresham Charter?—Yes.

4415. Have you looked at all at the scheme which has been put forward by the University of London, and which was submitted to Convocation?—Yes.

4416. Have you formed any opinion as to whether it would enable the University of London to discharge the functions to which Sir George Humphry referred, as a teaching University?—Well, I am not sufficiently intimately acquainted with it to decide that.

4417. You will remember that this scheme provides for the University of London discharging two functions; one that of co-ordinating in a general way the teaching in London itself and the other that of examining candidates from the whole of the Empire?—Yes.

4418. Some collegiate and some non-collegiate students?—Yes.

4419. Do you think that a single University is likely to be capable of discharging those two very different functions?—I do not think so. I think I have said so before.

4420. I refer to some suggestions which fell from Sir George Humphry, that the medical profession would be willing to acquiesce in the acceptance in the University of London, providing it could discharge the functions that they required?—According to Sir George Humphry it would be modified very much upon the lines of the Gresham Charter.

4421. There is a great difference if you look at the two schemes; for, as I understand, the Gresham Charter holds the principle of federation because it does not wish to give its degree without the security of some regular course of studies. In that it differs entirely from the present University of London. I should have been glad to have your opinion as to whether you thought those two conceptions could be reconciled in a workable scheme?—I have already stated that I thought the London University has such a clear line of its own that it would be a great pity to interfere with its action by taking on any new view.

4422. Therefore, in spite of the obvious difficulties of having two Universities in London, you think on the whole that the line of the Gresham Charter is best, as contemplating the creation of a new University for London, and leaving the other to discharge the functions it discharges now?—Yes.

4423. That is your opinion?—Yes.

4424. And you believe that to be the opinion of your association?—Yes.

4425. The objections you made to the Gresham Charter which are important, were, I think, chiefly matters of detail. One was that you thought there ought to be an increase of the power of control of the Council. I think under the Charter there is much provision for control in the Council in the way, for instance, of fixing the syllabus, determining examinations, and the like. As far as I could see the only additional power you wanted was that of inspection?—Yes.

4426. The object of inspection, I suppose, was not merely to obtain efficiency, but in some degree to produce unity of action?—Yes.

4427. Therefore if schools are as complete as Sir George Humphry desires them to be, you think inspection would still have its use?—I think where schools are incomplete in certain matters they might be brought to combine with others.

4428. And the result would be that the strongest schools would practically be accepted, and the weak would conform to them?—Yes.

4429. I think you expressed an opinion that the medical schools would be unwilling to submit to this?—No, I hardly said that. I have had no opportunity of asking them what their opinion is.

4430. I rather gathered that this was your impression?—No, I could not say whether they would or would not. Supposing that power were taken under the Charter they would have the option of coming into the University or staying outside.

4431. And your idea is that the advantage of coming into the University would be so great that they would accept it?—Yes.

4432. Then another point of view was that the Council was too large?—Yes.

4433. That, of course, could easily be remedied?—Yes.

4434. Then I think you said that other colleges ought to have been included in the Charter?—Yes.

4435. Could you mention any?—Various colleges apparently institutions, and so on, were anxious to come in under the University scheme.

4436. You have not formed any opinion whether they were fit to come in?—No.

4437. I thought you might have suggested to us certain colleges, because it would be quite in the power of this Commission to recommend other colleges?—I have not thought of it.

4438. I should like to ask you with regard to the point of the rejection of the scientific examination. I am not sure whether I understood your statistics. I believe you thought the rejection was about 37 per cent.?—I spoke entirely subject to correction.

(*Bishop Barry.*) I understood you to say that you fancied the rejections came to something like this, but, if it is vague, I will not trouble you about it.

(*Sir William Savory.*) There will be no difficulty about getting statistics. They can be produced here.

(*The witness.*) It is all very well to produce statistics of the rejections, but you have to take into account the differences in the class of men who go up for the various examinations. You cannot bring them into statistics.

4439. (*Lord Reay.*) I think we may focus your examination into this. Your main object is not to enable the students to pass easier examinations, but to enable the students by better methods of teaching to pass examinations more readily?—Quite right.

The witness withdrew.

W. F. Cleveland, Esq., M.D., M.R.C.S., L.S.A.

23 June 1892.

WILLIAM FREDERICK CLEVELAND, Esq., M.D., M.R.C.S., L.S.A., examined.

4440. (*Chairman.*) Will you tell us what your position is with regard to the association?—I have lately been president of the association, and was elected one of those to appear before your Commission; I have listened attentively to the statement that has been read, and the remarks that have been made by Mr. Macnamara. I may say that I agree with him on the points he has brought before you, but I should wish to mention the importance to my mind, and the desirability of so modifying the examinations of London students, as to do away with the necessity for crowding the brain with a knowledge of a variety of subjects which must be, I think, of a more or less imperfect nature, and evanescent, and merely for the purpose of examination. I think this should be done away with, and the time so employed more profitably given to acquiring such knowledge as will, in future life, make them better and more useful practitioners.

4441. Do you think this can be done, or is likely to be done by the London University?—That is a point which I suppose is for consideration. What I understood I was more especially to speak upon was the admission or granting of degrees to past medical students.

4442. That you particularly wish to speak to?—Yes.

4443. I will only ask you with regard to the rest whether you, on the whole, corroborate the evidence which has been given by the previous witness?—I agree with the evidence that has been given by Mr. Macnamara. If there was one point at all upon which I should differ from Mr. Macnamara it would be simply on the desirability of keeping up the science examination. I admit that the arts examinations should be kept up, but I should not like the science examination in any way diminished.

4444. You approve, on the whole, of the Gresham Charter?—Yes.

4445. You think you would be more likely to get what you want through that than through any modification of the University of London?—It seems to me much more likely to give that degree which is more required at the present time. As regards the granting of the degree to the past students or those who have been in practice for years and acquired the valuable experience that men do get after a few years, it would be considered a great boon if the examinations could be brought within reasonable reach. Of course, allowance ought to be made for the wear and tear a man undergoes in practice. With the arduous work that he often has to do and broken rest, he would not be in a position to get up subjects for examination in the same way that a young fresh student with no care upon his mind would be able to do. But I can say for myself that after having been 10 or 15 years in practice I felt my want of a degree, and would gladly have taken an English degree or a degree in London if I could have obtained it; but I was practically debarred from doing so, and had to repair to Scotland for that purpose. I think there are many men in this position who would be glad to have the degree under those circumstances.

4446. What examination would you require—one single examination in arts?—I think an examination should be given in arts, no doubt.

4447. And science?—And science, making it suitable for the occasion. It is difficult to specify what the examination should be, but certainly not of that strict character that has been thought necessary in such a body as the University of London.

4448. Nor so strict a one as would be required for for existing students?—I think it ought to be more practical and less theoretical.

4449. A different examination?—A different examination for the degree.

4450. And no examination in medical matters?—Examination in medicine, surgery, and midwifery—certainly an examination.

4451. They would all have to go through a stiff examination, but one of a different kind?—Yes, one of a different kind from that which would be given to existing students; and I should think it a *sine quâ non* that the final two years of the curriculum should be passed at a London hospital, this being to a certain extent a guarantee that the standard of requirements has been effectually maintained.

4452. Do you think many would come forward and be anxious to take a degree who had already got degrees at other Universities?—I do not know that. You see the profession at the present day is different from what it was. There are so many men who are called doctors who are not really doctors at the present day at all. It is a feeling that many have that they would like to be able to say they were really doctors instead of merely nominally doctors. The profession has undergone a great alteration. The status of the general practitioner as he is called, is really better than it was in former times; his education has made him more on an equality with the consultant. In fact, consultants are altogether different from what they used to be. Consultants now must be specialists. If a general practitioner had a patient who showed any serious symptoms or signs of an obscure disease and was anxious to have further advice, he must take him to a specialist. If the practitioner did not suggest it to the patient, the public are now so thoroughly well acquainted with who are the specialists and the authorities upon each subject that they would insist upon having one.

4453. There is very great importance attached to the possession of a degree, is there not?—I think many men would be glad to have a degree, because it is no doubt a great advantage in many points.

4454. What is the great advantage of it to a man whose reputation is already established?—I think he takes a higher position and he takes consulting fees very often. A man who begins life as a medical practitioner and takes his degree, if he is successful very often gets called into consultation and gets higher fees, so it is an advantage on that ground, and also his social status is increased. I think the main body of the profession now also take such an interest in the corporations they are connected with, that they are showing it by members desiring to have a voice and control in affairs that would not have been thought of many years ago; an instance of this with regard to the Royal College of Surgeons occurred a short time ago which terminated in a law suit. It was with regard to the claim that members thought they possessed in the control of the affairs of the college. I think if practitioners could obtain a degree, they would be proud of it, especially after they had passed an examination in Arts and Science.

4455. This is a matter which would only refer to the first year of the new University?—I should have thought that it should have been longer than that, make it retrospective, say, for 8 or 10 years.

4456. But all those people who wish to have degrees would be provided for and everything connected with their examination would be finished in a year?—That would be all completed first, they must have obtained their full qualifications from licensing bodies before they are allowed to proceed for a degree.

4457. But this would be comparatively a minor point, it would be a minor matter compared with many other regulations of the University?—Quite so, with regard to instruction of students I should think that should be made as practical as it can be made. One has often had occasion to regret that opportunities have been lost, by which men might have made their studies more clinical at the time of their studentship.

4458. You think if these medical degrees were there for past students a great many would take advantage of them?—Yes; but I do not think it would be a common thing for every practitioner to rush up to the University to take a degree, I think it would entail more anxiety and study than most men would like to devote to it. It is only those who would desire to raise themselves.

4459. You think it should be confined to the past students of the colleges which were joined to the new University?—It should be made an essential that they should have passed the final two years of the curriculum in London, because London offers such great advantages. The advantages in London are unrivalled, and that would be to a certain extent, as I said before, a guarantee of the candidates' attainments.

4460. I understand that it is chiefly with regard to this one point of giving degrees to past students that you wish to be examined?—Yes. I think the other matters I had better leave in the hands of those who are better acquainted with them.

4461. With regard to the rest you give a general assent?—Yes. I give a general assent to what has been stated.

4462. (*Bishop Barry.*) You are very anxious for the existence of this retrospective provision for past students, but I apprehend that even if that were found impossible you would still be generally in favour of the Gresham Charter?—For the advantage of present students certainly I would.

4463. (*Mr. Anstie.*) You have, I think, answered his Lordship that your chief reason in favour of the Gresham Charter is that it will promote the interests of existing practitioners?—Yes.

4464. Apart from any such question would you be of opinion, on educational and medical grounds, that it would be more desirable that there should be in London one University or two?—I think it is scarcely possible after what has passed to make the London University conform to what the students would seem to require.

4465. Do you mean what the students wish or what it is desirable they should wish?—What they wish, and what it is desirable they should wish, referring to their capacity and the quality of their examination.

4466. Are those two things in your view the same? Do you think that the University ought to be constructed according to the wish of the students?—No, clearly not.

4467. I thought you would hardly say that?—No.

4468. Then your view is not that the wish of students and that which they ought to wish are identical?—No.

4469. There is a question of academical and professorial interest?—Yes.

4470. And one in which the reputation of the learned and scientific profession of medicine is much interested. I want to know whether, assuming the necessary co-ordination of teaching opportunities, and assuming also the due influence of the teachers in the medical schools upon the curricula and the examinations, you would think it desirable to have one University in London or two?—I think the idea is that the Gresham University would be——may I answer it in that way.

4471. That is not an answer to my question, because what I was seeking was your opinion, not the idea of somebody else. I want to know whether, in your opinion, assuming these essentials to be satisfied, it would be better in the interests of the profession and medical education at large, that there should be two Universities or one?—I should say one University, certainly, if it could be done.

4472. (*Mr. Rendall.*) You say you would be adverse to burdening the brain with a variety of subjects, but you would not in any way diminish the Science Examination?—I would not.

4473. Would you introduce a difference in the Science Examination?—The difference would be there that more time should, if possible, be given to clinical and practical instruction.

4474. Can you mention any subjects in which you would relieve the present burden?—In the Preliminary Examination?

4475. No, any subjects in the final stages that you would think it desirable and practical to omit?—No, I am not aware that any could be omitted.

4476. Then how do you satisfy the objection of "crowding the brain with a variety of subjects"?—I think in arts. I would diminish those, certainly.

4477. You differ there, then, from Mr. Macnamara. He was rather in favour of increasing the arts; you would be in favour of diminishing it?—I would make the examination less severe, so as to avoid crowding the brain with an amount of knowledge which is really of no use afterwards. A great deal of it is of no use, I will not say all.

4478. That is in arts, not science?—I think a knowledge of science is much more likely to be found useful in after life.

4479. The subjects of the latter you would leave as they are, as far as you can see?—Yes.

4480. The Gresham University, you say, would be more likely to give the kind of degree that is required. Can you tell me in what respects?—As I said just now, the large body of the profession, the general practitioners, are desirous of having a degree, and I think they would take a degree of such excellence, if I may say so, as that contemplated by the Gresham University as a degree that would satisfy them, rather than go to Oxford and Cambridge, or London University. So it would be an inferior degree to a certain extent than those I have mentioned.

4481. You think the Gresham University would result in a degree somewhat inferior in excellence?—Yes, a little inferior in excellence in order to satisfy the wants of the general practitioner of the present day.

4482. Do you find other advantages in favour of the Gresham University degree?—I think the great point of the two final years of the curriculum being passed in London is a very important point.

4483. You would attach importance to that being compulsory?—I think that is of the greatest importance.

4484. Can you tell me why? London University regularly recognises medical schools as efficient elsewhere?—I think that in London the opportunities are greater. There are greater opportunities in London for acquiring a knowledge of one's profession than in other schools.

4485. Do you think it inadvisable that students from any others should be allowed to proceed to a London University degree?—That is the view taken by our metropolitan branch. I only represent that. They think it would be an essential thing that the final two years should have been passed in London.

4486. You think it better to exclude provincial students from the Gresham University?—Yes; entirely provincial.

4487. Do you not think that it would have a bad effect in depriving provincial schools of their best students?—I think it would make the degree more valuable in the hands of those who possessed it.

4488. If you exclude all those who did not come to reside in London you think it would be better?—Yes, showing that those who did had a degree of practical knowledge which cannot be obtained so well elsewhere.

4489. Does it appear that the students in the provincial schools are less efficiently trained than those in London?—That is a difficult question. I do not think I can answer that. I have no evidence to show that at all, but the impression upon my mind is that as London possesses such great advantages, those advantages could not be equally enjoyed in the country.

4490. It is not within your knowledge that the percentage of failures, for instance, in the examination is greater in respect of provincial than metropolitan schools?—No, I cannot say that it is; but the examination does not test the clinical knowledge; the residence in London is more for the purpose of insuring that clinical knowledge has not been neglected.

4491. In what respects do you feel that clinical knowledge and the training opportunities in, let us say, Westminster Hospital are superior?—I have no doubt you may be able to see cases in London that you cannot see in the provincial schools.

4492. Students usually adhere in clinical practice to the hospital attached to their own school, do they not?—They have opportunities of seeing other cases. When I was a student it was not uncommon to go to other hospitals to see anything that was of unusual interest.

4493. They are admitted to other hospitals freely, are they?—I think so. I have never heard of their being excluded. I think it is a common thing for them to go to any important operation that is performed. I think they admit any student in a hospital to witness an operation.

4494. There is one difference between the London University degree and the proposed Gresham University degree to which I alluded previously in Mr. Macnamara's evidence; that is, that the London University degree carries a registrable qualification, and the Gresham University degree does not. Would you tell me with which you think the advantage would there rest?—I think it should carry a registrable qualification, certainly.

4495. Then in that respect you think the Gresham University degree less good than the London?—As it stands, certainly.

4496. It would involve extra cost?—It clearly would involve extra cost.

W. F. Cleveland, Esq., M.D., M.R.C.S., L.S.A.

23 June 1892.

4497. And that would be a disadvantage?—That would be a matter of consideration, no doubt.

4498. The cost of obtaining the Conjoint Board diploma is very considerable?—It is.

4499. I think Mr. Macnamara said something like 40*l.*?—Yes, about that.

4500. Do you agree with Mr. Macnamara that it would involve duplication and multiplication of examinations?—I think it would.

4501. That would be inevitable unless the two were identified?—Yes.

4502. And that you would feel to be objectionable?—Yes.

4503. Would you also endorse the statement which Mr. Macnamara made somewhat hesitatingly that the profession would be inclined to support the giving of a registrable value to the degree?—I think so.

4504. You think that would not meet with opposition?—I am inclined to think that would be adopted.

4505. Now with regard to extending the degree to practitioners, you said there would be some need to reduce the requirements and make some allowance for the wear and tear of professional activity. Can you tell me upon which point you would reduce the requirements?—Of course, if you admit medical practitioners to proceed to a degree there must be an examination in arts.

4506. Would you adopt a lower standard for that?—I think for a man who has been in practice for some years I should adopt a lower standard than for a student.

4507. In science likewise?—I think a little less so. I think it is only a common sense view to take of it that a man would be less able to get up what was required.

4508. You would not drop science altogether?—No. I should desire to make the examination such that the graduates would be satisfied and proud of having passed it.

4509. You would rather diminish than drop it?—Yes.

4510. You think it would be to some extent necessary?—Yes.

4511. At the final stage, or the later stage, I was surprised to hear that you insisted on residence and full clinical training for the last two years. Do you think that should be demanded of the licensed practitioners?—I think so. I think it would be a guarantee. But he is already supposed to have got it.

4512. I know he is supposed to have got it. I did not know whether you would insist on more?—I do not think that it should be additional. I think if he has already done it as a student it is enough.

4513. Provided he has fulfilled that at a previous stage of his career, you would make no requirement of that kind?—If he has fulfilled that at a previous stage of his career, I would not require it, certainly.

4514. Sir George Young spoke of licensed practitioners proceeding to the degree *per saltum*, which I understood meant that they should enter and be required to pass the final examination; with that rather revolutionary proposal you would not altogether agree?—No.

4515. You would have entrance in arts with diminished requirements?—Yes.

4516. And you would diminish the scientific requirements?—Yes.

4517. You think that there should have been at some stage full clinical training?—Yes, and full practical examination in medicine, surgery, and midwifery.

4518. (*Professor Sidgwick.*) I think you said you assumed that the degree of the Gresham University would be of a less exacting standard than that of the existing University of London?—I did.

4519. Can you tell me in what respect it would be less exacting? I assume that in your view it would be desirable that it should be less exacting?—Yes.

4520. Can you tell me in what respect the standard would differ from that of the London University?—I can not, but I must say broadly, that the examination should not be so severe as that of the London University, because I think it is admitted on all hands that the London University examination is a most searching one, and one that a great many men who have some ambition to make a mark in their profession, go up for, and fail in. Therefore I think it would be hardly fair to make the Gresham University which should include a great body of men who are in practice so severe and exacting as the University of London.

4521. A distinction has been drawn between the purely medical subjects of examination, and the scientific subjects, and it has been represented to us that the standard of the London University, though it is no doubt exacting in the purely scientific subjects, is not particularly high in the medical subjects. Would that be your view?—I think it ought certainly to be less exacting in theoretical subjects than it has been. That is the general impression that one meets with from all those who have had experience of the matter. It is the general feeling, I think I may say, in the profession that it is a very difficult portal to pass through.

4522. Is it the view in the profession that it is too exacting even in the purely medical subjects?—No, I do not think it is. I think it is more in the Preliminary Examinations.

4523. Then, if I understand you aright, the diminution would relate to those Preliminary Examinations?—Yes, it would chiefly relate to those.

4524. Are you acquainted with the conditions of taking the degree in the Scottish Universities, I mean the degrees in medicine?—I should be unable to speak positively upon any matter connected with that.

4525. It was, I think, represented before the last Royal Commission that what was really required for the University in London was, that the medical degree should be attainable on somewhat the same terms as the degree of Edinburgh?—Yes, I think that seems to be the view that one would be disposed to take.

4526. I understand that you attach great importance to the enforcement of the last two years in London?—Yes.

4527. Still, do you think it would be desirable to exclude the provincial colleges whose teaching is now admitted?—I think it would be desirable. That is the impression that is on my mind, and that is the conclusion that the metropolitan branch that I represent have arrived at. I represent that opinion as well as my own. We think it is most desirable that the final two years of the curriculum should have been passed in a London school.

4528. It might be desirable not to deprive the provincial institutions of any opportunities of obtaining a degree that are now open to them?—Clearly so, and if they choose to pass two years in London, let them by all means be privileged to proceed.

4529. But do you not think it would be desirable that while the new University gave the degree upon the terms you now suggest there should still remain degrees of the existing London University which might be obtained by the provincial institutions on the terms that are now imposed?—I think if the London University could be made to fit itself in with the requirements that the Gresham University are about to supply, as I said before, I would retain the London University and have only one, but if it could not be done by the London University I would say, let there be two.

4530. But do you not think that there is this great objection to making one University only; that if you impose this condition of two years' study you thereby deprive certain provincial institutions of opportunities that they now possess of taking degrees: whereas if you established a new University as was done by the Gresham Charter you would leave to the provincial institutions their existing opportunities of taking a degree from the University of London. Do you not think that would be more satisfactory and less open to objection than any course which deprived them of what they can now obtain?—I think that is an open question. I think it is not an easy question to reply to.

4531. I have one more question to ask, and that is with regard to the conditions required for the past students who have been for some years in practice. If I understood you, you thought it desirable that they should now be made to pass an examination in arts and science but that it should be an easier examination?—Yes.

4532. I understand that it would be desirable that they should be made to pass an examination in science to secure that they had attained a higher standard than their previous guarantee would secure. It is not equally clear to me why they should now be made to pass an examination in arts, I mean in many subjects that would not bear upon their present work?—I think it would be only consistent with the higher status that they were

about to take that they should give evidence of their having had such education as that implied.

4533. Do you think it would do them good if they were made, if I may say so, to cram up a little Latin and Greek?—I do not think those who would have merely to cram up Latin and Greek would go up to the University at all. I think a better class man would go up, and one whose earlier education had not been neglected, and for that reason I would have him pass an arts examination to show what stuff he was made of.

4534. But if an examination is imposed as a condition of taking a degree, we always have to take into account not merely the past work which it attests, but the work which it will cost students to go through. Do you think it desirable that students of a comparatively advanced age, should at that advanced age be induced to get up the rudiments of certain languages in order to obtain this degree, do you think it would have a beneficial effect?—I do not think there would be so much getting up because it would be only through not having had the opportunity of taking a degree when they were students that they would be induced to come and take that degree now, it is not as if it was acquiring anything *de novo*.

4535. Do you not think it might be more desirable to raise the standard of the examination in science a little higher than you suggested?—I think that is quite a question, I do not press so much for that, but I should certainly press for both examinations, and in a degree suitable for the reach of the candidate.

4536. (*Lord Reay.*) In the final examination for the degeee you would lay great stress upon the practical part of the examination?—Yes, I think that is an important part.

4537. You would lay more stress on it than is laid on it by the University of London?—Well I think the London University's practical examination for the degree is very good. I do not see any objection to that. But what I think is most desirable is that one should see that the opportunities of clinical instruction have been taken more advantage of. I think there are ways open now to estimate what a man's attainments are in practical knowledge.

4538. Would you make that examination more searching?—I would make that examination more searching, so as to bring out his practical knowledge as against his theoretical knowledge.

4539. In that respect, therefore, the degree would be of a higher nature than the present degree?—In that respect, as a practical examination, I think it would be higher perhaps.

4540. (*Mr. Anstie.*) There is one question arising out of the answers you have given to Mr. Rendall and Professor Sidgwick. I understood you to say to Mr. Rendall that you were in favour of an examination which should require qualifications diminished from those now required by the University of London and the Royal Colleges, but not inferior. Of course it is not a question I should put to anyone who is not an expert in academic questions, but I should venture to ask you, as you are an expert in academic questions, what is the distinction you draw between diminished and not inferior?—I am looking to the practical view of the question more than any other, and I think that is the great point—to have the examinations of such a practical nature as to fit men to be better qualified members of the profession, and I think that would constitute an essential point in the examination.

4541. You want to make it less scientific?—I would diminish it as compared with the University of London. I am taking that. I did not say the conjoint examination of the Colleges of Physicians and Surgeons. What I said was the University of London. I think that for a degree like this the examinations should be of a less searching character than is required at the London University.

4542. The purpose of examination is to search knowledge, is it not?—Yes.

4543. To search knowledge of what kind—in what department?—Under the head of practical knowledge.

4544. You want it to be very searching for practical knowledge?—Yes.

4545. And not searching for scientific knowledge?—Less searching; I do not say not searching. I would have it fair and reasonable in every way. But the general feeling is that it has been too searching.

4546. As I say, I should not venture to put this question to anybody who is not an expert in academic questions. You say that is the nearest approach you can give us to a definition—that it is to be not too searching but searching enough?—That is the point.

4547. That is the nearest you can give us, is it?—I cannot go into the nature of the examination, because that is not a point I wish to speak to. It is merely to give you the idea that the general impression is that the examination is too severe—too exacting.

4548. One other question upon that point. I did not gather why you said that the students at provincial schools should be excluded from the opportunity of obtaining a degree. Why was that?—The feeling is that this is to be a London University, and generally the impression is that it is a teaching University, and a University for granting degrees, and it is supposed to be so identified with London that, unless a candidate had full qualifications to practise, and would pass two years of his life in London, at London schools where there are such great advantages it would be better under those circumstances to exclude them. It would make the degree more valuable to those who obtain it.

4549. What I want to know is why they would not get the advantages in the practical part elsewhere?—I think there is no place like London.

4550. Take Birmingham, Liverpool, and the great towns where there is the same kind of population. Take a population of the kind that is to be found in Edinburgh?—I can only say that the advantages would be great in those large places that you speak of, but at the same time I think they are less than they might be in London, because I think London stands pre-eminent in that respect. Patients are sent up from all parts of the country to the London Hospitals from those very places you mention, such as Liverpool and Birmingham.

4551. Does it really come to a question of competition between London schools and the schools in great centres which are not London?—I think for this University it would be most desirable, as I said before, that they should retain that condition.

4552. That the pupils should go to London medical schools and not to medical schools anywhere else?—For obtaining the Gresham University degree.

4553. Otherwise they are not to have the University opportunities?—They have them already for other Universities.

4554. (*Bishop Barry.*) Then, what I understand you to desire is, that the Gresham University should serve the purpose of all London medical schools, and that the London University should serve the purpose of provincial schools which are not at present within the jurisdiction of other Universities?—I do not see why London University should not go on as it is, purely as it is.

4555. Does this mean that the Gresham University should serve the purposes of all the London schools, and that the London University should continue to exist to serve the purposes of such provincial schools as are not included within the other University organisation?—I think the feeling is that the Gresham University——

4556. Excuse me. I am asking for your opinion, not for the feeling of somebody else. Is that your opinion?—Would you kindly repeat the question?

4557. Is it your opinion that the Gresham University should serve the purposes of all the London schools and that the London University should continue in existence in order to serve the purposes of provincial schools which are not connected with any other University organisation?—That is not my opinion, if the condition is carried out of those who wish to obtain the Gresham University degrees conforming to the rule of passing two years at a London medical school first.

4558. Then your answer is that the Gresham University should serve the purpose of all the London medical schools, including in the London medical schools those persons who think fit to add to their training in great provincial cities a certain time of study in London schools?—Yes.

4559. And the rest you would leave to the London University?—If the London University is retained as it is, by all means let it go on as it has done.

4560. Is that what you desire?—I do not desire it, if the London University will take up the matter in the same way that I should like to see the Gresham University take it up.

W. F. Cleveland, Esq., M.D., M.R.C.S., L.S.A.

23 June 1892.

4561. Then, practically, what you desire is that the London University should do that which it is proposed the Gresham University should do?—Yes, if the London University will do it.

4562. Your desire is that it should do it?—If they are willing to do it. I do not desire them.

4563. Are you of opinion that the assumption which Mr. Anstie has twice made is a practicable one—in other words that the London University can do its present work, and can at the same time do the work provided for in the Gresham Charter?—My private opinion is that it cannot.

4564. (*Mr. Rendall.*) You say in somewhat guarded terms, that a feeling or opinion is held by your association that it would be desirable to enforce London residence upon all provincial students. Can you tell me in what way that feeling or opinion has been ascertained?—I can only tell you that it is a resolution come to by the Committee of Council formed for the purpose of considering this matter.

4565. The Council being how large a number?—There are about six or seven on the Committee of Council.

4566. Six or seven out of the 14,000 members of the association. Do you think that six or seven would represent the opinion of the association in that particular?—That I cannot say.

4567. Can you give me in the words of the resolution, or state what the exact terms of the resolution were?—I have not the resolution in words, but it is on the minutes of our Council.

4568. Was that particular resolution referred to the members of the association inviting an expression of opinion upon it in any particular?—No, it has not been.

4569. Then you cannot speak to the prevalence of opinion among the members at large?—No, I cannot speak to the prevalence of opinion among the members at large, but it was unanimous on the part of the members of the Committee of Council.

4570. Can you tell me how many members of the Council belong to metropolitan schools as distinct from provincial schools?—I should think all the members of the Council of the metropolitan branch have had their training at the metropolitan schools.

4571. They would have some natural partiality for the London schools?—We are speaking of the metropolitan branch.

4572. You are not aware that any of them had their training at provincial schools?—No, I do not think there would be any who had their training at provincial schools.

4573. They would represent the London schools?—Yes.

4574. Can you tell me how far the association or how far the Council would go; for instance, would they favour the extinction of provincial schools of medicine in the interests of the profession?—No, I cannot say that they would favour that at all, because a great many members of the association reside in the country, and I should think they would be rather opposed to that.

4575. Do you think they would favour the transference of the clinical work of the provincial schools to London?—No, I do not think they would, because if they could obtain the degrees at the Universities near them it would be enough. They would not care to come to London.

4576. Would it not very much discourage the clinical work of the provincial schools if it was not to qualify for a degree. Would the association think that desirable or undesirable?—I can only answer as I answered before that they would have the power to do it; it would be within their compass to do it if they would conform to the rule we are suggesting of the two years.

4577. Do they approve of the teaching in anatomy and physiology in the earlier stages at the provincial schools?—We have no statistics I think, nothing to bear upon that point.

4578. Then opinion cannot be said to have formed itself very definitely?—It is only on very general principles that one is able to speak upon the matter.

4579. You are aware that a large amount of reciprocity does exist in the medical schools in the country; that London students proceed to Edinburgh, and Edinburgh and Cambridge students proceed to London and the like?—Yes.

4580. Do you think that is a desirable state of things?—I do not see any objection to it.

4581. But you think in this particular University it would be desirable to make this special requirement to enforce it?—I think in this particular University it would enhance the value of the degree.

4582. And you would prefer that it should be in one University in London?—Yes.

4583. And you would prefer one University to two?—Yes.

4584. (*Professor Sidgwick.*) In consequence of your answers to some of Mr. Anstie's questions, I have not got a very clear idea of what your view is. Can you first mention what the provincial colleges are that are admitted now?—No.

(*Mr. Rendall.*) I can give it you shortly. Manchester, Liverpool, Leeds, Newcastle, Sheffield, Birmingham, Bristol, Oxford, and Cambridge.

4585. (*Professor Sidgwick.*) The reason I ask is this. It is evident that with regard to some of these provincial colleges, for instance, those of Manchester, Liverpool, Leeds, and Newcastle, they are now able to obtain degrees from northern Universities?—Yes.

4586. Therefore, I presume, there is no need to consider their interests or requirements when the question is raised of instituting a new University in London?—That is so.

4587. With regard to those that remain—those for whom now there is no opportunity of obtaining a degree so long as the pupils only learn in their own towns—I think in answer to me you admitted that it would be a grievance if they were deprived of any opportunities of obtaining a degree that is now open, if the degree given by the existing University of London was no longer open?—I think it would create a grievance to those who wish to proceed to the University of London.

4588. Do you see any reason why that grievance should be caused?—I think the possession of the London University degree is considered such an honour, that every facility should be given to those who wish to take it.

4589. Then you would not be in favour of depriving the students in those provincial colleges, Birmingham and Bristol, of the power they now possess of obtaining a London degree?—No, I would not deprive them.

4590. That would rather lead to the conclusion that the degrees of the Gresham University should be kept separate from the existing examinations and degrees of the London University?—In the event of the Gresham University being established and the London University continuing it would necessarily follow, would it not?

4591. Would it not be an argument for retaining the two Universities rather than having one? By retaining the two you would be enabled to avoid inflicting any grievance upon the students of Birmingham or Bristol?—Yes; if there was no possibility of removing that grievance, I think it would be a pity.

4592. (*Sir William Savory.*) Is not your view something of this sort: that there are a large number of practitioners who do not possess a degree, and who wish to have a degree?—Yes.

4593. And the degree of the University of London is out of the reach of those men?—Yes.

4594. And that, therefore, you would have a new University to supply the demand?—Yes, or a modification of the examinations of the University of London.

4595. If the University of London could be induced to do it, well and good; but if the University of London cannot come down to the level, then have the new University to supply the demand?—Yes.

4596. Is not the word "practical" rather equivocal in our profession. When a man knows little or nothing is he not apt to call himself practical?—If you choose to take that view of it I want a man to understand his profession, and to know how to treat a disease, besides knowing Latin and Greek.

4597. The word "practical" is a refuge for the destitute, is it not?—You may use it in that sense if you choose.

4598. All practice is founded upon knowledge?—Some is founded upon experience.

4599. But that is knowledge?—Yes.

The witness withdrew.

JOHN SYER BRISTOWE, Esq., M.D., LL.D., F.R.S., F.R.C.P., examined.

4600. (*Chairman.*) What is your connexion with the Medical Association?—I am on the Council of the Association. I have been President of the Metropolitan Counties Branch, and I am on the Council of that branch also.

4601. You came here with the last two witnesses to give us your opinions upon this matter?—I do.

4602. I do not know whether you were in the room when the first witness, Mr. Macnamara, was examined?—No, I was not.

4603. Did you know what he was about to say?—I have read the paper that he put in as his evidence.

4604. Do you agree with it; do you corroborate him?—I agree with a good deal of it. The private opinions of course I do not say that I agree with altogether, but I agree generally with his views. I have come to support the two resolutions of the Metropolitan Counties Branch which, I believe, are in your possession.

4605. You agree that it is desirable to modify the examinations to which the London medical students are at present subjected unless they go elsewhere than to London?—I do not know that I can say that. Perhaps I may briefly state what I come to support.

4606. Yes?—I come, in the first place, on behalf of the Metropolitan Counties Branch to urge upon the Commission the necessity there is, as has long been recognised, for the medical students in London to have the opportunity of obtaining medical degrees which practically they have been debarred from for years. They have not enjoyed the same facilities that the medical students in Edinburgh and Glasgow have long had, and which those in Durham and in Manchester have.

4607. Practically the only degree open to them in London is that of the London University?—Yes, and there are difficulties in the way of obtaining it. There have been considerable difficulties which have made it, practically, hardly a degree for London students.

4608. In what respect are they too severe?—It is not wholly that they are too severe; it is in part. Up to some few years ago I should say that not more than about 20 or 25 degrees were conferred in the course of each year by the University of London, although the entries of medical students in London amounted to 400, or 500, or more. If you compare that with what occurs, or with what did occur in Edinburgh, Glasgow, and other such places, you will see what an enormous disproportion there is between the results. This is a matter I went into some years ago, and perhaps I might be allowed to put in a letter which I wrote some 12 years ago to the Chancellor of the University, in which I discuss the question fully. (*The pamphlet was handed to the Chairman.*) My views are that the University of London then, and in fact up to the present time, is not in touch with the medical schools in London; that there is little or no sympathy between them. It has not associated itself with them in the way that it is desirable it should do. And, further, the primary examinations of the University of London are examinations which deter students from attempting to join it, and which result in so large an amount of plucking that really they are prohibitory.

4609. Are there more students plucked in proportion to those that go up in the London University than in the generality of the Universities?—I believe so. At the time my letter was written, I calculated that only 10 to 14 per cent. of the students who entered at the Primary Examination—the Matriculation Examination, were successful in attaining the M.D.

4610. A great many do not wish to do more than matriculate. Is not that the case?—I think not with respect to those who aim at being medical men.

4611. You object to these examinations because they were not in touch or in keeping with the teaching?—Yes.

4612. You would prefer to see means of giving the degree which would be in touch and in keeping with the teaching?—Yes.

4613. Do you agree with the previous witness that the scheme of the Gresham University would provide for this?—I think it would; at the same time I do not quite see why the University of London should not do it.

4614. Do you think that the London University might be so modified as to meet your wishes?—I do.

4615. You think that without abandoning its present practice of giving the degrees for the whole of the University it might also fill the place of the teaching University for London?—Yes, I think it might.

4616. Do you think that the one function would not interfere with the other?—I do not see why it should necessarily. The Gresham University appears to provide what is wanted for London.

4617. Did you read the scheme of the London University which was rejected by Convocation?—I did at the time, but I have not looked at it again for the purposes of this inquiry.

4618. I do not know whether that would meet your wishes?—I should not quite like to say off-hand.

4619. But you see no difficulty, supposing the governing body of the London University was more closely brought into connexion with the teaching bodies in the colleges, and other alterations made in the University of London being able to fulfil the purposes?—No.

4620. You have read, I believe, lately the draft Charter of the Gresham University?—Yes, I have gone through it.

4621. Supposing the University of London might be willing to remodel itself in this way, you would be inclined to something on the plan of the Gresham University?—Yes.

4622. The first witness to-day, Mr. Macnamara, recommended some change in the Gresham University. Do you agree with those; in the first place, the number of the Council?—I had rather give no opinion upon that point.

4623. This is, perhaps, more important. Do you agree as to giving the Council of the new University more power over the colleges of which it is composed?—I think it is important that it should be brought into relation with them. Whether it should have more power over them or not I am not prepared to say, but there should be some influence brought to bear upon them.

4624. You think they should be brought into connexion?—Yes.

4625. That the staff of the colleges should be brought into close connexion with the Council either by being represented on it, or by their advice being taken by the Council as Faculties and Boards of Studies?—Yes.

4626. There is provision in the Charter for a good deal of connexion between the two, do you think it could be strengthened in that way?—I am not prepared to give a well-considered opinion, but, so far as I understand it, I approve of what has been proposed.

4627. You think there would not be any very great objection supposing it to appear necessary, in other words to having two Universities in London with its 5,000,000 inhabitants?—I think there might be two Universities, but I am in favour of one.

4628. Do you think the two would clash in any way?—I think they would clash.

4629. That there is no room with this enormous population for more than one?—I think they might clash.

4630. You think this new University would injure the University of London?—Yes, I think it would.

4631. By taking away people who would otherwise go to it for a degree?—Yes, they would probably compete with one another also, which might not be for the benefit of either.

4632. You would prefer to see one only?—Yes.

4633. There was a question to which the last witness attached very great importance namely, that of granting medical degrees to past students, have you considered that?—I think it is a desirable thing; in the letter which I handed to your Lordship, I advocated that to some extent years ago. I expressed the opinion that when men had attained a certain age they should be allowed if they could, to pass through the requisite examinations in rapid sequence instead of being required to spend time at college and study between the successive examinations.

J. S. Bristowe, Esq., M.D., LL.D., F.R.S., F.R.C.P.

23 June 1892.

4634. The same examination as for undergraduates?—Yes, and if that were done I cannot see any substantial objection to the adoption of such a course. But I think now that I should agree with the last witness that it is desirable on the whole, if a new University is established, that a degree should be obtainable by men who have been some years in practice, provided they pass the latter examinations and some modified examination in arts or science as the case may be. The latter is a matter of detail which I should leave to the University to decide upon.

4635. Would it not be difficult to have two sets of examinations, the easier one for the older men and the more difficult for the younger?—It might be difficult, but I think it could be done. Something would depend upon the examiners. Examiners very often try to find out rather what a candidate does not know than what he knows; but if they would look at the matter with insight, I think they might make reasonable allowance.

4636. That depends upon the disposition of the examiners?—Yes, very much.

4637. Some wish to pluck if they can and others wish to pass?—Quite so.

4638. You think something of this nature would be desirable to give medical degrees to past students?—I think it would for a limited time. At the time of the founding of the University there would be a number of men who had passed the age of pupilage, who yet might legitimately wish to become M.D.'s, and who might properly have the opportunity afforded them.

4639. A medical degree might be very useful to have, and they would be glad to have it?—It would be useful to them, no doubt.

4640. This would be a small matter, and even if that were not put into the Gresham University Charter it would not make you oppose it?—No.

4641. Is there any other matter you would wish to touch upon that has not been touched upon by the previous witnesses?—No. I merely came to give evidence upon certain points. I have not prepared myself with regard to any other matters.

4642. (*Lord Reay.*) Your object is not to substitute a lower degree for a higher degree?—No.

4643. But your object is to connect the degree with the teaching in London. Whereas in London we have the best opportunities for obtaining clinical knowledge students leave London to obtain clinical knowledge where the degrees are conferred on them?—Yes, quite so.

4644. When you speak of the examinations being made more practical, you do not mean that you want to substitute a practical examination for a theoretical one, but that you want to test the theoretical knowledge by practical illustrations?—I am not quite prepared to say even that. I am not quite satisfied about so-called practical examinations. Examinations often profess to be practical which really are not so. Practical examinations are very difficult to carry out satisfactorily.

4645. Do you think the examinations as at present conducted are sufficient to test the amount of clinical knowledge acquired?—I think it would be almost impossible to carry out the clinical examinations to a much larger extent than is done at the present time. You must recollect that even in London the clinical material is limited, and there are so many examinations going on now that really it sometimes becomes difficult to get a sufficient number of patients fit and suitable to be examined.

4646. It is a material difficulty?—Yes, it is a material difficulty, and it is a question whether we could carry out practical clinical examinations to a very much greater extent than it is done now.

4647. Still you consider it desirable to pay more attention to practical knowledge?—Yes.

4648. As an illustration of the theoretical knowledge which the student has obtained?—Yes, I think so.

4649. (*Professor Sidgwick.*) Do you attach the same importance as the previous witness to the two final years being spent in London?—I think that is important; but that is on the condition that we are going to have a University in London for London in the same sense that there is a University in Edinburgh for Edinburgh. That is the ground of the suggestion. If we are to have a University in London for London it is important that the students aiming at its degrees should have been educated wholly or partly in London; but if they are educated only partly in London it is obviously important that the last few years, which would be years devoted to clinical work, should be spent in London. That is the reason why the minimum time should be two years, and that the minimum time should be at the end.

4650. Then you think it desirable that there should be a University for London?—I think a University for London would be very valuable for the medical schools, but, as I said just now, I am not at all prepared to admit that the University of London might not accommodate itself to the medical schools. But in that case I do not see that we could claim the two years. For then it would still be a University, as it is now, not only for London, but for provincial schools.

4651. Then you hold that if there is only to be one University, namely, the existing University of London, this condition would not be enforced?—I do not think it could be.

4652. But at the same time you think this condition would be a good thing in itself?—Yes.

4653. That the students should thereby be allowed to take advantage of the superior opportunities that London affords?—Yes.

4654. But you think this advantage cannot be obtained—it must be given up—if there is only one University?—If there is only one University as there is now, unless you can modify that so as to make it not a University for Great Britain I do not see how we can insist upon the two years in London.

4655. Then we must give up the regulation which seems to be desirable?—Yes.

4656. With regard to the examination I think you gave evidence before the former Royal Commission?—I did.

4657. So far as I have grasped the drift of your evidence which was then given, you do not regard the strictly medical examinations of the University of London as superior to those of Edinburgh or Glasgow?—I do not think they are.

4658. Therefore you would think that that standard of London is not more exacting than that of these other Universities so far as the strictly medical part of the examination goes?—No, I think not.

4659. Then the changes you desire to introduce are to make the requirements somewhat less exacting as regards the non-medical part, the preliminary part of the examination?—Yes.

4660. May I ask whether this diminution of requirements in your view should take place in the requirements with regard to literature and say elementary mathematics, or the requirements of the Matriculation examinations; or do you think there ought also to be a diminution as regards scientific requirements?—It was hardly a diminution that I advocated in fact. I stated very fully in my letter to the Chancellor of the University the views I really entertained.

4661. Will that answer my question?—I think so. My view was not to diminish, if I may say so, the real severity of Matriculation or the Preliminary Scientific Examinations, but rather to limit their scope and to give a more thorough examination in a smaller number of subjects. In the Matriculation Examination of the University of London, unless this has been modified in recent years, there are seven or eight different subjects which students have to get up, and I contend that that is more than the average student is able to master thoroughly. I thought it would have been far better that a student should be examined thoroughly, or more thoroughly, in two or three subjects, say mathematics and Latin, or French and German, and then if he liked in one or two other subjects at his choice according to the education he had received at school, whether literary or scientific. I thought in that way examinations might be equally good or perhaps better, and yet might not be such a tax upon the students. I do not want to diminish the requirements in the sense of making them less real.

4662. You want to maintain, if I may say so, the quality of the attainments secured?—Yes. Perhaps I might go on to say that in my letter to the Chancellor, I pointed out that in the University of London at that time, the examinations were very uncertain, a misfortune which is very likely to arise when large numbers of candidates are under examination, and those are

examined rapidly and by examiners and assistant examiners. Thus, taking French and German at matriculation, the rejections at this examination were only 4 or 5 per cent., and at the next examination 30 or 40 per cent. That shows some fault on the part of the examination or on the part of the examiner.

4663. What you said relates rather to the Matriculation Examination?—Yes.

4664. Now, as regards the scientific examination?—I took very much the same exception to that at the time I speak of. I do not know anything about the last four or five years, but I know that at the time I speak of, examiners very often went into matters much more deeply than according to the regulations they should have done. I recollect perfectly well that on one occasion a question was put in natural philosophy, and a young German professor in that subject looking through the questions, acknowledged he himself could not have answered it.

4665. Do you think that this Preliminary Examination and the preliminary teaching on the scientific side, ought to be strictly limited to what would be of use to a student in his own department of medicine?—I think to some extent, I would not say wholly, because I had rather see a student well educated in matter outside his profession. Still, if one is to take the average students and consider their requirements, I think examination in these subjects may very easily be made too exacting.

4666. If I understand you, the questions require the students to cover too wide a range?—Yes.

4667. (*Mr. Rendall.*) Is it your opinion that it would be well that a new University degree should constitute the qualification for registration?—Well, I had rather it did not. That is my private opinion.

4668. In fact, the Gresham scheme is preferable, which involves a separate registrable qualification?—Yes.

4669. You do not see any objection to increased examination and the increase of cost?—I will not say there would not be an increase in cost.

4670. But you think the increase of cost would not matter?—It would to some, certainly.

4671. We are told that it would involve something like 40*l.* extra in cost?—I do not know.

4672. That would be a serious disadvantage?—I cannot say. I have not gone into that matter.

4673. Have you gone into the question of examinations? It would involve the multiplication of examinations, would it not?—No, it would not necessarily multiply them.

4674. A student would have to take all the ordinary examinations for the qualification, and in addition to that, examinations for the University course?—They practically do that now; at any rate those who go to the University of London, Oxford, Cambridge.

4675. Surely not anything like universally?—Not universally, but to a large extent.

4676. Is it widely true of Cambridge?—I cannot speak of Cambridge, but of Oxford I can speak.

4677. The returns we have show that there have never been six M.D. extra degrees given in a year?—But the M.B. is really the test. The M.D. is awarded only for a thesis. But the M.B. is givenafter examination. I believe 16 to 18 M.B. degrees are granted in a year.

4678. You think the compulsory increase of examination would not be a serious evil?—It would not be compulsory, because they need not go up to the new University.

4679. But it would be compulsory on all those who were going up for that degree. You would not attach much importance to that?—There is something to be said against it.

4680. A witness this morning thought examinations were already too much multiplied. Do you think so?—I am not a great advocate myself of examinations, I confess. But possibly, if a new University was established, there might be some arrangement between the Colleges of Physicians and Surgeons and the Universities which would enable the former to take part in the medical examinations. If that could be done, I daresay it would be an advantage.

4681. I understood you to say that the London University gave only about 20 degrees?—At the time I spoke of. That would be ten years ago. They are double that now.

4682. To what do you attribute that greater popularity?—There is no doubt that within the last five or six years the London University has made concessions which have, I will not say rendered the examinations easier, but which have opened the portals wider.

4683. You think that a very desirable tendency do you?—Yes, I think it is.

4684. Do you wish to carry that further?—I do.

4685. And even if that were carried sufficiently far, you think a single University, even the practically reconstituted London University, would meet the needs of London students?—Yes, I think so.

4686. Do you say they would not be able to compete for the less stringent degree?—That is not the term I should use.

4687. I do not press the term, I will say easier?—Yes.

4688. The students at provincial schools taking a school like Birmingham?—Of course the same thing could apply there.

4689. You would be disposed in creating a new degree to remove the grievances?—The proposal of the Gresham University which was put into my hands, is to make a University for London.

4690. But you would enforce on a provincial student residence in London as part of the degree?—Surely. An equivalent condition is imposed in Edinburgh and Glasgow upon students. The proposed Gresham University is to be a University for London.

4691. Then with respect to the new University, you would enforce the obligation of coming to London?—I am assuming that it is a London University, connected with the London Schools of Medicine, and other London Schools. In that case clearly, one would require as is required in Oxford, Cambridge, or any other place, that the degree should be given to students connected with the particular University.

4692. Would you lay very much stress on the amount of residence required, say two years?—That we regard as a minimum. The reason is that it was felt that a great many students are educated at Oxford, Cambridge, or other schools in various parts of the country, but if they become London students, and so proceed to a London University Degree, they should naturally be required to become resident in London and study in London. I think that is essential.

4693. It seems to me a highly reasonable minimum. It is the same minimum as is practised at Edinburgh, and adopted at Victoria?—Yes.

4694. Would you tell me whether you would lay much stress on the residence being the two final years?—Yes, because the chief advantage of London medical education is the clinical teaching.

4695. You are aware that at Edinburgh and Victoria, the matter is left open whether it should be the final years, or some two years of the course?—I did not know that.

4696. In the case of London, at any rate you think it ought to be the two final years?—The chief point, and the one to which we attach most importance, is that in London the facilities for clinical teaching are enormous. Those in Edinburgh, Glasgow, and other places are small compared with them. In Edinburgh you have a single general hospital of 600 or 700 beds in which practically all the students are educated.

4697. What is the practice in London hospitals. Do students generally take their clinical work at the hospital attached to their own schools?—Yes.

4698. Taking the schools mentioned in the Gresham Charter, would you say such clinical opportunities enjoyed at the Middlesex Hospital, or the St. Mary's Hospital, or at Westminster, are superior to the clinical opportunities offered at Manchester, Liverpool, or at Birmingham?—No, I do not say that. If you compare one hospital with another, I have no right to say that the clinical opportunities at Manchester, are not as good as those of any one school in London. All I say is that in London you have a number of these schools, and the amount of clinical opportunities is collectively much larger in London than it is at any of the other places. I do not want to compare invidiously the Royal Infirmary at Manchester, or that at Liverpool with individual London hospitals. I should put them on a level.

J. S. Bristowe, Esq., M.D., LL.D., F.R.S., F.R.C.P.

23 June 1892.

4699. But in thinking of the clinical teaching, one has to think of the individual rather than the bulk?—A hospital like Westminster has a small number of students, and a small number of beds.

4700. But you would admit all the students of the weaker as well as the stronger hospitals to this degree?—I say, that as a rule, the smaller hospital has a smaller number of students, and therefore the clinical opportunities that they would enjoy there, might be as great as they would obtain at any other place.

4701. It is rather clinical variety than the number of patients to the individual student, is that it?—If a man is appointed a clinical clerk in a hospital, and has allotted to him during his clinical clerkship a dozen patients to work at—I mean a dozen beds with a succession of patients—he would get ample teaching say at Westminster Hospital. That is the proper way to teach, not simply to let students go round and see a number of patients and take no special part in what is going on.

4702. The attraction of the provincial students to London on a large scale would, of course, mean a waste of the clinical resources in the provinces?—There is no reason to suppose that men would be attracted from Manchester to London.

4703. I was thinking of Birmingham?—You may perhaps some day be trying to get a University for Birmingham.

4704. It would be a strong inducement for students to come to London and leave those schools?—To get a degree in London, do you mean?

4705. Yes?—Well, it might, I cannot say.

4706. How do you feel that would be desirable in the interests of the whole country, to weaken provincial medical schools?—No, I do not aim at that. But I think it is desirable in the interests of England that medical students should be retained in England, as far as possible, instead of being attracted to Scotland and elsewhere. I think we are rather severely handicapped in England.

4706A. But you would not do anything to bring about a monopoly?—No, that is not the object of the British Medical Association. Our branch has no feeling of that kind at all.

4707. You would not think it desirable?—I would not aim at it. I do not know that it is desirable. I have not thought of such a thing.

4708. (*Professor Sanderson.*) It is quite the case, is it not, that the London University took the initiative in establishing practical examinations?—Yes.

4709. And, in fact, it had candidates to examine patients at an earlier period than any other examining body?—Yes, that is quite true.

4710. So that as regards practical examinations in medicine, surgery, and midwifery, there is no practical examination in the country which one can consider to surpass the examination of the London University?—Well, I do not know; I am not prepared to admit that. I do not know how far they may have modified their examinations of late, but if I am asked to compare the examination six years ago of the London University with those of other bodies, I prefer those which were going on in Edinburgh and Glasgow to those which were going on at the London University.

4711. In practical medicine?—Yes, I can explain why if you like. They may have altered their method in London now.

4712. The method is better?—Yes, the method is better.

4713. Could you tell us that shortly?—Yes. I have been an examiner in medicine at the London University, so I know something about it, and I may tell you that I have been a visitor on behalf of the Medical Council some years ago at Edinburgh, Glasgow, and Dublin. At the University of London the practice was to give the candidate a patient; he had to sit down with the patient for half-an-hour or so and make his notes. Then he was required to write for an hour his account of the case and his diagnosis, and all that kind of thing. Each candidate had two patients in succession. The examiners formed their opinions of the candidates' practical knowledge by a perusal of his reports. That is what was called a practical examination. In Edinburgh and Glasgow, and it is the same at Oxford now, where I am examiner, the practice has been to allot certain patients to certain candidates and tell them to take notes, then for the examiner to go first to one candidate and then to another, and let him examine the patient in his presence and give his opinion upon the case, so that the examiner sees the precise method by which the candidates examine their patients and sees whether they are *au fait* at this kind of thing. He discusses with them their cases, and hears what they have to say. I think that is a much more practical examination than that according to the former method.

4714. Is the method not depending upon the examiner?—I do not know, I cannot say whether it has not been altered. It is very possible that London may have altered.

4715. Are you cognisant with the mode of practical examination at the Conjoint Board?—No, I am not. I fancy it is something of the same kind, but I have not been there.

4716. Of the kind last described?—Yes, only the patients are not in bed. The patients are brought to the place.

4717. So far as you know the examinations of the Conjoint Board are really practical and good?—I believe they are.

4718. You could not say whether you think they are equal to, or comparable with, the examinations of the University of London?—I object to the examinations of the University of London as formerly conducted, because although they pretended to be practical they were not practical.

4719. I should like to ask you one or two questions about the scientific examinations. The ordinary course of study, for example, of an Oxford student or a Cambridge student is to devote four years to scientific subjects, and two years to practical subjects?—Yes.

4720. Is that a proportion that you think is reasonable?—I may say this: I think the best medical education is the combined Oxford or Cambridge and London—Oxford and Cambridge for the first part, and London for the last.

4721. You mean in course of study?—Yes, I think it has the best results. I think that taking it altogether the combined education of three or four years at Oxford or Cambridge, and two or three years in London, is the best education for a medical man that at the present time exists.

4722. Do you think that the course of study which is actually followed by the University student in London is substantially the same, or is it different from the one we have been speaking of?—I am inclined to think not quite, but I should not like to give a definite opinion. I have not had much to do of late years with the students in the early stage. I have not really followed what has been happening in London.

4723. The previous witnesses spoke of the confusion of studies, which arose from the mixture of scientific with practical work in the London schools as a source of great evil. It appears that the students, after being unable to pass through scientific examinations for the University of London in time, endeavoured to mix those studies or continue them at the same time that they were engaged in practical studies. Have you observed that?—I should not like to give an opinion for the reason that I have not had much to do for the last few years with that class. I believe there is some truth in it.

4724. I think I understood you to say that you think the preliminary examination of the University of London is on the whole excessive?—Excessive in the way of quantity.

4725. How many years do you think the student ordinarily devotes to those subjects?—I do not know. I can only repeat what I said before. I have had nothing to do for some years with the preliminary part of medical education.

4726. You would not think that a year devoted entirely to physics and chemistry would be at all excessive?—No, I do not think so.

4727. And, of course, with regard to biology, it is difficult to say how long ought to be given to that?—Yes.

4728. You do not know how long in general men devote to that?—No, I do not.

4729. You fancy that the examination in science, I mean the preliminary examination, is really higher in its requirements than the corresponding examination at

Oxford and Cambridge, namely, our preliminary examination at Oxford?—I do not know what the preliminary examinations at Oxford are.

4730. Are there any subjects in the curricula of the University of London which you think might be omitted or partly omitted?—Well, I forget at the present time. All these are matters of detail, and I should not like to give an opinion without going into the matter very thoroughly.

4731. I am going to ask a question or two upon a point which does not relate to the programme at all. What do you think in general as to the plan and arrangement for teaching science which London schools possess. Is it your opinion that they are probably sufficient?—Yes, I should think so. Of course I am only speaking of the one I was connected with, St. Thomas's. I think the chemical arrangements there, and other arrangements, are all very good, and so with regard to physiology.

4732. Great progress has been made?—Yes, great progress has been made, and I fancy it is the same at any rate at the other large schools. I cannot speak with respect to the smaller ones, because I know nothing about them. I mean St. Bartholomew's, Guy's, University College, and King's, and some others.

4733. In case a better arrangement could be established between the University of London and the schools, on which side would it have to be?—I do not quite know.

4734. What sort of arrangement should it be?—I think something in the way of Boards of Studies, something to bring them into practical and close relationship. In the Gresham University Scheme it is suggested that there should be the Board of Studies.

4735. If the Gresham University adopted some such scheme as that you think it might work?—Yes, I think it might, if the teachers at the schools were associated with it in some way of that kind.

4736. (*Mr. Anstie.*) You have been asked questions as to details of examinations which I need not say I am not able to follow fully, but I should like to put this question to you. Assuming the London University to be remodelled in the direction you have indicated by connecting itself with the organisation of the schools, and introducing into it to a large extent the influence of the instructors in the schools, could details of that kind be easily arranged so as to give facilities to medical candidates consistently with the maintenance of the high standard of attainments?—I think so.

4737. And that would be the object you would desire to see realised?—Yes.

4738. Now one or two questions on general principles. I am right, I think, in saying that you are very experienced both as a teacher and an examiner?—Yes.

4739. You made an observation with respect to the uncertainty of examinations. You seemed to consider that an uncertainty in the standard of examinations is shown by the difference in the amount of rejections?—Yes.

4740. Is it not very well known to those who have been practically engaged in examinations, and is it not a very well attested matter, that nothing is more variable in quality than the men who had come up in different years?—Yes.

4741. Supposing that to be the case you would hardly say that a variation in the number of rejections shows an uncertainty in the standard of examinations?—Yes, I do.

4742. How can you show that?—I will tell you. In connection with the figures that I quoted showing uncertainty in the examinations, I went into the matter very carefully and found it was largely connected with the appointment of new examiners. You have an examiner say for a couple of years in a certain subject, he is followed by another examiner in the same subject, and at once there is a notable change in the amount of rejections.

4743. I think you are aware that inquiries of that kind have been conducted at various periods, and with very different results from those which you have arrived at, you are not the only person who has called attention to that matter. You are perhaps aware that investigation has not always resulted in that conclusion?—I am aware there is room for difference of opinion; that is my opinion.

4744. All I am putting to you is this, that a mere question of difference in the amount of rejections is really no proof of a difference in the standard?—Not taken alone.

4745. In fact is it not the case that in the conduct of examinations, it not unfrequently occurs that examiners in a particular year find it necessary in order not to reject too many to lower the standard which perhaps the last year they have insisted upon; are you not aware that that is a fact?—I can quite believe it, but that would rather confirm my views.

4746. No?—Yes, it would add to the uncertainty of the examination.

4747. No, it is precisely in the opposite direction?—No.

4748. Just attend for a moment before you make that answer; you say that variation in the number of rejections proves a difference in the standard of examinations?—No, I did not say that.

4749. Was not that what you led us to infer?—I say it goes some way to prove it, I do not say it proves it.

4750. Does it not, on the other hand, often happen that in order to prevent so great a difference in the rejections the examiners shift the level of the standard of examination?—Then I say that shows uncertainty; it confirms my view.

4751. You do not answer my question; is it not a fact that you in order to prevent so great a difference in rejections the examiners shift the level of the standard of examination?—I do not know, I cannot say.

4752. I am appealing to you as a gentleman of experience to say whether that is not so?—I do not know that.

4753. You cannot say?—No.

4754. You have never had that difficulty occur to you in the course of your career as an examiner?—Yes, that thing has passed through my mind undoubtedly.

4755. And through the mind of your colleagues?—You ask me whether that thing has been done, I cannot say.

4756. You have never discussed that point?—I cannot say I have not discussed that point, I have discussed most points. But I do not recollect to have done so.

4757. Now there is another point of general principle which I should like to ask you upon, because it touches not only your own profession but others. You attribute great importance, I understand, to what I may call the two years of practical training?—In a certain sense. I thought I explained with regard to the two final years, which should be years of clinical teaching, that it would be important if a University was established in London and for London medical students, that the final two years should be spent in London.

4758. I think you are answering something which I have not asked?—Then I misunderstood you.

4759. I want to get away from these extremely narrow and particular questions if possible. I am asking on general academic grounds, and I should be glad of the benefit of your experience on this point, because it has a bearing on my own profession as well as on yours. You attach great importance, I think, to the question of there being two years of practical training?—I have not said so.

4760. Am I wrong, then, and you do not attach importance to it?—I think it is important, but I have not expressed that opinion before.

4761. But you do now?—Yes.

4762. You have had a great deal of experience in this matter, and I should like to know whether in your judgment it is more useful to the student that those years of practical training should come after, or should come before what I may call the strictly scientific and theoretical instruction, or whether you would desire that they should run to some extent concurrently with it?—Well I say that either it should come after or be concurrent, not before.

4763. But you have no decided opinion as to whether it should be after or concurrent?—I think it might be concurrent partly, because I think they might overlap.

4764. Are there any reasons that have occurred to you as reasons why it might be desirable to keep the practical training concurrent or at least to have it in some degree concurrent with the scientific and theoretical

J. S. Bristowe, Esq., M.D., LL.D., F.R.S., F.R.C.P.

23 June 1892.

training?—There is a practical difficulty in having the two going on together.

4765. Are there practical reasons in its favour. Let me put this question to you; when a young man is studying the theoretical scientific branches of his subject is it not the case that he is a little apt if he takes the whole of his science and theory in the first instance to give it very much the go-bye in the course of his practical training?—I do not think I quite follow you.

4766. Is it not the case that a man will more readily grasp and more securely retain the theoretical and scientific knowledge which his education gives him if he is able concurrently with it to put that science and theory into practice?—If you will allow me just to say a word or two before answering, it may make matters clearer. I am not quite convinced of the propriety of drawing a sharp line between practical and scientific. If you mean by scientific training for a medical man simply physiology, anatomy, and chemistry, and by practical training, the study of medicine and pathology, I see what you mean. But the study of medicine and pathology is really as scientific as the other. I look upon the whole training as scientific from first to last. But it is of advantage on the whole that a man should devote the latter part of his time to that which is the purpose of his life: that is, that he should in the first place work at anatomy, physiology, and chemistry, which are only subsidiary, and then later on, work at clinical medicine, surgery, and pathology to which he is subsequently to devote himself. But I look upon those as scientific work equally with the other.

4767. May I take it that this is your view, that with respect to certain branches of science, those you have enumerated, chemistry, and others, they should be taken at the outset, and, if I may say so, got rid of, before the student enters upon the practical training, but that the scientific training in these matters which he will have practically to consider afterwards, should be conducted concurrently with his practical handling of the matter?—Yes.

4768. (*Professor Sanderson.*) May I just add a question. It is generally admitted, is it not, that the subject of pathology, that is to say, the science of medicine *par excellence* should be pursued at the same time as the practice of medicine?—Yes.

4769. But that the study of the preliminary subjects, such as chemistry and physiology, should be completed before the practical is begun?—Yes, as far as possible. But the medical student learns chemistry and physiology in order to apply them to medicine and surgery, in fact, he is still pursuing his studies in physiology and chemistry when he is working at pathology later on. He is going on to higher stages.

4770. (*Mr. Anstie.*) Then may I take it that your view is that on the whole the division of subjects which has been adopted in the examinations for the medical degree of the University of London, is so far correct in that it makes the preliminary scientific an antecedent to the medical scientific and practical training?—Yes.

4771. (*Lord Reay.*) It has been suggested in some quarters that the scientific part of medical education should be removed from the medical schools, and should be concentrated either in a central school, or should be removed to those colleges which have a science faculty. Have you any opinion on that point?—On the whole, I should rather object to that being done uniformly. I think there are certain medical schools which might very well combine. I think possibly there are certain studies, certain branches of science which might be conducted better outside the medical schools, but there is a great advantage, in my opinion, in having each school compact so to speak, and having all the branches of science taught in it. Take St. Thomas's, which is a fair example. We have a physiologist there; it is true he does not make a very large income by it, but here is a home for a physiological worker. If our school were taken away, his appointment would come to an end; there would be one lost appointment for a worker in his branch of science. And so with regard to chemistry. No doubt if they had one central school, each professor would receive a larger salary, and have more elaborate apparatus, but I am not at all sure that in the long run that would be an advantage for science, or for medical schools. I can quite understand that there are some schools where the payments are so small that they cannot secure proper teachers. I think it might be better for them to combine, so that there should be a central school to which the students might go. The two things might work together. You might have a central school, and yet the larger schools be independent.

4772. You might have a central University school if the colleges could not overtake the work, but they as well as the schools would secure closer supervision of individual work?—Some of them, but in some schools they would prefer to retain their own scientific lectures, and I think it would be an advantage that they should do so.

4773. Then you do not contemplate a transfer of scientific training from the medical schools?—I think it would be an advantage from various points of view. I think it is an advantage to physiology and chemistry that there are professorships open to good men.

4774. You look at it from the point of view of your profession?—No, not our profession.

4775. From the student's point of view?—I think as far as the student is concerned in the larger schools in London it works quite satisfactorily as it is. In St. Thomas' we have an admirable lecturer on physiology, and he has excellent apparatus. The plan works very well. I say there are some schools where I think the student would benefit by receiving his scientific teaching elsewhere, namely, where the school is small, and can scarcely pay salaries adequate to secure efficient teachers.

4776. But where there are sufficient means you are distinctly of opinion that it is to the advantage of the institution and to the advantage of the student that the scientific teaching should be given at the great medical schools?—Yes, I am.

4777. May I ask whether you do not see a distinct advantage in the academic degree conferring the professional qualification?—In a certain sense. You know there are conflicting views. I am myself in favour of the Corporations licensing to practise. I mean by that the Colleges of Physicians and Surgeons.

4778. Would you explain why you prefer it. It is an important point?—In the first place, I suppose that, with the exception of Oxford and Cambridge, the power of conferring licenses to practise has not existed in any University in the United Kingdom until the last few years.

4779. (*Mr. Anstie.*) That is surely a mistake?—What University possessed the power?

4780. Dublin possesses it and exercises it?—When did it acquire that power?

4781. It has always had it?—Then I will leave Ireland out and say England and Scotland.

4782. Are you sure about Scotland?—They have now, but they had not.

4783. (*Mr. Rendall.*) They have had this century, have they not?—Not the whole of the century, within the century.

4784. (*Lord Reay.*) Might I ask your opinion on the theoretical question whether the qualification should be separate from the academic degree. I think the Corporations look better after their alumni than the Universities do. If men act unprofessionally or disgracefully I think corporations have greater power than the Universities exercise.

4785. That raises another question, whether after they have taken a degree there should be a body exercising a supervision over them. But I ask why it is necessary that an academic degree which we assume to be a superior qualification should be supplemented by a lower qualification?—I do not think it is a superior qualification so far as the knowledge of medicine goes. It may be, so far as general education goes, but I do not look upon the examinations of the University of London or other places as being superior to those of the Conjoint Board.

4786. Do you mean to say that a person having the medical degree of the University of London has not obtained a superior qualification to a person who has only been licensed to practise?—No, I do not think it is better in the professional sense.

4787. (*Professor Sanderson.*) You refer to the practical itself?—Yes, I say that as physicians and surgeons they emerge quite as good practical men and with quite as good a knowledge of pathology, medicine, and surgery from the examinations of the Conjoint Board as from any other. I believe the examinations in professional matters are really better conducted by the licensing bodies in England than other bodies.

4788. (*Lord Reay.*) Your statement is that the London degree only gives a scientific guarantee, and that the examination of the Conjoint Board gives the professional guarantee?—Yes.

4789. Could not the new University be organised in such a way as to give security for both the scientific and the professional requirements?—Yes.

4790. (*Professor Sanderson.*) Would it not be an easier plan if the University could accept the examination of the Conjoint Board as part of its examination?—I think that would be by far the best plan for all bodies and for the students too if they could somehow or other join in that kind of way.

4791. (*Lord Reay.*) Then you do not attach so much importance to the multiplication of examinations by two different authorities which would be one of the results of that plan?—They would be diminished according to Professor Sanderson's suggestion.

4792. Can it be denied that additional examinations would ensue?—No, only in the earlier subject. A degree ensures that a man shall be a better educated man. I mean having a degree is a *testamur* that a man is well educated all round.

4793. But you defeat one of the great objects of the new University, which is to have all examinations under the control of the University without assistance or interference from other authorities?—Was that the object? I should prefer the Conjoint Board associating itself with it.

4794. What did you mean by saying that the Oxford and Cambridge plan should be adopted for the first four years?—I think that was in answer to Professor Sanderson.

4795. What exactly did you mean?—I do not know whether you are referring to what I said, namely, that I thought at the present time the best education for medical men was the preliminary education at Oxford and Cambridge and the final education in London. I think that this combined education at the present day produces the highest type of well-educated physicians and surgeons.

J. S. Bristowe, Esq., M.D., LL.D., F.R.S., F.R.C.P.

23 June 1892.

4796. Therefore, a new University should aim at having its preliminary courses on the same level as those at Oxford and Cambridge?—I suppose that would follow.

4797. (*Mr. Anstie.*) I want fully to understand this. Do I gather that you say that the man who has had the training of Oxford or Cambridge, and superadds to that the training of London, is *cæteris paribus* the best man?—Yes.

4798. He has had the training of two different Universities in that case?—No, one or other. I say Oxford or Cambridge.

4799. One or other; but he first takes Oxford or Cambridge and then London?—Not the London University, but the London medical schools. Oxford or Cambridge University; then he comes to London for clinical medicine and surgery.

4800. The Royal Colleges Conjoint Examination?—Yes, and he takes his degree probably at Oxford or Cambridge.

4801. What he gets at Oxford or Cambridge is the earlier scientific part, and what he gets in London is the later scientific and practical?—Yes. I arrive at that from practical experience of the different kinds of students who come to our London Hospitals.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Ninth Day.

Friday, June 24, 1892.

PRESENT:

The Right Hon. the EARL COWPER, K.G., M.A., in the Chair.

The Lord Reay, G.C.S.I.
The Right Rev. Bishop Barry, D.D., D.C.L.
Sir William S. Savory, Bart., M.B.
Sir George M. Humphry, M.D., F.R.S.
The Rev. Canon Browne, B.D.
Professor H. Sidgwick, Litt.D.
Professor Burdon Sanderson, M.D., F.R.S.
James Anstie, Esq., Q.C., B.A.
Ralph C. Palmer, Esq., B.A.
Principal G. H. Rendall, M.A.

J. Leybourn Goddard, Esq., M.A., LL.B., *Secretary.*

The Rev. Principal Cave, B.A., D.D., examined.

Rev. Principal Cave, B.A., D.D.

24 June 1892.

4802. (*Chairman.*) You have come before us to give evidence on one particular point?—Yes, the question of the addition of a Theological Faculty to the University.

4803. Do you speak on your own behalf or on behalf of an association?—I am speaking in a double behalf, as representative of the Council of Hackney College, and also as representative of the Nonconformist Colleges of London mentioned on the paper you have before you. Shall I enumerate them?

4804. Yes, I think you had better?—I am speaking on behalf of Cheshunt College; Hackney College, West Hampstead; New College, South Hampstead; the Presbyterian College, Guilford Street; Regent's Park Baptist College; and the Wesleyan College, Richmond—virtually the whole of the Nonconformist Colleges of the London district.

4805. Can you tell me at all how many students these colleges contain in the aggregate?—In each case?

4806. Yes; you might give me each case?—An average of from 35 to 40 in each college. The Wesleyan College, Richmond, would be about 60; Regent's Park College would be about 40; the Presbyterian College would be about 30; New College about 40; Hackney College about 36; Cheshunt 35 or 36.

4807. (*Bishop Barry.*) New College is Congregational?—Yes, New College is distinctly a Congregational College. Perhaps one ought to say that Cheshunt College and Hackney College are unsectarian in foundation. They are practically Congregational, perhaps, one may say, but not in foundation. New College is distinctly Congregational.

4808. Am I right in thinking that Cheshunt College was originally founded by Lady Huntingdon?—Yes, and Hackney College was founded by John Eyre, of the Church of England.

4809. (*Chairman.*) The representatives of these colleges met together?—Yes, and formed the common application that we present to-day, that there should be in the new University of London a Theological Faculty. Of course our great aim is advancement of theological education in the London district. We have been doing what we can for some time in theological

Rev. Principal Cave, B.A., D.D.

24 June 1892.

education, and we are anxious to get the stimulus of a degree, and, perhaps, also the guidance of a curriculum. The suggestions that we make are very largely along the lines of Oxford and Cambridge, but instead of the theological degrees being given after a test, we suggest that they should be given without a test; I mean to say a religious test.

4810. You wish that these colleges you mention should be constituted colleges of the University?—Colleges for that one faculty in the University.

4811. This is entirely a Nonconformist movement; no other denominations join in it, do they?—The paper which I have handed in will show that we have been in communication with King's College, the Church Missionary College, Islington, and St. John's Hall, Highbury. We have every reason to think that we are working in entire harmony, and that they are with us in the application, but we have not come to a result yet.

4812. What you propose is that these eight colleges, and any others that may be disposed to join you, should be affiliated to the new University, with regard to the Faculty of Theology, and that the Faculty of Theology should be on the same footing as the other faculties?—Certainly; that is, as far as I understand the Gresham Charter on which we are proceeding, there are Boards of Studies, and associations of the teaching staff—I forget the exact technical term—the Faculties; and there is then a representation on the Council. What we suggest is, that according to the usual line there should be the Faculty; there should be representation on the Board of Studies, and also collegiate representation on the Council. That is mentioned in clause 4 on the paper. "In clause IX., p. 6, after line 9, "insert 'Four members nominated by the above-named "'Colleges of Divinity, one of whom shall be nomina-"'ted by the governing bodies of St. John's Hall, "'Highbury, and the Church Missionary Society, "'alternately; the other three being nominated by "'the governing bodies of the remaining colleges.'" That is not definitely settled yet, but it is made the basis of the agreement with these colleges and the other Church of England colleges. We simply ask for some representation on the Council, leaving the representation to the Commission.

4813. You have gone into the matter, and you are quite of opinion that there could be a Theological Faculty undenominational, in which any body of any creed could enter into competition and take a degree?—That is the point that we really strongly press upon the Commission. We think that the time has come for a perfectly free Theological Faculty. Of course the word "theological" is used as we use "arts," "science," or "medicine" for a circle of sciences, and there are now so many branches of theology that could be studied in common, that it seems to us that the time has come when it would be a great advantage to theological education to have a faculty in the University, and at the same time the examinations should be perfectly open. Our point is that the examinations should not be in theological opinion but in theological knowledge. The present study of the philosophy of religion, Old Testament and New Testament exegesis, and so on, would give us a large range of studies; then there would be the history of doctrine, and the history of controversy.

4814. And every heresy and every subject connected with theology from the very earliest times?—Quite so. Embodying the history of the attack on Christianity and its defence, and also the history of Christian doctrine approaching it from the point of view of historical study.

4815. So that anybody could enter for it irrespective of his views and opinions?—Yes.

4816. Even if he believed in nothing?—I do not quite see how he could believe in nothing. He could give no answers if he believed in nothing. Of course he need not occupy any denominational position as regards religion. That is the point that we put.

4817. You think that practically there would be no difficulty in working it. Of course a professor would belong to some denomination, but you think he might teach it as an abstract question, and not be biassed by his own convictions?—There are already Faculties of Philosophy and Medicine, and it seems to us that the differences in Theology would be no greater than they are found to be in medicine or in philosophy.

4818. Do you wish to state your case more fully, or to give more reasons for wishing for this, or to give answers to any difficulties which you have heard of, or which might be raised?—Of course we have been practically engaged in theological teaching for a long time, and I might say that we have very much felt the necessity for something like the stimulus of a theological degree. We have done amongst ourselves what we can. There is a very considerably body now known as the *Senatus Academicus of the Associated Colleges*, that has had common examinations for many years The examiners are taken from all religious bodies. As a matter of fact we find no difficulty, either in obtaining examiners or in the conduct of examinations. The difficulty is that we have no recognition of our title. That which we give is simply the ordinary title that could be assumed of an Associate of the Senate, or a Fellow of the Senate. If we had the stimulus of a degree it seems to us that theological training would be largely stimulated, and we should have at once fuller teaching and more interest shown by our students in the subject. As I have said, we have had practical knowledge that it is perfectly possible to work the examinations along lines such as I have suggested. We see no difficulty in the way, and, on the other hand, we do see a great advantage to the general impression made upon the world at large, if theology occupies its place with other sections of knowledge. I call your attention to the fact that England stands alone in the matter. We have Universities without a Faculty of Theology. In the University of Rome there is no Faculty of Theology, but that is for a particular reason. In the University of France there is a Theological Faculty. One has only to call your attention to the Universities of Germany and other nations for you to see that there is usually associated with University life a Faculty of Theology. We hope there will be the same thing here. We are shut out from the theological degrees of the Universities of Oxford and Cambridge by the present tests, and, although some of our students may take Arts degrees at those places, we wish to see an opportunity for Nonconformists as such receiving degrees in theological knowledge.

4819. Would you call yourselves "B.D." or "D.D."?—That is a matter of indifference to us. We are not concerned with the title. What concerns us more is that there should be a Faculty for theology.

4820. In theology, more than anything else, there would be great difficulties in teachers examining their own pupils, would there not? Would they not be more likely to be partial than in any other study?—I think not, if I may be allowed to say so. Much depends upon the questions being put in the history of doctrine. If you are asking questions upon doctrinal theology, as such, as held by an individual church, then I see difficulty; but on the lines we have marked down I see no difficulty. With regard to Old and New Testament, Languages of Literature, and the Philosophy of Religion, and so on, I see no great difficulty in the matter at all. It seems to me quite as easy that there should be examinations in theology as in philosophy.

4821. In the Charter there is a safeguard against an examination being conducted entirely by the teacher. He is associated with an outside man?—That we understood. There is a great advantage in teachers examining their own classes, but one would expect an outside examiner to be associated, in order to give character to the degree.

4822. (*Bishop Barry.*) May I ask precisely the position in which you stand now in the negotiation with other colleges than those represented to-day?—Do you mean with King's College?

4823. The other Church of England colleges?—We are simply meeting in a friendly manner at present. As far as we know we are in perfect agreement with them, and they with us.

4824. I think they have not yet committed themselves?—They have not yet committed themselves. We had reason to believe at our first meeting that they had committed themselves to a union with us in the application.

4825. Were they not rather under the impression that the application to the Commission would be deferred, until after such an agreement had been arrived at?—I put the question to the committee whether it would be an improper thing for us to appear before the Commission speedily, and I was told at once no.

4826. What committee is this you are speaking of?—The committee of the common colleges.

4827. Including the representatives of King's College?—Certainly.

4828. I think there was an impression that this application would be deferred until these negotiations had come to an end, but possibly there may have been some reasons why you had to press it on?—No reason, except that some of us were going to leave England for holidays, and we were anxious to appear. We have thought of appearing for a long time. I think the sole question is a question of time. We have no reason to believe from our previous conferences that there would be any difference between us and King's College.

4829. In that case King's College would probably have given in its adhesion, if there were no subjects of difference?—As I have said, our conferences have been friendly; we had every reason to believe that we were together. I have had no reason to believe differently.

4830. May I ask if your attention has been directed at all to the scheme of the Scotch Universities in this respect?—May I ask which scheme; as it exists, or the new Commission?

4831. I have here the calendar of the University of Glasgow, and I believe the same arrangement, *mutatis mutandis*, takes place at other Scotch Universities?—Yes.

4832. Has your attention been directed to that?—On the side of theological degrees?

4833. Yes?—They vary. Glasgow and Edinburgh have one arrangement; St. Andrew's has another arrangement.

4834. Differing in principle?—Yes, differing in principle. That is, you must have attended the classes in Glasgow and Edinburgh, before you can take the degree in theology.

4835. But the character of the examination, I suppose, would probably be very much the same in all these Universities?—The character of the examination is very much the same as the examinations in my own college.

4836. As far as I can see, the subjects of examination at Glasgow are Oriental languages and ecclesiastical history, in which the history of doctrine, of course, is much considered?—The examinations, I think you will see, are conducted along the line of the history of doctrine.

4837. I have not been able to see the papers, but there is no limitation in the syllabus. Then Doctrine of Biblical criticism ——?—Of course Biblical criticism includes Old and New Testament.

4838. And I think, moreover, that in the subjects for detailed examination are included Hebrew, New Testament Exegesis, Apologetics, Divinity, Church History, and Biblical criticism?—Yes.

4839. Would such a curriculum as that satisfy yourself and those whom you represent?—Most of those words as used seem to me exceedingly general. If they are taken in their general use, I say yes. Most of the words may be used in a narrow or a wider sense. "Exegesis" might include several things: Biblical archæology, or Textual criticism, or the Higher criticism. Nearly all those words might be used in a wide or narrow sense. If taken in the wider sense, that would suit us entirely.

4840. In the Scotch colleges there is no test at all for the belief of those who are entering an examination?—I can speak for St. Andrew's. I do not know the others. The variations are a little greater. Those who attend the classes would belong to the Established Church of Scotland in Glasgow and Edinburgh.

4841. The Established Church of Scotland——?—I beg your pardon, the Established Presbyterian Church.

4842. The University, as such, imposes, Professor Ramsay tells me, no tests at all?—I should think not.

4843. And you wish that that line should be followed in the new University?—Yes.

4844. Have you considered the case at all of non-Christian colleges?—May I ask what you mean by "non-Christian colleges."? Would that include Jewish colleges?

4845. Yes; I do not know that there is one, but supposing the case of a Jewish college, would you see difficulty in including that under the Faculty of Divinity?—I should see no difficulty whatever from my own standpoint. If they are willing to submit to the examination as put down I should see no difficulty. If the Jew will study the history of Christian doctrine and the history of the Christian church, and so on, and give answers upon theological knowledge, I see no difficulty whatever.

4846. And that would apply to a Unitarian college?—Yes.

4847. There is at present no Unitarian college within the London district?—No; there was one, but it was removed to Oxford.

4848. Would you allow those colleges to be constituent colleges of the University?—I see no difficulty from my standpoint.

4849. May I ask whether you appear before the Commission with a two-fold object? I mean first to urge the creation of a degree in Arts, which should allow, as at Oxford and Cambridge, the taking of philosophy and theological subjects as a part of the examination, and secondly, the creation of a Faculty of Divinity for granting the students divinity degrees?—I am obliged to you for suggesting it. That is quite our attitude. We should be glad to see the final examination in Arts taken in either philosophical or other subjects as at Oxford and Cambridge at present. Then further examinations for a higher degree purely in theology.

4850. The two objects although connected, are perfectly distinct ideas?—Yes. One might be given and the other not.

4851. The one exists at Oxford and Cambridge, and I am informed that there is no difficulty in working it, and I assume that as a matter of fact Nonconformist students often present themselves?—Yes; one of my own colleagues took the first position in the theological tripos at Cambridge.

4852. You would require a preliminary examination, I suppose?—Yes.

4853. Of what nature? Have you considered?—We have no objection, say, to the London matriculation and the first examination of Oxford and Cambridge. We wish the preliminary Arts training to be along the lines of a University career.

4854. This, then, is one point on which you would lay considerable stress?—Yes.

4855. The second is the creation of a distinct faculty?—Could the first be granted without a faculty, because there would be no control of the examinations on the part of constituent colleges? Even for the first it seems to me that there is a necessity for a Theological Faculty.

4856. I think it might exist without a Theological Faculty?—At Oxford, I think, it is at present carried on by the Theological Faculty.

4857. There would be no test for the students. Would there be any test for those conducting the examination?—As teachers in the colleges or as teachers in the University, may I ask?

4858. As teachers in the University?—I should think not.

4859. Do you contemplate the appointment of professors in the University in this faculty, distinct from those employed in the colleges?—We should have no objection, although that question has not really come before our view. Intercollegiate lecturing, for example, might be established.

4860. That is not quite what I mean—University professors appointed as such?—We should like to see it, but in that case absolutely free from test.

4861. And you would not feel any difficulty in submitting your students to examination by a University Professor so appointed?—Certainly not; if the professor was eminent in his subject we should be glad to submit our men to his knowledge.

4862. Practically, I suppose, you contemplate that the teaching of the students would be conducted very much by professors of various colleges?—That is so. We should have no objection to their attending professorial lectures if there was an advantage in so attending, but we contemplate their being taught within our own walls at present.

4863. The Gresham Charter, as you are aware, gives the Council power to appoint lecturers—of course they might be professors—in any subject whether connected with the faculties or not?—I should be glad to see some men of professorial standing at the new London University expressly devoted to the several branches of theology.

Rev. Principal Cave, B.A., D.D.

24 June 1892.

4864. You have spoken of examinations conducted by a *Senatus Academicus*. In that *Senatus Academicus* are the various colleges of which you spoke of to-day represented?—Yes, but more than that. There are colonial colleges and other colleges in England and Wales.

4865. Not colleges connected with the Church of England?—I think not. The reason has been that we have found it very difficult to get such association.

4866. In the Scotch Universities I observe they give the degree of B.D. by examination, but they confer the degree of D.D. only by special favour of the Council, or whatever the body is there?—Is that quite so?

4867. It is so in Glasgow?—In St. Andrew's, I think, it is different. I hold a St. Andrew's D.D. They also give it after 14 years' service as B.D., on the writing of a thesis, which is virtually along the lines of a German University.

4868. Which would you prefer in this faculty?—Both.

4869. I believe in Durham they also give the B.D., but not the D.D. Should you be satisfied, supposing we thought it desirable, that the practice at Durham, Glasgow, and Edinburgh, should be followed in that respect?—I should be glad to get the B.D., if I could not get a D.D., but I do not see why both should not be given on the same lines. I should expect, according to the Charter, that a certain honorary degree would be given, but I should also expect that a degree could be gained by a man for fair knowledge.

4870. (*Sir George Humphry.*) From the very broad view on which you wish this faculty to be established you probably would not object to its being a Faculty of Theological Science?—The actual wording is to me quite immaterial. I do not care whether it is divinity, theology, or theological science. As a student of theology, I prefer the word "theology," which embodies the whole, but if it is a matter of mere name, I have nothing to say. What I want is the fact. I do not care how that is expressed.

4871. You mention several universities abroad in which there are theological faculties. Are they on the same broad lines which you desire?—The question is being asked with regard to the Universities of England and America. As far as I know, tests are not instituted in the Universities in America.

4872. Either tests of those who go to the University, who seek to learn, or of the teachers?—I think not. Of course, one cannot give a general answer with reference to every university in the world, but in Germany, certainly, no test is put upon one or the other. In the German Universities sometimes they have a Protestant Faculty, and in others a Roman Catholic Faculty. I do not think any special test is ever put upon either teacher or student in the Protestant Faculty.

4873. In the great Universities of Germany there is no particular test, is there?—I believe not, as far as my knowledge goes, and I have resided in some universities in Germany. I only wish that we had the same excellence of teaching, and the same broadness of views in giving degrees, that are manifest in Germany.

4874. By whom would you expect that the professors would be appointed?—The Council, I suppose, has full authority. It would no doubt be after conference with faculties, but that, I think, is quite a detail. Some might be appointed by the State.

4875. I suppose the real practical difficulty would be in having professorships which should be quite open, and examinations quite open to persons having every variety of belief. That would be, perhaps, the practical difficulty?—I see no practical difficulty. In our reading we read the prominent books of the best men, and we find that they belong to vastly different denominations, if I may use the term. In the study of religion, for instance, one is almost compelled, as a student, to read Dr. Martineau, and if you come to Exegesis you read the best teachers at home and abroad.

4876. That difficulty will probably diminish as time went on?—I think there would be no difficulty from our practical knowledge of the working of the Senatus.

4877. You mentioned teachers examining their own classes?—No, I think not. Did I? My position was that there would be no doubt some teachers in our colleges who would be also examiners in the University, and that there would be besides outside examiners. But I never anticipated that the teachers alone would examine their own classes. I should prefer not. I do not see the value of a degree when the teacher only examines.

4878. I understood it the other way?—The stress of the examination would, from my point of view, lie in the outside examiner.

4879. They would share it between them?—The method of the *Senatus Academicus* is that the paper is set wholly by outside examiners.

4880. And you think you could rely upon the perfect fairness of examiners or professors appointed from one of the several colleges. There would be no fear of that by your own body?—That is an incidental point that I am not pressing. I am not sure he would be a professor in one of the colleges.

4881. But if he were you think there would be no difficulty?—I do not see any difficulty. We have every reason to believe the professors would be fair and honest.

4882. The several colleges have such feelings towards each other that you think that there would be no difficulty on that ground?—I believe none whatever. That is the very keynote of our application.

4883. You would be willing, I suppose, that this faculty should be founded in any University which should be now constituted—whether it should be on the basis of the Gresham Charter, or on the basis of the University of London, or any other?—I have no objection; only one would like to say a word there. It is an essential part, it seems to me, that the colleges should have some power in the Council. From the University of London our colleges have largely drifted away because they have no representation.

4884. Suppose under a new Charter that representation were given?—That is an indifferent question from my standpoint.

(*Mr. Anstie.*) You strongly insist upon the necessity of a collegiate or institutional representation on the governing body of the University?

(*The Witness.*) I think so.

4885. Of course the basis of this present Charter, and almost ever other practical scheme proposed, involves on the one hand institutional and on the other hand faculty representation?—My own preference is distinctly for institutional representation.

4886. Without faculty representation? There is a little difference. This Charter, as you observe, proceeds on the two-fold basis of a representation of the institution as such—I may say the governing body of the institute—and a representation of a faculty consisting of the teachers?—I beg your pardon, I misunderstood. In that case I do not care at all for the institutional representation. What I care for is the faculty representation.

4887. Would not there be a little difficulty in establishing a branch of the University upon a footing so different from that of all the other branches which all recognise both institutional and faculty representation?—Quite so. Our position is that we should like both. We should expect both; that is to say, Hackney College would have not a representation upon the Council wholly, but half a representation on the Council, as it is put here, and at the same time the professors will form part of the faculty.

4888. You would be prepared, perhaps, for a sort of body or council in which the colleges might be united and send up a joint representative or representatives to the governing body?—That is suggested here—that two colleges should have one representative, not that the united colleges should have four selected, say, all by one college. There are eight colleges here and four representatives, one being given to each two colleges.

4889. You would not stand upon the particular arrangement?—No, that is a detail. We want a representation on the Council in order that our views may be shown on the Council.

4890. Supposing all the colleges to be united in a common body, would it not equally answer your purpose to have that common body send up representatives who would fairly answer for the interests of the different institutions?—I am talking somewhat in the dark. Is your thought that there should be a possible body where the colleges of the Church of England and those of our own denomination should be united in one?

4891. You propose that two bodies should have one representative, but you do not stand upon that?—No,

that is a detail altogether. It is only the principle of representation upon the Council which we have found the lack of so much in recent years.

4892. But you do, I understand, wish that there should be both an institutional representation and also a faculty representation?—We should prefer that.

4893. Would you think it desirable that there should be no qualification beyond the earliest preliminary examination that you mentioned—the matriculation?—I think I said more. I was thinking of the Oxford and Cambridge method. Of course, in London another method is adopted. In the London University there is a matriculation, and instantly they pass from matriculation to the professional degree—Bachelor of Science, Bachelor of Arts, or Bachelor of Medicine. At Oxford you have two examinations before you come to the final, and it is the final only that is theology. That is what was in my mind.

4894. Would you wish or not that they should take the full Arts degree? It can hardly be reckoned a professional degree, can it?—The Arts degree in London is different from the Arts degree at Oxford and Cambridge. A man takes it in specific subjects at Oxford and Cambridge. He may take in languages, for instance. In London it is different.

4895. You would be prepared to accept some intermediate examination in London?—Yes, I see no difficulty whatever. I was thinking all along of the final arts examination only being very largely in the theological school.

4896. I suppose in point of time you would desire that the general education should not be too much prolonged before entering on the specific subject?—There are some of our colleges that are purely theological colleges; they do not touch Arts. Men must have certificates in Arts before they proceed, so that education for the University, as a rule, is a six years' course. We like three years in Arts and three in Theology. We have no objection to five. However, that is an individual opinion. I am speaking rather for Congregationalists as such than for our entire body. The custom would vary, no doubt, in different religious bodies.

4897. If you had three years in Arts that would allow time for each course, would it not?—The Arts degree would be after three years in every institution, one would think.

4898. Not more?—Not more. You would then proceed to a special divinity degree.

4899. Now with regard to the colleges. I think his Lordship in examination put the question to you as to what limitations you would put upon the colleges in point of creed. I am not sure whether we got an answer to that question. Would you limit it to what we might call colleges of Christian doctrine?—There are two points: the test you put upon the student who presents himself for examination, and the test you put upon the college. We do not see why there should be a test upon one or the other. Neither the college nor the student should have a test. As a matter of fact we have at Hackney College a test, but we would not allow another to put it upon us, nor would we put that test upon another college.

4900. The test I am thinking of is the test of the college as such, not of the students in the college?—Do you mean as regards its line of teaching, or as regards its being of University standing?

4901. As regards its line of teaching?—I had rather see it perfectly open. I had rather see that the student in any college in London should be received so long as he came up to the University standard. The standard would be the University standard. It depends upon the quality of the teaching, not upon the subjects taught.

4902. And you would be prepared to allow among the constituent colleges of the University a Jewish college?—We have no reason to suppose a Jewish college would ever apply, but if they did I should say yes. I think it would be a grand thing to get students of Jewish colleges studying these subjects. But it is a very improbable case.

4903. If you had a college established in London like the Mahommedan College at Allyghur in India you would not object to such a college as that?—If they would submit to the subjects that are taught as well as present themselves in such a way that they could pass the examinations, I should not object to any man.

4904. I am speaking not of the individual but of the college?—Of course, the college must be resident in London in that case. If one should be built in London and they wished to take the degree I should accept them.

4905. (*Mr. Rendall.*) You have dwelt upon the importance of the stimulus of a degree to theological students?—Yes.

4906. I do not know whether you would accept the earlier stage in the Arts?—Yes.

4907. Would you extend that to the intermediate?—Yes.

4908. But not to the final?—We are simply asking that what is done at Oxford and Cambridge should be done in London. That is the better way of putting it. That at Oxford and Cambridge has given a very healthy stimulus to theological study.

4909. Are you aware that at Oxford and Cambridge, as at every English University, graduation is necessary prior to the giving of a theological degree?—At Oxford and Cambridge it is so, but every man who possesses his Arts degree cannot take a theological degree. A man may have taken the highest position in the tripos in Arts and be unable to proceed to the B.D. degree.

4910. He must have first taken the M.A. degree?—B.A.

4911. M.A. at Oxford, I think. In a Scotch University in every case he must have graduated?—That is so.

4912. Would you be content to accept that arrangement that there must be graduation in arts prior to a theological degree?—So much depends upon what constitutes the Arts examination. If the Arts examination might be partly in Theology, yes. There are two things that should be put clearly before us. One is that the London University has adopted a totally different method of giving degrees; it has given us Bachelor of Science straight away from the matriculation; Bachelor of Medicine, Bachelor of Laws, and Bachelor of Music straight away from matriculation. It is different from Oxford and Cambridge. It might be that a B.D. should be given straight. That is a different question. I have no objection to an Arts degree being demanded before a B.D. degree be conferred.

4913. You have spoken of the examination at Oxford being conducted in the Theological Faculty, but they are in no sense supreme. The final decision does not rest with them, but with the general body of the Senate?—In this case I had inferred that the final decision would lie with the Council.

4914. You would be prepared to submit the recommendation of the independent faculty to the general academical body?—Quite so. I should be sorry to see anything else.

4915. You have regarded the colleges hitherto on the Gresham basis, and have thought of these colleges as the colleges of the University in the same sense as King's College and University College?—Not in the same sense as King's College and University College, because they have teachers in all the faculties.

4916. Your colleges would represent a single faculty?—We should put it distinctly if we said the Theological Faculty occupies the same position as the medical schools.

4917. Namely, colleges of a single faculty?—Yes.

4918. That would mean the admission of the six nonconformist colleges and presumably St. John's, Highbury, and the Church Missionary College? Are there any others?—King's College, of course.

4919. That would mean the admission of eight more federated colleges into the University?—That is it.

4920. You would wish all of them to be represented, either singly or conjointly, upon both the academical body and the Council?—The Charter arranges for all teachers in the colleges being upon the academic body, and it seems to me that there ought to be some representation on the Council.

4921. You laid very great stress upon that representation on the Council. Already the numbers of the Council have been objected to as large. Does this representation, claimed by a very large number of

Rev. Principal Cave, B.A., D.D.

24 June 1892.

bodies, seem to you an essential point?—Should the medical schools have 10 representatives? It seems to me that it is possible to lessen that number, but that other colleges surely should have representation. All colleges in the University should have representation on the Council. I do not ask for numbers or how it shall be representation. That is a question for the final decision of the Commission in every way, of course; but that there should be some representation on the Council seems to me to be vital to our having any interest in the examinations and control over them.

4922. (*Professor Sidgwick.*) I am not quite sure that you quite realise that the question is whether, besides the representation of the faculty on the Council, which would be indirectly representation of the college through the teachers, you think it is an essential point that there should be also representation of the college as an institution?—I do not think it an essential point, but I think it a very important point.

4923. (*Mr. Rendall.*) Can you quote any parallel in any British University of a college with a single faculty in Theology being admitted to direct representation in a University?—Keble College, Oxford, surely.

4927. I think it has no representation as a college upon the University body, has it?—I have not enough knowledge, perhaps, to answer that. It has full influence. Does it not take Arts and Theology also?

4925. I imagine it takes students of any faculty. There is no distribution of faculties in that way as far as I understand the constitution of the colleges of Oxford?—This Gresham scheme is a new departure. I do not think a precedent could be quoted one way or the other.

4926. You are aware of the principle of the Scotch colleges?—Yes.

4927. You are aware that the colleges are institutions recognised, and are not constituent colleges with representation upon University bodies?—I think we must be careful in that statement. It seems to me that the colleges are not represented in any way at all such as is contemplated in the Gresham Charter. The point I want to emphasize is this: that the students whom they examine are the students whom they themselves have taught in schools.

4928. Not in the case of theology, if I am correctly informed. What I understand is that the students graduate at some Scotch University. At St. Andrew's they allow them to graduate at any University. At Edinburgh and Glasgow it must be at the Universities of Edinburgh and Glasgow. The theological degree is supervenient on the ordinary graduation, and for that purpose they recognise certain institutions as giving the ordinary theological training and qualifying students for admission to University examinations in Theology. That is a correct statement, is it not?—That I do not know. A student from my own college took an M.A. No question was asked as to whether he had received theological training, and I, as head of a theological college, gave no certificate. The mere fact that he was a graduate of Arts gave him the position of taking the B.D. afterwards in Edinburgh without any reference to a theological college.

4929. That was a graduate of Arts at Edinburgh, but if he had not been a graduate of Arts at Edinburgh he would have had to attend a certain number of courses, and, I think, be attached to some recognised institution?—He would not be admitted into the University at all. You must be a graduate of Glasgow or Edinburgh to receive the B.D. at Glasgow or Edinburgh.

4930. I think at Edinburgh he need have attended two courses only, if he is a graduate of any other university. I believe that is it?—I know that, as a matter of fact, students of ours can go to St. Andrew's, having received a London degree. They must be graduates of Edinburgh before they can receive the B.D. The point before us was that the college has no place. Certainly, no application was made to me for the certificate in the case I mentioned. Attendance at our college undoubtedly fitted him for his B.D. degree, but that was not asked for.

4931. How far would some university recognition of that kind meet your views; that is to say, that the University should recognise qualified colleges for training, and admit their students to University examinations in Theology or Divinity?—That is all included in what we ask, is it not, only we ask a little more?

4932. You are asking for representation, and federation or incorporation in the University as colleges?—We think as a matter of justice, seeing that the Nonconformists are shut out from theological degrees.

4933. I am not drawing a distinction between Nonconformists and the Church of England?—That is an important point in our claim. We are claiming common justice. We have no place where we can send our students for theological degrees in England. In view of an appeal to the public, that is a strong point.

4934. Do you wish that all the teachers in all the colleges should belong to the Theological Faculty?—I have no opinion. I should think it might be that the Faculty would appoint representatives. I see no difficulty upon that. That seems to me quite a detail.

4935. Can you tell me what number of teachers in the colleges give the whole of their time and work to the service of their college?—You mean in theology?

4936. Yes. In your own college, for instance, how many are making their teaching work the whole or, at any rate, the main work of their lives?—We have four. I think that is about the average.

4937. And that would be about the same in the other colleges?—I think so; four is about the average. Should there come in a union of London Colleges, there might be a larger staff.

4938. For homiletics and so on you have external lecturers?—Yes. The University would not institute lectures on homileties, and therefore it would not have teachers.

4939. The numbers on the academical board would be very much swollen if you add all the attached teachers in the minor subjects?—Yes. We draw a distinction between the professor as such and an ordinary teacher or lecturer.

4940. Now if you will allow me to depart from the Gresham Scheme, and think rather of a central scheme—I am not quite clear whether the question was put before—how far would you be prepared to rest the appointment of professors in the hands of a University board or University committee?—As distinct from the Council?

4941. One would naturally think of some elective board appointed by the Council, or in some other way?—That is a matter of detail.

4942. How far would you leave the appointment of professors in the subjects to some board appointed by the University?—In the University do you mean?

4943. Yes, in the University?—I see no difficulty. I really have no express opinion upon the matter.

4944. Could you accept in one of your colleges a professor or lecturer appointed by the University?—Do you mean to say that he should be part of our governing body, or that he should lecture within the college walls? I thought it was a cardinal principle of the Gresham Scheme.

4945. It is, but I am departing from the Gresham Scheme?—Do you mean, would it be possible for the University to appoint a professor within our walls?

4946. Yes.—No, it could not be. They could appoint as lecturers and they could give lectures within our walls, but it must be submitted to our committee. Our committee might be thankful to assist them, but there could be no putting down of professors within our walls without the consent of our council.

4947. Of course, it is conceivable that the University might appoint certain teachers in the colleges if all teachers recognised were appointed by the University?—I do not understand at all. Hackney College has its own trust and its own history. No possible body can interfere with the internal arrangements of Hackney College.

4948. And you could not tolerate any interference?—I mean to say if you offered us a very good teacher, and asked that our board should accept him, I think they would jump at it and be glad to have him; but if you said "You must have him" we should not take him.

4949. That would arouse jealousy?—No compulsory power over our college could be allowed to be exercised.

4950. (*The Rev. Canon Browne.*) There were three points on which I thought it possible that the question and answer as recorded did not quite express your view. The Chairman said, would you pass a man who believed in nothing? You replied that if he believed in nothing

he could give no answers. You did not, of course, mean that belief would be necessary for success in examination?—I was thinking, of course, that just as far as a belief is necessary in a medical examination it is necessary in a theological examination and no further. If a man had no opinion whatever on a medical question he could not answer the question.

4951. You did not think that belief was required as an essential for passing in the paper?—Belief may be many different things, a mere intellectual assent or a religious belief, which is very much more profound; I cannot understand how a man who has no intellectual beliefs can answer questions in an examination.

4952. Then I think some phrase of this kind was used; that with regard to the examinations in Theology in Cambridge these are conducted by the Theological Faculty. Mr. Rendall asked a question with regard to that. Of course, you mean an examination for theological degrees?—I really do not know enough to say.

4953. As you know, no doubt, the Special Examinations in Theology are not conducted by the Theological Faculty at all?—Not conducted. But are they not in any way suggested by the Faculty?

4954. The examiners are appointed by the grace of the Senate on the nomination of a non-theological board. The Board of Studies Theological makes suggestions of examiners for the Tripos, but not the Theological Faculty?—The Theological Board of Studies would in this case be the same; the one thing would be the same as the other. The Theological Faculty is the Board of Studies.

4955. But in the Special Examination in Theology in which men can take their Arts degrees, there has been no nomination by a Theological Board?—I have no objection to that.

4956. I am not sure that your answer about tests was quite understood. Your opinion was quite clear that any number of colleges may impose upon their own members just what tests they like, but that the University shall impose none?—Yes.

4957. That is simply your meaning?—I do not say any number of colleges, but any number of colleges individually.

4958. Each upon its own students?—Yes, each upon its own students. Of course, we vary very much. The methods are very different in the different colleges represented here. If our institution was purely Congregational there would be no tests whatever, but as a matter of fact it was founded upon a sort of Congregational and Episcopalian foundation.

4959. I think when you read your answer you may see that it does not quite convey that meaning. With regard to the position of Theology in the University, quite apart from the colleges, should you be satisfied with an examination faculty with no central University professional teaching in theology?—I should prefer some additional teaching, but that is not what we are speaking about especially. The point we are aiming at most distinctly is the examination faculty.

4960. The appointment of central professors in Theology might raise difficulties which otherwise would be avoided?—It is wholly incidental to the scheme from my point of view, although I should prefer it.

4961. Would you require that your college representatives should take a full part in the government of the whole University in all its branches?—Interpreted, that means, should there be representation on the Council?

4962. I am taking it if you get what you ask for?—It seems to me far preferable that the colleges should have some representation on the Council, however slight.

4963. That was not the question, but whether the representatives of the purely theological colleges should have a full share in governing the University in all its branches?—So much depends on the word "full." It seems to me that what is granted to the medical colleges should be granted to the theological colleges. Do the medical colleges take part?

4964. I am speaking of the new University?—What we want in the new University is representation on the Council.

4965. For the purpose of governing the University, or of managing the theological affairs?—It seems to me vital that the Theological Faculty should have influence on the Council; it is not that it can override, for it has a small representation, but that its view can be stated to the whole University.

4966. You have passed now from my question. You say your idea is that the Faculty should have whatever influence it can——?—I daresay we have a different connotation for Theological Faculty now and again in conversation, but I feel that we want representation on the Council of the University for all University matters.

4967. Then you said, and said, if I may presume to say so, very justly, that it was a strong point with you that there was no place in England to which you could send your students for a degree. I entirely agree with that, but you gave that answer to a question about demanding a constituent position upon the government of the University. Now supposing the new University gave freely and openly degrees in Theology to all comers, what hardship would you then have which would enable you on that ground to demand a constituent position on the University?—I was assuming that the Gresham University Charter was before this board, and that we were largely discussing on that basis. If you ask me which I prefer, whether I have any preference for a central examining body, that is, an enlarged University of London, or something of that kind, I do not think it would make any difference. We should prefer to be constituent colleges in such a University as the Gresham Charter suggests.

4968. If there was a University going with constituent colleges you would like to be among them?—Yes.

4969. I was asking you rather a broader question. Supposing the new University is established on a wider basis than that, if the theological degrees were perfectly open to you, so far as that is concerned, you would not have that special demand for a constituent position?—Do you mean that there should be no constituent colleges in any faculty in the University?

4970. If so, you would not demand a constituent position?—I do not see why Theology, as a subject and as a faculty, should be differently treated from Medicine, Arts, or Science, and if you have some constituent colleges Theology has its rights.

4971. (*Professor Sidgwick.*) I wish to ask a question with regard to the absence of any religious test from the examinations. You mean it to be an examination in knowledge, not in opinion?—Yes.

4972. I should like to get the point quite clear. I will put a question that I once put to a clergyman of the Church of England, an examiner in theology at Cambridge University. I said: "Could an atheist obtain a "first-class?" He said, "Certainly, if he was suffi- "ciently able and took sufficiently strong interest in "the history of religion." Could you answer that question?—Yes. I should think he would cease to be an atheist if he knew the other side.

4973. Suppose the candidate expressed his atheism in the examination?—The questions are put to ask the candidate his knowledge. If he were asked the history of a certain atheistical opinion it is totally irrelevant if a man says: "I hold that opinion."

4974. Sometimes a young man in examination will say things of that sort?—Yes. The mercy of examiners is often exercised, I know.

4975. Suppose he did, would you regard that as a disqualification? Would you regard a statement of his infidel views in the answers as a disqualification?—If they are fairly answers to the questions, no. But the question is whether a man is bringing in relevant or irrelevant matters. As an examiner I strongly object to irrelevant matters, and very often we throw a man out for doing such a thing if it is done deliberately.

4976. You treat it as if he said that he belonged to the Conservative party without the question being asked?—If a question was asked on the history of Congregationalism I cannot see that it is relevant for a student to say: "This is the history," and then say, "I am a Congregationalist" at the bottom of the page. The examiner would pass it by as wholly irrelevant, and so it would be in the other case.

4977. Suppose (which I understand is what you prefer) besides the teachers of Theology in the colleges there is also a professorial faculty in the University. Then I understand you to say that you do not conceive that there would be any difficulty about the attendance of the students in the colleges at their lectures in consequence of their divergence of opinion?—I should think not. For example, if you have a professor of any

Rev. Principal Cave, B.A., D.D.

24 June 1892.

branch of Semitic studies, which it is difficult, say, Assyrian and so on, to teach in our colleges, we should be glad for our students to have permission to attend lectures on that subject. The same applies to a large range of subjects. For instance, when a man has given special attention, as Professor Ramsay has done, to Early Church History and so on. And there are other cases where we should be glad to have University professors supplementing the teaching done within our walls. We are not able to take up the teaching of these recondite branches of Theology for lack of professors of that kind.

4978. With regard to the divergence of theological beliefs, I may say that I think our experience at Cambridge is entirely on the side of what you have said, as to there being no difficulty in conducting a fair examination. But it is not quite so clear that if professors are appointed the divergence of belief might not create a difficulty?—Our students are all inclined to make an allowance for the bias of the opinions of the professors. What they look for is the knowledge of the teacher, and if the teacher were pre-eminent in his subject they would be thankful for his lectures without considering his belief. That he had some incidental beliefs would not make any difference. In attending a theological lecture some pupils might have different views, but they would take the lectures.

4979. You have had experience of the German Universities, I believe?—You are asking about 20 universities. If you ask me if I know anything about the internal life of one or two, I do.

4980. I will change the form of my question. Has it ever been brought to your notice that the result of the appointment in any German University of professors of decidedly liberal opinions in Theology has led to the black-marking of them, and has led to its being understood that the student who is turned out by this University has not, in fact, an equal chance with others?—In actual practical pastoral life.

4981. Yes?—I do not think so. You see in Germany if a man does not like one teacher he can go to another. They can perambulate from one University to another. Wherever a teacher is able he has a full class. I have seen much more emptiness caused by the quality of the teaching than by the opinions of the professor.

4982. You think there is no difficulty of that sort?—I think not; of course there is a public opinion in Germany that causes men of an extreme kind to withdraw, but if the question is whether a man is blackballed because he has been under one teacher in a University, I think not.

4983. You do not think there has ever been any tendency in that way?—I am afraid the tendency is in human nature.

4984. The tendency I was going to ask about is the tendency for the students in Theology to be withdrawn from a University owing to the views of the leading professors, an alarm having been created that students turned out from this University would have a certain inclination to freedom of thought which was not desirable?—In the Universities that I know such a thing has not existed. I cannot say for all.

4985. (*Mr. Rendall.*) Which Universities do you know?—I know best Bonn, Heidelberg, and Leipsic, especially Heidelberg and Leipsic. Bonn, of course, is more for science than for Theology.

4986. (*Professor Sidgwick.*) Do you think that, if attendance upon University professors or lecturers were required that would create a difficulty?—I cannot answer for all the colleges, but it would make no difference with us. We should be thankful if the teaching was of a high class.

4987. Then you do not think the diversity of opinion on the part of the professor would be a serious obstacle?—I am afraid I never knew four professors who thought exactly alike in the same subject. We do not find it makes any great difference.

4988. If you will allow me, I will return again to the question of the representation of your colleges on the Council. I quite understand your view to be that, supposing the medical colleges are represented as institutions on the plan of the Gresham Charter, you would urge your claim to be represented also in the same way and in the same proportion?—Yes.

4989. But supposing the Gresham Charter should be modified, and suppose it was decided that the medical colleges should only be represented so far as their teachers were members of the faculties, that they should only have faculty representation and not institutional representation; would you then feel it any grievance that your colleges being also colleges in one faculty should in the same way have only faculty representation?—Certainly not. Our great desire is a theological degree. We want the best terms associated with the degree that we can get. We want also fairness as compared with other faculties. That is all we would say.

4990. Supposing the Gresham Charter was modified in the creation of a large University staff somewhat resembling the University staff at Oxford or Cambridge, with professors and University lecturers, do you see any objection to allowing the University or the body representing the University to select lecturers in your colleges giving them the title of University lecturers?—I should think it very desirable.

4991. That is a change you would approve of?—If our college happened to possess professors who were the most eminent in one special subject, it would seem only right that they should be professors in the University.

4992. You would approve of the election of them being made by some external body?—Certainly.

4993. (*Lord Reay.*) You give a distinct preference to the Gresham Charter if you are admitted as constituent colleges?—If the Gresham Charter stands we should like to take our part with it, but if you ask any comparison with others you see one knows nothing of the others. One's judgment upon another scheme depends upon knowing the other scheme.

4994. But you give preference to the new University if composed of institutions with an individual corporate existence?—Preference, certainly.

4995. You would rather have that type than what has been called the Professorial University?—Certainly.

4996. You would prefer a Theological Faculty in which the colleges were represented rather than the foreign system of a Theological Faculty without colleges?—Yes.

4997. If that system of college representation is not accepted, would the alternative be a Theological Faculty constituted by the University itself?—Yes.

4998. I understand you would not view with suspicion theological professors appointed by the Council of the University?—As examiners or as teachers in our walls?

4999. No, as teachers and examiners in the University?—Certainly not.

5000. You would allow the University to teach those theological subjects which might be taught objectively; you would not admit theological subjects of a strictly doctrinal nature?—Strictly doctrinal, but historically treated. I should not like any sectarian teaching whatever.

5001. The difficulty, of course, has been felt elsewhere?—Yes.

5002. Perhaps you are aware how the difficulty has been avoided in Holland?—Yes.

5003. There some theological professors are appointed by Government?—Yes.

5004. But there are other theological professors appointed by the Church?—Yes.

5005. The former teaching those subjects which can be taught in a purely scientific manner, and the latter teaching those in which there is scope for denominational opinions?—I should prefer no denominational teaching whatever.

5006. The denominational teaching in this instance would be given by the college?—Yes. The college looks to denominational teaching purely, but there are broad lines of theology in which all men may be examined quite irrespective of denominational tests.

5007. Therefore you conceive a line of demarcation between the teaching in the colleges and the teaching in the University, in the latter of what you have very properly called the more advanced subjects in which you feel a deficiency exists at present?—Yes.

5008. That is a system which, although you would prefer direct representation of the colleges you consider to be workable?—I much prefer collegiate representation, but we should be thankful for that.

5009. Are not the Theological Faculties in France distinctly Protestant?—That is true, but is not that because the Roman Catholics would have nothing to do with it?

5010. Yes. But as a matter of fact they are Protestant?—Yes. They need not be in essence. It is simply as a matter of fact. In theory they would not be.

5011. What are the faculties in Germany?—They vary. In some Universities you have one faculty in Theology, and in other Universities you have Protestant and Roman Catholic side by side. I imagine that where the teaching is predominatingly Protestant the Catholic teaching is given in seminaries.

5012. But the Protestant and Catholic faculties in German Universities are kept separate?—Yes, all.

5013. Are the faculties in Switzerland the faculties are also Protestant?—Yes, if they are to be called Protestant; I do not know. Would there be no Roman Catholic teachers? I am not sure.

5014. You are not prepared to answer that question?—I am not prepared to answer that question. I should have thought they were without any test at all.

5015. In Belgium they have a Roman Catholic University at Louvain; so there we have another system?—Yes.

5016. With regard to Scotland there has been some confusion. The students of the Theological Faculties at Glasgow and Edinburgh, though not necessarily, are mainly students belonging to the Established Church, because the Free Church and the United Presbyterian Church have their own colleges?—Quite so.

5017. There is nothing to prevent the students of the Free Church and of the United Presbyterian Church attending theological classes in the University and obtaining degrees, but as a matter of fact they naturally would go to their own colleges?—That is the real attitude of things.

5018. And the Church of Scotland has imposed certain regulations on those students who attend the Faculty of Theology in order to enter the ministry. That is so, is it not?—I do not know.

5019. Then you are distinctly of opinion that if there were a Theological Faculty of professors appointed by the University, the students who attended their lectures would not be viewed with suspicion by their co-religionists in afterwards discharging their duties as ministers?—It seems to me that it depends on the men. It would depend very largely on ability, it seems to me. I do not think our council would put any obstacle in the way of attending. It would lie with the students as far as they would care to attend.

5020. One of the advantages which you seek is that your students should mix with the students of other faculties in the University?—Certainly.

5021. (*Professor Sanderson.*) Would it be possible to formulate the limits of Theology as a science, so as to separate from it subjects which you did not wish to include?—I should have thought so, with perfect ease. We have what is called amongst us the theological encyclopædia, that is, the whole range. The difference of opinion would come in in the doctrinal section. I am not aware that it would come in anywhere else.

5022. Would it be possible to formulate the science of Theology as separate from, and not including, the doctrinal subjects?—I am afraid I do not understand.

5023. You propose that in the new University Theology should be included as a scientific subject?—Yes.

5024. I want to know whether it would be possible to define that science by means of lists or schedules of subjects?—Perfectly, I should have thought, just as we have our theological encyclopædic hand books. You have only to select certain subjects.

5025. That cyclopædia is comprehensive, is it not?—Theology is as wide as Arts, Science, or Medicine.

5026. Would it be possible for you to furnish us with a statement of the elements of Theology regarded as a science? I think you stated just now that you did not object to the term science of Theology?—No, certainly not. Theology is a science. It seems to me tautologous to say Science of Theology, because Theology is a science. Theology is the science of religion.

5027. In other sciences you would have no difficulty in defining a list of subjects, Pathology, for instance. Could you do the same with regard to Theology?—Are we using the word in the same sense? I am speaking of the whole range of theological science. The only place where difference of opinion occurs is in the doctrines of Theology, dogmatics.

Rev. Principal Cave, B.A., D.D.

24 June 1892.

5028. I want to know whether you can give us a limitation of the subjects you intended to be included in the examination of the University?—Yes. Do you wish the line of subjects for examination and teaching?

5029. Yes?—We begin with the philosophical connexions of Theology. Then we should pass on to some knowledge of heathen systems, which would be comparative Theology. Then distinctly Old Testament and New Testament study, which involves Hebrew and New Testament Greek and involves a wide range of study. The study of the Bible is no easy matter. Then we pass on to the whole range and circle of historical studies: the history of the Church, the history of doctrine, of practice, of creeds. There it seems to me our subjects would end.

5030. (*Sir George Humphry.*) May I ask whether you would require the students who present themselves for the examinations and degrees in Theology to have attended the lectures or to have been educated at any particular school or college?—I do not know that I quite understand.

5031. Would you require them to bring certificates of having attended the lectures at any particular college?—That seems incidental to the scheme. If the scheme is that of the Gresham University they would, of course, bring certificates of attendance at the class or college. If the scheme is wider there is no need. They present themselves with adequate knowledge in certain subjects.

5032. It might be that the University would be open to students all through the country and all through the empire?—Yes.

5033. And therefore you would not require the students to have been educated at any particular college or in any particular way?—You mean supposing the system of the London University was adopted, then no certificate would be required. At present a certificate is required of good conduct, not of residence, but of good conduct.

5034. Not of attendance at any particular course of lectures?—If the London University system was adopted we should fall in with that.

5035. As an open University?—At present nearly all our students who graduate have to go to London University.

5036. Open to all students as well as very open as regards subjects?—I should prefer a University with constituent colleges.

5037. Then you would require attendance on those Colleges?—To certain lectures in subjects. I do not know that it means in individual subjects; but one would require a certificate that a man had attended a certain number of lectures in recognised colleges. There might be inter-collegiate lecturing, which would be a great advantage, and a man at one college might attend another college, and thereby get a qualification.

5038. Would you require certificates?—If the University only granted degrees to the students of constituent colleges it seems to me to be involved.

5039. If it granted degrees on a wider basis they would not be required?—No; if it granted degrees on a wider basis they would not be required. As I have said again and again, we should prefer this system of the Gresham University, but we would take the other. Our students, that is to say, would apply for any degree that is open to them.

5040. (*Bishop Barry.*) May I ask whether you think the establishment of a Theological Faculty would be more easy in a University constructed on the general lines, with modifications, of the Gresham Charter, or a University constructed on the lines, with whatever modification, of the University of London?—It seems to me much more easy on the Gresham lines.

5041. Can you tell me what has been the experience of that examination in the text of Scripture which is conducted by the University of London. Has it proved effective?—Do you mean as drawing candidates?

5042. Yes?—Our students do not care to present themselves for it.

5043. As a matter of fact, is it not attended by a very small number?—Very small, I should think.

Rev. Principal Cave, B.A., D.D.

24 June 1892.

5044. From all colleges put together; from the public?—Precisely. There is no interest in the examination to our students. A student who had the alternative of presenting himself with a certain amount of labour for the London Scriptural Examination which involves a prior B.A., or for the St. Andrew's B.D., would certainly select the St. Andrew's B.D.

5045. You say you have no fear of professors being appointed by the governing body. In such a case, would you contemplate the attendance being compulsory or a matter of choice?—Matter of choice.

5046. (*Mr. Anstie.*) There was a question put to you by Lord Reay, the answer to which I am not quite sure I understood. It was with regard to whether you would be willing to accept the appointment of a Theological Professoriate by the University, and I understand you to say that you would?—Of course, there is a Theological Professoriate in the colleges appointed by the colleges, but the University Professoriate might be appointed surely by the Council.

5047. Would you be content that the University Professors should be appointed by the University, and by the University alone?—As between the University and the colleges, or between the University and the State?

5048. Between the University and the colleges?—Yes.

5049. Would the consequence of that be the limiting the collegiate teaching to what may be called denominational purposes?—I do not think so.

5050. Would not that be the consequence? Where is it your idea that these University theological lectures should be delivered?—London is a large place of course.

5051. Would it be possible to have the University theological lectures delivered at those colleges, or would you require some central place where they could be attended by all?—I do not see any difference in either scheme. It would be better, perhaps, that the lectures should be given in a few centres. Do you mean would our colleges be any obstacle in the way?

5052. I want your opinion as to what would be the convenient course?—I think it better that they should be in centres in so large a place as London.

5053. Would those centres be, in your view, some of those constituent colleges you refer to?—It would not matter. It is purely a matter of detail.

5054. Not quite. So far as you have a University Professoriate dealing with those matters which you would think fit for University examination, it would seem naturally to tend to withdraw those subjects from collegiate instruction?—If such a subject as Hebrew were taught by a University professor I think it would be a great advantage.

5055. You could not stop at Hebrew, because I am supposing that the whole range of subjects which you would think proper to be made a matter of University examination in theology should be in the hands of University professors, and be provided for by a University Professoriate. Would not that have the effect of withdrawing the colleges from all but denominational teaching?—I do not think so. It seems to me from my experience as a teacher, that if you have two classes of work, tutorial work and professorial work, which are different things, the tutorial work must still go on in our colleges. The professorial work is of a higher grade, and we should be thankful that our students should avail themselves of it.

5056. You would not in that case desire that any of the collegiate staff should be represented on the University Faculty?—I do not see why it should be so. A professor may be doing both works. He may have a certain amount of drill work, which is really tutorial work, and he may also have another subject which he may prefer to give to a different class from elementary students.

5057. I am not saying that a man teaching at a college should be excluded from the University Professoriate, but that the University work should be divorced, as it were, from the collegiate work?—There would be certain work done in the colleges and certain work done by the professorial staff of the University. It would be to the advantage, it seems to me, of theological education that that higher work should be open to all the students who have done other work in our colleges.

5058. (*Professor Sidgwick.*) May I ask one question, because I was not quite sure as to the answer that you gave? I asked you if you would object to having attendance on professorial lectures made compulsory, and I thought in answering me that you said you would not object?—Again, I am afraid I have got a little confused between the college and the University. If you ask that every student in our college should attend compulsorily certain professorial lectures I say no, we could not do so; but if every student who is to present himself for a degree is to attend compulsorily certain professional lectures, as I say, I see no objection to compulsion.

5059. Then with regard to the representation on the Faculty: I did not quite understand from your answer whether supposing there was a University professoriate, and thereby a distinction drawn between professorial work and the ordinary tutorial work of the college, you would still think it desirable that those who were doing tutorial as distinct from professorial work, still being members of the Faculty, could elect members of the Board of Studies and be eligible to representation on the Council?—It seems to me that the closer the relation between the college and the University the better, and I do not see how that close relationship is to be kept up unless the teachers have some voice in the matter—I mean the teachers in the colleges as distinct from the teachers in the University.

5060. Suppose, however, the plan were adopted of having a full University staff, but that a considerable portion of it is made up of lecturers who would, as a matter of fact, be lecturers in the colleges, though they would receive the appointment of University lecturer from the University; do you conceive that there would be any objection to limit the representation on the Board of Studies and on the Council to membership of the Faculty to those who receive from the University the stamp and title of being University lecturers?—In presenting themselves for examination, you mean?

5061. No?—As giving certificates?

5062. I mean as teachers—that they alone should be held to constitute the Faculty of Theology—that, in fact, the University itself, and not the colleges, should determine who was a member of the Faculty?—I have not considered the point. I really could not say.

The witness withdrew.

Rev. Principal Angus, D.D.

The Rev. Principal Angus, D.D., examined.

5063. (*Chairman.*) You heard the evidence of the last witness?—Yes.

5064. Do you agree with it?—Substantially.

5065. Then we may, perhaps, go at once to the parts in which you differ. Is there anything you would like to state?—The one point upon which I have some doubt is, whether our colleges would, as colleges, accept the theological teaching from the University in the sense that they have the right to come and teach there. If the Universities were to start classes dealing with the evidences or doctrines or history of Christianity I have no doubt that would be used by individual students of our colleges; but I doubt very much whether it would be practical to organise formal teaching in each college, one after another, as part of the University. That is a point upon which I have some doubt.

5066. The Gresham scheme is the only one which would work out the plan you would approve of, is it—that the colleges should continue to be autonomous and regulate their own teaching, and be affiliated to the University and have a share in determining? It could not be worked by a professorial University in which all the teachers are appointed by the University body?—I think there would be difficulties in the last suggestion I must say.

5067. But you agree there is such a thing as unsectarian theology, and that it can be taught with advantage?—Yes.

5068. You would admit that any colleges which had a sufficient number of students, and which were sufficiently well organised, any theological colleges of that kind might be affiliated to the University?—Quite

5069. Not only the Nonconformist colleges, but, for instance, to take an extreme case, you would feel that a Jewish or Mahomedan college might be affiliated to the University. Would you or not?—I should feel no difficulty in admitting any Christian sect.

5070. But you think they must be Christian?—I do not see how a Mahomedan can come and be examined in Christian subjects. If a Mahomedan likes to come I do not object to examining him, of course.

5071. But not a Mahomedan college?—They begin with the rejection of Christianity, practically.

5072. Then you would not agree to that?—I should not agree to that.

5073. There must be a test of some sort you think. Any college who wished to be affiliated must be distinctly Christian; is that the way you put it?—I should not quite put it that way. I do not object to a Mahomedan being examined in theology if he pleases, but it must not be done *quâ* Mahomedan.

5074. We are not talking of an individual, but we are talking of a college. I do not know that there is likely to be at any time a Mahomedan college in London. But take an extreme case; take a Jewish college. I suppose they have a system which they believe to be theology, and they might claim on that ground to be affiliated to the University. The only way to shut that out would be to have a test. Would not that be the case?—I do not understand that anyone is pressing for the examination of Mahomedans in Mahomedism.

5075. I am talking at this moment of colleges. You would have to have a test that any college which desired to be affiliated to the University must be a Christian college?—Well, it is practically in that form.

5076. With regard to individuals I suppose you would not find it necessary to have any test at all, except that as the Gresham scheme now stands they must have received their education in some college connected with the University?—I wish to say a word or two, if I may be allowed, on what is closely connected with our work. Our difficulty is to get men of decent secondary education before we can train them as ministers, and London is one of the most defective cities in the world, I suppose, for secondary education. We have 800,000 pupils in board schools. We have a very large number of young men who have been at private schools, and they are very ineffectively trained for any department of life, either business or literature, and there is no connecting link in London accessible for connecting the choice men of these 800,000 with University life. I think it would be a noble thing if this teaching University would superintend not only at the centres but at the extreme circumference of London all educational institutions that profess to make it their desire to train men for University education, to fit them for it. It is the one great need. If our colleges were in Nottingham we should be within reach of the central University College, and it would be easy to find preliminary training to fit men for it.

5077. Would you give the central body any power in the appointment of teachers?—That I do not know, but I believe that if this new movement could take up work of that sort there would be large financial help put at their disposal, and above all the innumerable inferior institutions that are springing up on all sides would have for a year or two system and energy and power given to them, and that would make these institutions the best feeder of all for University education.

5078. You think that the central body would infuse life?—No doubt it would make one of the greatest changes of all modern times.

5079. But to do that it must have some power of interfering in your internal concerns, must it not?—I should allow a large amount of liberty on their part with regard to that, and our theological institutions would gain immensely. On the present system young men in London who want to be ministers either go immediately to business at the age of 15 or 16, and by the time they come to us they have lost everything, or they get no secondary education at all. That is disastrous. When they come to us they have forgotten all their Greek and a good deal of their mathematics, and we have to begin *de novo*. That is the great evil I think in our present modern system.

5080. To return to theology. Though I suppose a man may be examined in an unsectarian manner, would it be easy to learn theology in an unsectarian manner. That would be very difficult, would it not?—It is difficult on paper I should say, and at first sight, that is to say, if you learn theological views with your education. Certainly if you are a churchman you have done so. If you are a Wesleyan you have done so. If you are an ordinary Nonconformist you have done so. But there is a system that ought to be mastered in all cases.

5081. But would not theology be better learnt in connexion with a definite creed?—Yes.

5083. Therefore the teaching ought to be done in distinct colleges?—Yes.

5084. The examination carried on on unsectarian principles?—Yes, on the great truths. I do not think there is any practical difficulty in it.

5085. (*Lord Reay.*) May I ask whether you would object to a University with which the colleges would be affiliated making attendance at University lectures obligatory for students who were seeking a University degree?—I should expect to keep ourselves free to supplement the central teaching in each case. I should rejoice in it as a distinct thing, but not to interfere with the internal management of the individual colleges themselves.

5086. May I ask you just to glance at this curriculum of the Theological Faculty of Leyden (*handing same to the witness*) and to inform us whether there are any subjects to which you would object?—I do not think there is anything here to which I should object.

5087. You think all those subjects could be taught without raising difficulties?—Certainly; I might scruple at one or two of the names, but that is another thing. I am quite certain that there is a large field which is fit for lecturing, and which ought to be mastered by ministers.

5088. Do any of the Nonconformist ministers at present obtain degrees either at Scotch Universities or at Universities abroad, because they cannot obtain them in England?—There are no divinity degrees obtainable here. I do not think our ministers try and obtain them. When they attain eminence they get them. They are really free gifts if they are obtained at all. They are not satisfactory because they are honorary, and they do not stimulate education at all. The degree does not follow the learning; but the public standing of the man, which is quite another thing.

5089. You would prefer a Theological Faculty giving supplementary teaching to that given in the colleges, and the latter to be recognised by the University?—I should prefer it to be supplemental in that way.

5090. You would prefer that to the other system in which the University would not recognise the colleges at all, but would have a faculty of its own in which attendance could be made compulsory?—I should prefer it to be supplementary in that way.

5091. Supposing this principle were adopted of the colleges as constituent factors of the University, would you allow the University to recognise the teaching of certain individual teachers in the colleges, as University professors?—I should not personally object to it, but I should prefer some test of the colleges by the result of the examination.

5092. My question refers to teaching, not to examinations. Let us take this case, the University might say with regard to one of your colleges that its teaching was so efficient that it would send University students to attend the college lectures. How would you view such a proposal?—I should not personally object to it. It is practically what is done in the case of Arts. That is to say, I should not object to the application of that test to Arts teaching. I think that is one of the mistakes in the University of London, that they collect the affiliated institutions and take no pains to ascertain whether the teaching is effective or not.

5093. Therefore you would have no objection whatever to the University taking some pains to ascertain the nature of the education given in the colleges?—None, or to the competency of the teachers.

5094. Is it not a fact for secondary education that there is better provision in London through the High Schools for girls than there is for boys?—Undoubtedly.

5095. And there is a great need for similar institutions for boys. Would you consider it desirable that those institutions to be supervised by the University eventually?—I certainly should; and especially in the case of the class below those for whom these schools are provided. They are generally well to do people

Rev. Principal Angus, D.D.

24 June 1892.

who send their children there, whereas what we want also is efficient education for the boys who come from our board schools, and from private schools where there is less property on the part of their parents.

5096. In fact, secondary education similar to that given in Germany and somewhat at the same cheap rate?—I do not think it is as good here as there.

5097. You wish that to be organised?—That is what I want in the interests of the University, as well as in the interests of our theological institutions.

5098. You think the influence it would exercise on the higher teaching all important?—It is the foundation of it, practically.

5099. The foundation of an efficient University is the education that is previously given to those who are to attend it?—Yes; and I think it is a thing that is needed. There are hundreds of thousands children in London out of whom 10,000 or 20,000 ought to repay a better education. It would be extravagant to do it for the 800,000 board school children, but if you get the picked boys from that set, we should have capital schools for commerce and for learning, and the University itself would all benefit by the arrangement.

5100. You have no objection whatever to the University appointing professors and lecturers in the Theological Faculty?—No, I should have no objection to that, certainly.

5101. (*Professor Sidgwick.*) Do you share the views that have been expressed with regard to the relation between Theological colleges and the University. I mean, do you think that it would be enough if they were represented merely as faculties, or do you require a representation of them as institutions on the government of the University?—I do not quite follow the question. Would you favour me with it again.

5102. It is with regard to the mode in which the colleges should have a control over the organisation and administration of the University. Do you attach any importance to any particular mode of control?—I think the safest thing would be to put a fair proportion of representatives of the colleges on the larger body.

5103. On the Council of the University?—Yes. It seems to me that something of that sort is absolutely essential to keep it in touch with these different institutions. I have seen endless mischief from the non-connexion of the existing affiliated colleges and the old University of London with its alienation of feeling, misunderstanding, and so on, and, above all, no interest taken on the part of the University in the condition of the colleges themselves.

5104. I think we are all agreed that there should be some connexion. My questions refer rather to the precise mode of connexion, that is, as to whether the mode of connexion should be by the representation of the teachers in the colleges as members of a Theological Faculty, or whether you think it fundamentally important that colleges as institutions should be recognised on the governing body of the University. I may say that I ask partly because, in our system at Oxford and Cambridge, we have certain elements of the two modes. We can conceive either being adopted. There is partly a representation of professors, and there is a certain representation of colleges through their heads. What I was asking is, whether you attach any particular importance to the precise mode of connexion so long as there is some sort of connexion?—I should strengthen the connexion through the representation of the colleges on the Council.

5105. You think the colleges should be represented as institutions?—Yes, as institutions, just as would practically be done, I presume, with King's College and University College.

5106. The difficulty I feel is, that the Council may become unwieldy. It is agreed that the faculties should have an important representation. You will have seen that it is proposed in the Gresham scheme that each of the four faculties shall have four members. If the Theological Faculty is also established it would probably have four; therefore there would be 20 members on the Council of the University, who would represent teachers, as arranged in faculties, without any regard to the institutions. If, besides that, representation were required for institutions the Council would be liable to become extremely large?——Yes.

5107. It would become an unwieldy body precisely through this two-fold representation of faculties as such and of institutions as such. Therefore, the object of my question was to ascertain how far you attach great importance to this two-fold representation?—I think we should all prefer to have some such scheme as has been suggested by King's College, namely, that there should be a certain number from these colleges put upon the Council itself.

5108. Over and above the representation of the faculties?—Yes.

5109. Now one more point. I did not quite understand how you think a University ought to act with regard to secondary education. Of course the obvious mode in which the University can act upon the secondary education is by establishing a good matriculation examination, but it is at first sight travelling beyond the province of the University to go behind that examination and supervise the teaching of boys before they come to the University. Is it that that you would rather prefer?—I think that last is required in the present state of education.

5110. And how do you think the University ought to deal with that; in what way?—By helping and encouraging schools for secondary education?

5111. Yes?—That is a very complex question indeed; and a very difficult question.

5112. Can you give me any instance of a University having tried to act upon secondary education otherwise than by instituting examinations?—I should like to give them control over the teachers of the secondary schools. When you come to deal with bodies like ours, which are supported by subscribers and ministers and others acting in a public capacity, it is extremely difficult for any outsider to come in and interfere, but if you are starting the schools in order to prepare these boys for all the colleges, and also to prepare them better for business the case becomes easier. I think it is demonstrable that if you were to secure good teaching in four or five branches which are available for degree work—secure it partly by funds put at your disposal, and partly by general influence—the effect would be that you would increase the money efficiency for business purposes of all you trained there, and prepare men to take the degree itself. A modern language, mechanics and mathematics, and even Latin would simply have a money value for young men of business; and they would all be available in supplying material for degrees.

5113. Still, are you not proposing that the University should undertake a function quite unlike that which any University in the civilised world has ever tried to undertake?—You have the analogous practice I think in the University extension scheme of the two older Universities, only that instead of lecturing, which I think is very often profitless, I want this University to take the teaching and guide and control it. If you would do with regard to secondary education what the Universities are doing by ministering to taste in part there would be a grand field open to us.

5114. I think you said, in answer to Lord Reay, that the provision for education of girls in London was really superior to that for boys?—Yes, there is no doubt about it.

5115. Why have not high schools for boys been established by an independent organisation in the same ways as high schools for girls have? Is not the success of the latter *primâ facie* proof that an independent voluntary organisation can do the work?—The difficulty a father has when he has sons to bring up is that they are called away to business. The girls have no such call. If it is a question of the boy's education the father says at once: "He must be in business by 16 or 17." Give him evening classes, and in two or three years you will find men coming to King's College and other institutions. The boy has a money value and the parent is too uncertain of the result of giving him a good education to spend the money on him. If you could give them good education many of them would turn out professional men, and all would be more intelligent as men of business.

5116. (*Mr. Rendall.*) For the elevation of London education I think you say you desiderate central control as the great need of the metropolis?—Yes.

5117. But you seem to shrink from that in the sphere of theology, or rather you would limit it there to a voice in control of the preliminary teaching?—Yes.

5118. You say it would be difficult to interfere with your colleges. Can you tell me what are the special difficulties?—First of all as compared with what I have been suggesting we do not take into our institution boys at all. We do not bring men up to the ministry as a profession. We wait in point of fact until they are 17, 18, 19, or 20.

5119. What difficulty do you apprehend with regard to University recognition?—The difficulty is chiefly here that all the expense of our theological education is met by our friends.

5120. That is so with other institutions. It is so with schools?—Well, scarcely.

5121. The expense is met by the governing bodies?—Nearly every boy has his school fees to pay.

5122. So I presume have your students?—No.

5123. You make a difference in there being a large number of free students?—We make a difference so far as their board is concerned. Our tuition is provided absolutely by our churches.

5124. Why should not the University recognise, either accepting or refusing certain courses of lectures, that is to say, approving the syllabus, the scope of the course, the length of the course, and such details. What objections would you have to the University exercising such control?—If the University will establish lectures and not make them compulsory I should see no difficulty; nor in the general approval of the syllabus of studies, so as to include all subjects of examination.

5125. But why should it not approve or reject the lectures in your own institution? If the University does not so direct or control, how could it tend to cure the evil that you have spoken of as infecting institutions?—Its business, I think, should be supplementary simply.

5126. But its business would be nothing in regard to your institution as I understand—nothing tangible?—If you provide good lectures we should use them beyond any question.

5127. But you would not have any interference or supervision of your own lectures?—Except in judging results or accepting our testimony of the character of the men.

5128. Then if you give no control and no direction, why should you claim representation? It is asking that you should have representation on the University and it is giving the University no power of direction or control?—Do you claim that control in medicine, for example?

5129. I should, certainly?—Accepting by testing results.

5130. As far as I know in all medical schools the course is laid down and approved by Universities and if departed from would not be accepted. That is so even at the London University?—That kind of control would be acceptable enough. I thought you rather meant the control of examining our tutors, and so on, stopping this, and insisting upon that. If you tell us what the course you examine upon is, we should be prepared to accept that no doubt, but we have a number of things—preaching, for example. You cannot control that.

5131. Speaking of the more scientific studies, would you submit syllabuses to a board of the University?—Certainly.

5132. For acceptance or rejection?—Certainly; or any suggestions they have to make.

5133. Would you go that far?—Yes. What I was thinking was that you would come in and regulate our mode of arrangement which cannot be done with advantage. It cannot be done even in public schools with advantage.

5134. (*Mr. Anstie.*) We have been going over a rather wide field. I will venture to ask you whether you have not been an examiner yourself in the University of London?—Yes.

5135. You have had considerable experience?—Yes.

5136. Should I be warranted by the answers you have just given in suggesting that if you have a series of examinations which are wholly disconnected with teaching very great difficulty arises in the conduct of them?—Well, I should hardly put it so. I should say that the best examiner of any class is the man that teaches, but any man who knows his business and the literature of any subject finds it quite an easy thing to examine fairly a large number of men whom he has never seen before, all of whom have been taught possibly from different text books. But if taught properly an examiner ascertains and reports on the fact without any difficulty at all.

5137. Would that be possible in your judgment to a man who was not himself a teacher?—I think he needs to understand teaching, but if he masters his subject he is as competent to tell whether a paper is satisfactory as if he had only one view and the answer gave his view, he says immediately "There are different "views upon that particular point."

5138. Assuming a University to exist such as is proposed by this Charter, and by similar schemes, upon the basis of a close connexion between teaching and examination, would any difficulty exist in your judgment in the University conducting a fair and impartial examination of external students?—I think there would be no difficulty in examining external students, no serious difficulty.

5139. You think that could be done with a due regard to the fact that the candidates had not been trained in any one of the particular institutions connected with the University?—Quite so.

The witness withdrew.

The Rev. Professor J. Agar Beet, D.D., examined.

5140. (*Chairman.*) You, I believe, belong to the Wesleyan College, Richmond?—Yes.

5141. You have heard the evidence that has been given by the two preceding witnesses?—Yes.

5142. Do you agree with it and corroborate it?—I agree almost entirely with the evidence of Dr. Cave, either entirely or almost, I am not quite sure.

5143. And with the same wish that he expressed and that has been expressed by the colleges as regards founding a Theological Faculty?—Yes.

5144. And with regard to the part the colleges are to have in it?—Yes.

5145. I will not ask you to go over any ground that has been gone over before, but I should be glad to hear anything that you think has been omitted?—I should like to say that I think we should accept the mere affiliation without control if we could get no more. If we could get no more I think we should be glad to send up our students to be examined by this special University. But we think we might fairly ask for a certain control, such as Dr. Cave has wished, and although we would accept the one we should accept the other with a much greater readiness, and we think it would serve the interests of knowledge. That is the chief thing I wish to say.

5146. The Gresham University you would like to be on the same conditions as these other colleges with regard to this one faculty?—Yes, but if that could not be done we should still be glad to send up our students to be examined.

5147. If there was a Professorial University would you like to be joined to that—one which would gradually tend to absorb them. I suppose that would not meet your views?—Personally I should not object to that to a certain extent. I should have no objection to University professors, and it seems to me that the tendency of such would be the gradual absorption of certain departments of theological teaching; but I think that would come about only gradually.

5148. That would gradually have the effect of making your colleges altogether unsectarian. You would not approve of that, would you?—I think not. I think there are topics that must be treated in a sectarian way. It would tend to limit our teaching to those topics that were peculiar to our own Church. Many topics that are common to all I think would be gradually absorbed by the University professors, but I

Rev. Prof. J. A. Beet, D.D.

24 June 1892.

only look upon that as an ultimate tendency of the movement immediately before us. We are not directly asking for that.

5149. You think you might be absorbed, and yet the University would continue to give instruction in your particular views. That would hardly happen, would it?—No. There are departments in our work that must be given at our college because they pertain peculiarly to the work of the Christian pastor.

5150. Therefore you must continue autonomous?—We must continue autonomous, but there are other subjects, with regard to which I think we should not object to send our students if the thing were done gradually and safely.

5151. At any rate, you give up a great deal of power to the central authority, and you would be assisted and directed by them?—Yes, but we do not ask for that.

5152. What you would prefer would be to come in under the Gresham scheme, as you have set forth?—Yes.

5153. Is there any other point you wish to lay before us?—I ask that Theological Science may be recognised in the Gresham University as a department of human knowledge. It seems to me that there is a great deal that comes in with Theological Science which is dealt with in a thoroughly effective way. It is an important part of human knowledge, and I think it ought to be recognised in a great University. Therefore I ask for a Faculty of Theology or Theological Science. I also think the stimulus to our men would be very good, and therefore I ask that they may be admitted on most favourable terms to this University on matters of Theological Science

5154. (*Mr. Anstie.*) I take it that you distinctly prefer for a Theological Faculty to the creation of a special and distinct body conducting examinations and conferring distinctions in respect of theological knowledge upon those who have already proved their possession of a general education by a University degree. There are those two modes of dealing with the matter?—Yes, I would accept either. I would prefer the former.

5155. (*Rev. Canon Browne.*) Have you paid much attention to examining, yourself?—I have been examiner on the *Senatus Academicus* of the associated theological colleges to which reference has been made. That is the only examination work that I have done outside my own church.

5156. That is the kind I should be glad to hear about. We have been saying that it would be easier to have a central examining body than a central teaching body in theology, with which I may say I entirely agree?—Yes.

5157. It is not well for us to minimise the difficulties, as we really have to face the question. The subject of church history has been mentioned as a subject that could be lectured upon centrally and examined upon centrally. I should like to know, from your point of view as an experienced examiner, what you would say was the duty of the examiner with regard to a question that I have put down here: "Examine the evidence "on the question of two or three orders in the ministry "from the year 125 A.D." That would be a fair question in church history?—Yes.

5158. The examiner is bound, he has a moral duty as a fair minded man to give full marks for a satisfactory answer to that question which ever way the candidate sums up?—That is my view.

5159. And you cannot doubt that it is perfectly easy to find an examining body that would give effect to that principle?—I think so.

5160. And you yourself would have confidence that there would be fair play for your students?—Yes.

5161. For instance, in examining on French history, taking the special period of the revolution, I am giving, and I think you would approve of my giving, full marks for a good answer from a tearing revolutionist or an ardent royalist?—Yes.

5162. That would be carried out in the theological examinations, you have perfect confidence?—Yes; I have perfect confidence that that would be carried out.

5163. Now take another subject, political economy. I have heard a distinguished commissioner who has left the room, examining in political economy, ask the question, "Is there any connexion between the price "of a partridge and the wages of a policeman." I asked him was the answer "Yes" or "No." He replied that he would give full marks for either answer well supported. Is that your view?—That is my view.

5164. That being so you see no difficulty in examining?—Would you allow me to say that on the *Senatus Academicus* to which reference has been made, we have had candidates from various churches with various ideas on a great many subjects. No practical difficulty has yet been found. There has been perfect confidence. The examiners have been from all churches, some have been Anglicans, they have been from all English churches, and I say that so far as I know no difficulty has yet arisen.

5165. (*Lord Reay.*) With regard to the last questions that have been put to you, you would not be satisfied merely with the constitution of a Board of Examiners. Your object in coming here is to show that a University is not complete which lacks a Theological Faculty?—That is so.

5166. You plead for theological education in a more advanced sense?—Yes; but we ask first for that which is most easy to get. Therefore we ask first that our students may be examined, believing that if this University be constituted, it will go a great deal further than that.

5167. But it is an entirely different system. The London University is an examining University?—Yes.

5168. The University which this Commission has been appointed to organise is a teaching University. The two systems are entirely different?—They are. But our college at Richmond is already a teaching institution. We should like it, if possible, to be affiliated to the Gresham University. There would be collegiate teaching, of course, of theology in the Gresham University. We should like to go further than that, but how much further, events would have to show us.

5169. What you wish is that theological education now given in the colleges should be supplemented by University lectures in the more advanced theological section. That is the great blank which at present exists in theological education in London?—We should like that; but in addition, we should like our own men to be examined by University authorities. We should like both.

5170. But you advocate the establishment of a Theological Faculty in the new University in order that it may teach?—But our first object in that is that the Theological Faculty shall examine our students. We think it will go further, but we ask for a Theological Faculty in order that, in the first place, they may examine the students who have been already taught in the existing colleges, and we think it would lead further to professorial teaching.

5171. Then there is a considerable difference between your view and Dr. Cave's, with whom I understood you agreed. Dr. Cave laid great stress on the necessity of having higher theological teaching. You now lay stress upon examination, which is a different aim?—My opinion from private conversation with Dr. Cave is that his first point like mine (the immediate point, I do not say the most important point) is for the examination, but we feel that if that were granted and a University formed the other would follow.

5172. You are aware that the object of this University is not chiefly to give degrees?—Yes.

5173. The object of the new University is to improve the teaching, and consequently to make it easier for students to obtain degrees implying a high scientific standing. You accept that?—Yes.

5174. You find no difficulty in drawing the line between the subjects for the scientific lectures which will be taught at the University and the doctrinal subjects reserved for the colleges?—No.

5175. And in answer to the Chairman, I understood you to say that you looked forward to the time when the scientific subjects would be absorbed by the University, and the colleges would undertake the professorial subjects—Yes, but in addition to the professorial lectures there is yet a sort of college drill even in the subjects with which the University lectures will deal. There is a drill at the college which would be very important for the education of our students.

5176. You mean the tutorial side?—Yes, but it is important.

5177. And you would have no objection to the appointment by the Council of the University of the teachers in the University, the theological professors?—Certainly not.

5178. Without any reference to the views they might hold?—Yes, by University professors you mean the men who would lecture at the University?

5179. Yes. Of course the University cannot accept the control of bodies over which it has no control itself. It is a question of reciprocity. You would therefore accept University control which did not interfere with your own liberty as long as your teaching was efficient?—It seems to me that none at our college ought to have any control in the Gresham University unless he himself has been accepted as a competent teacher by the Gresham University.

5180. Then all you ask for is that in the Gresham University some control should be given to those teachers of the Theological Colleges who had previously obtained recognition from the University?—Exactly.

(*The Witness.*) In order to guard against any misunderstanding I should like to say that I have no thought of our colleges being absorbed by the University; that there is specific work to be done that can be done only by the continued maintenance of these Theological Colleges. All I mean is that if there is effective professional teaching instituted by the University that will make it the less important that on those subjects there should be separate teaching colleges, and gradually we should be able to give up some part of our work to the professorial work instituted by the University. That is all that I meant. I strongly hold that we must maintain our colleges. We need them for other reasons. Then I want to guard against another mistake. We could not allow the University to suggest teachers in our colleges; we must hold perfect freedom in that. But I said this: only those teachers whom we chose should be recognised by the University whom the University approved. We cannot give the University the first choice of the teachers, but naturally unless they are approved and recognised by the University we could not expect them to be recognised. That is all I meant by that. I hold fast by Article 25, where these words occur: "A college in the University shall not in any "way be under the jurisdiction or control of the "Council, except as regards the regulations for the "duration and nature of the studies to be required of "the students of the college as a qualification for "University degrees or distinctions." Nothing that I have said is meant to contradict what I find in this draft Charter.

Rev. Prof. J. A. Beet, D.D.

24 June 1892.

The witness withdrew.

The Rev. Principal Vaughan Pryce, M.A., LL.B., examined.

Rev. Principal V. Pryce, M.A., LL.B.

5181. (*Chairman.*) You have heard the evidence of the other witnesses?—Yes.

5182. Do you concur with it?—I concur with Dr. Cave's evidence so far as I heard it, almost completely, that is, I think, completely; and with Professor Agar Beet so far as I understood him. I do not think I have anything to communicate to the Commission beyond what has already been said. My own notice and feeling in coming here I may perhaps be allowed to express in two sentences. Of course there is the smaller reason, namely, that we Nonconformists in England are unable to procure a Divinity degree in our own native land which we think to be an undesirable state of things to continue. The other point, and with me I confess the principal point, is that if a new teaching University is to be started for London, where it appears to all of us there is a very great need, it could hardly be a University in the true and complete sense of the term without the Faculty of Theology being in some way recognised. I confess I should be better pleased with the system which could incorporate the colleges of London if that were possible, not necessarily recognising all their teaching staff, but recognising such of their teaching staff as the University approved; and the University laying down to them certain courses of studies which they must pursue. That would leave us free to do our work in other ways.

5183. You would wish to be joined to the University in such a way as that your teachers should have some voice in settling the curricula and the examinations?—Yes.

5184. And the way in which they are to be conducted?—Yes.

5185. In fact, the Gresham scheme approves itself to you as the simplest manner in which that can be done?—Yes, I have been carefully through that, and I think, on the whole, it strikes me as satisfactory. I have nothing further that I desire to say. I am willing to answer any questions that may be put.

5186. (*Professor Sidgwick.*) I should like to ask with regard to teaching. As I understand you approve of the Gresham scheme by which the teachers, though organised into faculties for the purpose of the University administration, are themselves entirely appointed by the colleges. The University has no voice in the appointment?—In the appointment of the teachers in the colleges?

5187. Yes. Do you approve of that position?—Yes, I prefer that position.

5188. As I understand, you would not object if it was thought desirable to institute over and above the college teachers a University professoriate?—Not at all, and if the University chose to ordain that, say, in certain subjects every graduating student must attend certain University lectures, I should see no objection to that at all.

5189. Suppose it was proposed, besides outside professors, to select certain teachers in the colleges, to make them University readers and lecturers, do you see any objection to the arrangement?—Not at all.

5190. Would there be any difficulty if that were done, in the admission of students from other colleges to attend their lectures?—I think not. In our colleges I think mostly the class-rooms are open to any student who chooses to enter as a visitor. If he wants to enter for a continuance he would have to get permission, but they are all open.

5191. As I understand, you attach importance not merely to the opening of the examinations, which, of course, a mere examining body like London University could do, but you think it would be of real value to have a teaching body in London with University rank and University organisation?—That is distinctly my opinion. Of course, if we wanted simply an examining body, we should approach the University of London, of which we most of us are graduates. But our hope is that this scheme may institute a teaching University which shall recognise the Theological Faculty, and which would place it on exactly the same basis as that on which they place the medical schools.

5192. Then with regard to the question of the mode of representation, you may have heard the questions I put?—Yes.

5193. Do you attach any importance to what I may call the institutional representation as distinguished from the Faculty representation?—I think there is an importance about the institutional representation. As to the extent of it, it is quite another question; but I think the more closely a teaching University could link the theological colleges of which I speak now, to the University, the more likely it would be to be a prosperous University in that direction. I should have thought that any tie that would bind the colleges to the University would be a very great advantage to the University as well as to the colleges.

5194. Suppose the difficulty I put was taken into consideration, that if you have adequate representation of Faculties, the Council might be too large a body if all the institutions required representation?—I think I should be disposed to say that it was fundamental so far forth as this, that one Faculty ought not to be placed in a different relation with the University from the rest. In no other sense.

5195. (*Lord Reay.*) You accept as the result of your institutional representation on the Council of the University, the result of the reciprocal action of the University and the colleges within certain limits?—Certainly; I beg your pardon, that means that the

Rev. Principal V. Pryce, M.A., LL.B.

24 June 1892.

University would dictate the line of study that had to be taken.

5196. Not, of course, touching in any way the doctrinal part?—I see no difficulty.

5197. You would accept that?—Yes.

5198-9. Therefore, the more close the link with the governing body of the University the better?

(*Rev. Canon Browne.*) Do you really mean that the University might lay down, however broadly, rules as to what you should teach, or rules as to what your students must be expected to know.

I should raise no objection, probably we should raise no objection to the University laying down the syllabus of study.

5200. Your students must show knowledge over a certain area?—I understood your question to go further. I understood you to ask me whether we should consent that a syllabus should be gone through by our collegiate professors, and that the students should be required to attend that or a similar one elsewhere.

5201. But not to treat that as an exclusive and an exhaustive syllabus?—No, it would not be that; we are bound to reach other subjects.

5202. (*Sir William Savory.*) When you speak of the London University you speak of it as it at present exists, I presume?—Yes.

5203. What objection do you see to the adaptation or modification of the present London University to the new scheme?—To the Gresham scheme do you mean?

5204. I do not mean the Gresham scheme, but a University in which teaching should be more or less included?—I think the strong objection felt by the London graduates is this. I think there are two objections; first, the London University has a work of its own and is Imperial, the second, I think, is that the London University degree would necessarily be lowered in its public value if there were two degrees in the University, one of which might be got by the examination alone, and in the other of which residence counted.

5205. But in the new University do you contemplate residence within a certain institution?—I imagine by residence is meant attendance at a certain college.

5206. Why should not that be the case for the London University as well as for the new one?—That, of course, would completely transform the London University.

5207. There need be no limits to its transformation?—Formerly a certain amount of residence, as you know, was required in London.

5208. By the term "residence" I presume you mean residence in some colleges connected with the University, not residence within the walls of the particular institution?—No.

5209. Where would be the difficulty of having that residence in connexion with the London University as well as with the new University. Supposing the London University choose to arrange to have these colleges as part of itself as the new University might do?—That is a question I have not thought about. The London University abandoned that position some years ago.

5210. Yes, but things have so altered since?—Yes.

5211. Do you see no objection to two Universities in London?—I see objections to two Universities in London, but it appears to me that the bases on which they stand are very different. I should personally be sorry if anything interfered with the only University that I know of in the world that has a purely examining body; one that tests knowledge and nothing else; and one that is open to all the world. I should be sorry to see a change there. The values of the degrees of the London University are simply the values of knowledge. That I should be sorry to see changed. Well, when one thinks of London with a population almost equal to that of Scotland and no teaching University in it, while they have four in Scotland, one thinks the disadvantage in London is very great.

5212. But if the present University existed in its present scheme and you had a new University which would be called a teaching University the two would fundamentally differ, would they not?—Yes.

5213. Which of the two would you prefer as an institution, as a University? Do you think both schemes are equally good?—They are both equally good in different directions. If I wanted an evidence of knowledge, I should certainly go to the London University. If I wanted an evidence of knowledge plus something else, I should go to the teaching University.

5214. That something else, what is that?—That something else is what is involved in residence which, I think, every other type of University, except London, lays much stress upon.

5215. But supposing the London University accepted the scheme of having colleges connected with it, in what respect would such residence as that interfere with the character which the London University has for granting degrees in knowledge. Why should not there be one University which should combine the advantage of both. You would not say it was a disadvantage to have residence, would you?—No. I should personally have, I think, no difficulty about that, but I assume that the London University was very unlikely to do anything of that kind.

5216. I imagine that what you stated is on the assumption, that such a change in the London University was impracticable?—Yes.

5217. But if it were practical might it not be the better scheme to combine the two in one University?—I confess I should be personally satisfied if the London University would give us theological degrees.

5218. I am rather taking the question of residence. You put that as something else in which the other University would come in, but of course the question of theological degree might belong to either, might it not?—Yes, it might belong to either. The residence I understand to count for something in this way; the University takes care that men are associated together, and secondly, the University prescribes in a more exact way what line of study shall be pursued.

5219. Residence you take to be an advantage?—Yes.

5220. Why should not that be added to the London University without impairing the excellence of its examinations or losing the advantage of the prestige which justly belongs to it, and add to that whatever advantage might come of residence in colleges affiliated with it?—I see no objection to that if the London University entertains the idea of theology. Our college and the others were formerly affiliated in arts with the University, but that has ceased.

5221. May I take it that your inclination to the new University is rather governed by the probability that you would be more likely to get the theological department recognised in the new than in the old?—Very largely so.

5222. But if a theological department could be arranged for the London University, then, I presume, you would be satisfied?—Personally, I should be quite satisfied.

5223. But you see, although I can quite understand from your point of view, the supreme importance of that, there are other very important considerations with respect to one or two Universities?—Yes.

5224. You see, if this new University was started would not there be naturally a suggestion or an expectation that the degrees would be upon a lower scale?—Yes.

5225. It is hardly anticipated that the degrees of the new University would rank upon the level of the degrees of the existing one?—That is so.

5226. Do you think that would be a very advisable condition to have in London—two Universities contending upon those lines—one upon keeping up the standard of its examination and degrees, and the other competing for graduates upon the plan of lower scale of examination?—I should suppose that in a large city like London, there is ample room for both. I should further suppose that what is found to be advantageous in Scotland, what is found to be advantageous in Oxford and Cambridge, and elsewhere would also be advantageous in London. I have not thought of the London University giving us this advantage, inasmuch as it is so completely departed from that course years ago. On that point I am not prepared to express an opinion.

5227. I suppose the reflection is irresistible that the prospect of success in the number of its graduates in a new University must be for several years determined by the greater facility with which its degrees could be obtained?—Yes, I think there is no doubt of that.

5228. The temptation of the new University would be to grant its degrees on easier terms considering the prestige of the University of London. The new University, if the standard of its examinations at all approach that of the London University, would be contending against very great difficulties?—That would be a very great temptation, I can imagine.

5229. And do you think that under such a temptation as that it would be better to run the risk of two Universities, than if possible or practical so to modify the present existing University as to make it within reach of those who desire a change?—I should raise no personal objection to two Universities; I should feel none, I think, when one considers the vast needs of London and its difference from other parts of the country.

5230. But how could the needs of London be so vast that one University should not supply those needs if it were adequately organised?—Well, I think that is just possible. It is a point that really has not entered my mind till this moment.

5231. But it is one which is worth thinking over?—Yes.

5232. (*Professor Sidgwick.*) In consequence of the answers which you have given to Sir William Savory I should like to ask one or two further questions. Have you thought over, before you came here, the question how far it was probable that if there was a new University for London established, besides the examining body that is known by the name of the London University, the degrees of the University would be lowered?—I have thought over it. I have thought it very possible that the style of the examination might differ, as I know it does differ in Scotland, from the London University, because they lay much stress upon association with colleges.

5233. Would it not be rather a different kind of examination than a difference of degree?—Yes.

5234. It would not be so much that the standard was higher or lower, but that the standard was given in a different way and would be regarded as a guarantee of a different kind?—I think that would be a more accurate way of stating it.

5235. (*Sir William Savory.*) Do you really think that is a practical distinction. In what respect could one examination differ from another in kind without being inferior if the degree is to be more easily obtained? In other words, if the examinations were equally difficult would a modification of that kind necessarily make the degree more accessible. Would it not turn after all on a question of degree higher or lower?—I am not able to answer that question. I am not able to see the point.

5236. But it is a very important point?—I quite see the importance of it.

5237. It could be put that there should be a difference in kind, but if the difference in kind means greater accessibility it would mean practically an easier examination, would it not?—Yes.

5238. There is no escape from that, is there?—I think, in my mind, there is a little confusion arising from the circumstances that I should contemplate in the new University an arrangement in relation to degrees that I confess I have never contemplated with regard to the University of London. For instance, we have spoken here to-day of the arts degree, speedily turning off into a theological direction. I confess I have never heard of the University of London taking that course. That, I think, to be a very desirable course.

5239. The degree at the London University is acknowledged to be a difficult one to obtain?—Yes.

5240. And that upon the high standard of its examinations?—Yes.

5241. If the degree depended upon anything in the examination except its severity and high character then the examination ought to be altered, ought it not? If there is anything in the examination except its legitimate severity to make it difficult—if it depended upon any faulty arrangement so that another University could have an examination of equal difficulty, though of a different kind, then it would become a question whether the examination of the present London University ought not to be amended. That would be a fault, if such a fault could be demonstrated, but that fault has not yet been demonstrated in the London University?—No.

5242. I take it that the examinations hold their high character because of the mode in which they are conducted?—Yes.

5243. Not from any technical difficulty which is advisedly put in the way of the student?—No. I should not myself hesitate to say that while I greatly prize the University of London degree, yet I think it a misfortune that no Londoner can get any other degree, when in other parts of the country a degree may be obtained, that undoubtedly often means far less than the corresponding London University does mean.

5244. A lower degree?—Yes.

5245. A degree after an easier examination?—Yes, a degree after an easier examination. That is a disadvantage I conceive which London suffers under as compared (I venture to say it, though I may be rebuked for saying it), with both Oxford and Cambridge, and the whole of Scotland. I hope that remark is not misunderstood.

5246. (*Rev. Canon Browne.*) I do not think it is misunderstood?—I meant a Pass degree of course.

5247. (*Sir William Savory.*) I take it your objections to the London University come to this: that in the first place there is no theological department?—Yes.

5248. And that in the second place the examinations are pitched at too high a standard?—Yes.

5249. If there were a theological department at the London University, and any arrangement could be made by which degrees under certain circumstances were made more accessible than your objections to the existing institution would be removed?—Not entirely.

5250. (*Chairman.*) Do not you think there ought to be more connexion between the teaching and the examination?—Yes, I think so.

5251. (*Sir William Savory.*) That would be by affiliated colleges?—It is so large and difficult a question that I had rather not answer it, I have not thought about it.

5252. It all turns upon practicability?—Yes.

5253. But I fail to see why without a consideration of those questions the new University should be at once deemed to be necessary in your opinion, and I think you told me that you really had not considered that other matter?—No. I am quite clear in my own mind on two points, first I should like to see close affiliation between our colleges and the University, and I confess that I should like to see a degree that could be secured on fair terms but less difficult terms than those in London.

5254. You are aware that on the medical side the London University does recognise certain schools or colleges?—Yes.

5255. So that on one side, at all events, that condition is fulfilled?—Yes.

5256. There might be differences of opinion as to the degree of control which should be exercised over these colleges; but, in point of fact, what is generally demanded for the new University in that direction already exists in the medical side of the London University?—Yes, that is quite true.

5257. (*Lord Reay.*) The evidence you have given is in favour of more advanced theological teaching by the new University. That was one of the demands made very clearly this morning by Dr. Cave, when I think Sir William Savory was not present?—Yes.

5258. Would not the result of more advanced teaching be that, very far from the theological degree in the new University being a low degree, it would be of a very high character, as the result of scientific teaching?

(*Sir William Savory.*) There is no theological degree.

(*The Witness.*) There is a confusion I am confident, and I am afraid that the excitement has weighed upon my mind, and I am not quite sure that we have been talking about the same things. I meant when I spoke of a degree on easier terms than the London degree simply an arts degree. The theological degree proper, the degree of divinity, is necessarily a very different thing.

5259. (*Lord Reay.*) That is the degree to which my question referred?—That of course must be a degree of a high character.

Rev. Principal V. Pryce, M.A., LL.B.

24 June 1892.

5260. That is to say, the character of the degree in the new University will entirely depend upon the nature of the teaching imparted by the new University?—Yes.

5261. Therefore, the better we organise the theological teaching at the new University the higher will be the theological degree?—Exactly.

5262. And the result of the student being examined by the University where he obtains this higher teaching will be that he can pass these higher examinations with greater ease than he could pass lower examinations at a University which examines and does not teach?—Yes, that is what I meant.

The witness withdrew.

The Rev. OWEN C. WHITEHOUSE, M.A., examined.

Rev. O. C. Whitehouse, M.A.

5263. (*Chairman.*) You are professor of Hebrew at Cheshunt College?—Yes.

5264. And I think you also act as Secretary to this association, I may call it, though I believe it is only a temporary one, for promoting the appointment of a theological Faculty?—Yes. I may also add that I came here as representing Cheshunt College in place of Dr. Reynolds, who is Principal of Cheshunt College, who could not be here to-day. He expresses his regret at not being able to be present.

5265. Have you anything to add to the evidence that has been already given?—I should like just to emphasise what Dr. Cave has already put forward for us at Cheshunt College, and also, I believe, for Richmond College, which is of very great importance, that the 15-mile radius from Guildhall should be maintained.

5266. Is that laid down in the Charter?—The definition of the London district in the Charter is Clause 27: "The London district for the purposes of the Univer-"sity shall be the administrative county of London, "including the county of the City of London."

5267. How far does the administrative county of London extend?—I think it will be necessary to modify that to the extent of making a 15-mile radius from Guildhall, or from some centre near Guildhall.

5268. The London district does not take you in at present, does it?—No, I do not think it does. We are sometimes called London. I have even seen letters addressed, "London, N."; but Cheshunt does not come within the postal district of London.

5269. You would wish to be included?—Yes.

5270. Would the 15-mile radius include all the colleges that you think ought to be included?—It includes all the colleges with which I am specially concerned in connexion with this movement. It includes the Wesleyan College at Richmond, as it would include us.

5271. Do you consider yourself a London college practically?—Yes.

5272. Most of your students find a career afterwards in London?—It does not follow because we are in London or near London that students would find their careers in London. They find careers all over the world. Some of them are missionaries.

5273. Do they come from all over the world?—Yes, they come from all over the world.

5274. They all reside there?—Yes, at Cheshunt.

5275. In the college building?—Yes.

5276. Beyond the question of district is there anything that has not been alluded to before which you wish to enlarge upon?—I should like to take up first of all the question answered by Principal Vaughan Pryce. I think most strongly that there is full scope in London for two Universities, because the existing University is not only *urbi* but also *orbi*. It is an examining University fundamentally, and it fulfils very characteristic and different functions from any other University that exists. I think in addition to a University of that character London requires a teaching University in which the stress should be laid upon the influence of the teachers on the students in the lines of the articles that were published by Professor Karl Pearson in the "Academy" some years ago, in which that side of the new teaching University was very strongly and very ably enforced. The personal contact of teacher and pupil should form the strong distinctive feature, in my opinion, of this new teaching University for which, with the great population of London, there is enormous scope. When we also reflect that with a population like that of Holland and that of Scotland, there exist not one but several Universities in both countries, one cannot but come to the conclusion that there is abundant scope with the enormous population of London and its district for a separate teaching University. Then, moreover, in the experience of the last few years attempts have been made to reorganise the London University on another basis of constituent colleges, and so forth. Those attempts have proved useless; experience has shown them to be abortive. I therefore fail to see that there is any very distinct prospect that London University will ever very distinctly change its present character.

5277. Do you mean there is no chance of its making the attempt, or do you think it would be impossible that it should be done?—I think the conditions are so complex, the schemes have proved so unwieldly, as was proved by the discussion of the whole matter in Convocation when it finally came up last time. The present University is doing very good work, not only for London but for the whole world.

5278. You would prefer the Gresham scheme to any other that you have looked at, with modifications?—With certain modifications.

5279. One of them being the appointment of a theological faculty?—Yes.

5280. To which your college and others should be affiliated with regard to that one faculty?—Yes. Speaking of that point may I say that, in common with Professor Beet, I lay special stress upon clause 25—"A "college in the University shall not in any way be "under the jurisdiction or control of the Council, "except as regards the regulations for the duration "and nature of the studies to be required of the "students of the College as a qualification for Univer-"sity degrees or distinctions." I think a great deal of friction might be produced if we did not strictly adhere to the lines of that clause.

5281. You would not give the University more power over the management of the colleges?—I would give the University a power over the internal regulations as far as is laid down in that Clause 25. I lay stress upon Clause 25 as safeguarding the due relations between the individual constituent colleges and the University, and preventing any friction that might otherwise arise if more power was accorded to the University than is accorded in this clause.

5282. There is no other alteration you wish to propose at this moment, is there?—I have no alteration, but I should like to state that I think very great good might arise from the appointment of University lecturers as distinct from college lecturers on special subjects which I might consider rather auxiliary or subsidiary to our theological disciplines as ordinarily pursued. I think, for instance, in comparative religion special lectures on the Vedic religion or Arabic or Mohammedan religion would be of immense service; also in subjects like Assyriology, Egyptology, and Biblical Archæology very great service might be rendered in a special department to supplement the teaching which ordinarily goes on in our colleges.

5283. At the end of Clause 3 there is this power:—"The University may appoint lecturers independently "of a college, to give instructions in any subject, "whether it be or be not included in a faculty"?—I should be inclined to lay stress upon that. Also I should like to lay stress upon those courses of lectures which would be ancillary to and which supplement the training that normally goes on in our colleges. Another thing I should like to lay stress on is this: I do not lay any stress upon whether it is a B.A. degree or whether you call it a first theology test somewhat on the same lines as the London University had its first Bachelor of Laws and second Bachelor of Laws. I do not lay any stress upon whether it is called a B.A. degree or first theological test. I think a great deal will depend upon the power given to select from a certain group of subjects, such as the more elementary Hebrew and some

portion of reading in the Old Testament and also of New Testament exegesis, and subjects like those, so as to form a kind of introduction to a more complete system of theology which would be pursued for the final graduation in theology, pure and simple. There would be the Matriculation stage, then there would be the degree, and then finally the theological examination proper. I think that arrangement would be of very considerable service to our colleges.

5284. Do you attach a great deal of importance to the D.D., or is that immaterial?—I was thinking more of the B.D. The D.D. would be something quite beyond the graduation, but it would be a final stage in another sense. But I should not like to commit myself as to whether it should be given as the result of examination or should be given, as it is in the Scotch Universities, as an honorary degree to a *vir pietate gravis*.

5285. Is there anything more you wish to say?—I should like to state that we have found in the *Senatus Academicus* examinations which have been conducted among, and which have been of very great advantage to our theological colleges, no difficulty whatever on the score of examiners, and I imagine no difficulty, therefore need be looked for in that direction in the Theological Faculty and in the theological examinations of the new teaching University. In the *Senatus Academicus* we have had examiners belonging to the Church of England, such as Canon Cheyne; and Dr. Marcus Dodds and Dr. Iverach, Presbyterians; in fact, we have had examiners from all the different denominations belonging to what might be called Evangelical Christendom.

5286. You see no difficulty in an impartial examination in theology?—None whatever, I do not see why there should be.

5287. Anybody who made himself acquainted with theology would probably be a man of strong individual views as to religion, would he not, in most cases?—We have not found the difficulty in the case of the *Senatus Academicus* examinations.

5288. He would not be biassed in favour of those who agreed with him as opposed to those who did not agree with him?—I do not think that difficulty would arise. You may trust a competent examiner.

5289. (*Lord Reay.*) You are of opinion that it would be better to leave the existing University of London to examine students without asking the question where they have been taught? You wish the existing London University to remain as it is?—I consider that the great *raison d'être*.

5290. And the *raison d'être* of the new University would be the organisation of the higher teaching in the metropolis?—Yes.

5291. And on the highest basis?—Yes.

5291*a*. The most advanced scientific basis?—Yes.

5292. So as to rival the Universities of Paris, Berlin, Vienna, and other seats of learning?—Yes.

5293. The natural result of that organisation would be that the degrees of such an institution would have the same high value as the degrees of the Paris, Berlin, and Viennese Faculties?—Yes.

5294. Because the degrees would be correlative to the teaching?—Yes.

5295. With advanced teaching you would have high degrees?—Yes.

5296. And with inferior teaching you would have low degrees?—Yes.

5297. Everything in your view would, therefore, depend upon the organisation of advanced teaching in the new University which you claim?—Yes.

5298. (*Professor Sidgwick.*) With regard to the theological teaching, I understood you to say it would be advantageous for the University to provide it?—Yes.

5299. Would there be a difficulty if the appointment to those Chairs was entirely free and unfettered? For instance, you might have a Roman Catholic who was the most eminent man in some department. Do you think that no difficulty would arise if a professor was appointed either, on the one hand, a Roman Catholic, or, on the other hand, a Freethinker?—It would depend to a certain extent upon the subject to which he was appointed.

5300. Say the subject of Ecclesiastical History?—I think it conceivable that a difficulty there might arise.

5301. And I suppose if a difficulty arose it would be aggravated by any regulation which involved attendance at the lectures?—It would very much depend, of course, upon the character of his teaching. If his teaching was distinctly biassed difficulty would immediately arise. If, being known as the master of his science, he taught without putting his own religion forward no difficulty would arise. It would largely depend upon himself, I imagine.

5302. Suppose a man of pronounced views like Renan were appointed to the Chair of Hebrew in the University, would not there be a disturbance?—That would depend to a certain extent upon what was the range of dealing with the subject of Hebrew; for instance, if he took up the subject of the Old Testament religion and the evolution of Old Testament religion, it is just conceivable that difficulties might arise, but I think at the present day they would hardly exist. 20 years ago difficulties might have arisen, but I doubt whether there would be difficulties now.

5303. Do you think you would be prepared to face all difficulties of that kind. Although you think it is within the range of possibility that friction would be caused and that alarm would be caused in that way, you do not regard that as a serious ground for not proceeding on these lines?—That is an extreme case. I must confess that in dealing with the case of a man of the type of Renan I think difficulties might possibly arise, though not in such an aggravated way as they would have arisen 20 years ago.

5304. Still you would be prepared to leave the appointment, practically, quite free, on the understanding that it was the duty of the body appointing to the Chair to appoint the most eminent man?—Yes.

5305. And if he happened to avow views like those of Renan you would still hold that it would be the duty of those who appointed him to regard his abilities and disregard the other considerations?—Yes. I think in the main I should say yes. I do not want it to be supposed that certain safeguards ought not to be taken. If there was something very peculiar and *outré* about his views they should not be introduced. It is conceivable that a man, quite apart from any supposed heterodoxy, might have something essentially extravagant in one direction which would disqualify him. Of course a properly constituted University would take account of all those points. I should be prepared to thoroughly agree that scientific eminence should be the prime requisite.

5306. You would be prepared to leave these other considerations to the common sense of the body that had the appointing?—Yes. Might I ask a question before I close? It has been mentioned once or twice that we have been in conference with King's College. Those negotiations are proceeding slowly, and though, of course, we cannot tell what will eventually happen, our hope and our desire is that we should co-operate with King's College, and the other two colleges that were mentioned, and that we might appear quite in harmony with regard to these questions. We appear to-day as Nonconformists claiming our rights, but we also desire, and we have with that object met Dr. Wace, as the representative of King's College, and one or two others besides, to arrive at a common understanding. I simply wanted to know whether there would be any later opportunity for us, if it should so happen that we can arrive at this harmonious understanding, to appear again before this Commission.

5307. (*Chairman.*) Yes, I think one of you might. I do not think there would be any objection to that if you come to a conclusion?—Of course I cannot say that we shall, but we have a strong hope that we shall be able to do so, and we should consider that a desirable consummation.

5308. (*Professor Sidgwick.*) With regard to the definition of the London district, if we deviate from Clause 27 as you propose, that is to say, the clause which says the district shall be the administrative county of London, do not we inevitable get into difficulties. I understand that you propose we should deviate from that?—To the extent of constituting the 15 miles radius.

5309. Are there no other colleges 16 miles from the centre that would be jealous. Do you think the line can be easily drawn at 15 miles?—Yes.

5310. (*Sir William Savory.*) I think I understood you to say that the great advantage of a new University

Rev. O. C. Whitehouse, M.A.

24 June 1892.

would be that it would be a teaching University in connexion with certain colleges?—Yes.

5311. That the present London University has not such connexion—that it is an examining University?—Yes.

5312. And that this is a defect?—I said it was distinctly its great claim; its distinctive *raison d'être*. I think there is scope, and there has been in past history justification for the existence of a University constituted on precisely those lines.

5313. But the principle of the two would be very distinct?—And that would be the *raison d'être* of having those two Universities.

5314. But if one principle is right can the other be right too?—I think so.

5315. You think the two opposing principles can be equally right?—There is nothing to prevent the student availing himself of both.

5316. No, there is nothing to prevent it, but as a matter of expediency, and as a matter of convenience to the metropolis, if the new University presents certain advantages over the old, why should not the old avail itself of those advantages and have them too? Surely if the two Universities upon two opposite principles should exist, one must be better than the other in your opinion?—I do not think you can easily compare excellence in two totally distinct categories. The two things are very distinct in character. One is good in its own character, and the other is good in its own character.

5317. Without discussing an abstract question like that, in which I should hardly agree with you, let me put it in this way. Supposing a pupil came to you for advice, and these two Universities existed, to which would you recommend him to go?—That would depend to a certain extent on the character of the pupil and his circumstances. If he were being trained in the provinces I should say distinctly, make use of the London University.

5318. Then I gather it to be your opinion that whatever advantages a new University might secure, the present University of London on its present plan has such great advantages that you would not interfere with it?—I would not interfere with it at all.

5319. I thought another reason that you expressed for the formation of a new University was the hopelessness of getting any change in the London University?—When you say, "interfere with it," do you mean that I would not wish that it should have no theological Faculty?

5320 I understand you to say that during the last ten years a great deal had been tried in that direction, and that the London University had not made the change, and that therefore it was hopeless to expect that it would make the change. Did you not say so?—Yes, I did say so.

5321. Then, I say, that this is one of your reasons for not attempting further to meddle with the University of London?—Yes, that is my reason.

5322. Do you think the character of the London University is high and the standard good?—Yes.

5323. You are acquainted with the standard of the examinations of the London University?—I have passed them myself.

5324. Can you tell us how those examinations might be made more accessible to the students without being diminished in severity by being altered in kind?—I cannot say otherwise than by providing more educational means.

5325. A better equipment of the student?—Yes.

5326. But if an examination is properly conducted, the difficulty of passing it means the high standard, does it not?—Yes.

5327. Do you think that if this new University were founded under the conditions indicated the examinations would be equally high with those of the existing University?—That depends to a great extent on the will of those who constitute it.

5328. Precisely. But what do you think? Is it a part of your scheme as you put it forth, that the examinations of the new University should be on a level with those of the old?—I should hope that the examinations of the new University would hold as high a position as the examinations of the old.

5329. Then if they hold as high a repute would not that mean that the standard of them was as high, and that the difficulties of passing them would be as great?—I think probably it would be so.

5330. It must be so, must it not?—It would depend partly also upon the quality of the examination, that is to say, the question of difficulty of examination. But I do not think necessarily it implies their practical value.

5331. I quite understand that there is a difficulty about that particularly about the word "practical." But assuming an examination to be properly and fairly conducted, I suppose it may be taken that the higher the standard of the examination the greater the difficulty in passing it?—Yes, that would be true; but I think I ought to say in addition that I do not know that the practical value of the University depends entirely upon what you might call the inaccessibility of the degree.

5332. No, because, of course, the inaccessibility might be due to other reasons?—It might be that the examination was of a special or technical character, in other words not a judicial or absolutely fair examination. But you would not suggest that of the London University, would you?—No, I would not.

5333. Assuming the examinations to be conducted in the style in which they always have been conducted at the London University, it simply means that the difficulty of passing them depends upon the high standard at which they are pitched?—Yes.

5334. And do you think that a new University could pitch its examinations upon the same high standard and yet make it easier for men to pass?—No.

5335. A man might be better educated by some scheme so as to come better up and be better able to pass, but that would depend upon the men and not upon examinations, would it not?—Yes.

5336. Do you think there is any danger if a new University were to be constituted of the examinations being of a lower order than that of the London University?—I admit that that is possible, and possibly more especially at first while the University is young.

5337. Is it not only too probable? The London University has a high character for examination; its degrees are much valued; and surely the great temptation to a new University which is contending against a University with such a high reputation as London University has, would be to give a degree upon easier terms?—Might I ask a question? Has that been proved to be true in the case of the Victoria University?

5338. I do not know. I think you have to go into a number of questions there of another kind. I am putting this to you as a very simple question?—If I could have an answer to my question, I could answer yours more distinctly.

5339. Do you think there would be no danger about that?—No, I cannot see that there is any danger.

5340. Would you feel quite satisfied in your own mind that the new University would have a standard of examinations as high as the old. Would you not be rather doubtful about it?—I should be doubtful about it at first, but I should think as time went on the evil would correct itself.

5341. Would not that depend upon the prosperity of the new University?—That prosperity might depend largely upon the efficiency of the examination.

5342. It might cut both ways. It might go lower or higher?—Yes.

5343. Now take the medical profession. Do not you think that the medical profession might be very jealous lest the standard of the examinations in the new University should be below the level of the present University. Would not those who are most concerned in the interests of the profession think it a bad thing for the profession, if a lower standard were introduced?—I quite understand that.

5344. The warmest friends of the profession would desire to have the character of the examinations kept up?—Yes.

5345. Would you admit that at all events at first, there would be a danger greater or less of the examinations in the new University being pitched upon a lower level than the examinations are at present?—As I have said before, I think that would correct itself, and it would be a danger that would be only temporary.

5346. You think there would be a temporary danger only?—Yes, I think there would be a temporary danger only.

5347. (*Professor Sidgwick.*) In reference to your answers given to Sir William Savory, I should like to ask whether you do not think the difficulty of passing the examination or obtaining a degree in a University, may be due not to the high standard of attainment in the subjects, but to the multiplicity of subjects that are included in one examination?—That is quite true.

5348. And that it is possible that a new University might deviate from the practice adopted by the University of London with respect to that?—Yes.

5349. You think that might be the case?—Yes.

5350. You are aware that it has been given in evidence before the Commission that it was not part of the case of King's College and University College, that they did not wish to adopt any lower standard. Perhaps you are not aware of that?—No, I am not aware of that fact.

5351. (*Lord Reay.*) The difficulty of an examination depends, as you have said, upon the high standard at which it is pitched?—In the light of the question just asked, the high standard might involve the number of subjects demanded, not necessarily the high standard required in some individual subject.

5352. (*Sir William Savory.*) Is not the height of the standard due to the number of subjects as well as the degree to which the knowledge is carried?——

5353. (*Lord Reay.*) It also depends, as has been said, upon the man?—Yes.

5354. But the difficulty of an examination depends also on the nature of his previous education?—Yes.

5355. An able man badly trained would have greater difficulty in passing an examination than an inferior man who had been carefully trained?—Yes.

5356. The object of a teaching University is to provide that training, is it not?—Yes.

5357. And to give an education which would make difficult examinations relatively more easy to pass?—Yes.

5358. (*Sir William Savory.*) But are there not two ideas involved in that last question?—The character of the examination and the qualification of the candidate are surely distinct things. When you speak of the character of the examination you do not take into consideration the quality of the candidate. That is another point?—You have been speaking first of all of the difficulty of the examination and of the standard of the examination. The difficulty of the examination has relation, of course, to the individual who endeavours to pass it, and that difficulty is conditioned, as Lord Reay elicited from me, by the character of the education the candidate has previously had.

Rev. O. C. Whitehouse, M.A.

24 June 1892

5359. I think I can sum it up in a single question. Do you think the difficulty of the London University examination at present depends upon anything else but the high standard?—No, I do not.

5360. (*Lord Reay.*) Do you not think it also depends upon the want of a proper connexion between the educational and the examining authorities?—Yes; but I am dealing now simply with the question of difficulty of examination. The standard of the examination does constitute the difficulty as well as the multiplicity of subjects. The difficulty, of course, would begin to diminish.

5361. Could both difficulties be met if the student had been properly trained by those who conduct the examinations? Do you not admit that?—I do admit that, but the standard of the examination would still maintain its high character whether the examinee has been trained or not.

5362. The difficulty of passing an examination of a high standard depends upon the high standard of his education and its close relation to the subsequent examination?—Upon how the man has been trained and upon what the examination is he has to pass.

5363. Assuming the high character of the examination, a student who has been well trained in a teaching University will obviously find it more easy to pass than one who has not enjoyed the same opportunities and has been merely crammed on the lines of a syllabus imposed on his teachers *ab extra*?—Yes.

The witness withdrew.

Adjourned to Wednesday next at 11 o'clock.

Tenth Day.

Wednesday, 29th June 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir GEORGE HUMPHRY.
The Rev. Canon BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
Professor BURDON SANDERSON, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
Professor GEORGE G. RAMSAY, LL.D.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

KARL PEARSON, Esq., M.A., examined.

K. Pearson, Esq., M.A.

29 June 1892.

5364. (*Chairman.*) Will you tell us what your position is in public life?—I am a graduate of Cambridge, and have studied in Berlin and Heidelberg. In 1884, I think, I was appointed Professor of Applied Mathematics at University College, and two years ago to the Gresham Professorship of Geometry. I have been actively interested in the University question for the last six or seven years. I should like, in the first place, if I might do so, to draw a distinction between any evidence I may give as Secretary of the Association for promoting a Professorial University and that which I may give as an individual professor of University College.

5365. Were you present during the evidence of Professor Carey Foster and Mr. Dickins?—No. They were, I think, called before the scheme of the Association was actually adopted.

5366. Will you be able to go into more detail with regard to that scheme?—Yes. I should like to put before the Commission the scheme as it at present exists, if I may do so. This is the accepted draft. (*For this document, already handed in by Professor Weldon, see Appendix No.* 5.) Also there is a list of members of the Association which I will put in. (*For this document see Appendix No.* 8.) I should like to say a word about that list of members. In its present form it is merely a proof. The scheme is finally adopted, but the list of members is only a proof, as I hand it in at present. I can add two or three names of some importance, which only reached me this

K. Pearson, Esq., M.A.

29 June 1892.

morning. Those are the names of R. B. Clifton, F.R.S., Professor of Experimental Physics in the University of Oxford; W. H. M. Storey Maskelyne, F.R.S., Professor of Mineralogy in the University of Oxford; Robert Adamson, M.A., Professor of Logic and Philosophy at Owen's College, Manchester.

5367. These all concur in this paper which has been drawn up?—Yes. I should say that this paper has been before them. It has been accepted by the Association. It was presented to every member of the Association, and every member has been asked if he wishes to continue his name as a member of the Association. I have no doubt many of us would differ slightly from certain statements, but the paper, as it is drawn up, is a general statement in which we all agree, though many of us might modify it in certain points. I might mention another matter. You will see a blank left for the names of the president and vice-presidents. I may say that Professor Huxley has consented to take the presidency, but he has yet to be formally elected. Of course there will have to be a meeting of the Association, but I have no doubt what that will result in. It will come before the next general meeting of the Association, so I would ask to supplement my evidence later by sending in the names of the president and vice-presidents.

5368. Your plan, as far as I have heard, is to constitute a Professorial University, which is, either immediately or gradually, to absorb all the existing institutions?—I should say not all the existing institutions; there would have to be a process of selection. Certain institutions would not, I think, be suitable for absorption into a great Professorial University in London. Perhaps, if you would allow me, I might say a few words more about the Association before drawing attention to various features of the scheme. I would notice that we have practically drawn all the London teachers together into this scheme, King's College and the medical schools being excepted. I think this has only been possible by working for a clear and broad ideal.

5369. Have you University College?—We have the majority of the teachers on the arts and science side; the medical side remains more or less neutral. I will read you later a motion which has been carried by the professorial body of the college. I would say that the executive committee of the Association has been very far from a nominal body; it has met and often sat for four hours at a time arranging this scheme. The scheme, after being drafted, was presented to the Association at large, and amended in several important points. I draw attention to the fact that the executive committee consists of four University College professors, two professors of the Royal College of Science, one of the Central Institution, one principal of a provincial college, the Sub-Registrar of the University of London, with Professor Ray-Lankester and Sir Henry Roscoe to represent the general interests of science. I will draw attention also to the amount of support the scheme has received from provincial colleges, several principals, and some of the strongest professors in the provinces supporting the Association. Of course, as I have said, the scheme as it stands is distinctly a compromise, that is to say, if we had had individually the arranging of it to ourselves we should probably have drawn up different schemes. But this is a scheme on which we have all been able to agree. I think the reason is that we have not sacrificed the ideal of a great University with a view to pleasing all possible interests. With regard to the members of the Association you will find that 62 are members of the Royal Society; there are 34 provincial professors, 34 London teachers, 4 members of the Senate of the University of London, and 8 of its examiners. The main idea of the proposals is the following; to obtain a University on the general lines of a great continental University, and not a federation of colleges for examining purposes. We want, in fact, nothing in the nature of college organisation interposed between the teachers and the University, being convinced that until the narrow collegiate interests are replaced by wider University interests, there is no real hope for improvement in London. We want, in fact, the German or Scottish system in which the professor is essentially the unit of academic organisation, and not the college. I should like to draw your attention to the fact that I think there is great danger in confusing the institution called a college in Oxford or Cambridge with a body called a college in London. They are practically totally different organisations. A college in London competes for students with other colleges by the reputation of its professors, the excellence of its laboratory equipment, and the completeness of the education it gives. In fact, it has to attempt to teach everything that a student is likely to want.

5370. Is not that to a certain extent the same thing that exists at Oxford and Cambridge?—I should say not. The whole of science teaching, or very nearly the whole of it, cannot be adequately conducted by the Oxford and Cambridge colleges. It is essentially a matter for University laboratories.

5371. I suppose till some years ago that was the condition of Oxford or Cambridge—say 30 or 40 years ago—but the system of inter-collegiate lectures has tended to do away with that. A short time ago I suppose Oxford and Cambridge were exactly in that position of competing colleges?—My knowledge of Oxford is comparatively a small one. I am essentially a London teacher; but I should say that the inter-collegiate system has not tended to replace the University system in science, certainly not at Cambridge. Then I should like to add that inter-collegiate lectures would be likely to be found quite unworkable in London. A student comes down to a London college at about 10 a.m., and spends the day till 4 or 5 p.m. in the lecture room or laboratories. The college endeavours to provide him with all books and apparatus that he may require. London is too large for a student to pass from one centre to another, and for this reason, partially collegiate and partially University teaching in separate centres would be nearly impossible. To attempt it would be to create a new centre competing with the colleges. Then, returning to the point about the difference between Oxford and Cambridge colleges, I would notice that the London colleges are possessed of the buildings, laboratory equipment, and libraries, and a University would start with none of these if placed outside the colleges. For instance, I can draw attention to one suggestive point with regard to this. I do not think any single Cambridge college ever proposed to spend 15,000*l.* or 16,000*l.* on engineering laboratories. That is essentially University work at Cambridge. But, at the present moment, at University College we are spending between 15,000*l.* and 16,000*l.* on engineering laboratories. I think that is really a point very useful as an example. The reason why we are spending that money is on account of competition with the Central Institution and with King's College. We cannot afford to let the electrical laboratory at King's College or the electrical and mechanical laboratories at the Central Institution be superior to our own, and thus deprive us of our students. As a matter of self-protection I thoroughly agree with this building scheme. I daresay Professor Ayrton will be able to tell us what sums have been spent at the Central Institution. Instead of these being spent upon separate buildings they ought to have been spent upon one large building—say, a palace of technical instruction. The same remarks apply to chemical and physical laboratories. We are spending considerable sums in enlarging our physical laboratories. At the present moment the Government has before it plans for large laboratories at South Kensington—physical laboratories—and doubtless in due time King's College or other bodies will also proceed to build rival physical laboratories. All these laboratories are being put up for certain large sums of money, but are not exactly on a first-class University scale. They are on what we may call a second-class University scale, something like the physical laboratories at Heidelberg, and not like those at Berlin or Strasburg. I think what is wanted is that there should be elementary teaching at a number of centres, and that the second and later years' students should be drafted into the University laboratories, and into the head centres of each particular branch of University study.

5372. Do you think one laboratory would be sufficient for the whole of London?—One laboratory for the higher teaching in each branch. I think any attempt of the Council of a federal University to make one college take one subject, and another college take another, would meet with the most determined opposition. We have to remember that a large staff of teachers in the large colleges depend for their livelihood on a given department being maintained in a high degree of efficiency. Science pays in London; arts do not. Any college would, of course, select science, and arts would be put on one side.

5373. Science is much more expensive than arts, is it not, if it requires these expensive laboratories?—It certainly is, but the number of students in pure science is far greater than in arts.

5374. Does it pay better?—Yes, it pays better. I think I am right in saying that professors are largely

paid at any rate at University College by fees. The chief science professors get a very fair income, even apart from the question of endowments, but it is difficult to keep the arts professors going. Then again, much of the pure science is supported by the applied science, and without some system of fees going into the University chest, and teachers being protected by the University, you would have by any system of federation to inflict great injustice, or else leave matters very much as they are at present. For instance, if the University built a laboratory at one college every other college would demand a like laboratory, while University laboratories apart from the college system would be in themselves a great waste of money. All the present buildings would be reduced to very minor work indeed, whereas they are built for the higher class of work, as well as for the ordinary work. Then, I should like to say a word as to the method of teaching. I have had some experience of Cambridge, German, and London teaching. The London teaching differs entirely from that at Cambridge, and approaches the German system. The student learns in the first place from the teachers, and not from books. I think a good teacher can exert far more influence in London than he can at one of the older English Universities. He may be, for instance, with one group of his students (of one year) 9 or 10 hours a week lecturing and demonstrating. He is not a guide to a text-book, but his lectures replace the text-book, which is only consulted in the second or third place. In the best cases—of course it would be invidious to mention names—the teaching is up to the highest level of professorial work in Germany. I might mention that it is customary at University College for the Dean at the end of his two years of office to draw up a report. During the last two years there have been 84 original memoirs and works contributed by University College students and professors to scientific journals. I refer to that to show that the colleges are not merely engaged in pass teaching. A great deal of original work goes on, not only at University College, but I have no doubt you will hear from Professor Ayrton afterwards that it is the same at the Central Institution, and I have no doubt it is the same at King's College. In less efficient cases the model is still that of professorial teaching and not that of the lecturer or coach preparing for pass examinations. I conceive that it would be quite disastrous if any attempt were made to upset the professorial mode of teaching in London and to replace it by collegiate teaching for pass degrees and University teaching for honours.

5375. Would you make the professors teach for the ordinary pass-work as well as for the higher education?—The better teachers I believe now, having regard to the London University examinations—I know it was Professor Ray-Lankester's rule, and I think it has been the rule of his successor—teach all students for the honours degree. I think it would be disastrous if an attempt were made to replace this system by collegiate teaching for pass degrees, and University teaching for honour's degrees. I really believe in bringing the chief teacher, the professor of a subject, into contact with *all* the students at a very early stage of their career. If you have a lecturer solely for pass teaching the best men slip through the net and never get any enthusiasm for research or work of any kind. I would draw attention to the fact that this, what I may call professorial system of teaching as distinct from collegiate lectures, has established itself everywhere in London. I think it ought to be fostered and developed as most suited to its surroundings. The Association scheme is essentially the product of London teachers, and bases itself upon this professorial system. It recognises that the multiplication of colleges in London is a misfortune due to the mistaken policy of party and of public corporations. The Association scheme puts the professorial teaching in the first place, but it does provide for other types of University teaching such as may be absolutely necessary, for example, that of minor teaching institutions, or of University Extension lectures, and so forth, and further by the institution of *Privat-docenten* it proposes to put into the hands of the Senate of the University a very efficient check on any deficiency or laxity of the professorial teaching. That is all I should like to say in general on the distinction between the federal and the professorial University, and the suitability of either to London. I do not know whether the Commission would think that sufficient, or whether they would care for any tabulation of objections to the Gresham scheme.

5376. I should very much like to come to that by-and-by; but, first of all, I should like to know a little more about the constitution of this proposed University. The chief power is to be in the Senate, I see?—Yes.

5377. I do not think you say how the Senate is to be appointed?—Under clause 3 I think we do, subject to clauses 9 and 12.

5378. Do you give the professors a majority?—That, I think, is left an open point. It will depend very largely, I think, on what the Government at the time might be willing to do for the new University.

5379. The professors would have a very great voice in the management?—Certainly.

5380. Besides that, with the lecturers and other teachers they would form consultative bodies?—Yes.

5381. Then practically it would be governed very much by the professors?—In a large part by the professors, but, at the same time, through Crown nominees, the general interests of the public would, I think, be protected.

5382. There are two points I should like to take. I should like to take the objections to the Gresham Charter, and the question of what part the University of London would take in this scheme, if any. I do not care which I take first?—I have put down the objections to the Gresham Charter.

5383. Would you rather take that before you go into the question of how far you would co-operate with the University of London?—I think so. Perhaps I may be allowed to give the headings. I think the first objection is the objection of most members of the Association: (1.) That it practically created a federation of certain colleges for examination purposes. (2.) It would not have led to the formation of central, fully-equipped laboratories, but the perpetuation of the present system of second-rate competing laboratories. (3.) It made no efficient provision for the appointment of University professors as a means of attracting and retaining the best men for London.

5384. There is a power to appoint lecturers, is there not?—Lecturers, I think.

5385. And that, of course, could be extended?—Yes. But then as professors they would have had no control,—of course, these objections are taken to the Gresham Charter as it stands,—these professors would have had no control over the teaching equipment of the colleges. (4.) It excluded some of the admittedly best teachers, and best equipped teaching in London.

5386. Belonging to other teaching bodies?—Yes; I would refer especially under that heading to the Central Institution and the Royal College of Science. No teacher in London will say that the teaching there is not of the very highest University character.

5387. Would you bring them in under your scheme? Would they be willing to join you, and become professors in the new University?—The teaching staff of the Royal College and the City and Guilds are largely with us. I should say the Central Institution of the City and Guilds to distinguish it from others.

5388. (*Professor Ramsay.*) That is not Finsbury?—No, I am not referring to Finsbury at present.

5389. (*Rev. Canon Browne.*) Where is the Central Institution, that you speak of located?—In Exhibition Road, South Kensington. Professor Ayrton kindly gives me the complete title: "City and Guilds of London, Central Institution, Exhibition Road." In ordinary parlance we speak of it as the Central Institution. Then (5): It left open the door to the creation of a second teaching University in London, on the basis and with the prestige of the existing University. I would say with regard to that—I do not know how far it is matter of general knowledge—that I know that the Government at the present moment has plans before it for physical and chemical laboratories at South Kensington. They are laboratories which will rival those of Berlin and Strasburg for size, and at the same time these laboratories are to be the examination laboratories for the University of London. In other words, you would have outside the Gresham scheme some of the finest laboratories in London, which would be examination laboratories for the University of London, and teaching laboratories for the Royal College of Science. I must say that I consider that the first stage towards a second teaching University in London.

5390. That means that there should be another teaching University besides the Gresham?—I think there would be; it would develop out of that. Personally,

K. Pearson, Esq., M.A.
29 June 1892.

if I were connected with the University of London, and the Gresham scheme were carried, I should work for that end most heartily to prevent the extinction of the University of London; that is to say, supposing I were not associated with University College, but with the University of London as it at present exists. Then (6): It made no attempt to satisfy the popular demand for the recognition in some form of University work among the people. (7.) I hold that it was admittedly an attempt on the part of certain of the medical schools, and some of the arts and science teachers, to cheapen degrees, and so to attract students. I think it was clearly an attempt to cheapen degrees, and so to attract students.

5391. You put "clearly" in the place of "admittedly," do you?—Yes.

5392. (*Chairman.*) There is nothing in the Charter which shows that is there?—The speeches of those who advocate it, and the constitution of the University, I think, tended in that direction. I could put in a certain amount of evidence on that point, but I do not know that it is necessary. Then (8): It gave an overwhelming preponderance to the most purely professional of all the Faculties, and far too large a share of control to the College Councils, which consist of laymen often with very small academical experience.

5393. (*Rev. Canon Browne.*) They are laymen with regard to each special branch of knowledge?—I mean by the use of "laymen" to make a distinction between laymen and teachers by profession. By "teacher" I mean one who has taught or is teaching. The laymen of our Council consist largely of gentlemen who have never taught. In Oxford and Cambridge the administrators are men who have been teachers or who have been intimately associated with teaching all their lives.

5394. (*Mr. Palmer.*) You mean administrators as distinguished from professors?—I would not care to use the word "professor." I would use the word "teacher."

5395. Administrators who have not been teachers?—Yes.

5396. (*Rev. Canon Browne.*) A man may be a layman with regard to many branches which he is helping to administer, and yet be a learned man in his own branch?—I refer to laymen in teaching. If a man has taught in Greek and Latin I think he would be quite able to take part in a body to administer other forms of education.

5397. "Laymen" is not used as contrasted with learned men?—No, certainly not.

5398. (*Chairman.*) Are these all the objections you have?—No, there are one or two more. (9.) The scheme was opposed by a most influential section of the governing body of University College. I have a complete list of the names of the governors who opposed the Gresham scheme, and I should like to put that in. (*For this document see Appendix No.* 9 *and Question* 5418.)

5399. (*Rev. Canon Browne.*) Did they appear to oppose?—This was a protest again the Gresham scheme signed by 120 members of the governing body of University College, and sent to every Member of Parment two days before the withdrawal of the Gresham scheme.

5400. (*Chairman.*) 120 out of how many?—120 out of 300 or 400, I suppose, but they include all of weight. There was no protest on the opposite side. I withdraw those words "all" of weight. The most influential members of the governing body it would be safest to say, I think.

5401. (*Rev. Canon Browne.*) When you say they opposed you mean they published their objection to it?—I can read the protest.

5402. I know about it, but it means that they published their objection to it, and did not appear at the inquiry?—Yes.

5403. (*Professor Ramsay.*) That was sent in?—Yes. I can let you have copies, but at present I have only one copy. It was sent to every member of the House of Commons.

5404. Was it addressed to the Government?—No, it was a general protest.

5405. In the air?—To the House of Commons. It was sent to every member in order, if possible, to influence his vote in the event of the Gresham scheme coming to a vote in the House of Commons.

5406. (*Mr. Palmer.*) It was a minority?—No, I think we could hardly say that; the question was never placed before the governing body of the College. I believe if it had been placed before them it would have been rejected, but it never was placed before the governing body of the College. The Gresham Charter was so worded that it did not, on the surface, interfere with the College—that is to say, that neither the College nor any of its trusts were nominally touched by the Gresham Charter.

5407. (*Chairman.*) What was the body that supported it?—The Council of the College.

5408. (*Professor Ramsay.*) Do you mean to say that the governing body never considered this proposal?—It never came before the governing body.

5409. (*Chairman.*) The governing body being the Senate?—No, the governing body being the governors, life governors, and fellows, including some members of the teaching staff. They nominally elect the Council of the College. It is only a nominal election as a matter of fact.

5410. (*Rev. Canon Browne.*) How many are they? How many are on the Council?—I should be sorry to be called upon to say the exact number—whether it is 15 or 20 I cannot say.

5411. And the governing body?—The governing body, 300 or 400. I cannot at all say what the remaining 200 or 300 governors would have done. They sent us no reply.

5412. There you have 120?—Yes, 120 have distinctly expressed their opinion in one direction.

5413. (*Chairman.*) You say it never came before the Council?—I say it never came before the governing body. There are three bodies: the Council, which is the executive body; the professorial body, which is the Senate; and the governing body, which elects the Council.

5414. And what it came before was?—The Council.

5415. How many does the Council consist of?—I think 15 or 20.

5416. Were they unanimous?—I am not a member of the Council of the College. I have my own knowledge of what they were, but I should prefer not to say anything.

5417. (*Mr. Anstie.*) Professor Carey Foster is a member, is he not?—Yes, he is one of our executive committee.

5418. (*Rev. Canon Browne.*) Did it come before the Senate?—The history of the problem before the Senate is rather a long one, I could give you the brief lines of it. I may say that the Gresham Charter was never placed before the Senate and the Senate only carried a vote of confidence in the Council after the rejection of the Gresham Charter. I do not know whether I should be right in putting this document in now? (*The witness here handed in a Copy of a Letter and Protest against the proposed Charter then before Parliament. See Appendix No.* 9.)

5419. (*Chairman.*) You were one of the dissentients. We should hear the opinion of the dissentients from you as well as anyone else, I suppose?—Yes. Then another objection is: (10) At the present time a working majority of the teachers in the Faculties of Science and Arts at University College support a more comprehensive scheme than the Gresham scheme, and object to the Gresham Charter.

5420. The majority you say?—I say a working majority. The reason I use the words "working majority" is that there is a number of merely nominal professors who never by any chance come to the meetings of the professorial body, and what their opinions are none of us know. They do not take sufficient interest in college matters to come down to the meetings.

5421. (*Rev. Canon Browne.*) You state that from intimate knowledge, and not from public documents?—I would refer to the list of Association signatures in which the names of the professors at University College appear.

5422. Among these there is a working majority?—Of the science and arts teachers. I should like to come back to that point with additional evidence a little bit later, if I might do so. Then I will go on with the objections. (11.) It placed the University medical degrees in the unique position of carrying no license to

practise, and thus would have enforced on the medical students a double examination system, and as the document issued by the Victoria University indicates, the tendency would have been to reduce the two examinations to a single standard—probably by compromise with some licensing body.

5423. (*Chairman.*) You think it would have reduced the standard?—I think it would have reduced the standard to the license to practise. That, I think, is all I should like to say against the Gresham scheme, but I should like to more directly point out the features of the Association scheme which would in itself show certain further objections to the Gresham scheme. May I pass on to that now?

5424. I will just ask you how many of these 11 objections you think are fundamental and are against the whole thing?—I think they are so closely associated with the idea of federation that without changing the whole basis of the Gresham scheme, it would be impossible to get over these objections.

5425. Some of them could be remedied, I suppose?—I doubt very much whether they could be efficiently remedied by any system of collegiate representation on the governing body, and by maintaining the colleges in their present position.

5426. The question of letting the medical degree carry a license is rather a question of detail, is it not?—That we try to meet in the professorial scheme by incorporating the existing University if possible.

5427. It would require an Act of Parliament to enable the degree to carry a license with it?—I think it would be very difficult to get such an Act of Parliament in the face of the opposition of the Royal Colleges of Physicians and Surgeons. That is a point of course upon which I cannot express any very definite opinion, but I think they would be largely opposed to any scheme for granting the license to the Gresham as at present constituted.

5428. You say they are giving too much influence to laymen. Could not the Charter be altered so as to give more weight to teachers?—The influence of laymen comes in through the College Councils, and there, I think, would be the difficulty. I might add that I do not think those who designed the Gresham scheme had any knowledge of the enormous amount of the administrative work at present carried on in the colleges. There are committees; there are faculties of teachers; and there is the Senate of teachers. Anything that is started is generally planned in a committee. It then goes through a Faculty; it then goes through the Senate; and then in goes through the Council of the College. That is four distinct bodies. If you put on the top of this the Gresham scheme you then have to carry it through the Boards of Studies, Faculties, and the Senate of the Gresham. That would be seven bodies. The whole of the teachers' time would be occupied with red tape.

5429. Could not that be simplified either immediately or gradually. Supposing the University once established would not the power of the Council of the University be strengthened in the Charter, and might it not be hoped that it would gradually assert itself and gradually assume a dominant position over the colleges?—I doubt it very much. I should like to see the exact modifications which would have to be introduced into the Gresham scheme before I expressed an opinion. I believe those modifications would be so great that it would completely revolutionize the Charter and it would be shorter work to draw a new Charter, or to do what I believe will ultimately be necessary. I do not think any charter will settle the matter. I think an Act of Parliament will be necessary, and propably the question will rise into such importance that it may ultimately be made into a Government question. I do not think any Charter will solve the extreme difficulties of this subject.

5430. Then there is the question of the medical preponderance. That, of course, could be diminished by inducing the medical colleges to combine and not giving them one member each. It could be reduced in some way or other; that is a detail?—It is in a certain way a detail.

5431. It could be done?—Yes; but an attempt to reduce the individual representation may drive the medical schools out of your plan altogether.

5432. Then the fear of cheapening the degree you admitted is more from something outside than anything in the Charter?—Yes, in a way; but the Charter is so drafted that it allows the matter to be thrown into the hands of the college teachers. I think it must lead to a reduction of the standard of the degree.

5433. Would the teachers of the University wish to lower the degree. Would not they injure their interests?—It would bring more students into the colleges possibly. There is a danger that the Gresham would compete with the University of London by rivalling it by cheapness. I have no doubt that many of the teachers in the University would fight against it, but it is the judgment which I have formed on reading the evidence before the late Royal Commission, and what I know to be the opinion of some of the medical teachers. I believe there is real danger of cheapening degrees. I have a letter here from a gentleman who a few years ago was the dean of one of the large medical schools, and one of the statements he makes in it is that it is "mainly the outrageous demand of "the preliminary scientific examination of the Uni-"versity of London that has brought about the agitation for a University of moderate requirements."

5434. (*Mr. Anstie.*) Who is that?—I do not know whether I am right in mentioning the name.

(*Chairman.*) We have had evidence that the objection to the London degree is not so much its hardness but its nature—that there are too many subjects at once.

5435. (*Professor Ramsay.*) May we ask whose letter that is if it is put in as evidence?—Well, the letter was not a private letter, and therefore I think I may mention it. It is Professor Christopher Heath, who was dean of our medical school, and our school is generally supposed to be one which has supported a high standard of teaching.

5436. (*Rev. Canon Browne.*) Scientific teaching for medicine?—Yes.

5437. (*Professor Ramsay.*) Has that statement been made in any formal way to a committee or anything of that kind?—No; I think it ought not to be put down as a final statement by Professor Christopher Heath. The letter was written by Professor Heath to those who got up the protest against the Gresham Scheme. He was strongly objecting to our opposition to the Gresham Scheme in the outset of his letter.

5438. It was not an *obiter dictum*?—No. No person would make a statement of that kind directly. These are chance remarks that come out and show one the real drift of medical opinion.

(*Chairman.*) A chance remark that it was the hardness of the London degree which had caused this demand. Some people deny that, and say it is not the hardness, but the nature of it.

5439. (*Professor Ramsay.*) I think the remark was confined to the preliminary scientific examination. It did not refer to any other part, did it?—No.

5440. (*Chairman.*) It is necessary before a medical degree can be obtained?—I think most of the members of our Association would hold that some general standard of scientific or literary knowledge is important.

5441. But have you any reason to believe that that would be neglected in the Gresham University?—Well, I fear that the large medical representation might lead to that. It is a point upon which I ought not, perhaps, to express a definite opinion.

5442. Then it does not give sufficient facilities for a University for the poor, I think, was one of the objections?—For the people, I said. It is really very necessary in the particular constitution of our democratic society to satisfy the demand for popular lecturing of some kind. I should object very much to giving representatives of any private society a position in the University, but I think the University ought to undertake work of the University extension nature.

5443. Is there anything to prevent it undertaking work of that sort—having evening lectures?—I think the Gresham Charter rather excludes it. It talks about lecturing within the walls of the College.

5444. I suppose you could not give the same sort of teaching to a man whose time is occupied in earning his living and who can only give the fag end of the day to learning that you would give to a regular student?—I should say that that would be absolutely impossible. I think some of the demands put forward, perhaps, not by the governing body of any University extension society, but by some of their advocates in the press are very ill advised.

5445. All you could do would be to enable them to give lectures to the people. You could not expect to give them the same education?—I think it is impossible.

K. Pearson, Esq., M.A.

29 June 1892.

5446. Then with regard to the best teachers being excluded that might be remedied by bringing in other institutions besides King's College and University College, either at the commencement or allowing them to be affiliated afterwards?—You mean as federal colleges.

5447. Bringing in other colleges to which these teachers belong?—I think that would make the matter still worse. One of the few advantages of the Gresham scheme was the fewness of the constituent bodies at any rate on the arts and science side. There might have been hopes then that these would have been amalgamated, but if you bring in two or three other colleges—without some kind of principle of absolute University control over them—you simply widen the area of competing colleges, and I believe I am right in saying that the teachers, or a considerable number of the teachers, of those institutions would object strongly to forming part of a federal scheme. They would prefer their own freedom for the present to forming part of a federal scheme, although they would have no objection, if it were possible, to be absorbed into a University on broad lines.

5448. You think many institutions would be willing to be absorbed who would not come into a federal scheme?—I am speaking of the feeling of the staff rather than of the councils of those institutions. Professor Ayrton will probably be able to give you more information on that point than I can.

5449. Then with regard to the question of professors to be appointed by the University. We have already power to appoint lecturers, and I suppose could have further power?—I do not think that would get over my objection, for these professors would be without any place of teaching, without any of the equipment, or anything else.

5450. Then the question of there being too many laboratories we have considered. After you had given us these 11 objections you said there were some other objections which you might add which had been made by the teaching body of University College?—I said that in reading through what I thought were the advantages of the professorial scheme I would mention in the course of that the action taken by the staff of the University College, by the Senate of the University College, with regard to this matter. The staff having moved in favour of a broader scheme I should say would distinctly oppose any return to an institution of the nature of the Gresham University.

5451. I think we have gone through the Gresham Charter as far as you care to do so, what point would you like to take next?—I should just like to say a few words as to the advantages of the professorial scheme which perhaps I did not mention in my first statement. I would say that I do not think it is open to the objections I have just stated against the Gresham scheme. In the second place, I think it would found a University on those great lines which have been so successful elsewhere. I refer, of course, here especially to Germany. In the third place it would give the University that which the Gresham scheme entirely wants, the prestige of the old University.

5452. How would you do that?—The scheme provides if possible for there being only one University for London.

5453. You would join it on?—I should say rather that the University would come in as any other body would come in. In this way it would bring to the new University all the friends of the old University. The Commission may perhaps be unable to see the importance of that point; I ought to say that at University College we have lost a considerable number of our warmest supporters. Owing to the first steps towards the foundation of a teaching University in London not embracing the London University a very large section of our Council and some of our oldest supporters resigned; Lord Kimberley and Lord Justice Fry were among the number resigning.

5454. That was because they were in a minority perhaps; but if it had been the other way would not some have resigned?—I think any scheme which had embraced the University of London would have kept those friends for the College.

5455. Would you not have lost others if it had been the other way?—I do not know, I think it unlikely; at the same time my point is that any such scheme would probably bring those supporters back.

5456. Without losing any on the other side?—Yes, I hope so. Then I say the scheme meets with the active support or the benevolent neutrality of many of the leading teachers in the provincial colleges. The Gresham scheme was largely opposed by the teachers of the provincial colleges.

5457. We have not had much opposition except as to details?—I think the deputation that went up to Lord Salisbury was largely one of the country colleges. Bristol, Birmingham, and other places protested.

5458. And Victoria?—The nature of their opposition I think is such that we should meet with detailed objection. I think it would be found very difficult to reconstitute the Gresham Charter and yet to meet the objections of the Victoria University. I think the result would be that you will gain the support of the Victoria University and lose the support of the medical schools. Then another advantage I think of our scheme is that it satisfies the demands of the Victoria University that the medical degree shall carry the license to practise, and that the medical representation shall not be a preponderating one. Then (6): It has for the first time in the history of the movement for a teaching University in London brought a wide range of influential teachers from a great variety of London teaching bodies into close sympathy, and animated them with a desire for a University of definite type. (7.) Bedford College Council and staff have united to carry an important motion in favour of a University on the general lines laid down by the association scheme. (8.) University College Senate, that is, the professorial body, has carried a motion urging the Council of the college to adopt a similar resolution in favour of a comprehensive scheme of absorption. (9.) The Association scheme makes full provision for the recognition of work of the University extension character, and for the appointment of University lecturers at minor and non-absorbed teaching institutions. (10.) Lastly, while proposing central control and central University laboratories of the highest kind, it provides for local teaching such as is required for pass degrees or for the lower stages of honour graduation. That I think is all I should like to say upon that.

5459. I gathered from several of your remarks in stating the advantages that you contemplate working with the University of London?—I would refer to Clause 1. "It is desirable that there should, if possible, be one University in London."

5460. First of all I would ask you this: supposing the University of London would not meet your wishes, would you be prepared to start independently of it?—Yes; I think that would be the view of the executive committee. I am speaking now of what I think the executive committee of the Association meant by that clause, and what I think the Association understand by it. We should try if possible to work with the University of London, that is to say, that the University of London and its work should come into the new scheme.

5461. And do you think the University of London would come in? Have you any hopes that it would?—I can only point to the fact that we have four members of the Senate in the Association. I do not know whether any other members of the Senate have been asked, but I should think the Senate of the University have probably not formed a definite policy upon the matter.

5462. Have you seen the scheme of the Senate which was rejected by Convocation?—I have seen several schemes which were before Convocation and rejected.

5463. Do any of them meet your views?—No, I think not. They still maintain the competing colleges, and give far too large a share of authority to the existing Senate of the University of London.

5464. And not sufficient to the teachers?—Not sufficient to the teachers.

5465. In fact on most grounds they are as objectionable to you as the Gresham Charter?—Certainly.

5466. Therefore, your hopes are, in the first place, that the Senate may have a very different scheme from any that they have had yet, and also that Convocation may be induced to accept it?—I should not put it exactly in that way. I think Convocation will not exactly have to be fought, but I think pressure will have to be brought to bear upon Convocation—possibly through the press and in other ways—not to oppose some broad scheme for University re-organisation in London. If Convocation does ultimately oppose such a scheme all we can do is to go forward without the University of London. All I can hope is that if Convocation sees a good scheme, it will not, with a certain amount of pressure, oppose.

5467. The University at present gives degrees to the whole of the United Kingdom. Would it be possible to combine that duty with that of a teaching University in London?—Yes, I think so,—as a separate department of it, if not as part of the ordinary examinations of the University. I would draw attention to the fact that there is a movement in Wales at the present moment for a University for Wales, and there is a movement in the Midlands which will receive the powerful support of Mr. Chamberlain for a University for the Midlands. Victoria University already draws off the students in the North of England. As far as collegiate teaching goes the University of London is likely to be left without a very large number of collegiate students.

5468. Then you look forward in the future to the University of London becoming a University for London?—I should still keep the examinations open for students who read privately or work in smaller colleges.

5469. They would be at a disadvantage in not having had a teaching likely to lead up to the examinations or conducted by teachers who conduct the examinations?—No, certainly not. I should put it in this way. I will leave it optional to them whether they went in for the examination on the teaching side, or whether they went in for an external system of examinations. The University would examine externally much in the manner of the present local examinations of Oxford and Cambridge.

5470. Not the same papers or the same questions?—Not the same papers. I would say with regard to some of the provincial teachers, the view they expressed to me was that they would far rather their students went in for the examinations of the teaching side of the new University than for those of the present University, that is to say, provided you get for your teachers in the new University the leading men in every branch. They would have no objection then. They do object to second-rate teachers examining their students. But if you can once ensure that the London teachers shall be the leading teachers in their several branches, I think you will meet with very little opposition from the provincial colleges as to one system of examination. The scheme purposely keeps that point open under clause 7.

5471. You would not give any provincial colleges any representation on the Senate of the revised University, or would you?—No, I should not. They have no representation on the present system.

5472. You would confine it entirely to London?—Yes. It seems to me that for the external examiners no doubt teachers would be largely chosen from provincial colleges. They, in fact, at present form a field from which external examiners are largely selected.

5473. Then your idea would be carried on by two sides as it were, one to look after the general teaching of the country, the other to look after more particularly the London teaching. There would be two sets of teachers, and two sets of examinations; one for provincial or colonial people and another for London people?—No, I think, perhaps, I did not make my point very clear. I should not insist on having two different systems, but if there were very great pressure brought to bear in that direction two systems would be established. I fancy the provincial colleges would not desire two systems from what I have heard from members of them.

5474. Then you have hopes that the University of London could be so modified as to be included in your scheme, but if that should not be the case, you are prepared to go on without it?—Yes.

5475. I suppose these professors would require in order to really command respect a good endowment. I believe, in the higher teaching particularly, the fees are never sufficient to enable you to get good teachers without endowments?—You would certainly want endowments. I am not speaking for the Association in saying this, but personally I think a certain proportion ought to arise from fees. You would want considerable endowments. I would call your attention to the fact that the Government gives, I think, 16,000*l.* to the Welsh Colleges.

5476. (*Mr. Anstie.*) Not to the Welsh alone?—They get 4,000*l.* each.

5477. (*Rev. Canon Browne.*) There is a special grant to the Welsh Colleges?—Yes, there is a special grant to the Welsh Colleges. They have 4,000*l.* each. One of those colleges had some years ago 90 students, and got a Government grant of 4,000*l.* If you look at the population of London on that scale, I think you will agree that something ought to be done by the Government. There are other funds to draw upon in London of course, and there is a farther point that many of the professorships are already endowed, and economy in the matter of professorships, and in the matter of buildings and teaching ought to very much improve the state of affairs. If you could once stop the waste of competition that is going on in regard to small teaching bodies bidding against each other for students, it would be a great improvement.

5478. (*Chairman.*) With regard to the construction of this new University, its idea is to absorb all the colleges which now exist?—And that are willing to be absorbed.

5479. Would that apply to medical schools?—Certainly not. They are connected with large public charities.

5480. They would continue to have their own autonomy, and merely be affiliated with regard to certain purposes?—The construction of the Medical Faculty is described in clauses 10 and 13. Of course the Medical Faculty is a point on which it is difficult for me to say very much. It presents special difficulties here in London. But I should like to say that the Association's scheme recognises that it is impossible to absorb the medical schools owing to their close relation to vast public charities. At the same time it endeavours to grant much of what the Medical Faculty gains by the Gresham Charter. In the first place, the Medical Faculty will be elected by the medical teachers themselves, and in that way a distinction will be made between it and the other faculties. Secondly, there will be, or there would be, under the Association scheme as in other Universities of standing, medical professors appointed by the Senate from the various Faculties. I judge in practice that the Medical Faculty itself would recommend certain of its members for the honour of the office of University Professor in Medicine.

5481. It would rather mar the harmony of your scheme if all other colleges were gradually to be absorbed, the medical ones remaining intact?—I think not from this standpoint. The medical schools themselves practically own little or no property. The one I know more about than others, for instance, is Guy's Hospital. There the college laboratories, and so on, really belong to the hospital trust. They do not belong to the group of medical teachers. You could not in any way absorb these buildings and equipments without opening up the question which I think very few people would venture to touch, of the whole reorganisation of these charities throughout London.

5482. (*Mr. Anstie.*) You mean hospital charities?—Yes. The money has been lent really by the charities, I think, largely for buildings, and rent or interest is paid by the fees. I think that is largely the position.

5483. Do you speak chiefly of Guy's, St. Bartholomew's, and St. Thomas'?—I should think it is the case at these schools also. I should think the medical schools, which are groups of private teachers, so to speak, have no property which it would be possible for the University to absorb. It practically belongs to the charities and the schools, I think—I speak subject to correction—pay rent or interest for the buildings.

5484. (*Chairman.*) Is there anything more you wish to say?—I should like to draw attention to the fact that we have got very small medical support at present. I am hoping that the state of affairs may alter, but I am quite sure that as long as the medical schools think there is a chance of the Gresham scheme being carried they are not likely to support any other scheme.

5485. Why is that?—Because undoubtedly the Gresham scheme will give them more than they would get from such a scheme as this.

5486. More power?—I believe this scheme would really give them a great deal more power than they have at present. Now just a few words as to what I think ought to happen supposing the colleges declined to be absorbed. The question may arise as to what should be done if the colleges refuse to be absorbed or to give the University effective practical control over their resources. I hold that the degree-granting privilege is a very important one and that it ought not to be conferred simply because any body or group of bodies demands it. I think the power to confer this privilege of granting degrees ought to be used as a means of forcing the colleges to accept such terms as are best for the academic future of London; and I

K. Pearson, Esq., M.A.

29 June 1892.

believe that if the frame or shell of a University were created there would then be simply a race between Burlington Gardens, Gower Street, and the Strand as to which should fit themselves first into it. Supposing none of these bodies consented to surrender their privileges or a substantial portion of them, I should hope the Government might be induced to fill up this frame in the first place from the Government College at South Kensington. I think the very idea of that action more than enough to induce the Council of University College, urged forward, as it would be by the teaching staff, to capitulate. I believe that in all these cases the terms of capitulation could not be settled by charter; they would have to be settled by Act of Parliament. I think the whole question can only be ultimately settled by Act of Parliament. I ought to add that if the Commission thought it were in any way desirable the Association, through the executive committee, is prepared in a reasonable time to present the rough draft of such an Act.

5487. You cannot do that without finding out what the University of London will do, can you?—Yes, I think the shell of such a University could be created.

5488. Leaving the University of London out?—Leaving its admission more or less open.

5489. (*Professor Ramsay.*) Will you turn to your last point first. The idea of the scheme is one single University for London?—Yes.

5490. Doing all the University work, and comprising all these Faculties?—Yes.

5491. How many Faculties do you propose?—I think that is especially a matter for the University itself to settle. The Faculties might be created as they were needed. The constitution of the University as put forward does not define the number of Faculties.

5492. Do you think it is a possible thing to have a University with one Faculty, do you mean?—I think that would hardly be possible. I think the medical teachers must be marked off from the rest.

5493. Your idea would be then to have a Faculty of Arts and a Faculty of Science?—There, I think, I should leave it open. We have Faculties of Arts and of Science at University College, but they are perpetually crossing each other. You cannot divide your arts teachers off from your science teachers; and there are subjects like mathematics and other branches as to which it is impossible to say whether they are arts or sciences.

5494. How many Faculties would you consider essential to constitute a University?—I do not know that I consider any Faculties are essential. The University when established would group its teachers into bodies for consultative purposes, which may be called Faculties.

5495. Then you do not think it essential that a University should be formed upon the idea that the various branches of learning balance one another and act in combination mixed up together for general University purposes?—I think that is hardly necessary. I think you cannot clearly maintain the distinction between arts and science. You may distinguish between Law and Medicine, but to draw a rigid line between arts and science seems to me impossible. I think, for instance, the Faculty of Technology could be more clearly separated. In that case it is possible that certain members of the Faculty of Technology might be also members of the Faculty of Science.

5496. Would that do any harm to any particular study?—I think it does not do any harm to any particular study at all, but it would disqualify the Faculty from being taken as a unit in any way.

5497. Because its interests are mixed?—Yes.

5498. The professor would be in two Faculties?—Some of our professors are in three.

5499. That point might be easily adjusted by making the representation smaller in proportion in the case of mixed faculties, but do you agree to the principle that you must have a variety of Faculties, and that the University must be built up out of them, or do you make the professor, whatever his Faculty, the unit?—I make the professor.

5500. The Board of Studies is a smaller thing; it is never an essential thing in the government of a University, whereas a Faculty is?—It seems to me that it is rather a matter of name whether there is a small Faculty or a Board of Studies, but I think either might be given an administrative power with regard to various minor points.

5501. But I am speaking rather with a view to the governing body, which is usually made up equally, or more or less equally, from the greater departments called Faculties?—Is that universally so?

5502. You do not consider it essential?—I do not consider it essential. I was questioning whether it is universally so in the Universities which already exist?

5503. Without going into that question, you mentioned just now Laws. Do you regard it as essential or desirable to have a Faculty of Laws?—It is desirable.

5504. But not essential?—Yes. Put it the other way. I should desire to see professors of Laws who would probably be grouped together in the Faculty of Laws. But I think the Faculty is a minor point.

5505. And what of Theology?—Theology is a difficult matter in any large scheme, and would require very delicate handling from any one who ventures to touch it.

5506. Do you know that there is a particular proposal with regard to it?—I should prefer the proposals with regard to a Theological Faculty to come from the theologians themselves, and my point of view would be that it must rest largely with a strong governing body as to how far they accepted it or not.

5507. Then with regard to the Faculty of Medicine; do you regard a Faculty of Medicine as essential or not?—I think it must be in London because the medical schools are so very distinct from the other types of teachers. You must group the medical teachers, by which I mean especially the surgical and medical teachers, in one body together.

5508. Would you consider it a strong blow to your scheme if the medical schools would not come into it? Would you consider it a fatal difficulty in realising your scheme if you were unable to bring the medical schools within the four corners of it?—Do you mean if the medical schools declined to come in?

5509. If they declined to come in, and if no arrangement could be made with them?—I should leave them outside for a little time and I think they would soon be desirous of coming in.

5510. You made one answer to this effect: if the London University could not be brought to terms you would be prepared to start without the London University?—Yes. I want to lay it down as a distinct point that I should prefer one University in London for London embracing the existing University of London.

5511. But supposing the existing University of London cannot be brought in either by its own consent or by Act of Parliament, would you leave it out and go on in your own way?—Just as I should deal with University College. If University College would not come in, it would be a great blow to myself, but I should proceed to establish the University without University College.

5512. That has reference to a statement you made, which I did not understand. You told us about University College coming in as any other body would come in. Would you put the University of London in that regard upon the same footing as King's College, the Bedford College for women, and University College, simply as one of many bodies which it is proposed to unite?—Yes. You have to regard, I think, the fact that the University would be bringing a rather smaller share to the melting pot. The other colleges would be bringing, perhaps, half a million of money and large equipments, or equipments and endowments representing half a million of money. The University of London would be bringing very little—a very small pecuniary contribution.

5513. So, if the University of London could not be got in, you are quite prepared to face the going on without it?—Yes, but I think it would be a distinct disadvantage to go on without it.

5514. Do you say the same with regard to the medical schools—that if they will not come in voluntarily to any scheme of this sort, and if it is found impossible to get Parliament to force them to come in, you are prepared to go on with the Universty without any medical schools whatever?—I should not attempt to force the medical schools by Act of Parliament. I think, at the present stage the medical schools are likely to say, "We cannot possibly come into a scheme of this kind;" but when they see that they are not going to get what the Gresham Charter gave them, I think they are much more likely to come in. I ought to add that I have not personally discussed the matter with the

Deans of the medical schools. The scheme has been largely misunderstood in the medical schools, because it was supposed to mean an absorption of the medical schools. The words "absorption of colleges" were taken exception to, and the scheme was practically not read, otherwise it would have been seen that we were not going to absorb the medical schools. I should not like to say anything further upon that point, though, perhaps, I might send to the Commission at a later date any further evidence I have upon it. I only suggest that now, because I happen to know that there is an informal meeting of persons interested in the medical schools going to take place this week.

5515. Supposing the schools cannot be forced to come in, and they will not come in, do you think your scheme will stand upon its own legs without the medical schools and without the University of London?—I should make my frame. If the schools would not come in, the frame would remain empty until they chose to come in.

5516. Then you would have an institution without degrees for medicine?—No, it would have an opening for degrees in medicine.

5517. Your framework would start with a completely constituted University as far as constitution goes and power to give degrees, but on the medical side wholly a blank?—Yes, but the first step, I think, would be that one or two medical schools would come in to get the whip hand of the others.

5518. That would be a question for the future. But the University would start with one Faculty or two Faculties, as the case may be, and trust to the future to get the frame filled up?—I am quite certain that if colleges on the Arts and Science side would come in the medical schools would come in.

5519. Have you taken steps to get the adhesion of the medical schools?—The only step we have taken is to ask the pure Science teachers of the medical schools, who are fairly represented on our association.

5520. Is that quite so? There are 122 signatures attached to this memorial, besides two on the executive whose names do not occur as members of the association?—May I ask whose are the names?

5521. Mr. Dickens' and Professor Heath's names do not appear amongst the members of the association?—Then, I fear, they have dropped out by a printer's error.

5522. Then the numbers are 124. Are you aware of the fact that there is not one single medical teacher or surgical teacher in London on that list?—Quite so.

5523. The only persons who have to do with medical science at all are two teachers of botany, one teacher of chemistry, one of biology, and one of physiology—that is five out of 122?—Yes, medical teachers.

5524. And of those, five are upon the scientific part of the medical side?—Yes, I recognise that fact.

5525. Is that because no application has been made to any of those teachers in the medical department, or because they have hitherto declined to join?—There has been no general application to them. Copies of this document as it stands have been sent to the Deans of the medical schools for their consideration. I ought to say, perhaps, that the medical schools are bodies which move much more unitedly than the teachers of Arts and Science. No medical teacher would be likely to sign this document until a vote had been taken on it in their medical school and no vote in favour of this is likely to be taken in a medical school until it is quite certain that the Gresham Charter is out of the way.

5526. I suppose the reason of that is that there are very large and complicated vested interests in the medical schools. There are vested interests affecting the teachers in the medical schools with which it would be extremely difficult to interfere?—You mean on this scheme?

5527. No, in the medical schools themselves. Is not the great difficulty a network of vested interests caused by the medical schools?—Which great difficulty?

5528. With regard to adopting any new plan or coming into any new scheme?—I cannot say. I know that medical schools work a very great deal more together, as a body, than the Arts and Science teachers work.

5529. You have no knowledge yourself about the inner working of the medical schools, how they would be affected by the working of any such scheme as you propose?—I only know that when the motion in favour of absorption was carried in University College Senate there was an attendance of I do not know many medicals who did not vote against it. I feel quite certain that no one of them would have voted for or against it unless there had been a previous Convocation of the whole Faculty to determine which way they were going to vote.

5530. What is it your University has the power to offer to the medical schools; a degree, is it not?—It offers a degree carrying a license to practise, but only the purely surgical and medical side will be entirely organised by the medical teachers themselves.

5531. Without reference to any superior body such as a Senate?—There would be such a body.

5532. Without going into the details of that, the point is this: you have to offer to them a medical degree of a kind which they want, and which suits their requirements, and in return you expect them to make a certain concession of their autonomy for University purposes?—I think the only thing we require of them is to admit that they cannot have the degree-giving powers which they would have had under the Gresham. We do not desire to touch the autonomy of the medical schools. As soon as the medical schools say we will allow the University to appoint a pure science teacher, that teacher would cease to be a member of the Medical Faculty, and would become a member of the Faculty of Science.

5533. (*Professor Sidgwick.*) In what clause is the license to practise referred to. How is it included in your scheme?—Clause 1: "It is desirable that there "should, if possible, be one University in London."

5534. Then if the London University is left out there would be no license?—No. If the London University were left out there would be no license to practise.

5535. (*Professor Ramsay.*) That, of course, would be a serious blot upon your scheme. That license to practise is an essential part of your idea?—No, I would not say an essential part. It is not an essential part of the Gresham.

5536. You spoke in strong terms of approbation, I understood, about the preposterous proportions of the London University medical degree. Do you propose a distinctly lower degree?—It was entirely the other way about.

(*Professor Ramsay.*) Well, perhaps I did not catch the context.

(*Professor Sidgwick.*) Professor Pearson's strong language was in regard to some of the proposals.

(*Rev. Canon Browne.*) The preliminary scientific requirements.

5537. (*Professor Ramsay.*) It is of no consequence to my question. I only want to ask you this: Do you contemplate a degree distinctly obviously lower than the medical degree of the University of London?—No. I tried to make that clear. I think the difficulty arises largely with regard to what may be called the preliminary science training. The preliminary science training is where the difficulty comes in. A marketable University distinction should only be given for some literary or scientific attainment.

5538. The Gresham University degree would be lower than the degree of the London University?—Yes.

5539. And you think it should not be so?—Yes, I think it should not be so.

5540. Then you would not desire to see a degree distinctly lower in scientific requirements than the degree of the University of London?—No.

5541. Is it your opinion that such a degree would meet the requirements of the medical schools and be sufficient inducement to them to come in?—I think it would not give them all that they want, but the fact that they would be able to organise the degree would be very much better for them than nothing.

5542. Have you considered at all how your scheme would affect the Royal Colleges?—Of course you will understand that I am not speaking with any authority. I have no real right to speak upon medical matters, but simply as they are a point of academical organisation. I do not think the Royal Colleges ought to form part of any University for London.

5543. You would keep them out entirely, even as to the matter of representation?—Yes.

5544. On the ground that they are not a teaching body?—On the ground that they are a professional body which has interests far beyond London. I would protect their interests by seeing that the University degree was not reduced to a mere licensing qualification.

K. Pearson, Esq., M.A.

29 June 1892.

5545. Then you would retain their examinations entirely as they are now?—That would be entirely a matter for the Royal Colleges.

5546. But if you have a new degree which is *ipso facto* obtainable in an easier and simpler way by the medical students of all the schools in London?—I think that is what the University ought not to have.

5547. I did not mean by a low standard, but by a course of teaching which directly leads to a degree however high. If you offer to the medical schools a degree which meets their requirements, and which is at the same time a license to practise, would not you interfere with the examinations of the Colleges of Physicians and Surgeons?—No, I think the result would be that those who go to Victoria and Edinburgh, and other places for University degrees would be retained in London. That class of students who already go to Victoria, Edinburgh, and other Universities would be retained.

5548. Do you suppose the students would take the degree and also the license of the Colleges of Physicians and Surgeons?—Many of them do so at the present moment, and many would continue to do so. There are a certain number of students who leave London to take medical degrees in the northern universities and colleges. I think those would be attracted.

5549. Who do not go to the Colleges of Physicians and Surgeons at present?—I do not know whether they do or not.

5550. When there is another degree in London more easy to obtain, why should they go to the colleges when they do not do so now? I do not follow the reasoning?—My point is that you would not necessarily reduce the number of those who take licenses from the Royal Colleges of Physicians and Surgeons. If you made a cheap degree doubtless you would, but the degree that would be instituted would simply mean that a larger class of students would take medical degrees of the University of London instead of going out of London and taking the degrees of Owen's College.

5551. You mean to say that the ordinary pass student would still go on and take the license of the Colleges of Physicians and Surgeons?—I have not sufficient experience to say how far those students who were in London would take licenses.

5552. Not more than about 10 per cent. take the degree, what becomes of the remaining 90 per cent.?—There is also some large per-centage you have left out. Perhaps 20 or 30 per cent. take degrees in other Universities. These are the students the new University would bring in. Whether those students take licenses now or not I do not know.

5553. However, you are prepared in your scheme to disregard entirely the interests of the Colleges of Physicians and Surgeons?—I do not think we disregard them, but we make the degree not equivalent to the license to practise.

5554. You would require it to include the license to practise?—We do not necessarily require it. I think it would be an advantage which would come in if the London University comes in.

5555. You do not think it necessary to make any special provision for the representation of the Royal Colleges on the Governing Body, or to make them in any sense constituent parts of the University?—If Oxford and Cambridge were prepared to admit members of the Royal Colleges of Physicians and Surgeons to their governing bodies as representatives of the Royal Colleges of Physicians and Surgeons, I think London might be prepared to do it also.

5556. You said it was quite impossible for students to run about London to have what you call inter-collegiate lectures on a federal system. But is it not essentially part of your system that the teaching shall be organised in various and different centres?—Yes.

5557. Would not that involve running about?—No, because you group your subjects together.

5558. Can you arrange for all the subjects a student takes to be taught at one place?—Yes, all but the most elementary branches which would be taught at a number of centres. The central physical laboratory I should propose to have probably in association with the chemical laboratory; a student in that branch would be drafted off to that, and not be running from Kensington to Gower Street and then to the Strand.

5559. Do you think you could arrange to concentrate the teaching so as not to give them the running about?—Yes. It is done in Berlin, which is rather a large city, and the arrangement is in working order there.

5560. (*Sir George Humphry.*) The fundamental point in the system is that all teaching should be concentrated under one head?—With regard to the Science and Art Faculties, certainly.

5561. But the elementary teaching and high class teaching should all be conducted by one set of professors?—I think if you look at the scheme that is not necessarily so.

5562. That is a point you mentioned as very important?—I mentioned it as important that the pass student should come into touch with the professor, but not necessarily that the professor should do all the teaching of the pass student.

5563. What is meant by coming into touch?—Something like Professor Michael Foster does at Cambridge, Professor Michael Foster himself lectures in the elementary parts to his class.

5564. I think Professor Michael Foster's teaching is entirely devoted to the elementary part of the work?—That is not of necessity, but there you have a case where a remarkably good teacher does undertake a portion of the elementary teaching.

5565. The principle of this scheme would be that the professors should, in the main, be devoted to the higher order of teaching?—I think not entirely. Certainly they would do a large portion of it.

5566. Do you think the professor could really undertake both?—A portion of both most distinctly. I would point to the fact that it is really undertaken in Germany at the present moment. Professor Quincke gives two courses, one an elementary course, and one a course of training in research work.

5567. That is hardly done I think by anyone in England?—I think it may be said to be largely done in the London Colleges.

(*Professor Ramsay.*) I may say that it is also done to a large extent in the Scotch Universities.

(*Sir George Humphry.*) Two classes of teaching by the same professor?

(*Professor Ramsay.*) Yes.

5568. (*Sir George Humphry.*) It would be difficult to carry that out generally to a large extent. What you rather require, I suppose, in a London University is that there should be professors devoting themselves mainly to high class work and high class teaching?—I should disapprove of that very strongly. I approve very strongly of the very best teachers being brought into contact with the mass of students and that to my mind makes the great difference between teaching in Germany and teaching as I have found it in England, namely, that the leading teachers are brought into contact with the great bulk of students.

5569. That would be done only I suppose by lectures?—By lectures, and to a certain extent of course by demonstrators assisting the professor in demonstrating.

5570. Then we come to another class of teachers. The professors would require in the main to be certainly supplemented by another class of teachers in the case of ordinary students?—They are assisted. Every professor is assisted by demonstrators. Every professor devotes a certain amount of time to the students, and he is assisted by demonstrators who are not detailed off to attend particular classes.

5571. This would be contemplating very large classes?—In some of the elementary subjects there might be large classes. I do not know that they would be necessarily very large. The numbers are not very large.

5572. Do you object to colleges like King's College and University College retaining a certain amount of autonomy even though they might be put very much under the direction of the main University body?—It depends on the amount of autonomy. I should ask in the first place for absolute absorption. I think that is the ideal.

5573. There comes the difficulty. The difficulty is to obtain one's ideal, and though you, on the whole, believe that University College would admit such an absorption ——?—I have endeavoured not to speak for the Council of the College.

5574. But on the whole that is your impression?—I can only express a hope that with a certain amount of pressure it might come about.

5575. Then that is the hope with regard to University College. As to King's College you have not expressed any opinion?—I am not in a position to express any opinion with regard to King's College.

5576. As far as one can judge, perhaps, the probability is that King's College would object to absorbtion?—I have no doubt that if you were to ask King's College at the present moment it would object, but if you put forward a scheme as a shell I believe King's College, if they thought that was all that was obtainable, would accept it.

5577. Suppose they were obliged to put forward a scheme as a shell without any college, so that there would not be the assurance of the support of any college?—Not at present. I cannot say, of course, what might happen.

5578. We have to contemplate that as a possible difficulty?—Yes.

5579. There are difficulties all round, and I suppose it will be necessary to make some sort of compromise here and there?—Ultimately it possibly may be, but I am quite sure that any scheme which attempts to compromise with every interest will be an utter failure.

5580. With all the teaching in London concentrated under one head, it may be thought desirable that there should be separate colleges in different parts of London having a certain amount of independence, although to a certain extent under one central control. That is a reasonable and probable view, is it not?—I think it is a possible view; I am not at all sure of the reasonableness of it. I think it neglects the fact that you have not three universities existing in any large town, and that you cripple the teaching by separate Universities.

5581. I am not speaking of separate Universities, but London is an enormous city; there is nothing to compare with it anywhere. Therefore, as you have said here, collegiate teaching would be very difficult, and yet the proposal would be that there should be teaching in these different colleges?—Yes.

5582. Teaching entirely under one control?—Yes.

5583. So that there would be teaching of some subjects in one college and some subjects in another college?—And the elementary teaching at a considerable number of centres.

5584. Then I am again in a difficulty. The elementary teaching would be at King's College and at University College?—And possibly at South Kensington.

5585. So that elementary teaching would be under teachers distinct to a considerable extent from the great body of professors?—Not to the whole extent, but certainly to some extent.

5586. Elementary teaching going on at King's College and University College. Then we will suppose in addition that there should be some larger institution?—I do not quite follow that.

5587. There must be certain elementary teaching in these two colleges?—I do not think there must be. I merely think that it might be convenient to have several centres of elementary teaching for first-year students.

5588. There has been mention of a Government grant and the Government institution at South Kensington?—Yes.

5589. There may possibly be there, as I think you have mentioned, the opportunity for large and first-class laboratories to be occupied, controlled, and regulated, and taught in by first-class professors?—Yes.

5590. So there we shall have a high, first-rate, and great national institution, to be separated from these other colleges, University College, and King's College?—I think you will find it very difficult to do that unless you have some scheme of federation. There will be a great deal of opposition raised by the colleges against any attempt of that kind.

5591. Do you think there would be if it were recognised that the elementary teaching, which constitutes the great mass of teaching, should be at the colleges, and the higher and first-class teaching, which would be more limited, should be at these great central laboratories?—I think it would raise a great deal of feeling on the part of both King's and University Colleges, because they have not merely been accustomed to take pass work. I cannot impress that too much on the Commission. They are not merely in the position of colleges in Cambridge, they are small Universities improperly equipped.

5592. Then suppose them to continue their work as they do now, and suppose there to be at, say South Kensington, some larger first-class laboratories which are national laboratories, and in which the work of research and the highest kind of teaching could go on, do you think the colleges would object to that more than they would object to a total absorption?—Yes. I feel certain they would. I think the proposal that the colleges should be reduced to taking pass work only would meet with more objection than any other. It was one of the strongest objections to the scheme of the University Senate.

5593. I am not supposing that they should be reduced to pass work only, but that the pass work would fall to them now as it does in the main and other work too?—Take a subject like biology or physiology, I think there is more work turned out by University College than you would find from the biological laboratory at South Kensington. I think there would be a strong feeling if you proposed to build your central laboratory at South Kensington and neglected University College.

5594. It seems almost a pity to interfere with University College, does it not, if it is doing such very good work now?—I think it is possible to make it do better work.

5595. There is a question whether the whole should be concentrated under one head, or whether there should be different institutions in different parts of London?—The Association scheme advocates concentration. Wherein is the advantage of a number of different institutions?

5596. By their competition, as you have stated, tending to promote the improvement of all?—I beg your pardon, I think the tendency, as you say, to promote the improvement of all, destroys the efficiency of any one branch. The waste of money in small laboratories is extreme.

5597. You mentioned that the efficiency at University College was brought about by there being increased efficiency at King's College?—I think I hardly put it in that way. I said that we were compelled to spend money on electrical laboratories because King's College had spent it, but I think it is a great disadvantage to London to have three sets of electrical laboratories. I think the output of electrical engineers will either become too great, or if it is not too great it is not more than one of those laboratories could undertake.

5598. Do you think they would be better if they had it all at one spot than having these institutions with their independent autonomy stimulating each other with competition?—Yes. Of course, in answering that question I do not fully accept your way of putting it as to the word "stimulating." I think it might stimulate in some way, but it is a stimulus to expenditure in what I think a wrong direction.

5599. Still competition is the great stimulus all round of progress, is it not?—Organisation seems to me to be greater stimulus to progress.

5600. At any rate it is a very important element in teaching and elsewhere?—Yes, and that is duly provided for by the competition of external Universities, and the desire the University has to maintain the reputation of its degrees and the completeness of its equipments.

5601. Then with regard to the medical point Professor Ramsay has asked you a good many questions upon that, so I will not trouble you very much. You are aware of the real reason which is alleged for medical students leaving London and going to the northern and other Universities?—You mean which is alleged by the teachers in the medical colleges?

5602. All round; teachers and professors?—There is some distinction between floating opinion and opinion definitely stated. What is the opinion definitely stated?

5603. As far as one can deal with it, it is definitely stated. The great reason that is stated why the students do not go to the London University, but do go to the other Universities, is what?—I am asking you.

5604. The great reason that is stated is that they get it so much easier?—I know that reason is stated.

5605. And one of the causes that has brought about our present discussion is that the largest city in the world, having the largest number of medical students in the world, presents the greatest difficulties to the students in obtaining medical degrees. That is one of the fundamental faults?—Yes.

K. Pearson, Esq., M.A.

29 June 1892.

5606. How is that to be got over?—I think it is got over by the fact that you put the clinical side of the examining in the hands of the London teachers.

5607. That is so now?—I mean that the examination and the settling of schedules would be in the hands of the London teachers.

5608. I think that is so now?—I think hardly.

5609. Almost all the examiners in the London University are London teachers, and the schedules have been drawn up by them?—I cannot express an opinion on the medical side, but the schedules on the other sides certainly have not.

5610. That is one of the great points to be met, which really lies at the root of this discussion and difficulty. How is it to be met, or how can it be met? The difficulty is the largest city in the world, with the largest number of medical students, presents the greatest difficulties in the way of obtaining degrees?—I think it would be most unfortunate if it were met by a cheapening of the degree.

5611. What is to be done? Would you object to cheapening them to to same level as that on which they stand in other Universities, because it is acknowledged that the degree of the London University is the most difficult in the world to obtain?—I would not express an opinion upon its being the most difficult to obtain. I have heard medical teachers argue that it did not represent the highest level of scientific requirement, but it had something to do with the manner in which the papers were set, with the schedules, rather than the degree of hardness.

5612. I think it is the general feeling that it is the hardest. All who have passed it, I think, are proud of it as being the most difficult. One does not see how that complaint is to be met?—Then you think the Gresham scheme offers an alternative to that by the fact that it would cheapen degrees——

5613. I do not suppose anything. I merely say that is a point of difficulty. How is that difficulty to be met? I should think there is the greater difficulty that any scheme which proposes to cheapen degrees will not be carried. You will have the whole of the provincial colleges against you.

5614. I do not say cheapening exactly, but rendering it somewhat more facile. There have been proposals for some arrangements with the Royal Colleges with regard to the examinations. Have you thought over any plan of that sort at all?—I can only say that I think the medical degree ought to represent a certain amount of general academical culture. If you put it into the hands of a professional body, they are not the body to enforce that, but only the educational authorities can.

5615. The professional body quite feel that, and think there should be an increase of academic culture. The proposal was that they should pass the Matriculation of the University of London, which, of course, is a considerable increase. I do not know what the proposal about the Preliminary Scientific was, but after that the examinations of the Colleges of Physicians and Surgeons should be taken, in part, at any rate, as qualifying for degrees. Would you scheme admit any proposal or any plan of that kind?—The scheme puts on one side the Royal Colleges, and I think that is an important point. It will not affect the number of entries at the Royal Colleges, because the degree will not be reduced to the level of the license to practise. The degree may practically be reduced to the level of the northern Universities, but that would stand above the license to practise.

5616. Do you think so? That would meet the question at once?—I am afraid the professors of the Northern Universities would hold that their degree was above the license to practise. Of course I am not capable of expressing an opinion upon it.

5617. Then with regard to the Theological Faculty, it has been put before us very strongly by the Nonconformist bodies, who desire that it should be of the most open and free kind; and that there should be no test whatever either for teachers or for examiners. Would you agree to a Theological Faculty founded upon that basis?—As I have said before, I think the Theological Faculty must be left to theologians; but I think the University would have to make provision for some amount of general culture.

5618. (*Bishop Barry.*) That is understood, I think?—I think, from my experience of students from the Nonconformist colleges in London, that that standard of culture is hardly reached by the students of those colleges.

5619. (*Sir George Humphry.*) That standard would be raised. That they would wish, but they wish also that it should be a faculty entirely free and open for the study of theology on the broadest grounds?—If any training of that kind is supposed to be possible, I should say the thing would be to put it exactly on the same footing as we have done with the medical faculty.

5620. That is their desire?—But I should object very much to the representatives of the Nonconformist theological colleges being given places on the Senate of a great University.

5621. They take a broader, wider view?—Of course "wide" is rather a difficult word to define. The principle of our scheme is that there shall not be representation of the colleges as such.

5622. (*Mr. Palmer.*) Do I understand that you would not object to the representation of faculties, but only to the representation of colleges?—My idea would be rather a theological faculty, but we have not considered it at any great length, because we did not consider it as likely to arise in the immediate future.

5623. Would you object to theology or theological science being represented through its faculty?—I should prefer for it to be represented here through theological professors, rather than by representatives of colleges or representatives of faculties.

5624. Would you treat it in precisely the same way as the the medical faculty is treated?—Yes.

5625. (*Bishop Barry.*) Would not the faculty be composed of professors?—No. In the scheme that I put before the Commission the faculties embrace all the teachers in that particular branch.

5626. But still it would be in that particular branch?—Yes.

5627. And, therefore, it would be a body of teachers?—Yes.

5628. (*Mr. Palmer.*) Your scheme is that institutions of University rank should be absorbed; that institutions of minor rank should be allowed to continue giving lectures, and so forth; and that medical schools should be accepted as on a basis ——?—On the same basis—in view of what has just been said—of a possible theological faculty.

5629. Several objections have been referred to with regard to the absorption of institutions of University rank. It would tend to discourage endowments, would it not, in the separate places of University rank?—I think on the whole it would not. I think it would open up a greater field for endowment. A man would be much prouder of giving his money to a University for London than to any college in Gower Street.

5630. You referred to the funds of the City and Guilds as being very useful for the University?—I think not; I do not think I mentioned the funds of the City and Guilds.

5631. I understood you to refer to that?—I referred to the Central Institution as being a body of academic rank in London.

5632. The Central Institution is one of the three applied science schools or colleges of the City and Guilds?—Yes.

5633. And it is paid for in every way out of the funds of the institute?—Yes.

5634. My only point upon that was to bring before your notice that the funds out of which that and the other colleges are supported depend upon the annual donations only of the City Companies and the Corporation of London, who might or might not be actuated by your view. I wish to ask you whether they would be disposed to stop these contributions or increase them if they were absorbed?—That depends upon the amount of patriotism there is in the Corporation. I understand that the Grocers' Company in founding their technical school, have placed a large sum down for a perpetual endowment for the school, whether it would be possible for the City and Guilds Institute to do anything of the same kind, I am not at all in the position of knowing.

5635. There is nothing to lead you to suppose that they would be likely to do so?—No, I do not know that I could say there is.

5636. You mentioned that University College, for instance, the Council which direct everything, is not

composed of teachers or professors at all, but exclusively ——?—No, I did not use the word "exclusively." After a battle of long years we have a professorial representation of about a quarter, I think.

5637. I was only leading up to this. In the proposed Senate or Council of the University what proportion would you assign to administrators as against teachers?—That we have purposely left blank because it depends entirely upon the general tendency of public opinion upon that matter.

5638. You are aware that in the City and Guilds which is an institution 14 years old, teachers are not represented on the bodies of governors, council, or executive committee. Has there been any harm done by that?—I think at the present moment there has not. I think it is extremely likely. I do not know whether it would be fair to cite another example, that of Sir Thomas Gresham's foundation in the city, which has also been in the hands of laymen for many years.

5639. I think I may put it to you now that the laymen have in 1876, 1877, and 1878 approached the teaching body with a view of making their institution more useful, and the approaches have not been successful?—I am not acquainted with that, but I may say that I think the introduction of the teaching element on the Council of the University College has very much assisted the progress of the College; and that it is contrary to one's general notion of Universities abroad to have a large number of laymen practically administering the University to the exclusion of actual teachers.

5640. If the University were to take over or absorb all these large institutions of University rank, they must be prepared to take over the administration of the estates also. Would the teachers on the governing body be prepared to do that?—I formely belonged to a college at Cambridge in which the teachers and graduates of the college managed a property worth 30,000*l.* or 40,000*l.* a year. No outside laymen were brought in for the purpose of administering the estates of the college.

5641. Is it not a practical thing to leave the administration of trust estates in the hands of lay trustees, and to utilise the results of those funds for the purpose of the University by the governing body of the University. Has not that been the practice of the authorities of endowed schools, and kindred institutions?—I think it might be valuable if there was no danger of the trustees suddenly withdrawing their support from the University.

5642. You want to bind the trustees?—Otherwise I think it might certainly be fatal to the University. For instance, I will put a purely imaginary case. Supposing the Central Institution came in, and the University concentrated its technology there, and supposing on some occasion, the schools in other places being closed, the City or one of the important companies withdrew from the Institute, the University would collapse on that side entirely. I think that unless there was some efficient hold on the funds any other view would hardly work. I think the difficulty might be met by appointing largely the representatives of those governing bodies as Crown nominees on the Senate.

5643. But you are not prepared to say how far you would afford representation on the Senate?—I would endeavour to balance lay and academic elements.

5644. Half?—Yes. I think you would find that the teachers would be glad to leave many things to the lay members, and the lay members would be glad to accept the opinion of the academic members on educational matters.

5645. I daresay you know that there are no funds that could be called trust funds under that institution [*i.e.*, Gresham College]?—No funds that could be called trust funds.

5646. I mean that the funds belong to the City and the Corporation jointly, subject to the burden of maintaining the College and the Royal Exchange?—Subject to certain trusts.

5647. Yes, but they are not trusts, except that they are subject to certain burdens. The words are the words of Sir Thomas Gresham's will, which has been frequently advised upon, and there has been no objection or doubt cast upon that?—That may be the legal aspect of the matter, but at the same time there is another aspect, that 50*l.* a year in Sir Thomas Gresham's time (which was the sum he gave to his professors) has a present value of about 500*l.* And there is a moral aspect; I have no knowledge of what those funds amount to.

5648. They amount to about 18,000*l.* a year?—I have no knowledge at all of what they amount to, or how they are spent, but I should feel that there might be a moral obligation on the City to do something for the higher teaching of London.

5649. Would you be prepared as a professor to reconsider a proposal which was made before you became a professor?—I do not know what that proposal was. I placed my resignation in the hands of the Committee when I heard there was a re-organisation contemplated.

5650. Would you think it a misfortune that the Gresham, which for 300 years had been the nucleus of higher education in London should become a nominal centre?—I should think for a period of about 70 years after its foundation it was the centre of higher education.

5651. Has there been any change?—I should say entirely in the character of its teaching, and the reputation of its professors.

5652. You mean that it has undergone some change?—The reputation of its professors in the first 70 years was that of the foremost men of science in England. That ceased within about 70 years after its foundation. The reason for the change I take to be the great increase in the value of money. The 50*l.* a year was not capable of providing the best men. At that date it was 50*l.* a year.

5653. There are, however, no funds from the Gresham institution which would be applicable to University purposes. I do not know if you know it, but the burdens which have had to be borne have not been repaid by the overplus; so that any gifts or donations to the University would be voluntary?—From the Gresham?

5654. From those concerned in the Gresham. I only wish to bring out that there are no funds available for general purposes?—The college is costing 2,000*l.* or 3,000*l.* a year, I suppose, now. I have no knowledge of what the college costs.

5655. The words of the will were "The overplus of "my rents and profits of the premises hereinbefore to "them disposed of will soon recompense the same"?—I quite agree that there is no legal claim.

5656. There is a great desire on the part of the laymen who manage that trust to make it more useful than it has been for some time past?—I think that it is quite possible. I was referring merely to the moral claim.

(*Witness.*) I do not know whether I might ask leave to refer to one general statement which I made. That is with regard to the action of the Senate of University College. I feel I may have left a state of doubt as to what exactly the professorial body have done. You might think by what I have said that they have definitely accepted the proposals of the Association. May I put in the exact motion that was carried?

5657. (*Chairman.*) Yes, I think you said it was a working majority?—I said they had also carried a resolution in favour of a wider scheme than the Gresham. I think in justice to my colleagues, it would be right that I should read exactly what did take place. This is the resolution carried on June 8th, by the Senate of University College:—"That in the opinion of the "Senate, the appointment of the new Royal Commission "on the reconstruction of the London University, offers "an opportunity for a more complete settlement of "the question than has hitherto been possible, and "with this view, the Senate respectfully urges the "Council to join with the Senate, in adopting a reso-"lution to the following effect—such resolution to be "transmitted to the Royal Commission:—'The Council "'and Senate of University College would view with "'favour the establishment of one homogeneous "'University for London, consisting of a supreme "'governing body on which the teaching staff would "'be largely represented, together with Faculties "'composed in each case of professors, readers, and "'lecturers appointed by the University. The teaching "'might at first be carried on in the laboratories and "'lecture rooms of the existing London Colleges. The "'Council would be prepared to surrender many of its "'rights of control over the teaching and funds of "'University College to a central body constituted "'on such lines, provided that other institutions were "'willing to act in the same spirit.'"

K. Pearson, Esq., M.A

29 June 1892.

5658. Was that carried on the 8th of June of this year?—Yes.

5659. (*Bishop Barry.*) Has that come before the Council yet?—The Council has had this before it and has postponed its decision. There is an important tag to it:—"That in the event of the Commission finding it "impossible to establish a single homogeneous Uni- "versity for London, the Gresham Charter be then "modified by the introduction of special provisions: "(1.) For University degrees in medicine connoting "a certain standard of literary or scientific education; "(2.) for possible future amalgamation of the consti- "tuent colleges under one central governing body; (3.) "for the appointment of lecturers and teachers with "power to lecture or teach wheresoever the University "shall give its sanction; (4.) for the future appoint- "ment of teachers by a central board."

5660. I think No. 3 is in the Gresham Charter?—No. If I read it rightly the teaching, as far as degrees are concerned, must be done within the walls of the colleges.

5661. I think not. The Council has power to appoint lecturers in any subject it pleases whether connected with a Faculty or not?—But I think you will find in one of the clauses that any student reading for a degree must have been two years within the walls of a college of the University.

5662. It is not then merely the appointment of independent professors which is desired, but it is that their lectures should be substituted for attendance at a college?—Practically this is to cover the work at the Birkbeck Institution or institutions of that kind.

5663. I doubt whether you could not do that under the Gresham Charter?—I think not for degrees.

5664. My impression is the other way, but perhaps you have studied it more than I have?—I felt it better to put that resolution in case I had misrepresented what my colleagues had really carried. This, of course, is a document which the teaching staff of the College have sent up to the Council of the College.

5665. Would it be right to ask whether there was a large majority or whether it was carried with practical unanimity?—It was carried with practical unanimity.

5666. *Nem. con.*?—Yes.

5667. (*Mr. Anstie.*) There was an answer of consider- able importance given by you to Mr. Palmer which I would like to pursue a little further. I understood you to say that, consistently with the claim of the professorial University as detailed in this paper, you would think it not impossible or unreasonable or undesirable that there should be on the governing body of the University, an institutional representation—that is a representation of the funds by which the University was supported?—I think I hardly intended to give that impression.

5668. I want to know how far you go?—I say that the Crown members might be chosen at any rate initially from the governing bodies of these institutions. I should advocate that very strongly.

5669. Then you, in common with some of the other witnesses who have already spoken in favour of this scheme, would think that that should be only a transi- tional arrangement?—I think on the whole it would be best that it should be transitional. I am not sure that it is absolutely vital, but it is a point I should press if I could.

5670. You would desire, if you could, that it should be merely a transitional arrangement, and that it should be arranged in the way you describe by the Crown playing the part of sponsor to these institutions. Would you consider it a fatal defect if it became necessary to provide for some future representation of those who were custodians of the funds upon which the future University would depend?—It seems to me that is practically abolishing the principle of absorption.

5671. Not quite. Supposing the institutions re- mained in this sense that there were funds under the management of trustees devoted to the purposes of a particular institution and that the professors of that institution formed part of the professoriate of the University, those professors, including in the term lectures, readers, and demonstrators would in their Faculty be united with the similar professors in other institutions. That, I suppose, you recognise?—You mean maintaining the federal nature of the University, in having duplicate and triplicate professors.

5672. Yes?—I think that would be most undesirable.

5673. What is the amount you think it desirable that the professors should still retain of local character?—I think in many respects it is unadvisable to have a duplicate staff at the various London Colleges. I should think if there were a University re-organisation, for instance, it might be desirable that the endowed professor of English at University College should lecture in the Strand. It might be advisable to con- centrate Arts and Literature in the Strand and there- fore it might be desirable that the endowment for that professorship should be given to a professor lecturing in the Strand and not in Gower Street. I should wish to economise power in that way.

5674. And you would contemplate something like a permanent arrangement?—Probably. That is merely an example.

5675. So that in that way although you would not recognise institutions you would recognise localities—centres of instruction?—I should recognise those because there are valuable buildings which it is to be hoped the new University would make use of.

5676. *De facto* you would have every reason to recog- nise them?—Yes. They would be University buildings instead of collegiate buildings as hitherto.

5677. You do admit—it can hardly be otherwise after what you have said—the localisation of various branches of teaching?—The localisation of various branches of teaching, I should think, must be a feature of a homogeneous University.

5678. And would you like at all the local funds to support that local teaching?—I do not quite understand what the local funds would be.

5679. Take the case you mentioned. You say litera- ture might be localised in the Strand and science perhaps I might suggest, localised in Gower Street?—Yes, or biology, or some branch of scientific teaching.

5680. Would you apply local funds to the support of that localised teaching, or would you think it necessary that the whole fund should be absolutely delocalised?—I understand you to mean by local funds those attached to University College or King's College?

5681. Yes?—I should say we should have to carry out so far as possible the trusts of those original funds not in relation to local teaching but in relation to the nature of teaching. The professor would teach where the University thought fit.

5682. Then you disengage the funds to that extent from the locality. You would say that the fund for the teaching in a particular place and in a particular institution should be applicable to the same kind of teaching in the University at large—the place to be determined by the governing body of the University?—Yes.

5683. (*Bishop Barry.*) May I ask whether you would propose to do that by Act of Parliament?—I think I said previously that I believe only an Act of Parlia- ment can solve the difficulties.

5684. These difficulties amongst others?—Yes.

5685. (*Mr. Anstie.*) I quite understand the position. You say that what you desire could only be done effectually by Act of Parliament?—I should go so far as saying not only what I desire, but I believe anything at all will have to be done by Act of Parliament.

5686. We will proceed upon the assumption that what you are now speaking of as that which in your view ought to be done for the purpose of making an efficient University in and for London can be done. Having regard to the fact that these are trust funds held by bodies and that Parliament would have to deal with them in this somewhat exceptional way, would you see any vital objection to the holders and trustees of those trust funds being represented in some way on the governing body of the University?—You mean perpetuating for ever the trustees of these funds; that is to say, the College Councils.

5687. No doubt it would be in some degree a perpetu- ation; it might be a variation but still a perpetuation of those bodies?—To that extent I am trustee for the funds of University College, being a life governor of the college. I say we ought not to be perpetuated. I do not see that we represent anything in particular. Our chief object is to form an efficient University for London, and I cannot conceive why the governors should object to the trusts being carried out for precisely the same purpose under a wider educational scheme.

5688. You say "precisely" but you admit that it is not precisely?—I am inclined to think that University College would be carrying out practically its own powers if it established a teaching institution in the Strand at the present moment. I think it could teach anywhere in London, and if some of its endowed professors lectured in the Strand they would not be breaking through the objects of the trusts of the college.

5689. I should like to get from you this, if I may press it so far. Assuming that a real practical difficulty were felt by this Commission in making a recommendation on the ground that it was of a character not likely to be backed by the weight of Government or to be accepted by Parliament, would you think it a very vital injury to your proposed scheme that there should be something in the nature of institutional representation?—It seems to me that the very key note of the scheme is that the institution should cease to exist, and when institutions are to be carried on and at the same time to be represented on the University body it is merely going back to a federal scheme. I do not know that I should have a very great objection to the trust funds being carried on by some sort of trustees; for instance, take a trust like the Quain Endowment, for the Quain professorships. It is, as a matter of fact, a separate trust, and the trustees chance to be members of the governing body of University College, or of the Council. The trust is to appropriate a certain sum to the payment of professorships and studentships, and so on. I should think those trustees might continue to exist under the new system, but they would not exist as an institution.

5690. Then I may take your answer to mean that you would only recognise those institutions to the extent to which the first Crown nominees might pay regard to their position?—I should like to say that I think that is what is desirable, and that is what I think one should try to educate public opinion up to. I do not think myself there is any immediate prospect of this University question being settled in the next year. I believe it will be a matter of several years' hard fighting and educating public opinion; but that is certainly the end I should have in view.

5691. Having those views, you would rather not accept any compromise or abatement from your demands for the purpose of your present evidence?—I should not like to speak for the entire executive committee of the Association, you understand. I am speaking of my own views. It would depend entirely (I think I may say that) on the amount of control which the University had. I want practical control for the University over the resources of the colleges.

5692. Over the whole funds?—Yes, the funds being held subject, as far as possible, to the present trusts.

5693. And I gather that the control over those whole funds is to be exercised by a body to which, speaking generally, you would admit none but representatives of the professorial staff?—No, there are Crown nominees.

5694. I will put aside Crown nominees?—But surely they are very important.

5695. Well, I will come to that in a moment; but apart from the Crown I may say that the whole of those revenues you put at the disposal of a governing body which is, apart from the Crown nominees, the professorial staff?—Yes, but I think that is a most important qualification.

5696. I will come to it in a moment, but that is right so far?—Yes, with the qualification and subject to the trust.

5697. Now that brings me to a point I particularly want to ask you about. What is the peculiar function which you think the Crown nominees would discharge in this governing body?—I should like them in the first place, as I said, to be representatives of the best lay element on the present college councils.

5698. You are still on the period of transition. I want to get rather to the broad and permanent institution of the University. What want do you think the Crown nominees would supply, and what special function would they discharge in a permanent sense in the new University?—I should look forward for Government support for any future University—I think there ought to be some—and no Government support will be given without some Crown representation. You have the Crown representation on the existing University.

5699. Then may I take it that your view of the Crown representation is that it is a concession by which you desire to obtain the advantage of public money?—Partly, and partly also because we are proposing to absorb the existing University, and there are a number of Crown members there, partly and—what is very important indeed—we do want to introduce into the governing body of the new University what I call the better lay element in the councils of the colleges.

5700. But I wanted to keep away from that transitional operation?—But permanently that lay element will not cease to exist. There will be the same type of admininistrators who, I hope, will be put on by the Crown.

5701. You think there will be an advantage in having a nomination by the Crown, because you think those nominees will supply a valuable element of lay administration?—I think they ought to.

5702. I am asking you whether you think they will?—I think they will. I think three nominations out of four will be good; the fourth may be a job. Probably only half the members of the lay councils are really serviceable members from the academical standpoint.

5703. Half the members of the lay council?—Of the present councils of the colleges who are not Crown selected.

5704. When you say from an academical point of view, you mean with regard to the advice which they give as to the conduct of teaching?—Yes, the conduct of teaching and the equipment of laboratories, and so forth. I am speaking of course of that council which I know more intimately than others. I do not think that on the whole it is a good body; it is certainly not a good body for governing a University.

5705. May I take it that you do not think that those who are in charge in one way or another of the funds of the various institutions are persons who could be trusted to contribute valuable elements to the new University?—I have tried to make clear, that I think it would be from the better element, that the Crown nominees would be selected.

5706. I am speaking of it in a permanent sense. I want to get away from this merely transitional point of view. May I take it that having regard to the permanent state of things you do not think that those who are in charge of the trust funds, and in that sense of the administration of these institutions, could be trusted to appoint valuable members?—I think the Crown (after the University was permanently established) would select the same type of men for the University Senate as are selected at present for the University of London Senate; and the best elements of the college councils are very much the same as the Crown nominees of the University of London Senate.

5707. Pardon me; then if that is so, if the best elements of the college councils are of the same type as the Crown representatives on the London Senate, why do you say they might not be, with restricted representation, of course, trusted to select in the future the same type of men as are now selected by the Crown?—Because I think there are many persons who are not the best element on the college councils.

5708. Yes; but I am proposing a great restriction you will observe. Of course these college councils are each one numerous, and there are several different bodies. I am supposing now a representation which will be restricted in the same way that the Crown representation would in any case be restricted, I mean in point of numbers. What I should like to put to you is this: supposing the administrative bodies of the various institutions which are interested in this matter of a London University were to be divided according to their respective departments of learning, and were in these respective divisions to act in common, do you not think you might trust them to nominate upon the governing body of the University competent useful members?—I am not at all sure upon that point. I should much prefer the pure Crown nomination and the professorial element. I am only speaking more particularly of the Council of University College. I think the method in which that Council is elected is not a satisfactory one, and I should object *in toto* to that method of election being indirectly perpetuated in a great University for London.

5709. I am not putting quite that. Supposing you had half a dozen institutions, and those institutions varied very much as they do in fact in the character of their teaching the number of their chairs, and their

K. Pearson, Esq., M.A.

29 June 1892.

educational resources in general, supposing that first dividing them into their several departments, you were then to unite those corresponding elements, do you not think there would be a considerable probability of their naming valuable members of a governing body?—I should like to ask, before I answer that question, what are the governing body? My idea is that the method in which the Council is elected is not satisfactory at all; it is not academical; there is no proper provision for the selection of people with academical experience; and I do not see that they as a body of voters for other representatives, would be more efficient than in their other capacity. As a life governor of University College you are probably acquainted with the method in which the Council is elected. Sometimes there are extremely good men on the Council; at other times men are put on who have practically no time to spare, and take rather *dilettante* interest in University matters and come occasionally.

5710. Then the result, I gather is, that you can suggest no way in which the administrative interests of these bodies can find entrance into or upon the proposed new governing body?—I do not see how if you are going to have a process of absorption it is possible to have an unabsorbed college council.

5711. Of course if you start with the assumption of absorption you negative at once any such suggestion, but may I take it that you do not see how any method could be arrived at by which the administrative bodies could be usefully represented on the Council of the new University?—The type of men who sit on those bodies will always form material out of which useful members might be elected by the Crown. Practically we know that very often the Crown nominees take their suggestions from the governing body itself.

5712. Or they may not?—Or they may not.

5713. And it would very much depend upon the peculiar state of circumstances existing at the moment whether they do or do not?—Yes.

5714. You would rather leave that entirely to the Crown?—Except in the transitional state.

5715. There is a question, with regard to the medical aspect of which you properly declined to be answerable, but as to which you had formed academic views, have you considered the two propositions which have been before the Commissioners. I ask this question because of an answer you gave with respect to Oxford and Cambridge in which you seemed to contemplate as possible some acceptance by them of the proposition of the Royal Colleges of Physicians and Surgeons for a union with them. Two suggestions have been made for the purpose of getting rid of this difficulty of the license, one is this: The proposal made in the Senates scheme (clause 47) is one by which arrangements may be come to by the Senate and the Royal Colleges for the conduct, if necessary, of a single examination on which the license may be determined by the colleges, and the graduation determined by the Senate. Broadly that is a description of it. That is one form. Another form is that the Royal College examinations should be kept entirely distinct from the University examinations, but that the University should accept on the more properly technical subjects, the *testamur* of the Royal Colleges as being not a necessary condition, but so far as regards these subjects a sufficient condition for allowing graduation. Have you considered this at all?—I should like first to correct an impression which has apparently been formed in your mind, which was very far from my meaning, namely, that the Royal Colleges were likely to impose any representatives upon the colleges of Oxford and Cambridge. The point I wanted to make was that it was as unreasonable for the representatives of the Royal Colleges to be thrust on the University of London, as it would be for representatives of those Royal Colleges to be thrust on the Universities of Oxford and Cambridge. I should say there is not the least chance of Oxford and Cambridge submitting to representatives of the Royal Colleges in any way interfering with their power of graduating, and I think it is extremely undesirable that the Royal Colleges should interfere with the terms of graduating in London.

5716. You observe that with respect to the first alternative I put to you, there would be no such interference. The proposition I put to you was that they should hold if necessary an examination in conjunction with the Royal Colleges at which the Royal Colleges should determine the question of licenses without degree and the Senate should determine the question of graduation, such graduation carrying the license?—Of course I am not really speaking for the medical side, but as far as I can speak I should keep professional bodies like the Royal Colleges entirely outside the University. Let the University examine for medical degrees with that academical element, an education in pure science and literature, which to my mind marks the educational element in a degree.

5717. If you have license examinations by a licensing body kept altogether and absolutely separate from the University graduation you have a difficulty introduced into the teaching of medical subjects and a necessity, or supposed necessity, of having two distinct courses, one for licentiates and the other for intending graduates?—It exists at present in other Universities in the country, I see no reason for changing it in the least.

5718. That is not quite the fact. At Victoria, for instance, they are now able to have only one course (so we are given to understand) and that course is defined with reference to University graduation which carries with it the license. In the evidence given before this Commission that point has been insisted upon and with or without reason very strongly insisted upon?—I should have thought the important point was to grant to the University degree the license to practice, and, speaking without real knowledge of the medical side, the license to practise is best obtained by introducing the London University into your scheme. I would keep all professional Corporations exactly in the same position as they hold with regard to other Universities.

5719. Where would you propose to accommodate and to give medical instruction to those persons who are intending to be licentiates but do not intend to graduate?—In the ordinary hospital schools as at the present day.

5720. But would not those very schools be the ones at which you would desire to see University instruction carried on?—I think so. I think the double course is carried on at a great number of the Universities at the present moment. Many graduates of Cambridge take the license of the Royal Colleges.

5721. It is stated to us that there are great inconveniences attending its being carried on in that separate way?—I am unable to express an opinion upon that point. It may possibly be a mere argument in favour of the old plan of cheapening degrees.

5722. I do not think of it as a question of cheapening the degrees at all, but a question of the co-operation between the merely licensing body and the degree-giving body?—I think it would draw into opposition all the provincial colleges, and probably the Scottish Universities, if you have special relations between London and these licensing bodies.

5723. Apart from that, do you see any objection to it?—Yes. I think the professional should be kept out of the academical sphere.

5724. On what ground?—On the ground that professional bodies are not, in the first place, teaching bodies.

5725. But it may be assumed, may it not, that professional bodies aim at producing a person competent to deal in a scientific way with the matters of his profession?—They are not dealing with academical education, which, to my mind, forms an essential part of the medical degree as distinguished from the license to practise.

5726. You think that is a matter to which they are so far indifferent that they cannot be trusted as a constituent element in any academical framework?—I do not see the necessity for it.

5727. (*Professor Sanderson.*) You recommend the creation of a homogeneous University, absorbing the existing institutions. In what sense do you call it homogeneous?—I mean by homogeneous that it does not consist of competing colleges. It is not a heterogeneous body, composed of colleges of various grades of teaching power with various aims and objects.

5728. You do not at all refer to the constitution of the Senate in that case. That is clearly not homogeneous according to your plan?—No. There is only one Senate, at any rate.

5729. It consists of 12 Crown nominees and of professors?—Yes.

5730. Has it occurred to you that it might be better to have the Crown nominees in another board of control, and to leave the professors to constitute a board of administration?—I think that point was fully discussed at the meetings of the executive committee of

the Association—whether there should be a separate body of that kind; but we thought the personal contact was of very great value. The two types of men absolutely working together are of far greater value than as separate bodies.

5731. The personal contact of two elements?—Yes. They grow to understand each other much better than if there be merely formal representations from one to the other.

5732. No doubt the great difficulty in your scheme is to be quite certain what we understand by the term "absorption," is it not? You have mentioned various ways of absorbing or bringing this about, and there seems to be one very important distinction; on the one hand administration of the income, for the purpose of teaching, and, on the other hand, the absorption of both the administration and of the funds?—I think the absorption referred to is complete absorption of management, funds, and everything. I do not quite follow the distinction you are drawing between the two kinds of absorption.

5733. In section 13 you say: "A teacher of pure "science in a recognised medical school to become a "member of the Faculty of Science, whenever the "appointment to his post is entrusted permanently or "*pro hac vice* to the Senate of the University." Does not that entrusting of the teacher or the teaching constitute a sufficient absorption?—No, I think not; I think the medical schools distinctly require special treatment, and it is not proposed to absorb them. But if the medical schools choose to hand over the appointment of all or any of the pure science teachers to the University they would become, on the basis of that, members of the Faculty of Science of the University.

5734. I wanted to ask whether that kind of absorption is not sufficient?—No, I think not. You cannot destroy the competition between medical schools, but what we want is to destroy the competition in the Science and Arts Faculties.

5735. The college gives up its control entirely; the professor is not answerable to the college in any way; he is answerable altogether to the University. That is a process of complete absorption as regards that professorship. What objection is there to that?—I have not sufficient knowledge of the working of the University of Oxford; but so far as regards my experience at Cambridge it does seem to be the state of affairs there. There are certain contributions by the colleges to the University. They are compelled to make contribution, and one form of contribution is the giving up of a fellowship or a certain number of fellowships to University professors; but the colleges are not compelled to accept any professor the University may thrust upon them?

5736. Yes?—I think not at Cambridge.

(*Professor Sidgwick.*) I think the comparison is true of Cambridge in one or two institutions.

5737. (*Professor Sanderson.*) Have not fellowships been attached to professorships and the colleges obliged to accept as a fellow the particular gentleman elected by the University?—Those are exceptions. I think I am right in saying that the general rule is that the college can refuse to take a certain professor, it practically selects what professor it will take.

5738. I want to know whether an absorption of that kind, if it can properly be called a process of absorption, does not give the Universities sufficient control over the professor to answer your purpose?—I am inclined to doubt it, because at Oxford you will find only one professor in each branch of the subject. Here in London we have a multiplicity of professors.

5739. That is hardly true, because we have at Oxford three professors of philosophy?—Hardly in any sense of the words competing professors as to fees.

5740. I do not see how that bears upon the question. I want to know whether the process of absorption suggested is not one which secures to the University all the advantages which the University would possess if it had not only the control of the teaching, that is to say, the performance of duty by the professor, but also had the regulation of the funds by which the professorship is supported?—I do not see how it would cut the ground from under the present system. I do not follow clearly the working of your scheme; how would you propose to apply it to the London Colleges?

5741. How would it affect competition?—By a scheme of absolute absorption you can ultimately get rid of this competing element and hinder the establishment of small laboratories.

5742. Then in order to bring about the desirable state of things, at Oxford, for example, the University ought to have the power of preventing the appointment of more than one professor of a subject?—I do not think that. I think at Oxford, and especially in branches of science, you have University laboratories. You have not rival University laboratories at Oxford. We have in London. The colleges each establish their own laboratories.

5743. I do not see how that attaches to the mode of absorption. For example there happen to be two professors who teach Zoology in Oxford. That fact arises from the accident of funds having accrued to the University from two sources?—Are there two professors of Zoology in Oxford?

5744. Two sets of collections?—They take separate branches, I suppose, I should say that is rather a wasteful system.

5745. Yes, but you cannot attribute it to the mode of election or the want of absorption?—I think it would be a very great advantage to us to be without it, and it would be a great advantage to Oxford.

5746. There is no reason why the University should not have sufficient control to prevent the appointment of two professors for one subject, with the system of absorption which I am describing to you?—I do not see how, without control over the funds, you can ultimately put an end to the smaller laboratories and develop one University of London.

5747. But the college need not interfere in the slightest degree either with the actions of the professor or the subject that he teaches?—I was trying to draw a distinction between an Oxford College and a London College; a London College is a totally different institution from an Oxford College.

5748. Different in this respect. A London College is sustained by certain funds. You wish to use the funds. Why not administer and use them for the purpose for which they were designed if the college will allow you to do that?—I do not follow how you are to take possession of the funds of the college except by absolute absorption.

5749. For the management of teaching, and the carrying out of the purposes for which those funds are to be applied, it does not necessarily follow that the college should give up any control over its funds?—I cannot clearly follow.

5750. Is it not possible that a college should hand over to the University certain funds, reserving to itself the management of the sources from which those funds are derived?—In fact to make them merely conduit pipes.

5751. Yes?—Then they would have no function whatever except receiving these funds and handing them over to the University.

5752. Precisely?—It seems to me a better straight forward way to get rid of these bodies than merely keep them there with a nominal function.

5753. How do you propose that the process of absorption in your scheme should be carried out?—You agree to the scheme, I suppose, of an appointment of a small and independent commission?—That is the method which struck the Executive Committee as possible. They thought it ought to be practically constituted of several lawyers of repute who would have an insight into the dealing with trusts of this kind.

5754. It is much better than the proposal contained in your own paper that the homogeneous academic body should absorb. I refer to the process of absorption described in clause 14?—I think that is only in the first instance, it is only the method of absorption which will be determined by this Commission. This Commission would not absorb the colleges. It would merely determine the methods by which they should be absorbed by the governing body.

5755. It would not set thing going. It would not organise the University?—It would not practically organise the academic part of it, but it would merely state what bodies should be absorbed—the conditions of the absorption and the re-settlement of the trust funds.

5756. You would think it quite certain that the re-settlement of the trust funds would accompany the process?—It would be very difficult without re-settlement to get any successful scheme.

5757. Now with reference to the medical schools, I should like to ask you what you mean by the expression

K. Pearson, Esq., M.A.

29 June 1892.

"pure science"?—That is purposely left vague. Chemistry and physics would certainly be treated as pure science, probably biology. Then comes the question of physiology. That, I think, would have to be left. In medical schools that chose to hand over the appointment of teachers of physiology to the University I suppose the University would have power to consider that as pure science. On the other hand there are at least certain parts of physiology which probably the medical schools would wish to keep in their own hands.

5758. If you are not able to state what science is, I do not see how they are?—The object will be to get as much appointment as possible into the hands of the University. It is an optional thing to colleges, handing over any appointment in pure science, but the more appointments the medical schools choose to consider as pure science the better for the University.

5759. Has another mode been considered, that is to say, the adoption of a plan according to which medical schools should pay per head for the students at the University?—I have not heard of that plan.

5760. With reference to the value of the degree you would think it would be a desirable thing if it were possible to have only one value—it is not desirable, for instance, that the University of London degree should be a better degree than the degree of the University of Cambridge?—I think it would not be possible to get a uniform standard. If the teachers have a high reputation the degree will be of corresponding value. I do not think it will be possible to get a uniform standard.

5761. Would it not be possible to obtain an equality between the old Universities and the new?—I think not only not possible but not desirable. It would destroy the individuality of the different Universities.

5672. Has it been proposed to establish the degree of Doctor of Medical Science as well as Doctor of Medicine?—I have heard something about it.

5673. I mean a higher degree, Doctor of Medical Science?—I have heard it mentioned.

5764. (*Professor Sidgwick.*) I did not quite gather which institutions you held should be absorbed. You mentioned, I think, Bedford College and the Central Institution, and the Royal College of Science. Do you regard those as constituting, along with University and King's Colleges, the institutions of academic rank which, in your view, it would be desirable to absorb?—I should say that of the higher academic rank in London there are only four.

5765. And those are?—University College, King's College, the Central Institution, and the Royal College of Science.

5766. Still you laid stress upon the fact that Bedford College had agreed to be absorbed?—Yes.

5767. Then you would allow any institution of inferior rank to be absorbed if it would like to be absorbed?—Yes; but I should be sorry to use the word "inferior" of Bedford College. I should say "minor." It is certainly not complete in all the Faculties.

5768. Your view of the Royal College of Science is somewhat changed since you wrote your book?—Since the earlier stages were written.

5769. I think you alluded to it as an institution with non-academic aims?—Certainly; but I would draw your attention to the fact that the statement was made six or seven years ago, before I was as fully acquainted with the work of the Royal College of Science as I am to-day.

5770. I think you attach considerable importance to the maintenance of a general standard of scientific and literary knowledge among the students of the University?—Medical students.

5771. I thought you meant among the students admitted to the degrees of the new University?—I attach importance to the degrees not being cheapened.

5772. You used the phrase "some general standard of scientific and literary knowledge"?—In special relation to medical schools.

5773. Would not you extend that?—Certainly.

5774. You are acquainted with the present working of the Royal College of Science?—Partly.

5775. You know that a most important part of their students are those who come in the national scholarships; no standard of literary knowledge is imposed upon them and only such sufficient standard of elementary scientific knowledge as is required to enable them to follow the courses?—Those students would certainly not be able to get degrees. There would be no exclusion of any students from any of the courses but only those who exhibit certain attainments will get degrees.

5776. Do you see no difficulty in absorbing the Royal College of Science if the students for whose need it was primarily instituted are not admitted to the degrees of the new University?—I think they would be admitted. I would draw attention to the fact that there is a large movement now for all normal teachers receiving what I will call academical education. At King's College and University College they have established departments for these Queen's scholars, that is to say, for persons training to be schoolmasters throughout the country.

5777. You have not seen the evidence given by Dr. Thorpe and Professor Rücker?—I understood that it was not the desire of the Commission that anybody should see anybody else's evidence.

5778. I will change the question, are you acquainted with their views?—I do not know that I am thoroughly acquainted with them. I know that they are extremely desirous that the Royal College should form part of the new University for London.

5779. In their evidence, if I remember aright, it was stated as their view that it was undesirable to impose any such standard of general knowledge; and that was not merely said in relation to their students in particular, but rather as a general result of their experience?—If I have put clearly my point, I think that is perfectly correct. I should make no standard for a person attending the lectures—no standard whatever—but only for granting degrees. That is a different point.

5780. You anticipate no difficulty from the absorption into the new University of an institution framed largely with a view to the encouragement of scientific education in the country, by means of scholarships?—There would be difficulties of course, but I do not think they are insurmountable.

5781. If I remember rightly in your paper you speak sometimes of a German University and sometimes of a Scottish University, as if they equally represented the type of a professorial University?—As opposed to the federal or collegiate system.

5782. You are aware that a fundamental point in the organisation of the Scottish University is the coercion to attend the lectures of certain professors with a view to graduation?—Yes.

5783. You are aware, perhaps, that that is a point in the organisation of the Scottish University which has been for many years very strongly attacked, with regard to which the Commission at present sitting has made some change, but it is a change which is regarded as by no means satisfactory by those who are in favour of a complete recognition of extra-mural teaching. You are aware in a general way of those circumstances?—Yes.

5784. I believe I am right in saying, in accordance with Professor Ramsay's statement, which you perhaps have read in the "Times," that there is practically no coercion in Germany. As regards these two principles you are decidedly in favour of the German in distinction to the Scottish?—Yes.

5785. Now as regards the graduation. I understand that it is proposed by the Association that all students should be admitted, wherever they may received their education, so that the University may be an examining board for the United Kingdom as the London University is now?—Yes; that it should grant degrees, in fact, to all comers, but possibly in different ways.

5786. May I ask if you regard that as desirable in itself. If you were making *de novo* a University for London would that be your plan, or is it only a concession to existing circumstances on account of the desirability of absorbing the existing University of London?—I think I should find that question to some extent difficult to answer. I should prefer very much to see introduced into England the German system, by which the student could pass from one large University to another, and take his degree finally at any University he pleases. I think that would be a strong feature in the new University, as distinct from the Oxford and Cambridge University system, which compels a man to stay in a University for three years.

5787. You would have two sides with regard to the examinations, as is proposed in the scheme approved by the Senate of London University?—Not unless it were forced upon the University. Many of the teachers in the provincial colleges say they would prefer their

students going in for examinations conducted by first class teachers in London to sending them to the external examinations; but if there were a sufficient public opinion urging us to separate the two systems of examinations, I think the University ought to do it. I think it is a matter that should be settled by practical requirements as they arose.

5788. You have spoken of competition among the teachers as the great evil of the federal system which you desire to remove, but in all that you have said in regard to that you appear to me to have had mainly or entirely in view the scientific subjects taught by means of laboratories. You have never used as an illustration, as far as I remember, the subjects of literature or mathematics which do not require a laboratory. How far do you regard competition as an evil, in all the subjects, or only as an evil in respect of its producing a number of improperly equipped laboratories instead of one thoroughly well equipped laboratory?—I recognise it on the arts and science side, also from the fact that small professorships are established which do not keep or procure the best men for London. Then you have very small classes. So far as my experience goes, it is quite possible to roll together the classes in English and Greek, and so on. It would be possible for those to be taken by one or two men, and in that case you would get men of higher standing than you get at present.

5789. So far as it is desirable to exclude competition, would not the result be obtained by appointing University professors, readers, and lecturers, without entirely absorbing and doing away with the independence of existing institutions somewhat in the way in which you are probably aware the University lecturers of Cambridge are appointed?—I do not see how it would work in London at all. In Cambridge the colleges are so close together that a man can attend lectures at one college and then pass to another. That would be impossible in London. A student may be reasonably supposed to attend lectures within a mile of each other.

5790. That is really the only difficulty?—No, I think the question of the management of the funds is most important.

5791. As I understand you, you think it would take a struggle of some years to get the various institutions you desire to absorb, to allow themselves to be absorbed?—I think the whole question will not be settled within the next year or so.

5792. May I ask whether those whom you represent would prefer to postpone the establishment of a University for London until this process of absorption has been instituted?—Would you appose any scheme which, while establishing a University, would still keep its colleges in the institution?—I could speak only for myself on that point. I daresay Professor Ayrton will be able to mention later what his colleagues may think. I think myself, and I have heard it strongly expressed, that we had much better do without a University in London than have a federal system of colleges for examination purposes. Let us postpone action till the matter is ripe rather than have an inefficient scheme.

5793. I think you said elementary teaching at a number of centres would be desirable under your scheme?—Yes.

5794. And therefore the difference between your scheme and what I may call a semi-federal scheme, resembling that of either of the older Universities, which aim at developing the higher teaching under University sanction, partly in connexion with and partly apart from the colleges, would after all, be a question of degree?—I think not exactly. I do not follow how it would be possible for a University, apart from the colleges, to control the equipment, and that equipment is not of the same kind as that of a college at Cambridge. It is in the nature of a small University equipment.

5795. You admit that your own scheme requires a very considerable introduction of new funds to be obtained from somewhere or other?—Partly introduction of new funds and partly economy of old funds.

5796. So far as the introduction of new funds is required that would facilitate the establishing of a combined system because the University would have the control of the funds from the outset?—Take the case of establishing a large biological laboratory. A properly equipped laboratory might cost 50,000*l.* or 60,000*l.* if it had to be started *de novo*, and a site found in an accessible spot in London, whereas if you take possession of a certain portion of existing college buildings and turn them into a laboratory of that kind you may be able to do it for a very much smaller sum.

5797. Now there are two minor points. First, with regard to the action of the governing body of University College. Could you say what part the governing board of University College take in the administration of the College?—The academical administration?

5798. I mean in any part of the administration?—Nominally, everything is settled by the Council, but the Council largely acts on the suggestion of the Senate.

5799. Practically?—The Council is governing body.

5800. The importance to be attached to the protest that you mentioned in relation to the needs and work of University College would partly depend upon the part that the protesters normally take in the administration?—I think if you look at the names——

5801. To return to my question. What part does this governing body ordinarily take?—It meets once a year to elect members of the Council.

5802. And that is all?—That is practically all.

5803. You spoke of the Charter of the Gresham University as not admitting the recognition which you propose the new University should give to University extension. You observe in Chapter 3 of the Charter that the University may appoint lecturers independently of a college, to give instruction in any subject, whether it be or be not included in the faculty, and it says the University shall also have power to grant certificates of efficiency in any branches of knowledge to students who have attended University lectures. Could you explain why those two clauses taken together do not allow the Gresham University to do what you think desirable? I do not mean what has been claimed by others?—Of course you refer to my answer on that point, but what I stated was the whole system of more popular lecturing. I included in that some such work as that undertaken at the Birkbeck Institution and various bodies of this kind as well as University teaching. These bodies prepare the men for pass degrees at the present time, but they would be unable, under the Gresham scheme, to prepare people for pass degrees, because the Charter distinctly states that all students for a degree shall have been educated within the walls of a college.

5804. If I understand you aright, you would not propose to give degrees for the work done by the students of the University extension system?—Not for their present standard, but possibly for a very very much higher standard. But nothing which I have seen leads me to believe that such a standard is possible in the immediate future.

5805. The degrees for which those other institutions prepare are, I suppose, the degrees of the existing University of London?—As a rule, the pass degrees of the existing University of London.

5806. Under the Gresham Charter they would still be able to prepare for the degrees of the existing University of London, and why would not that be as desirable for them as to prepare, under your scheme, for the degrees given by the new University?—It might possibly be as desirable for them, but it does not appear to content them. They want to have University lecturers at those colleges and to get a University sanction for their teachers.

5807. Have you reason to suppose that what you propose to give would content them?—I believe it would. I cannot say positively that it would.

5808. You are aware that they will ask a great deal more?—They will ask a great deal more.

5809. You spoke of cheapening the degree as a thing to be feared. I was not quite sure how far by cheapening the degree you meant to imply lowering the degree. I am now speaking of the medical side, as I think you did?—I spoke of the medical side, but at the same time I spoke of the arts and science as well.

5810. I am not sure how far you regard it as an undersirable cheapening of the degree that students in London should obtain the degrees on terms not more difficult than students of the University of Edinburgh or students of the University of Glasgow. Would you regard that as an undesirable cheapening of the degree?—I do not know what the standards of those Universities are.

5811. But assuming them to be less difficult than those of London?—I should not like to give an answer until I had some very definite medical authority as to

K. Pearson, Esq., M.A.

29 June 1892.

what the standard of the Scottish degrees is as regards that of London.

5812. Have you read the evidence given before the former Commission?—I have read the great mass of it.

5813. There was a view given by Sir Andrew Clark, which you will find at page 75. He says:—"We do "not wish to give our degree upon any conditions "inferior to the conditions upon which it is granted "by the University of Edinburgh. The argument "which applies to Glasgow applies to Edinburgh. "Why should not the College of Physicians and the "College of Surgeons in Edinburgh have the power "which we ask for? Because there is no necessity for "it; because it would be unjust to give it." He says that as to the University of Glasgow, and he says the same as to the University of Edinburgh. Therefore, upon that authority of Sir Andrew Clark the demand is rather for a degree that shall be less hard to obtain than that of the University of London, but on a par with those of the Universities of Glasgow and Edinburgh. Do you see any objection to that?—I cannot say altogether whether Sir Andrew Clark would interpret his statement in that way. He might not mean that it was a lower grade of examination, but he might mean that there are other circumstances connected with the teacher being an examiner, which rendered the degree more easy to obtain in Edinburgh and Glasgow than in London.

5814. But is it admitted that students leave London to go to those Universities?—Yes, I quite admit that.

5815. And therefore one may infer *primâ facie* that the degree is not so difficult to obtain?—That may not have to do with the degree of scientific attainment. That may have to do rather with the particular method in which the examination takes place.

5816. So far as the change made only led to the result that the degree was not lower in standard of scientific work than that of the northern Universities, you do not see any objection to the change?—It would depend entirely upon what I am not able fully to give an opinion upon, namely: the relative standard Scottish Universities, the amount of pure science and general culture involved in the degree of the Scottish Universities.

5817. You are acquainted with the German Universities?—Yes, to some extent.

5818. It has been represented to us that the professorial teaching in a German University is largely controlled by the State examinations, and it has been stated that it is a rule in Germany that the medical degree should only be given to students who have passed the State examination; in this case there would be precisely the same kind of introduction of an external body in the course for a degree that you are now arguing against?—You are referring purely to the medical side, I understand, because that State control does not exist in the arts and science side.

5819. On that side it is indirect, in the way that the majority of students preparing in the University are preparing for the State examination, and not preparing for the degrees of the University?—You mean the State examination in medicine?

5820. May we not say generally of the German Universities that only a minority of the students are preparing for a University degree?—I think I should want very definite statistics upon that point, putting aside medicine, and of course the Faculty of Laws. In the Faculty of Arts and Science I think it would be very doubtful. It may be so, but I should be rather surprised.

5821. (*Bishop Barry.*) I understand that from yourself and from those whom you represent, there is a fundamental objection to the principle of the Gresham Charter, independent of details?—Yes.

5822. That principle being the confederation of colleges; and your objection applies although the Gresham Charter contemplates the co-existence of the London University?—Yes, I think so.

5823. May I ask if there is an equally fundamental objection to the scheme which has been put forward by the Senate of the University of London?—I think there would be a strong objection to the scheme.

5824. A fundamental objection?—Yes; a fundamental objection in that it did not lead to the abolition of competition between colleges inside the walls.

5825. In other words that it proposes to allow colleges to exist under regulations, instead of being what I believe you generally call "absorbed"?—Yes.

5826. That was the fundamental objection to it?—Yes; of course I have not the absolute details of that scheme before me now.

5827. You have seen the scheme which has been printed?—Yes; you mean the last scheme rejected?

5828. Yes?—One strong objection to that was that it put the examination for degrees largely into the hands of London teachers, without putting the appointment of those teachers into the hands of the University at large.

5829. The examination that was provided for was to be in the hands of one of the teachers, and an external examiner appointed by the Council?—Yes.

5830. In some schemes it was proposed that the external examiner should have a casting vote?—Yes.

5831. That does not, in your judgment, give sufficient independence in the examinations of the colleges?—No.

5832. That is your own view?—Yes.

5833. And I presume the view of your Association?—That is my personal view.

5834. Whatever transitional period we may go through, your scheme requires that those institutions should finally cease to exist. I think you have repeated that phrase several times?—Cease to exist as institutions, although it may be quite necessary that certain portions of them under special trusts should continue more or less apart from the University.

5835. I do not quite understand what "more or less apart" means. That a door may be open or shut I understand, but I do not understand what "more or less apart" means?—I will give you a particular example. At University College we have a medical school. That would have to be separated from the college.

5836. Then it is only the medical schools that are to be so treated?—I should say supposing King's College were to come into this scheme the same would probably have to apply with regard to the department of Theology at King's College. You could not put that under the control of the University.

5837. Why not?—Because I think it is established for certain definite trust purposes, that is to say for the Church of England.

5838. You would not object to its serving a Faculty of Theology in the University?—I should not object to its forming a part of the Theological Faculty in the University. I do not see how an unsectarian body, that is to say, of no religious opinions of any kind, could carry out a trust for a definite theological purpose.

5839. Then would you allow the Council in that institution to exist, in order to manage this trust?—I should put it in the same position as the medical schools.

5840. Why should not the medical schools be absorbed?—I tried to point that out in the early part of my evidence. You mean the medical schools of London?

5841. Yes?—It involves such an enormous question as to the charities. The schools belong to the charities.

5842. Then it is simply on this ground and not that you do not think it desirable that they should be absorbed?—I consider it impossible. If we were founding a University afresh and founding medical schools, I should prefer to see one great medical school for London, but I see no great hope of that so long as these institutions are practically the property of large public charities.

5843. Nevertheless it might be quite right and fair to absorb great institutions like King's College and University College, although they are connected with very important trusts and were founded for particular purposes, and so treat them in a way in which you would not treat the medical schools?—Because I think there is some chance of University College, and I hope ultimately King's College, being willing to enter into this scheme.

5844. Then, may I ask, are those colleges to be absorbed only by their consent?—Only by their consent, certainly.

5845. I thought you said you conceived an Act of Parliament would be necessary for the purpose?—So it would.

5846. Merely an enabling Act, you think?—Yes.

5847. But you contemplate that the colleges will be ready to destroy themselves as independent institutions, in order to be fused in a larger body?—I think that is the only way to establish a satisfactory University in London.

5848. And your scheme depends upon that contingency?—Speaking for myself, I should say that it largely does depend upon that.

5849. Does it not entirely depend? I have tried to follow your evidence as carefully as I could, and it appears to me that it entirely depends upon ultimate absorption?—Not of all those bodies, but such as desire to come in.

5850. I presume there would be a gentle pressure put upon them to come in—that is to say, those institutions that did come in would be placed in a far more favourable position, and these independent institutions would be left out in the cold more or less?—Yes.

5851. Do you not consider that would be an indirect compulsion?—It might be to a certain extent compulsion, but in all these matters of academical reform there must be something of that kind.

5852. It is practically indirect compulsion, I think?—I should use every legal means to induce them to come in short of——

5853. I gather that what you say is "No com- "pulsion, only you must come in,"—(it must come to that, must it not)—"otherwise you will be in such an "unfortunate position that you will be obliged to "come in"?—I think that would be a very healthy condition of affairs.

5854. That is practically what is proposed; you are to establish this University in London and invite them to come in; if they will not come in you will place them under such difficulties that they will have to reconsider their determination?—I should proceed to found a University independently of those bodies.

5855. Contemplating the result of this absorption which we will call semi-voluntary, is it not placing them rather in a difficulty saying "Here, we will found "with Government funds a great institution and you "must come in, otherwise you will be placed in a "position which will be one of great difficulty"?—These colleges are all asking great favour from the State.

5856. But that favour is not the favour of being allowed to despatch themselves?—No, but they are asking the favour of being able to confer degrees. I do not think the State ought to grant them that.

5857. Under any circumstances?—I will not say under any circumstances. I will say except on such terms as will be beneficial for the academical future of London.

5858. In other words, it is to grant them this favour on the condition of their ceasing to exist as independent bodies?—Yes.

5859. Practically this is to grant a certain privilege to institutions which as corporate institutions have passed away. To their corpses, so to speak, or to the remnants of them, these privileges are to be granted?—I think that is putting it in rather a forced manner.

5860. We will not quarrel about terms, but that is the way it presents itself to my mind. Then there is one other point. I think you said that one difficulty about founding a central institution was the enormous cost?—Yes.

5861. And you thought the best practical method was to take possession of existing laboratories with a view to cheapness?—To take possession of such buildings as the governing body of any London institutions are willing to hand over.

5862. Only if they are willing?—Yes.

5863. You mean willing under the pressure of that indirect compulsion of which we have spoken?—Yes, I think that is so. I ought perhaps to draw attention to the fact that this compulsion is going on at the present moment. The Government are planning great physical and chemical laboratories at South Kensington.

5864. Do you mean at the College of Science?—Yes.

5865. They have already got the laboratories, have they not?—No; there are much larger ones in prospect, on the German plan—ten times as large.

5866. Has the Chancellor of the Exchequer given his permission?—I daresay you would notice that the scientific element was so strong that the National Gallery of Art was pushed out.

5867. Then your view is that all competition between independent institutions is, on the whole, injurious to education?—Yes; but I should replace that by a certain amount of competition between individual teachers.

5868. You do not see any advantage in independent institutions, developing some differences and some varieties of character?—I doubt whether there is very much variety of character in them more than in name. I doubt whether there is anything that is very largely worth preserving.

5869. We have had very contrary evidence on that matter from those who have watched the institutions; but that is your opinion?—I am speaking from having taught both at University College and King's College, and I should have said that the distinction in the type of student was one rather, on the whole, of age than anything else.

5870. I was not thinking of that. I mean developing in particular directions special educational activity, and perhaps particular ways of teaching; you think it would be far better to have all under one central system?—I think so, because at present they develop rather in the direction of what pays. King's College founds an electro-technological laboratory. Then University College must follow.

5871. Are these not founded because the advance in science makes it necessary that they should be founded?—I think not.

5872. When you consider the great size of London, does it not appear to you advisable that there should be independent local centres?—Of the higher teaching, certainly not.

5873. I see that a second resolution was passed, as an alternative in case the other should not be obtained, by the professorial body of University College?—Yes.

5874. The first was, "That in the event of the Com- "mission finding it impossible to establish a single "homogeneous University for London the Gresham "Charter be then modified by the introduction of "special provisions: (1.) For University degrees in medi- "cine connoting a certain standard of literary or "scientific education." That is not a point which is fundamental. There would be no difficulty in modifying the Charter in that respect?—You will understand of course that these are not my views nor are they the views of the Association.

5875. No, but it is a very important document which you were good enough to put in, which would carry more weight than that of any individual opinion, however eminent?—It is the opinion of the Senate.

5876. The second point is, "For possible future "amalgamation of the constituent colleges under one "central governing body." That is a fundamental objection to the Gresham Charter. That would be improving it in a sense almost inconsistent with its idea, would it not?—I think so. That is a clause in the direction of the professorial University.

5877. The first would be easily done; the second would strike at the root of the Charter?—Yes. But I think you would find it easier to carry the second than the first.

5878. That may be. Then the third is, "For the "appointment of lecturers and teachers with power to "lecture or teach wheresoever the University shall "give its sanction." That power exists in the Charter, as I think has been shown you by a member of the Commission?—Yes. But I drew attention to the point that it did not cover degree examinations.

5879. Pass examinations?—That those lectures could not be for degrees under the Charter.

5880. The fourth is "For the future appointment "of teachers by a central board." That, I suppose, would pre-suppose the non-existence of the colleges as independent institutions?—I think so.

5881. Then as far as I can gather, under the name of amending the Charter it was intended to attack it on two fundamental points: first, the existence of constituent colleges; and secondly, the appointment of teachers?—Yes, I think you might take it fairly that that document, especially the first part of it, read in conjunction with the second, means that the teaching staff of University College does not approve in the slightest degree of the Gresham Charter.

5882. Then it would be better to have avoided the phrase "amending the Gresham Charter"?—As I say, I am not responsible for the exact wording of that part of this document.

5883. (*Chairman.*) That is the Senate of the University College as distinct from the Council, and it has not yet been agreed by the Council?—It has not yet been settled by the Council.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Eleventh Day.

Thursday, 30 June, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Right Rev. BISHOP BARRY, D.D., D.C.L.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt. D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

J. W. HULKE, Esq., F.R.C.S., F.R.S., examined.

5884. (*Chairman.*) You appear before us on behalf of the Royal College of Surgeons?—I do.

5885. In order to give evidence on the general subject of a teaching University for London?—Yes.

5886. I need not say that you are in favour of some such thing being formed?—Assuredly.

5887. Have you considered the different means that there are for forming a teaching University for London?—I have given some attention to the matter.

5888. And the body which you represent has done so also?—Yes.

5889. Which scheme commends itself most to those on behalf of whom you speak?—That is rather a difficult question to reply to, but I should say that the revised scheme which was brought forward by the University of London was very favourably considered.

5890. The scheme which was brought forward by the Senate?—Yes, and rejected by Convocation.

5891. You prefer that to the draft scheme of the Gresham University?—Well, in the draft scheme of the Gresham University it seemed to the College of Surgeons that while it undertook the responsibility it had very little influencing power. The College of Surgeons would have undertaken responsibility in connexion with the examination and teaching, and at the same time would not have commensurate power with regard to influencing these matters.

5892. It would leave too much to other bodies?—It would leave too much to other bodies.

5893. Do you think it could be altered in such a way as to meet your ideas of what a teaching University ought to be?—That question I am not prepared to reply to.

5894. On the whole you would prefer the scheme of the Senate of the University of London?—I think I may say so.

5895. In fact in any scheme which should be adopted you think the University of London ought to form a component part and fill a prominent position?—I think I may say that we certainly should regard that as a very desirable thing.

5896. Suppose that the London University was willing to re-model itself so as to fill this position, you think there would be no great difficulty in its doing so?—I should imagine not. Of course there are some difficulties, but I should think not insurmountable difficulties.

5897. Have you seen at all what is called the scheme of a Professorial University?—Yes.

5898. Are you in favour of that?—Assuredly not.

5899. What part of that do you object to—the absorbing of the colleges?—I speak, of course, of my individual opinion, because that matter has not been before the Council of my college; but I should think any scheme whatever which would give the teaching body, the professors, an absolutely dominant power, without any Senate over them which would act the part of a moderating body, would be undesirable.

5900. You propose that the Senate should consist partly of a professorial body and partly of nominees of the Crown?—I think that whilst the professors should have a certain degree of influence, their influence should not be dominant and paramount.

5901. It is a question of degree. You would have them represented on the Senate?—I think it is desirable that they should have some influence, but not supreme influence.

5902. I do not think they intend giving them entire influence. They intend them to be supplemented by the Crown?—The whole drift of the scheme is that they should be dominant.

5903. You would prefer to see them on the Senate, but not in a dominant position?—Quite so.

5904. Then you think the London University would find no difficulty in forming a scheme which would meet your wishes. You think there would be no difficulty in their continuing to fulfil the position they now fill over the United Kingdom as an examining body. That could be combined with the position of a teaching University for London?—I cannot see that there are any difficulties which are insurmountable.

5905. Would you have a double body with two sides, as it were, one to continue the teaching of London, and the other that of the United Kingdom, or do you think that would not be necessary?—I should hardly think that a double body would be necessary.

5906. You would put it in the position of a teaching University for London, which examines also outsiders if they liked to come—something like the Dublin University?—Just so.

5907. You do not think the outsiders would be in a worse position than they are now?—I cannot conceive why they should be.

5908. The examinations would be adapted to the teaching which would take place in London. The teaching would lead up to the examinations if you have a teaching University. Therefore, those who have been brought up in London would of course have a great advantage over those outside, for they would have been taught the answers to the questions which would be put to them, and the outsiders would have to take their chance of that?—I think if the examinations are fair, and conducted upon broad lines, that certainly could not occur.

5909. Then the scheme as it was drawn up by the Senate suits you and those whom you represent, in the main, with very little alteration?—I think I may say so.

5910. I do not think the representation of the teaching body is very different from that of the Gresham Charter. Convocation is represented very largely, I see. That is a distinct part of the scheme. Your college is represented. You also have 12 representatives of the faculties. The peculiarity of this scheme as compared with the Gresham is the large representation of Convocation. Do you think Convocation a body which is fit to be trusted with a large share of representation on the Senate?—As far as I understand it Convocation consists of a large body of men who are, many of them, influenced by different views. It scarcely is a body which should be entrusted with much deliberative power. But I am not a member of Convocation, and it is a matter which I cannot express any opinion upon.

5911. I should like to know upon what particular point you are now prepared to give evidence. It would save time if I asked you that, having arrived at what scheme you would favour?—What I would say is that the College of Surgeons, first of all separately and latterly in conjunction with the College of Physicians, is perhaps the most important examining and indirectly teaching body in the medical profession in the United Kingdom, certainly this side of the Tweed; that we have annually presenting themselves for examination some 800 fresh candidates; that out of that number finally we have annually some 450 to 500 who pass, and if we take the various examinations which they are allowed to split them up into, I suppose altogether the number of examinations annually conducted would not be much less than 5,000; so that the work of examining is very very considerable indeed. Then I would say that in conjunction with the College of Physicians we have a large establishment, and very considerable buildings arranged for the purposes of examination, and that with regard to medical education we exercise a considerable influence, and for many years past have done good work and are doing good work. We also have, in conjunction with the Royal College of Physicians established upon Victoria Embankment a large laboratory for original research and scientific investigation. We think that all that constitutes a very considerable claim for the colleges to be considered in the construction of any University scheme. The College of Surgeons, in conjunction with the College of Physicians, is quite ready and willing, and would be happy to assist in the construction of a University, with the reservation of course, that so far as the college incurs responsibility, so far it shall have a commensurate power of influencing the matters connected with the examination and education in medicine.

5912. I see one point in the scheme which we are discussing is that the degrees in medicine are to be arranged for in conjunction with you?—We think that very desirable.

5913. You are, so far as I can judge, virtually to conduct the examinations for the degree?—We think it would be a desirable plan that we should conduct the examinations with some co-operation on the part of the University.

5914. That, I suppose, is one of the clauses that particularly commends itself to you. Who would appoint the examiners for the degrees in medicine?—The examiners would be appointed, as at present, by the Royal Colleges on their part, and by the University on its part.

5915. (*Bishop Barry.*) Would there be external examiners appointed by the University besides those appointed by the Royal Colleges?—There would be no objection raised on the part of the Royal Colleges, I think, to a certain proportion of external examiners.

5916. (*Chairman.*) Perhaps I had better read Clause 47 of the Senate's Scheme. "The Senate shall have "power to enter into arrangements with the Royal Col- "leges for conducting the examinations in anatomy, "physiology, medicine, surgery, and midwifery for "the pass M.B. degree by a board of examiners, con- "sisting of the examiners appointed by the University "and examiners to be appointed by the Royal Col- "leges, who shall join in the reports to the Senate on "such examinations. The examiners appointed by "the University may be called upon, if the Senate so "think fit, to make in addition separate reports. These "examinations may, if so agreed on, be conducted in "combination with examinations for the Royal Col- "leges. The arrangements for giving effect to this "clause shall be carried out under the direction of a "committee to be appointed in equal numbers by the "Standing Committee for the Faculty of Medicine "and a committee to be appointed by the two Royal "Colleges. Such arrangements to be subject to the "approval of the Senate and of the two Royal Colleges. "This arrangement for joint examination shall not "lessen or interfere with the duty of the Senate to be "satisfied as to the adequacy of examinations in all "respects." Was this clause drawn up after consultation with you?—I think so.

5917. I believe I rather interrupted you in the thread of what you were saying. Now, if you please, we will return to it?—With regard to the conduct of the examinations I think the College of Surgeons would view with disfavour and apprehension any delegation of the examinations to various bodies—supposing that this new University were to consist of a number of constituent colleges it should be delegated to the several colleges to examine their own students; that that should be equivalent to the University examination. I think any proposal of that kind would be viewed with considerable disfavour by the College of Surgeons. I think we should also view with extreme reluctance any examination of students by their own teachers. We think the teachers should be examiners, but that no teachers should examine his own students. It has been our custom, for many a long year past, in connexion with the College of Surgeons that no teacher examines his own students.

5918. Not even in conjunction with outsiders?—No, not even in conjunction with outsiders, for an outsider can really exercise very little influence.

5919. In what way would you preserve a connexion between teaching and examination if you debar the teachers from taking any part in the examination?—We have our examinations so arranged, the students are so distributed that no one is allowed to examine his own students.

5920. Nor to have any voice in the preparation of the paper?—Yes, in a certain manner to have a voice in the preparation of the papers. The papers for an examination are set by a committee of the whole Board of Examiners, but the examiners who constitute that committee do not know which particular students are coming up, and the examination questions are set for the whole body of candidates, not for particular individuals.

5921. Do you think a teacher is likely to be partial?—As a very old examiner I can have no shadow of doubt whatever in my own mind that if I were to examine my own students, knowing them as I hope I do, I might feel it difficult not to look with favour upon a man whom I knew as diligent, and if it were a man whom I looked upon as idle equally difficult not to regard him with disfavour. I think it most difficult for anyone but an absolutely dispassionate man to let the award be simply the result of the evidence before him at the moment, without any reference to a man's antecedents. If the teacher examines his own students there is another difficulty. The teacher may have—I hardly like to use the word—fads, and the student knows the teacher's fads, and he is ready upon those points though he may be the reverse of ready in other matters, but he gets favour there.

5922. That would apply to *vivâ voce*?—That would apply to *vivâ voce* more than to paper examination.

5923. Which is the more important work. I suppose the paper work tells more than the *vivâ voce*, does it not?—I hardly know that. I think a good examiner will sift a candidate more in the *vivâ voce* work than in the paper work.

5924. And that of course might be the work in which he might be more prejudiced in favour of the pupil?—We give the larger proportion of marks in our *vivâ voce*.

5925. You think the scheme of the Senate of the University of London provides safeguards in that way, and prevents the teacher having so much influence in the examination, or being so likely to be misled by partiality for his own pupils than any other scheme?—We do not object to the teachers examining. We think every examiner should be a teacher, but not a teacher of his own students.

5926. You think that is better provided for in this draft than in the draft scheme of the Gresham, or in any other scheme which you have heard of?—I am hardly prepared to express an opinion as to the comparative merits of those two points.

5927. What question will you take next?—With regard to those who come up to the University, who are what I may term London students, we think it desirable that everyone should have a certain period of residence in London. We think that the opportunities for study in London are so much greater than anywhere else.

5928. You are talking of the medical division, I understand?—Yes, I am confining myself solely and entirely to the medical division.

5929. You would give advantage to those who have been in the different medical schools?—We think that the opportunities for medical study in London are so great as compared with what they are in other places that it is very important that candidates should have a long period of residence in London, two years, perhaps.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

5930. And you would make that compulsory?—I think we should all of us prefer that.

5931. Is two years' residence provided for in this draft scheme?—No.

5932. But you would put that in?—We should be glad to put it in if it is not in already.

5933. (*Bishop Barry.*) It would be in the Gresham scheme?—Yes. It was in this originally, but it was struck out in consequence of great opposition on the part of the various country bodies and corporations.

5934. (*Chairman.*) I suppose it would be more difficult for the University of London to import that, considering its large connexion with outside teaching throughout the country?—It would be difficult, but not insuperable, probably.

5935. It would be much easier for a University which was confined to London, and had no outside duties?—No doubt it would be easier, but it would not be insuperable for the University of London.

5936. You do not think the provincial colleges would object to that; I suppose they might?—They very likely would object, but whether their objection would be insuperable I cannot say.

5937. At any rate that is one point which, whatever scheme is adopted, you would rather insist upon, residence of two years in some one of the medical schools?—We think it is very desirable.

5938. I shall be glad to hear anything else you have to say?—I think those are the chief points.

5939. Do you think there is any reasonable chance of this scheme, which, on the whole, you approve of, being accepted by the Convocation of the University of London, who threw it out by a majority of three to one?—You ask me a question which, as I am not a member of Convocation, it is very difficult for me to reply to; but this much I have heard, that the reasons were so very various, and afterwards upon reflection appeared to some of those who actually voted against it so regrettable, that my impression is that they would not probably act again in the same way. That is only an impression, to be taken for what it may be worth.

5940. Supposing Convocation does not agree, or that for some reason or other that cannot be carried, would you be willing to take the Gresham plan as an alternative or as a substitute?—If there was reserved for the Royal College of Surgeons, in conjunction with the College of Physicians, such a commensurate influence in the matter of medical education and examination as would enable them to exercise a controlling power, as it were, and to regulate these matters, I think, the colleges would be prepared to consider such a scheme.

5941. According to the draft the degree does not confer any registrable rights. In that way you have it in your hands. Anybody who takes a degree before he could practise would have to pass your examination. Is not that the case?—Yes, but we must look to the future. Is it likely that this would hold good through any long period of time?

5942. You think they will get an Act of Parliament enabling them to confer degrees without you, do you?—One cannot say.

5943. When that was done you might get a clause put in with a condition that the charter could only be altered if you had a greater voice. It has been objected by many that this degree would fall entirely into your hands, and that the Gresham University would be content with just as much or just as little as you required so as not to have a multiplicity of examinations. They say that the fact of your having to manage the examinations which entitles them to be registered will lessen the value of the degree, and will make them bring it down to your level. That is one objection that I have heard, the fact that you have too much influence?—I think our level is a very high level.

5944. I am only mentioning what other people say. We have heard the idea mentioned that you will regulate it too much rather than too little. You say, I have no doubt very justly that yours is a very high level. I might ask you what you think of the present London University degree. It is more difficult a good deal to take that than to pass your examination, is it not?—Clearly, because our examination is a pass examination, and though theirs is, to a large extent, nominally a pass examination, really it is an honours examination. It is a high examination.

5945. It is too difficult for an ordinary medical man to be able to pass, is it not?—It requires longer study and a special courseof studies. It is a high examination.

5946. What does the difficulty arise from? Are there not too many subjects?—Perhaps Mr. Howse, who is going to give evidence after me, will explain questions relating to the London University, because he is a member of the University. I am not.

5947. I think your chief objection to the Gresham University, as you have already told us, is that you think the University itself will not have sufficient power or position, but that everything will be too much left to the colleges?—What I tried to make clear was that the reason why the College of Surgeons feels some difficulty with regard to the Gresham University is that we should have, as it were, a certain appearance of responsibility, but no power.

5948. Would you like to be represented on the Senate?—We should like to have a sufficient representation to be able to influence questions of medical education and examination.

5949. Supposing you wish to come in you will have power of representation?—Yes, but it is not very clear what power we should have, because if each of these constituent colleges is to appear upon it there some 10 constituent colleges, I think, scheduled somewhere or other and altogether the total number of medical members upon the Senate is not to exceed 11.

5950. It is to be a question of arrangement between you and the Council as to how many of those 11 you ought to have?—Quite so.

5951. Therefore it is rather a question of detail not contained in the charter as to how much representation you would have. You would like to have more influence in the University than the Gresham Charter as it now stands gives you?—Yes, than the Gresham Charter as it now appears to us gives.

5952. You would like to have more direct influence in arranging the medical examinations than you will have in the draft charter which we have just examined?—As far as I understand the draft charter it does not seem to give to the Royal Colleges sufficient representative power.

5953. That is one of your objections. I think with regard to the establishment of Faculties and the appointment of boards of studies the idea is very much the same in both schemes. They each contemplate the establishment of Faculties, dividing the teachers into Faculties according to what they teach, and having boards of studies formed out of them which shall be consultative boards and have a voice in fixing the examinations. This part is common to the two schemes; therefore that you would not object to I suppose. In fact I gather that your objection chiefly is that you are not sufficiently represented upon it, and that you think the University would not have sufficient power as regards the colleges. I suppose both these points could be modified very much, and that the Charter could be altered so as to obviate both those objections, to give the University more power and to admit you to a larger share of it if it were thought fit; in fact that the Gresham Charter might be modified so as to meet your objection as far as I can judge. Is that the case?—I have no doubt whatever that anything which the Commission would lay before the Royal Colleges would be most carefully considered by our college. More than that I am not prepared to say.

5954. At present you prefer the idea of working with the University of London. Do you attach much importance to the objection which has been made to the Gresham plan, that it is a mistake to have two Universities in London?—I think it would be very undesirable to have two if one could be brought to meet the wants of the day.

5955. In what way—that they would clash with one another in even such a large area?—I think if you have two Universities there would be a certain amount of competition between them, and wherever you have much competition there is very likely to be—I do not like to use the term "under-selling"—but there is very likely to be a degrading of the examinations.

5956. Competition sometimes leads the other way, and perhaps owing to competition the degree would be more valuable, and more importance would be attached to it. It might work the other way?—Yes, it might.

5957. (*Bishop Barry.*) I should like to ask you the question why you think that the existence in London of two Universities which discharge wholly different functions would be undesirable? I mean the present University of London which exercises influence all over the Empire, and the proposed University, the teaching University for London, with a view to co-ordinating the various teaching institutions in London. Those two functions seem to me markedly distinct. Do you think they could be discharged by one body better than they could be discharged by two?—I think they could be discharged better by one body.

5958. How would it be possible for one body to unite such entirely distinct functions?—It does not seem to me that it would be an insurmountable difficulty for the present University of London to adapt itself to the present requirements.

5959. Still maintaining its cosmopolitan character?—Yes; it might have a London side, so to say.

5960. Then would you have two sets of examinations conducted by the same University, or let all the students come under one?—It is a mere matter of individual opinion. It might be arranged somewhat in this way. The present examinations of the University of London might be considered Honours examinations, and the others might be Pass examinations.

5961. Still it seems to me there would be the same difficulty—that we should have a University, the very idea of which is that it should give no favour whatever to London, and yet that it should be able to co-ordinate the teaching of London?—Yes, but when you say, "give no favour to London," I hardly follow in what respect.

5962. What I mean is, that it should not regard London any more than it should regard Manchester or Liverpool?—There is an apparent difficulty, no doubt, in that.

5963. There is one particular point which struck me. You attach great importance to the two years in a London medical school as a condition, I suppose, for the higher degrees?—As a condition for the degrees of the new University.

5964. Do you think there is any chance that the University of London would consent to such a provision as this, in defiance of the policy, which they have adopted throughout the whole of their existence, of throwing open their examination to all the world without conditions?—I am quite aware of that, but not being in anyway whatever myself a member of the University of London, I am not prepared to answer that question.

5965. But you are aware of what the general policy of the University has been?—Yes.

5966. You therefore would wish them to diametrically reverse the policy they have so long pursued?—In a particular instance.

5967. And in a most important instance, and one to which some colleges elsewhere would entertain, I know, a most serious objection?—Certainly.

5968. Do you think it is in the slightest degree likely, from any scheme that the London University has framed, that they would consent to such an alteration?—We see great modifications of old existing Corporations taking place in the present day.

5969. Modification is one thing, but contradiction or retrogression is another. Now the Gresham scheme would naturally fit in with that requirement of yours; and yet I observe that you prefer a scheme, in which that requirement would, to say, the least of it be extremely difficult to one in which it would be extremely easy?—If we have a metropolitan side—a local side—it would not be.

5970. Then would you give degrees to certain persons without that requirement and degrees to certain persons with that requirement of residence in London—the same degree?—You say the same degree.

5971. Well, whatever it may be, the M.D. or M.B.?—But the M.D. and the M.B. may have very different values. One may be the result of an Honours examination, and the other the result of a mere Pass examination.

5972. Then would it come to this—that the Honours examination should be open only to those who attend medical schools in London, and the Pass examination to others?—The Honours examination would be, as it were, a part of the Imperial University open to the whole Kingdom—the whole world if you like—but the other would be simply open to London students.

5973. Then it is the other way?—Yes, it is the other way.

5974. Are not the London students to be Honours students?—They may be.

5975. But I mean that is not what you contemplate as usual?—No, they may be.

5976. Do you think there is the smallest chance of the University of London consenting to such a scheme as that?—That I am not prepared to answer.

5977. At any rate you see no difficulty in bringing this into the Gresham scheme, in fact it is almost a part of it?—Yes.

5978. Supposing it proved that it was quite impossible for the University of London to reverse its whole policy in the direction that you wish; should you consider this of so much consequence that you would there prefer the Gresham scheme to the University of London scheme? In other words, do you make this condition about residence in London medical schools a matter of principal importance?—We make it a matter of great importance, but I would not say of absolute supreme importance. We consider it very important.

5979. Still, *pro tanto*, as far as it goes, it would be in favour of the Gresham scheme rather than the University of London scheme, which contains no such provision, I believe?—Yes. It contains none at the present moment, but I am not prepared to say that it may not contain one.

5980. Anything may happen. But judging from the whole policy of the University in the past, in which it has justly gloried, it seems to me extremely unlikely. Now, in the next place, supposing the Gresham Charter were adopted, what is the extension of power to the Royal Colleges which you desire? Is it a larger representation on the Council?—What we desire is such power (I am not prepared to say in what respect) as may enable us to largely influence and conduct the examinations, and also the medical examinations which rule at present.

5981. And which you would have under that scheme of the University of London?—Yes.

5982. If there were such provision as this in the Gresham Charter, so far your objection to it would be, I will not say removed, but it would be modified?—Yes, so far it would be modified.

5983. And suppose also, which I think is quite likely, a provision were made in an amended charter on those lines for your proper representation on the Council. There is, of course, no reason whatever why that should not be done; and I apprehend that it was not done, simply because your colleges had not seen their way to join in the charter at all at that time; but had that been the case you would have been included, I should think, considering the dignity of your body, as a matter of course. Now I should like to ask another question. Does your scheme for another University involve the appointment of professors by the University, distinct from any colleges, for the purposes of teaching and examination?—I do not quite follow. I do not understand the question as "my scheme."

5984. I beg your pardon; I meant the scheme which you would favour for a teaching University, and which you think the College would favour?—You ask me a question which has never been before my college, and therefore I cannot speak on behalf of my college. Individually, I do not see any objection to the appointment of certain teachers by a University.

5985. In the Gresham scheme you are probably aware that the council have power to appoint lecturers in any subject, whether included in a faculty or not, and unconnected with any college. Does that seem to you a valuable provision?—I see no objection whatever to that, only I should see a very great objection to the Council having power to impose this upon any of the existing medical schools.

5986. I do not think that this was contemplated, but it was simply that it was to appoint them to lecture or teach in the particular subject, and it might very probably appoint them as examiners in that subject?—There is no objection to that as far as we are concerned.

5987. Then with regard to the question of granting licenses, do you contemplate in this new teaching University that its degree should carry also a license to

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

practise; that, in other words, it should dispense with the necessity of coming to the Royal College?—If the colleges were in such an intimate combination with the University as practically to conduct the examinations, then there would be no difficulty.

5988. When you say conduct the examinations, you do not mean solely, but with the help of examiners from the University itself?—Yes.

5989. Then you would not feel any difficulty about allowing the degrees of the new University to carry a license to practise?—It is a matter that has never been before my college, and therefore I cannot speak for my college, but I think there would be no insuperable difficulty felt on behalf of the college that a sort of tri-joint examination (now it is conjoint) should carry a license.

5990. It has been often stated that one defect of our present system of examination in London is the want of connection with teaching. How would you provide for meeting that difficulty?—I have been an old teacher. I was a medical tutor in King's College for many years. I held the joint chair in general anatomy and physiology with Professor Burdon Sanderson in the Middlesex Hospital for five years; I have been for many years lecturer in clinical and systematic surgery, and I never felt that want, and do not believe in its existence as a real thing.

5991. Have you formed any opinion why it is that so few London students proceed to the degrees of the University of London at the present time?—The degrees of the University of London at the present time are given for examinations which are very high, and a very large proportion of our London men go into general practice, and they are not able to bear the expense of a long continued course of study and so on.

5992. How would you think that they stand in comparison with the degrees, say of such a distinguished University as Edinburgh, which we are told are largely sought by London students?—My impression, so far as I am able to form one, is that the London students go there because on a relatively easy examination they can get the degree.

5993. And yet I have always understood that the teaching in Edinburgh is of the very highest order, and that the degree is very highly valued?—I cannot express any opinion with regard to the teaching. I will only say on this, that a large number of men seek a degree simply and solely; that the Scotch and Irish come down here with their degrees; and our London men, not having degrees, are conceived by the public to be an inferior stamp of men.

5994. Then supposing no other change takes place, would you remedy that in London by lowering the standard of the London degree, or by changing its character?—We should not prefer to lower the standard of any London degree, but we should propose to have a standard in London as high, if not higher, than Edinburgh.

5995. I mean relatively to what the standard is at this moment?—Yes. There must be for the pass examination a standard not quite so high?

5996. In the variety of subjects or in the standard required in each subject?—It is very difficult to answer a question of that kind. It is perhaps not so much in variety of subjects, there may be something in that, but the whole style of the examination might be more practical, without being in the least degree inferior.

5997. Do you think that is at all due to the fact that the examinations have no necessary connection with teaching?—I am not aware of that, but I say most examiners in the London University are teachers in the various schools.

5998. Therefore their examinations have had connexion with some teaching?—Yes.

5999. Then in other words you would not refer the difficulty of the London examination to that cause?—That they are not teachers?

6000. Yes?—Certainly not.

6001. Your opinion, I think, is that no teacher should ever examine his own students?—Certainly.

6002. Do you think that this is always to be deprecated when he has the advantage of an external examiner also?—Yes, I do, because I believe that an external examiner really exercises very little influence over the examination

6003. Why?—For this simple reason that it takes some time for a person to become a good trained examiner, and the external examiner is put on to examine with the local teacher. Supposing he examines for two or three years he must for the first year or so be entirely, or to a large extent under the influence and guidance of the local teacher, and unless he is a man of extremely strong character it takes some time for him to learn all the ins and outs of the examination, and the particular standard required. Unless he is a man of extremely strong character he is so dominated, or likely to be so domiaated, by the local teacher, that practically the examination is influenced by the local teacher.

6004. Of course I know nothing of medical examinations, but I fail to see this in regard to the Arts examination?—I am not familiar with that.

6005. The external examiner would have a voice in preparing the papers, and he would have a voice in judging of the papers; and one scheme provided that in case of difference of opinion he should have a casting vote. Surely, strengthening his hand in that way he would not be merely a puppet?—The examinations you are thinking of are probably paper examinations. I am thinking principally of *viva voce* examinations.

6006. No, I should not restrict it to paper examinations; besides that I should suppose that the external examiner holds a *viva voce* examination just as well as the local examiner?—As a matter of observation, I can only say what I have said.

6007. I should think that a scheme in which the teacher and external examiner together conduct examinations would be a far better one than one conducted wholly by an external examiner, or still more than one conducted entirely by one who is a teacher. But that is not your opinion?—I still hold to it that no teacher should examine his own students, and that an external examiner in point of fact, so far as medical examinations are concerned, has a small amount of influence in deciding it. It is chiefly the local examiner who is, so to speak, dominant.

(*Bishop Barry.*) I fail to understand this, but of course I attach great weight to your opinion.

6008. (*Professor Ramsay.*) May I ask if you have had experience yourself of acting as external examiner alongside an examiner who has taught the student himself?—I have had no personal experience in the matter, but I have had much conversation with those who have acted in that capacity.

6009. You have not had any experience where you were a teacher, where there was an external examiner associated along with you?—No, never.

6010. And it is mere conversation you have had with various persons that leads you to the conclusion that in all cases the external examiner is dominated by the local examiner with whom he is associated?—I would not say in all instances, but generally he is likely to be influenced.

6011. Referring to what the Bishop said just now regarding other Universities, take a case where the external examiner sets a paper along with the teacher and in which he is given not only a vote but an absolute veto upon the passing of any student, the idea being that the teacher examiner sees that justice is done to the course which he has conducted, while the external examiner is there to see that the examination is up to the mark from the point of view of the subject. But you have no practical experience of your own about that?—None whatever.

6012. Have you heard anything about the way in which those examinations are conducted in the Scotch Universities. In many cases there distinguished London physicians and scientific men are examiners. You have simply had conversations with such examiners?—Yes.

6013. And has the information you have derived from those external examiners with whom you have conversed been that they were mere puppets in the hands of the teachers of the students?—I have never said that they were mere puppets, but that the result of the examination may be largely swayed.

6014. I thought you said they were apt to be mere puppets?—No, I never said that.

(*Bishop Barry.*) I am afraid that that phrase which I did not intend to be offensive was mine.

6015. (*Professor Ramsay.*) Your remarks did not refer at all to the matter of Arts?—No.

6016. And I suppose they would not refer to the case where the external examiner set the whole of the paper?—It is inconceivable to me that any one examiner should set the whole of the written questions for the papers. I am utterly unconversant with such a procedure as that.

6017. You are unconversant with such a procedure as that of a single examiner setting a paper?—Yes.

6018. But suppose that the external examiner has a schedule and scheme of the work before him, and sets the entire paper, sending it to the professor for his approval, or, it may be, his additions or suggestions. This is done with us in certain subjects. Would you consider such a plan as that open to the objections you have mentioned?—It is very difficult to answer off-hand questions of this kind. The whole system of setting papers is so totally different from that with which I am personally conversant. With us in the College of Surgeons our questions are set always by a committee of examiners. We always have some four or five at least of them present, and we all conjointly frame the examination paper.

6019. That does not apply to the oral examinations?—No, clearly not.

6020. It is the oral examinations you attach great importance to?—We attach great importance to the *viva voce* examinations.

6021. You think the fact that a man has taught a pupil and knows the character and mind of the pupil makes it impossible for him to examine him fairly alongside other students?—I do not say that it makes it impossible, but I think it lays him open to the objection "So and so was examined by his teacher. Well, we know what that means." I have felt it so strongly myself that as an old examiner I would never examine a student who, though he was not my student, was personally known to me.

6022. Would not that be remedied if both the examiners were present?—With us they always are. We never have a student examined by one person alone; always by two acting conjointly.

6023. Do I understand that you would be prepared if you went into a University scheme to limit examinations of the Royal Colleges to students who have been at least two years in London?—If there be a metropolitan side.

6024. Supposing the Colleges were to be admitted into the new teaching University on such a footing as would satisfy you, was it part of your understanding that the Colleges of Physicians and Surgeons should only examine students who had received at least two years' training in London?—We think it very desirable that all who present themselves for that examination should be two years in London.

6025. At the present moment, as I understand, there is no requirement of attendance in any particular school as a condition of admission to your examinations?—No, they must have gone through a certain curriculum of instruction, which is laid down.

6026. But not a curriculum in London I mean?—They may have taken that curriculum out in one of the provincial schools.

6027. That is the point. You examine medical students with a view to your license who have never seen the City of London until the day of the examination?—Certainly.

6028. Are we to understand that you are ready to give up that position in the event of your being joined to a University, and to become members of a body which would give no license and have no examinations for any students except such as had been trained for two years in a London medical school?—We are not prepared to give up anything.

6029. Did you not state that you would be willing to belong to a University, and to conduct in conjunction with that University examinations for licenses and for degrees, in which University it should be a condition that no student could present himself for examination unless he had attended two years in London?—If that University has a local side, a metropolitan side, we should consider that students going up for their degrees on the metropolitan side should have two years residence, but we do not for a moment say that we, by joining that University, should give up our right to examine anyone who comes to us for our diploma.

6030. Quite so. You would contemplate, therefore, having, as the Bishop explained with regard to the University of London, with regard to your license a double side, one in which you would examine London students to obtain a degree after that examination under the conditions of the University, while you would continue your present examination for all the Empire and all the world in addition?—Yes.

6031. Now, one question about teaching. I understand that this was explained before the Privy Council by your Council. You exercise considerable influence over teaching?—Yes.

6032. Will you explain exactly how that influence over teaching is exercised?—In the first place, we lay down a curriculum of study, and then every member of our Council is or has been a teacher.

6033. Is the curriculum of study you lay down necessarily controlled by the arrangements of the Medical Council?—Well, that is a question I am not prepared to answer.

6034. The London University says in effect that it has had a great influence upon the education of the country by means of its schedules and by means of its examinations. Is the influence which the Royal College of Surgeons has exercised in regard to medical education of exactly the same kind as that, and no more?—Of a similar kind, but to a larger extent.

6035. How is it of a larger extent?—Because a very much larger number of men become members of our college, present themselves for our examinations and study under our curriculum.

6036. They present themselves for degrees in the University of London?—Yes.

6037. It was not with regard to the number of students you examine, but it was with regard to the amount of influence which you have over the course of medical education in the country. Do the colleges influence general medical education in any more direct sense than that in which the Medical Council influences it?—That is a question which I am not prepared to answer.

6038. The colleges as such do not teach?—Not as such. We do teach to a certain extent; we have lectures at our colleges, and we have a large institution on the embankment where we have a great deal of teaching going on in the way of original research.

6039. Whom is that teaching conducted by?—We have an admirable head to our laboratories, Dr. Woodhead.

6040. (*Sir William Savory.*) Who comes from Scotland?—Yes; he gives a large amount of instruction there.

6041. (*Professor Ramsay.*) He is appointed by the colleges?—Yes.

6042. Who are the students in that institution?—If you like to term them students, I should prefer to term them gentlemen engaged in research; they are persons who come to us from all parts; they are not necessarily our own members or fellows, but they come to us from all parts. Their capacities for the particular research which they wish to carry out are subjected to an inquiry by a committee appointed to control the laboratories and upon the recommendation of Dr. Woodhead, who came to us from Edinburgh, and upon a sifting of their claims to conduct such work we give them opportunities. Dr. Woodhead assists them in their work and supervises and controls it.

6043. Then practically all these are what would be called post-graduate courses?—The lectures are post-graduation courses.

6044. The teaching does not form part of the curriculum of a student on his way to a license or on his way to a degree?—No.

6045. Therefore, so far as the teaching on the embankment goes the Royal Colleges of Physicians and Surgeons have nothing to do with helping or directing the ordinary education of the medical student?—So far not.

6046. Then the only way in which they do affect education is by the fact that they prescribe certain courses as a qualification for admission to their examinations. Do those courses contain anything which is not contained in the recommendations of the Medical Council?—I cannot say that. I cannot answer that question because I am not familiar with what the

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

recommendations laid down by the Medical Council are.

6047. Then the only connexion between the teaching of the colleges is that, as would necessarily be the case, a large number of eminent members of the colleges, and, I suppose, especially of the governing bodies, have been themselves distinguished teachers?—And are.

6048. In the various medical schools?—Yes, and are.

6049. As such, when they act in the Colleges of Physicians and Surgeons, they do not regulate in any way the teaching of those schools in which they themselves are teachers?—Yes, assuredly.

6050. As individuals they do, but do the Colleges of Physicians and Surgeons lay down for them the principles ——

(*Sir William Savory.*) A man cannot pass the colleges unless he complies with the curriculum of study, and we carefully supervise every school in London in that way.

(*Professor Ramsay.*) Supervise it, I presume, under the general control of the Medical Council?

(*Sir William Savory.*) No, the Medical Council have nothing to do with us in that respect. We, as a college, lay down certain rules, and see that they are enforced with regard to teaching in the schools, and if those rules are not carried out we do not admit to examination. We exercise the most direct and potent control over teaching.

(*Professor Ramsay.*) Is that control wider than that of the Medical Council?

(*Sir William Savory.*) Some think it a great deal wider.

6051. (*Sir George Humphry.*) I understand from you that the College of Surgeons, as well as yourself, think that some degree more easily to be obtained by medical practitioners should be given in London, than is now given?—Yes.

6052. That it should be given on somewhat easier terms than that given by the University of London?—Yes.

6053. And the reason for that is that so many pass away from London to other Universities to obtain that degree?—Yes, that is one reason.

6054. The degree being in those places obtainable on easier terms than it now is in London?—Yes, than it now is in the London University.

6055. What is the reason for their desiring to have the degree in addition to the licence? The licence gives them the full qualification to practice, why then do they want the degree?—Because they think the absence of a degree places them in an inferior position before the public.

6056. The College of Surgeons recognises that?—It sees that need.

6057. And desires that its members should obtain a degree?—It thinks it is very desirable for them to have an opportunity of obtaining one.

6058. At the same time I suppose they would not desire that the degree should be given upon quite the same terms as the licence. They would desire that a degree should indicate somewhat higher knowledge—certainly some higher knowledge in general subjects?—Yes, certainly.

6059. So that there should be something additional?—Certainly.

6060. I do not know whether you have considered these points. Does the College of Surgeons object or not to the Matriculation examination of the University of London?—As at present conducted, I think there are difficulties in that, so far as I know.

6061. The difficulties being ——?—The difficulties being that it embraces subjects and goes into matters which are at present almost outside the medical students' work.

6062. The range of subjects which it embraces is not, I think, very much greater—perhaps in one degree greater—than that now required by the Medical Council, and therefore by the College of Surgeons. I think there is only one additional subject?—It is a matter to which I have not paid any particular attention, and to which I would prefer not to reply.

6063. Have you considered at all the further point of the question of the Preliminary Scientific examination being required. At present the University of London requires Matriculation, and it requires, futher, the Preliminary Scientific examination?—Yes.

6064. Which Preliminary Scientific examination is no doubt of a more difficult character than the corresponding sort of examination which is required by other bodies?—That is what I thought you referred to a moment ago.

6065. No. There are two things. There is Matriculation, which is examination of ordinary school knowledge?—I thought you referred to the other—the Preliminary Scientific examination.

6066. Then we will retrace the ground a little. The Matriculation of the University of London, you think, ought to be passed?—Yes.

6067. Or an examination corresponding with it should be required of men who are to obtain the degree?—An examination which shows that a person is possessed of good general culture there shou'd certainly be.

6068. Are you familiar with the requirements of the Matriculation examination of the University of London?—I am not familiar with it.

6069. With regard to the other, the Preliminary Scientific, you perhaps are not familiar?—I am not familiar with regard to the Preliminary Scientific, but there is a general impression that it is too stiff an examination.

6070. The former Commission used these words:—"We think that the University should have power to "dispense with the Preliminary Scientific examination "now required of candidates for medical education." That was the view of the former Commission. Then they also say: "As to medical degrees we think that "a standard of attainments appropriate for Honours "ought no longer to be required by the University for "an ordinary or Pass degree." That is taking the view that the present examination of the University of London should be regarded rather as an Honours degree, and that therefore they should require something less than that?—For a Pass?

6071. For the medical degree?—Yes.

6072. Making a difference between an ordinary degree and an Honours degree in that respect?—Yes.

6073. With regard to the scientific teaching of the medical schools in London, in some of those schools (we have had it before us) the means and apparatus for the scientific teaching is scarcely sufficient?—It is certainly not so good as in some others.

6074. And not quite so good, perhaps, as it ought to be?—Not quite so good as one would desire it to be.

6075. Do you think that a combination of schools to a greater or less extent might be carried out with advantage?—I think it might be carried out.

6076. Then it would be desirable that there should be some kind of authority under which that could be done?—Do you mean a compulsory authority?

6077. I do; some kind of authority under which the scientific teaching could be carried on; I mean the teaching of physics and chemistry?—I am not prepared to advocate compulsion. I think if a school does not give efficient teaching in any subject the University should have the power of saying to that school, "You must improve that."

6078. "You must either improve it or——"?—"Or "make your arrangements that it shall be improved."

6079. Was not some such power contemplated in the scheme of the Senate of the University of London?—I am not prepared to answer that question.

6080. But on the whole the scheme of the Senate of the University of London meets the views of your college?—Yes.

6081. The two colleges assented to it?—Yes.

6082. Whereas the scheme of the Gresham Charter left those matters very undecided. The Gresham Charter requires that all candidates for its degrees should have a qualification?—Yes.

6083. Which qualification might be granted to anybody in the Empire?—Yes.

6084. And then any further requirements, so far as I know, were left quite uncertain, were they not? There was to be further examination, but it is not stated what or by whom?—I cannot speak to that point.

6085. And, therefore, that the position of the College of Surgeons and Physicians under that scheme would be very uncertain?—Yes.

6086. Whereas under the scheme of the Senate of the University of London it is more clearly defined?—It is more defined.

6087. In the scheme of the University of London the Corporations were represented as parts of the Senate, but schools not, I think. In the scheme of Gresham Charter the schools are represented, and the colleges not necessarily?—I think so.

6088. They might be, but it was not provided distinctly they should be?—I think that is so.

6089. Now with regard to the requirement of the two years' study in London. I am a little surprised and regret if the College of Surgeons really means that it would require those who pass through it for a degree to have studied two years in London, because that is quite a departure from anything they have hitherto required?—I think the colleges have always thought it extremely desirable that everyone, so far as it is practicable, should spend a long period of time in medical study in the metropolis.

6090. It is desirable, but they would not wish to see that made compulsory, would they? They would not wish to deprive students who are taught in Manchester, Birmingham, Scotland, and elsewhere, of the opportunity of coming to pass those examinations for the degree?—Not for the imperial—the general degree.

6091. They would not really make it a *sine quâ non* that the student should have been in London?—I do not say that they would make it a *sine quâ non* that the student should be in London, but they think it a very desirable thing.

6092. Of course we can understand that it is desirable that the student should study where knowledge is best obtained, but the great point is that they should have knowledge, no matter where they get it?—Certainly.

6093. And you would feel that the examinations at your college are such as to indicate that they have that knowledge. You do not depend, and you do not, I trust, wish to depend upon the sources from which they get it, but upon your examinations being such as to prove that they have got it?—No doubt.

6094. That is the real point, that a man has the knowledge no matter whence he has got it. I have always understood that to be the fundamental feature of the Royal College of Surgeons of England?—Yes.

6095. It is the Royal College of Surgeons of England not the Royal College of Surgeons of London?—But is there not some little confusion. At least I understand you are asking me questions about a University and in this University we are conversing on the supposition that there is to be an imperial side which will embrace the whole of the Empire. We suppose also that there is to be a local side; and for those who come up to have the degree on that local side we think residence is necessary.

6096. Do you think there should be in a great University a local side as well as an imperial side?—I merely put that by way of getting out of the difficulty.

6097. But is there any difficulty?—The University of London at the present time examines men coming from all quarters; the Royal College of Surgeons examines men coming from all quarters: why should either one or the other wish to narrow the quarter from which the students are to come. In fact, you would not really make it a *sine quâ non*?—I do not think we should make it a *sine quâ non*, but we think it desirable.

6098. In one of those charters it is made a *sine quâ non*?—But we are told that the Gresham Charter you can modify.

6099. You can modify it, but there it is. It is a feature of it?—Yes.

6100. The subject of competition has been mentioned. You have thought it unadvisable that there should be two Universities because it would lead to competition?—I do not say "would," but may.

6101. I think it was said that the competition might prove advantageous, but might we not put it in this way: that the competition in licence-giving or degree-giving may be disadvantageous, but the competition in teaching is advantageous?—Certainly.

6102. You would draw that distinction?—Clearly.

6103. With regard to the curriculum of the Royal College of Surgeons the Medical Council has no power to control it?—I believe none.

6104. But the colleges and the medical schools agree in short as to what is the best curriculum. That is the practical position of things?—I think so.

6105. In regard to the question of teachers and examiners respecting which several questions have been put, I suggest this point, which I think has not been quite brought out: that the teacher knows very nearly in what direction he can question the candidate to the candidate's own advantage?—Most assuredly, because he may possibly put his questions upon subjects which he has the day before been teaching him.

6106. You yourself could pass without much difficulty your own students by the questions you put to them?—They would have an enormous advantage.

6107. And no assistant examiner could exercise any influence upon that?—No.

6108. The assistant examiner could not know in what way you were advantaging the pupil by the questions you put, and therefore a teacher could, in spite of the presence of the assistant examiner, if he thought proper, favour his own student?—Yes, and he might do it almost unintentionally.

6109. No presence of an assistant or an external examiner could influence that?—No.

6110. When I say an assistant examiner I mean that no presence of any colleague could influence it?—No.

6111. (*Professor Ramsay.*) Let me ask you one question which I omitted. I did not quite catch what you said about your belief with regard to the standard of teaching in the Scotch Universities. You compared them with some English standard. Was it the standard of the London University examinations?—No, certainly not. It was the standard of our own examinations—the examinations of the two Royal Colleges.

6112. Do you mean to imply that you consider the standard of examination in the Universities of Edinburgh and Glasgow to be only on a level with the examinations conducted by the two colleges?—I would say that students who are rejected by us go north and get degrees in a very short time.

6113. Are you not confusing the license given by the Scotch Corporations with the degrees given by the University?—I am not aware whether the Scotch Corporation can grant them degrees.

6114. Certainly not?—They come back with degrees.

6115. You are aware, of course, that there are Corporations, both in Edinburgh and Glasgow, which can grant licenses, but which cannot grant degrees. I have nothing to say about a license given by those Corporations, but do you mean to say that the standard of the examinations at the Colleges of Physicians and Surgeons all round (I am not speaking of any department more than another) is as high or higher than the standard of the Universities of Edinburgh and Glasgow?—I judge by the fact, which is I believe not a very very unfrequent one (I cannot give you names, but as a general impression I think it is well founded), that men who have been rejected by us are glad to go north and come south again after a certain time, not, you would think, so long to have greatly polished them. They come back with degrees.

6116. If you speak of a general impression I have nothing to say, but have you any distinct facts to which you can point?—No.

6117. Do you mean to say that the course of study demanded by the Colleges of Physicians and Surgeons is as large as that required by the Scotch Universities under Act of Parliament?—That I cannot tell you.

6118. You do not know whether you teach all the subjects that they teach?—That I cannot say.

6119. And you do not know as an examiner yourself or in any other direct way whether the standard in one case is as high or higher than the other?—I cannot tell you.

6120. Is zoology included in your course?—No, I think not.

6121. Is a full course of pathology demanded?—Certainly.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

6122. Are the usual courses of chemistry demanded?—Our students attend classes of chemistry.

6123. Can you tell me to what extent, how long the courses are?—No, I cannot.

6124. Do they include practical chemistry?—Certainly.

6125. And organic chemistry?—Yes.

6126. Do you insist upon a course of botany?—Not now.

6127. Then there are at any rate two subjects, zoology and botany, which are imperative in the Scotch course and not in yours. You have seen, I suppose, the evidence given before the House of Commons on the part of the University of Edinburgh with regard to this particular question, in 1882?—I have not seen it.

6128. You are, no doubt, aware that the authorities of the Universities of Glasgow and Edinburgh would take a very different view from the view you have expressed just now?—I cannot doubt it.

6129. (*Mr. Palmer.*) Assuming a University or a side of a University established locally for London, Sir George Humphry pressed you as to whether you objected to knowledge on the part of a medical student being gained elsewhere than in London. I want to ask you whether what you wished to compare was not precisely what was conveyed by the late Royal Commission, that you would view with disfavour the London clinical advantages being lost to the London students?—Assuredly.

6130. In short, in the way in which they put it, the great majority of the London medical students, if they take a degree at all, take it elsewhere than in London, and that is a fact which the higher representatives of the medical profession view with regret?—It takes them away from London,

6131. That is what you regret, and if a local University were established you would like medical students to have the advantage of medical schools, and not be driven elsewhere?—Quite so; and that would be to their own advantage.

6132. (*Sir William Savory.*) With reference to the last question that Professor Ramsay put to you, I should just like to read to you this passage from the evidence which Sir James Paget gave before the last Commission: "The students who pass the examinations "of the two Royal Colleges in London are justly "regarded by those who can well judge as equal in "knowledge to those who have the Doctor's degree "from a Scottish University." ?—That is my impression.

6133. That represents the impression of a very large number of the most competent judges in London?—Yes.

6134. Then I think you have told us more than once that the Royal Colleges are quite willing to abide by the Scheme which is now known as the revised scheme of the Senate?—Yes.

6135. You were asked a further question about the number of representatives which Convocation had in that matter; I suppose I may take it that we did not greatly concern ourselves with that which seemed especially to belong to the London University?—That was not a matter of great moment.

6136. It was not a matter in which we offered any serious objection to what the London University itself might advise?—No.

6137. We rather were willing to show our readiness to consent to any practical scheme upon which the two bodies could agree?—Just so.

6138. Now with regard to the relation which the two colleges hold to teaching. I am afraid there has been a little misconception on that point. The colleges do concern themselves in a very direct way with the teaching of medical matters?—Most assuredly.

6139. They do not absolutely nominate the several teachers in the schools, thinking it best the schools should do that work for themselves, but they exercise the closest control and supervision over teaching?—I think so.

6140. If they thought any subject were inadequately taught in any hospitals in London, they would immediately interfere to get it remedied?—They would not hesitate to do so.

6141. Has it not occurred quite recently with respect to operative surgery, that it was represented to the two colleges that this was not taught as efficiently and as thoroughly as it might be, and were not steps taken to correct that in the different schools?—Certainly.

6142. And taken in the most practical manner by inviting returns from the several schools of the absolute number of operations performed?—Yes.

6143. That we may take as an instance of the close and thorough way in which the two colleges do supervise and control the matter of teaching?—Certainly.

6144. Then the Council of the college, the governing body of the college are themselves either absolutely at present teachers, or they have been teachers within a very short time?—Assuredly.

6145. Is it not one of the standing rules of the College of Surgeons that members of the Council should be actually in practice?—I believe so.

6146. Thereby emphasizing the fact that the several members of the Council should be actually engaged in practice, and therefore in teaching the subject with which they are principally concerned?—Certainly.

6147. Could you imagine any closer way in which the College of Surgeons could be connected with the teaching except by nominating the teachers themselves?—Except, as you say, by nominating the teachers themselves. I can hardly conceive any other way.

6148. Would it not be a very imperfect and inadequate view of the College of Surgeons to represent that it only concerned itself with examination and not with teaching?—Most certainly.

6149. I think you have already stated that, yearly, upwards of 30 lectures are delivered in the College of Surgeons?—A large number of lectures, I should think about 30.

6150. To advanced students; something in the nature of what has been called a post-graduate course?—Yes.

6151. And the College of Surgeons would be prepared (has not the matter been frequently discussed?) to add further lectures?—Yes.

6152. There is a great deal of difference of opinion about the number of lectures which ought to be given, but is there not a strong impression that lectures are rather overdone than underdone?—Yes, a very strong impression.

6153. To suppose it an examining body and not a teaching body, would be a one-sided representation of its functions?—Yes.

6154. In all the essential parts of teaching, the control of teaching, seeing that students are properly taught, and refusing to examine them unless they produce guarantees of that, the College of Sugeons acts as efficiently as it well could do?—Yes.

6155. The London University looks to the medical colleges for the teaching of those who come up to it to graduate?—Yes, assuredly.

6156. And in the same way they prefer, at the present time, to leave the teaching of students who come up for examination in the hands of the several schools?—I believe so.

6157. Do you think really if the London University were to take upon itself the duty of appointing the several teachers in London schools that medical teaching would be more efficiently carried on?—I cannot conceive that it would be.

6158. Do you think that in any way it would be to the improvement of teaching that the University should take the power of appointing teachers out of the hands of the colleges and appoint them itself?—No.

6159. There may be difference of opinion upon that, but it could hardly be represented, could it, that the London University in its present position wholly divorces itself from the act of teaching?—No; I do not think that is a right representation of it.

6160. It requires schedules on the medical side from those who come up?—Yes, I believe so.

6161. Guarantees that they have gone through a certain curriculum of study, and then they are subject to examination?—Yes.

6162. With regard to the examiners of the London University, as a rule they are all teachers?—On the medical side—and I only speak for that side—I believe all.

6163. If it should happen occasionally that a man is not a teacher at the actual moment that he is an examiner——?—He has very recently been one.

6164. So that the teachers there are examiners?—Quite so.

6165. And it is quite a misconception to believe that the London University is not in any way connected with teaching on the part of its examiners?—I think that is a wrong idea.

6166. The examiners of the London University are teachers?—Quite so.

6167. But they are not teachers of the students they examine, and that distinction is not drawn so sharply at the London University as it is at the two colleges?—I am not conversant with the practice of the London University in that respect.

6168. Occasionally at the London University a teacher examines his own men, because the numbers of the examiners are limited. Occasionally a man's own students come before him. But with regard to the college it is a fundamental principle, and one which can be carried out thoroughly owing to the number of examiners that no teacher examines his own men?—It is a very well established principle of practice.

6169. I do not want to take you through all that matter again, about which a good deal has been said, but I may take it that this is a fundamental principle?—To which we hold most strongly.

6170. And over and above all the objections which may be taken, and some have been expressed to-day, to teachers examining their own men, in our profession the objection would be taken that it would not offer a sufficient guarantee to the public?—Yes.

6171. It is in our profession a notorious fact that in many subjects teaching does tend to run in grooves, and we think the fundamental principle of teachers not being directly concerned in the examination of their own men tends to correct what otherwise might grow into a positive evil?—Certainly.

6172. It has been said that the objection is modfied by an outside examiner, but when you come to look into that matter closely is there not a some confusion in the matter, the man who sets the question is really the examiner?—Yes.

6173. The question has already been put to you if an examiner choose to pursue a certain line of examination, the outside examiner could hardly interrupt him, even if he were aware of the tendency of the question?—Quite so, and he would not necessarily be aware of it.

6174. And after all that must necessarily assist the student?—Yes.

6175. You have said that the two colleges would favour a junction with the existing London University rather than join a new institution?—That is my impression.

6176. And am I right in assuming that one of the strongest objections on the part of the medical profession to the foundation of a new University in London would be a suspicion that the character of the examination would become lower?—Yes, I think I used words to that effect.

6177. Whatever is provided for in the charter it would be entirely a question with those who have the interests of the new University at heart, and if they kept up the character of the examinations to a level with those of the existing University would not their chances of success be thereby considerably impaired?—They would not get the number of students necessary for their success.

6178. At all events, the greatest prospect of success so far as regards the numbers coming to them would be the introduction of an easier examination?—Certainly.

6179. You have had a great deal of experience of examinations?—Yes.

6180. It is said now and then that the examination is not to be made lower but it is to be different. If it is made easier, does not that really mean after all that it must be lower?—I do not see the difference.

6181. Unless there were some very faulty condition of the examination of the University of London, if it were the fair and reasonable examination that it is generally accepted to be, could it be made easier without being made lower?—I think not.

6182. With regard to the two colleges and the students, the colleges are by no means prepared to limit their diploma to London men?—Certainly not.

6183. But they would for many reasons encourage men by all possible means to study in London, and apart from the vexed question of the superiority of the teachers, there is no doubt that the clinical resources in London are vastly greater than anywhere else?—You cannot compare them with those anywhere else.

6184. You have often seen tables of the number of beds in London at the disposal of the students?—Yes.

6185. And if I may venture upon a comparison, you have seen such tables with reference to Edinburgh?—I have.

6186. Not going particularly into numbers there is a vast difference?—An immense difference.

6187. And however able a teacher may be in clinical work, which is, after all, the chief duty of the student, he cannot work without material, so that in point of dresserships and clinical clerkships, the number of beds at the disposal of the teachers is a most important matter?—It is a very important matter.

6188. Therefore, for that reason alone, by every possible means the colleges would encourage men to study in London, but they would not exclude men who had learnt their profession in the provinces?—Certainly not.

6189. And every year perhaps the reason against such exclusion would grow stronger, inasmuch as teaching and clinical material in the provinces grow better and better?—Certainly.

6190. And much as may be said for London there is no doubt that some of the provincial colleges and hospitals are better equipped in that respect than some of the smaller London hospitals?—Yes, I think so.

6191. So that on the common ground of fairness it would not be right to exclude provincial colleges?—No.

6192. Exclusion is one thing, and the encouragement of London work is another?—Yes.

6193. Now you have been pressed about the character the London University should assume under its altered conditions, whether it should be strictly limited to the Metropolis, or whether it should be, as it is now, wider in its range so as to include the provinces. Can you say why both those conditions should not be fulfilled, that is to say, why it should be not altered to meet the needs of the teaching in London and still retain its imperial character?—It does not appear to me that the difficulties are insuperable and insurmountable.

6194. And if it could be achieved, do not you think that for our profession it would be far better, than that two Universities should start in London with the great pressure upon one of making the degrees easier than those of the other?—I think it would be most disastrous.

6195. Really the strong view which many entertain against the formation of another University in London is founded upon that fact?—Yes.

6196. Are we assuming too much for the colleges to say that they do not in any respect make this a personal question, but rather a question in the interest of the profession for which they are very largely responsible?—That is it, certainly.

6197. It is in the interests of those bodies which are associated with them, in the interests of medical education in which they play so important a part, that they are extremely jealous of any step being taken which would in any degree tend to lower the character of medical education?—Yes, certainly.

6198. It would be far better if it came to an issue that men who wanted a degree should be unable to obtain it, than that men should obtain a degree with increased facility, but at the cost of the standard of professional education?—Yes.

6199. And perhaps through the whole of this question, whatever future form it may take, that will be the supreme question for the two colleges?—I think so.

6200. What is best for medical education is the question?—Certainly.

6201. Then it was said that competition at the University might tell in two ways. But would competition between two Universities be likely to tell in the

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

way of raising the standard or lowering the standard of examination? Which is most likely?—I think the question would be lowering the standard of examination.

6202. Competition often means cheapness, and there is no great reason why this should be an exception to the general rule. Do you see any insuperable difficulty in modifying the plan of the London University to suit the present demand?—I have already said it did not appear to me that there were insuperable difficulties.

6203. You were asked a question why so few proceed to the University of London. I suppose the answer to that is that the examinations are very difficult?—They are very stiff.

6204. And in preference to the constitution of a new University, with all the faults and dangers that might beset it, it would even be better to constitute two examinations of the London University. There might be an honours examination, something of the character of the present one, and there might be an examination of somewhat lower grade, a pass examination. That is only an illustration of one of the many ways in which the difficulty might be met?—I think I used words to that effect.

6205. Then you were asked a question whether the character of the examinations of the London University was due to the examiners not being teachers. I presume that is answered by a reply which you have already given, that the examiners of the London University are teachers?—Yes.

6206. There is another very important question in relation to this subject. If a great change is brought about, do you not think that in one respect an improvement might be made in the mode in which the preliminary or scientific subjects are taught, that instead of every hospital, small and large, teaching its own physiology and chemistry, and perhaps anatomy, these preliminary subjects might with advantage be taught at a common centre, setting the school free for clinical work?—That is a matter for which I have spoken and advocated for many a long year, as you yourself also have.

6207. There would be many advantages in it?—Very many.

6208. The best teachers could be secured; a higher remuneration could be given for their services, and there would be a general concentration of force?—Yes, no doubt there would be very great advantages. It would be necessary, I think, to be a little safeguarded in one direction. I am not sure, for instance, whether, with regard to the teaching of physiology, there might not be some danger in the whole course of the teaching being less adapted to qualifying students for their work as medical practitioners. If the teaching were absolutely divorced from the schools and fell into the hands of professors, who were in no sense whatever associated with medicine, I fear inasmuch as the study of physiology is a means to an end, whether, unless it were safeguarded by a syllabus or in some way of that kind, there might not be some danger of its running off on lines which would not be of much value to the student.

6209. But assuming that there might be differences of opinion upon that matter, it would not follow by any means that the concentration of lectures and teaching at a particular place would involve the appointment of men unacquainted with professional wants?—Certainly not.

6210. That might as well be provided for then as now?—Yes.

6211. And it might have the advantage of the men being better taught, and the schools, or some of them, at all events——?—Greatly relieved.

6212. Relieved from a burden difficult to bear, giving them the opportunity of devoting the whole of their force to the teaching of clinical subjects?—Yes.

6213. That might be entertained in considering what steps should be taken with a view to the formation of a new University or the modification of the existing one?—Yes.

6214. (*Mr. Anstie.*) Having regard to your very emphatic expression that it would be most disastrous to have two Universities, I should like to draw your attention to a suggested solution of the difficulty with regard to licenses, which is, that the Gresham University, though starting without the power of giving licenses, should in a few years, as many anticipate would happen, obtain that power. Would that be an advantageous solution in your judgment?—Not so advantageous as the London University's scheme.

6215. In that case the two Royal Colleges would retain their own power of licensing?—Yes.

6216. So you would have a London University licensing by graduation; the Gresham University licensing by graduation, and the two Royal Colleges licensing without graduation. What effect do you think that would probably have upon the functions of the two Royal Colleges?—You say "of the two Royal Colleges," might I ask you to explain a little more in what respect you mean?

6217. You see there would be two Universities, each of which would have the power of giving a license by graduation, and passing by the functions of the Royal Colleges altogether, and one of those would have incorporated in it the whole of the London medical schools. What would remain as far as London work is concerned for the two Royal Colleges to do? Do you see what I mean?—I quite see what you mean. My impression is that the prestige of the two Royal Colleges would still be such that men would seek their diplomas. At the same time, it must place the two Royal Colleges in an uncertain and dangerous position; but I do not think that looking to the work they have carried on it would be fair to them.

6218. When you say that the prestige of the two Royal Colleges is such that they would continue to retain that although people got licenses by graduation, you imply that the license by graduation would not be of equal value to the college diplomas?—Well, it does appear so, and I am not quite sure that they would be. My impression is that the college diplomas would be very very highly valued.

6219. But does not that necessarily imply that the graduation would be of a lower standard than the Royal College diplomas?—No, I think not.

6220. Of course I speak of general practitioners, those for whom it is desired to secure a wide possibility of graduation. One would presume they would go to the new University, which gave a license by graduation?—No doubt a large number of them would go to that, because it would give them in the eyes of the public a better position.

6221. You have referred to the arrangement contained in the 47th clause of the Senate's Scheme, and I should like to put this question to you, which has been suggested before. It is the clause in which the Senate is to come to an arrangement with the two colleges for conjoint examination for license and graduation. Another suggestion has been made that the University, whatever it may be, should accept for the practical subjects in medical education the testamur of the two Royal Colleges, and should retain in its own hands the determination of the less practical and more purely scientific branches. Of those two plans, which would you prefer?—It is a matter to which I have not given any consideration, and about which I hesitate to express an opinion.

6222. You see the difference between the two methods?—I think I see what you mean, because if I understand you rightly, the two colleges would conduct examinations, and upon certificates given by them that the students had passed successfully that examination, the University should confer its degrees.

6223. After adding thereto of course the more purely scientific branches?—As an alternative to what?

6224. As an alternative to the conjoint conduct of examinations contained in Clause 47 of the Senate's Scheme?—Of the two, my individual opinion would be rather in favour of the second; that is to say, that the two colleges should give a certificate, "a testamur," as you term it, and that the University should conduct for itself the more purely scientific.

6225. Following what you have said with respect to the relation of the two Royal Colleges to the medical schools, I gather as the result that they do in fact exercise a very practical control over the conduct of those schools?—I believe assuredly they do.

6226. Having regard to the extent to which by your examinations that control is exercised, is there any probability of the two Royal Colleges being regarded by the schools as their representative for institutional purposes on the governing body of the University?—

There you ask me a question to which it is impossible for me to reply.

6227. You do not dissent, I understand, from the proposal that the teachers at the various medical schools should constitute the Medical Faculty of the University, and should as such have a representation on the governing body?—Some representation.

6228. Having regard to the powers which the colleges already exercise over the schools, would it in your judgment assist the concentration of teaching which you have spoken of as so desirable if the colleges on the one hand and the medical teachers in the schools on the other hand were united in a single body? Would it tend to assist in the concentration of teaching if they were united in that way upon a common University body?—If the colleges and the teachers in the schools were to be united?

6229. Yes; something in the same way as that indicated by the Standing Committee provision of the Senate's scheme. Would it tend to assist concentration?—It might. In union there generally is strength.

6230. I understand you expressed a decided opinion against the examination of a student by his teacher?—Certainly.

6231. If the opposite view were pursued, that every student ought to be examined by his own teacher, it would come to this, would it not: that inasmuch as there are 11 medical schools, each student would have to be examined by a teacher in one of those 11 medical schools?—Yes, with the result that you could scarcely have any uniformity.

6232. That occurs to one as a possible result. Does not there seem to be a difficulty in making the arrangement by which this fundamental principle is to be observed: that every student in everyone of those 11 medical schools is to be examined by his own teacher. As Sir William Savory points out to me, it would imply more than one teacher in each school being employed to examine the students in that school?—Yes.

6233. Does not that appear to you to be a cumbrous and difficult arrangement?—Yes.

6234. And apart from every other consideration it would appear to you as almost impracticable?—Yes.

6235. Then if we pass by extreme views of that description, may I take it that the object of connecting teachers with the examinations is that the examination should correspond with the teaching as modified from time to time by the progress of science?—Assuredly.

6236. If you secure that end it is the only end you would care to secure?—Yes. I think it is secured under the present system.

6237. (*Professor Sanderson.*) I think you have admitted, have you not, that there is no reason to suppose that a student educated as regards clinical subjects at Birmingham, or say, Leeds, would be any the worse, as compared with a student educated, for instance, at Charing Cross or Middlesex Hospital?—Certainly not.

6238. Did you make it clear that a student in London belonging to a medical school such as either of those I have mentioned, is in reality only a pupil at that school, and that he has not the advantage of the large range of clinical opportunities which exist in London?—Do you mean that a student at Leeds would simply have the run of the Leeds Infirmary, and that a student in London could go from hospital to hospital?

6239. I mean that a student at Charing Cross, for example, has the opportunities which Charing Cross affords, but no others?—Quite so.

6240. Therefore, does not it follow that it would be extremely unfair to give a preference to education conducted at Charing Cross as compared with education conducted in Leeds, where the opportunities are at least as good?—Yes; but we were considering the question of a University degree on a London side.

6241. Then you do not think it is because education is likely to be better in London, but because the institution, being a local one, it is desirable, that the men should be resident in the locality?—What we think is this, that London offers such a very much larger opportunity for clinical work than any other place. Take, for instance, if I may illustrate it, Edinburgh. I have had students from Edinburgh University come down to me who have been dressers and have held clinical appointments there. Say a student has had two beds in Edinburgh, he comes to me and I give him fifteen beds straight out. He has much better and larger opportunities.

6242. I quite understand that, but I do not see that there can be any greater advantage to a man who is in a small hospital in London, who is limited as regards his opportunities to that small hospital. I do not see that his advantages can be at all greater?—As a matter of fact a large number of the senior students, though they are not affiliated to other hospitals than the one in which they enter, do go round to different hospitals. If there is any interesting case it soon spreads, and they go from hospital to hospital. I see constantly many students who are not members of my hospital.

6243. And do you think that really does appear as regards London students, that they do go from hospital to hospital?—I am quite sure that they do; many do. I do not say all as a body, but many do.

6244. But on the other hand you would not suggest that there is a great advantage in London as regards the practical subjects?—If a man has better opportunities in London as against places away from London, it is to his advantage to get his education in London.

6245. But for other reasons than that, the instruction is better. Perhaps there are other reasons?—The instruction in a London hospital is much more likely to be more regular than in provincial colleges, where the visits to the hospital are less regular. It is more systematic.

6246. I am glad to see you are in favour of the co-operation of the Colleges with the University in examination. Of course, all co-operation must depend upon equal standard and upon equal range, must it not?—Yes. You cannot have an examination conducted by three Examiners, two of which would have one standard and a third a different one.

6247. What I wanted to get at was this: whether as regards the practical subjects, that is to say, medicine, surgery, and midwifery, one might safely assume that there is no difference, or no substantial difference, between the examination of the University of London as at present conducted, and the conjoint examination. Or if there is a difference, is it a difference which could be got rid of by the improvement of the one which appears to be inferior?—You mean whether the practical examination of the two Royal Colleges is exactly on a level with any practical examination which may be held by the University of London at the present moment.

6248. Yes. I would not say "exactly" but "substantially"?—It is a question that I am not prepared to answer, because I am not conversant with the University of London's examinations.

6249. There is one point which I must just ask about. In the examination of the University of London, a man is placed by the bedside and has the opportunity of examining a patient completely in bed?—Yes.

6250. Whereas in the examinations of the conjoint board, what is done is to bring a person to him to be examined?—And by bringing the patients to him from all the different hospitals in London, we have a much better selection than you could get in any one hospital, by taking students to the hospital.

6251. Then you think that is not a disadvantage, but rather an advantage?—I think so.

6252. Is not the examination which a man makes of a patient in bed very much more complete?—The patient is in bed or on the bed; he is stripped, and can be handled in any way whatever.

6253. But does not it happen that the patients who can be brought to Examination Hall for the purposes of examination are sure to be more chronic cases, and that therefore the opportunity of testing a man's knowledge of acute diseases is less efficient?—You can scarcely, I think, examine students upon acute diseases without great cruelty to the patient.

6254. What I want to find out is whether there is great difficulty with regard to the examinations of the conjoint board in bringing them to the level of the University of London?—I conceive it is on a level with the University of London in that respect. It is even more difficult I think. You have there a large number of selected cases that are brought down and a very large range of cases, and the examination is a very searching one.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

6255. In that case there is really no obstacle to accepting the examination in clinical subjects of the conjoint board, either by the present University or by any future University body?—I can see none.

6256. But I suppose you would not admit that to be the case as regards scientific subjects. I mean by the scientific subjects, chemistry, physics, anatomy, and physiology. You would not regard those examinations as adequate from a University standard?—Certainly, so far as I understand the question the examination in those subjects by the conjoint colleges is not on the same level as the examination in those subjects by the present University of London. Is that what you mean?

6257. Yes?—It is a different kind of examination I am told, but you are asking these questions about the examination of the University of London with which I am not conversant. I can give you no information about those.

6258. The point I want to get at is this. May we take it that the examinations in practice might be preserved without the alteration of either, and the examination in science could not be?—That is a question I cannot answer.

6259. You expressed the opinion that it would be desirable that the teaching of the sciences in the medical schools should be brought together into one or more central institution?—I did not express the opinion that that there should be. I think it desirable that there should be with certain safeguards.

6260. May I ask how that could probably be best brought about. Would it be by a process of co-ordination, or by what method do you think it could be best brought about?—My impression is that it should come about naturally by the amalgamation for those purposes of various courses in the smaller schools. It is a process of natural growth I think.

6261. You think that possibly the institutions already existing in connexion with the London schools would become centres for scientific teaching?—Yes, I think so—aggregates.

6262. You would not wait for the creation of a University having itself all the apparatus for teaching?—Almost everything that is stable is of slow growth and gradual progression. If you make anything by some violent convulsive movement the chances are that you will have instability.

6263. Would you mind stating what you think in general as to the length of time that a medical man being educated for ordinary medical or surgical practice should spend in purely preliminary and scientific work, including, if you like, anatomy and physiology?—You mean assuming that his whole curriculum is to extend over a certain time, what proportion of that?

6264. Yes, taking the ordinary education of well-informed and thoroughly trained medical men?—We assume that he spends five years.

6265. But I mean in the purely scientific part?—It is a matter that I am not prepared to answer off-hand.

6266. You said just now you thought there was a risk if, for example, the teaching of physiology were in the hands of physiologists?—No; excuse me, if I may make a correction. Perhaps I did not explain myself clearly. I did not say if physiology were in the hands of physiologists, but if it were in the hands of physiologists who have no touch whatever with medicine.

6267. That really helps what I was going to say. I will put the question differently. Is it not the case that all leading teachers in physiology are connected with medicine directly at present?—At present; but there are tendencies in the other direction, that they will be dissociated.

6268. Is there any instance of that in any of the large centres of medical science?—I cannot say that there is.

6269. So that really the danger is rather a theoretical than a practical one, is it not?—No, I do not think it is. I think it is a danger which is already beginning to be felt.

6270. That the teaching of physiology in some of the medical schools is becoming too general or too comprehensive?—Is acquiring a direction which does not prove of very great service to the medical practitioner.

6271. Why is that? Is it because it is too comparative for example?—As shown in the examinations, it is running very largely into all sorts of experimental work, acquaintance with a large number of complicated pieces of machinery, and things of that sort.

6272. But does not that arise simply from bad teaching?—That is the teaching you are advocating, I thought.

6273. I was not advocating anything. I wanted to know whether there are any examples which show that the scientific teaching of physiology has led to such results?—I find in my hospital work that my students are grossly ignorant of the common A. B, C relating to the organs of breathing, digestion, and so on, whereas they talk learnedly about the *metabolism* of the tissues and so on. They go into all those bye matters instead of the fundamental matters which would be useful to them.

6274. With reference to the question, about which so much has been said with regard to the examination of students by their own teachers, is it not true that it applies more especially to pass examinations, that is to examinations conducted orally, as the examinations are at the Conjoint Board, than to honours examinations, in which the practical part is very much more extended?—Probably it has less reference to competitive examinations than to pass.

6275. (*Professor Sidgwick.*) You said that you approved of the clause in the Gresham Charter which requires the final two years of the students to be spent in London?—We think it very desirable.

6276. With regard to a question that has been asked you as to whether the students now trained in London do take full advantage of the unrivalled clinical opportunities in London, do you think that the use of those opportunities could be made more effective by organisation?—I cannot doubt that it could be.

6277. And you think that would be one desirable result of having a teaching University in London, that this kind of organisation would go on?—It might.

6278. With regard to the degree, I gather that you would probably agree with what was said by the vice-president of your college in 1888. It is in the evidence before the preceding Royal Commission: "We wanted "for London the same privileges as those enjoyed in "other towns, such as Dublin, Edinburgh, and Glas-"gow, and more recently by the Victoria University, "where degrees have been granted by the Universities "on examinations which are really not superior to "those that we hold ourselves." That would be your view also?—That we ought not to grant degrees on examinations of a lower standard.

6279. Mr. Bryant says London is placed in a peculiar position, in that it alone of all the large towns of the United Kingdom was deficient in the power to give a degree?—It is so.

6280. And that it would be desirable to have a degree given upon easier terms than it is now given by the University of London?—Yes, than is now given by the University of London.

6281. And it would be, speaking broadly, upon the same terms as it is now given in Dublin, Glasgow, and Edinburgh—without implying that they are all the same. You mean you do not wish for a degree on lower terms?—Certainly not.

6282. And you maintain that the examination for the license that you give is equal as a test of study to the degree of the northern Universities?—We believe so.

6283. At the same time, if there were a new University for London, you think the degree ought to require somewhat more study than your license. Would you still maintain the distinction between the two?—Yes, chiefly in the direction, perhaps, of more scientific work.

6284. Then, if you regard it as desirable that there should be this degree obtainable upon more easy terms than the present degree of the University of London, do you not think there would be less danger of confusion between the two degrees if they were given by two distinct Universities rather than by the same University?—In the case of a large number of the public there would be some danger of confusion, but not by those who know.

6285. If this easier degree were given by another University so that it had another name it would decrease the danger, would it not?—Yes, it would decrease that particular danger.

6286. I think you said your college was prepared to approve of the degree of control or influence over the

examination which it was proposed to give them in the scheme of the University of London?—Yes.

6287. So far as I understand that consists of two points; first, that in the constitution of the Senate in clause 3 they elect two members, that is, the president of the Royal College and one other fellow of the college are to be members of the Senate. That is one of the points of the scheme that you approve of?—Yes, I think we accepted the scheme as a whole.

6288. The only other thing is that with regard to clause 47, which gives the Senate power to enter into arrangements?—Yes, I think so.

6289. (*Mr. Anstie.*) Clause 16 must be read in conjunction with clause 47?—We agreed to this clause.

6290. (*Professor Sidgwick.*) Do you attach importance to this regulation for a standing committee in Clause 16?—A standing committee of the Senate?

6291. Yes, or would you think it enough if there were two members of the Royal College of Surgeons on the Senate, and if some such clause as clause 47 were introduced, but the question of standing committees left in a more undefined sense?—Yes. The advantage of a standing committee appears to be this: that if you have a standing committee for a particular division of the University it would be composed of persons who would know the subjects treated of by that division. Therefore it is probable there should be a standing committee.

6292. Then I may take it that the important point is rather the degree of control which the royal colleges would have in the representation?—Yes, that is very important.

6293. They were content to have two members out of a body of 52?—The two colleges together had four.

6294. You, I think, said that you objected to give the teachers a preponderate influence over the administration of the University?—I objected to their having paramount dominant power.

6295. Would you object to a constitution of the governing body which gave them half?—The proportion is a matter that I hardly like to express an opinion upon.

6296. Are you acquainted with the system of any other University?—No.

6297. But you are aware, perhaps, that in the overwhelming majority of Universities the teaching body has practically a preponderating influence?—Yes, I am aware of that.

6298. You say the level of your examination is a very high level, and you also laid stress upon the influence of the royal colleges upon the schools. May I ask why this control has not been exercised in bringing the scientific teaching of what I may call the inferior schools up to the mark. It would appear from the account you gave to Sir William Savory of the amount of control that you can exercise, that if the scientific teaching in any of the London schools is not up to the mark, your college has a considerable share of responsibility in the matter?—Yes; of course it is well understood that there are practical difficulties in always carrying things as far as one would desire. The circumstances of some of the smaller schools make it exceedingly difficult to provide all that is necessary, but so far as possible we exercise all the control we can, and in case of inefficiency I think it would be found that we should decline to receive their certificates on those subjects.

J. W. Hulke, Esq., F.R.C.S., F.R.S.

30 June 1892.

6299. When you say the level of the examinations is a high level, would you say it was a high level as regards the scientific subjects?—In that I suppose you include anatomy and physiology?

6300. Yes?—There I should say, I think, it is sufficiently high.

6301. But as compared with the University of London you would not say that it is?—No, as compared with the University of London I would not say that it is quite so high.

6302. Do you consider that the degree of the University of London implies a materially higher standard in purely medical knowledge?—Yes, I would say so.

6303. What, if I may ask, is the fee of the examinations in the royal colleges?—Those financial matters I had rather not say anything about.

6304. (*Mr. Anstie.*) There is one question arising out of an answer you gave, which I should like to get more clearly. I understood you to take some exception to the preliminary scientific, or rather generally to the scientific teaching for medical students on the ground that it tended to be too remote from a practical bearing on medical subjects. Am I right in thinking you took that view?—Not quite right with regard to the general scientific teaching, but I instanced particularly physiology. There is a tendency, we think now, for that to run off in lines which are not quite so useful to the medical student as they might be.

6305. May I put this question to you broadly? In your judgment ought the scientific subjects to form part of the medical curriculum and be under the control of medical authorities, or ought they to be independent of that control?—I think they must be under some kind of control or some degree of influence.

6306. You think the science ought to have a medical flavour in it?—I think so.

The witness withdrew.

Adjourned for a short time.

H. G. Howse, Esq., M.S., F.R.C.S., examined.

H. G. Howse, Esq., M.S., F.R.C.S.

6307. (*Chairman.*) You come on behalf of the Royal College of Surgeons?—Yes.

6308. You heard the evidence of the last witness?—Yes.

6309. Do you agree with it in the main?—Yes, in the main.

6310. You agree that of the whole of the schemes which have been before the public you prefer that of the Senate of the University of London?—Yes, to any other.

6311. For the same reasons that were given by the last witness?—Yes, speaking generally. Of course there are certain additions and modifications which it seems to me might be made with advantage in the scheme of the University.

6312. What would you suggest in the way of modification?—I marked one or two things. For example, it seems to me that the Senate is a very unwieldy body. It seems to me that if it were possible it is desirable that the size of the Senate should be diminished. Then it only gives a three years' tenure of office, and although the members are capable of being re-elected, I think the three years' tenure of office is an exceedingly short one. By the time a member of the Senate has just made himself acquainted with the work of the University, he would be retiring, and although he is capable of being re-elected, it appears to me to be a shorter period than is desirable. Then another thing which has objection in it is that the local committee in arts and sciences really implies the examination of their students by their own teachers. I conceive very serious objection to that.

6313. You have the same objection that the last witness had?—The same objection. I can conceive that it is less objectionable in arts examinations than medical examinations.

6314. Why?—In arts examinations there is comparatively little oral or practical examination whereas in the medical examination, the great bulk of the examination, if it is at all an efficient one, must be an oral and practical examination.

6315. And in that case the examiner, you think, is more likely to favour his own pupils?—Yes, in the medical examinations where there is so much more oral and practical work.

6316. Then you object that the examinations should be settled too exclusively by the teachers?—Yes.

6317. On the general question of examining their own pupils, would you entirely cut them out from this, or would it be sufficient if you joined somebody from outside? Would you allow no teacher to have any share in examining his own pupils, or would you be

H. G. Howse, Esq., M.S., F.R.C.S.

30 June 1892.

content if an external examiner were associated with him?—I think the kind of examination which gives the best results is the association of two examiners together, the external examiner and the examiner who is more or less a teacher; but I would give the power, especially in oral examinations, to the external examiner, and let the examination itself be modified more or less by the teacher who is standing by. It seems to me that the examination gains in breadth and in quality by the external examiner being the one who principally conducts it.

6318. I suppose the idea of the teaching University is that there should be a connexion between the teaching and the examination, is it not?—Certainly.

6319. There is plenty of teaching in London and plenty of examining, only they do not fit in together?—Well, I do not know that the two do not fit in as far as the medical examinations are concerned, because I hold that the teaching element has a powerful influence in the medical examinations in London.

6320. Then you think they do fit in together to a certain degree?—As far as the medical examinations are concerned. I cannot speak for the arts examinations.

6321. Are the curricula of the medical examinations settled by the advice of the teachers with regard to the Royal Colleges? Have the teachers practically any voice in settling those curricula?—The Council of the College of Surgeons is almost entirely (a very large proportion of it, at any rate) composed from the teachers of the various medical schools. There are a few representatives from the provincial medical schools, but it is mainly composed of the teachers in the London medical schools. There is a very great connexion in that way.

6322. More than there is in the examination of the London University?—In the London University the members of the Senate are not largely connected with teaching, but through the committees of the Senate they ask advice occasionally of the examiners as regards particular points in the curricula and in the subjects examined upon. For instance, quite recently as an examiner at the University of London, I had a letter from the registrar of the University asking my advice and that of the other examiners upon one particular subject.

6323. One of the things that most commends itself to you, I suppose, is the dominant part which the Royal Colleges are to take in the medical examination?—In the University of London scheme you mean?

6324. Yes?—Yes, I think that is a very important point. I think that if a new University were to be constituted to-morrow the system of examination would have to be entirely organised afresh in connexion with it. Examinations cannot be organised and made up in a day. They must grow gradually. You have to try one system one year, and you find that there are certain points about it which have to be modified in another year, and various experiments have to be made in the perfecting of that examination. Now in connexion with the Royal Colleges there is already a pass scheme of examination ready to your hand which is in the highest degree efficient. I am speaking now partly as an examiner at the College of Surgeons and partly as an examiner at the University of London, so I know intimately the way in which both examinations are conducted.

6325. That part you approve of?—Yes.

6326. Then you were going through the different objections you had to the scheme of the Senate. Will you continue in that line?—I do not think we have any very strong objections to the scheme. I only mention those really as very subsidiary points. I have marked clause 8, section 46—"Matriculation and degrees in arts and "science." "The Senate shall have power to enter "into arrangements with the constituent colleges in "arts and science jointly, or any of them separately, "upon the following basis." There is nothing objectionable in that, but in sub-section 3 we have this.—"Examinations of students, being candidates for "Matriculation and the Pass Examinations for the "degrees of B.A. and B.Sc., by a college professor or "teacher in the subject"—which is practically the same subject that I have already alluded to—"or other "person appointed by the college, and an examiner to "be appointed by the Senate, with power to the Senate "to make regulations or byelaws from time to time for "dealing with any cases in which the examiners may "be unable to agree upon their report." That is, it seems to me, giving too much power to the local teacher in the conferring of that degree.

6327. Is there any other objection?—I see I have not marked any others.

6328. Do you think that there is the least chance of Convocation adopting this scheme? I suppose there are no means of knowing that?—I have no means of knowing it. Of course the vote was very strong against it on the last occasion, but I think that was a vote which, with certain modifications in the scheme, I should not suppose likely to be repeated; but I cannot speak positively on that ground.

6329. Then you agree with the last witness, that London University could combine the work of a teaching University without losing its position as an examining University for the whole of the United Kingdom. You agree with what was said about that?—I think it would require considerable modification of the London University as it exists at the present time. I think the present examination should be maintained. I am only speaking of medical examinations. They should be maintained as they are and constitute an honours degree. There might be a pass degree which would be constituted in connexion with the Royal Colleges which should not carry honours with it, but might be simply known as M.D. London, the other being M.D. Honours London.

6330. Would you require residence for two years in a London medical school?—I have no authority to speak on behalf of the college regarding that. For my own part I think that the clinical instruction given in London during the last year, or year and a half, or two years, is an important feature in the curriculum, and if this is to be a local London degree a certain amount of residence may be reasonably required. At the same time I am only speaking my own opinion about that. That is not a subject on which I am authorised to speak with regard to the college.

6331. For a London degree you would require that, but you would also be willing to give degrees to people out of London who are not able to come up here?—The general degree which is now given would be a degree to all the world.

6332. A separate degree for the London men?—Yes, a separate degree for the London men.

6333. Would not there be a certain amount of confusion between the two?—Not if the honours degree were marked—if they were given the right to call it honours.

6334. The ordinary degree given to Londoners?—Yes.

6335. The honours degree to everybody?—Yes.

6336. Then you think there should be an arrangement something on the lines of this scheme by which the London University should continue to perform these two entirely distinct functions?—That is my opinion.

6337. Supposing either that Convocation will not ratify this scheme, or that the Senate will not introduce it again, and supposing the University of London to be out of the question altogether, will you turn your attention to what is called the scheme of a professorial University for London?—Yes.

6338. Do you agree with the last witness that you have great objections to it?—I think the scheme is an entirely impracticable scheme. It would in the first place entirely destroy the character of the local institutions. It proposes to absorb them completely, and not only to take the power of appointing the various teachers in connexion with them, but also to exercise complete control over the character of the teaching,—to which I should not object; but also to exercise a control over teaching plant, and to receive all the fees. It seems to me that that is a function which no central body in a metropolis like this, so very widely extended and with such a large number of teaching institutions, could carry out efficiently, and they must delegate a considerable amount of that power to local committees, which would be practically the same as the governing bodies of the institutions at present existing. What relations those local committees would have to the Senate, what the powers of the one and the powers of the other would be, I really cannot understand. As regards the medical schools, I think it would be quite impossible to absorb them in that way, because the medical schools are exceedingly complex bodies, not only having relations to the teachers, but also having relations to the governors of the

hospitals,—in regard to whom the negotiations would be extremely complicated.

6339. (*Professor Sidgwick.*) It is not proposed to absorb them?—I am quite aware that they propose different arrangements for the medical schools from what they propose for the arts schools. But we have here a question of principle, and if the principle is so excellent with regard to the arts colleges, it must be excellent with regard to medical schools. Taking my own experience of the constitution of the medical schools, and the very great efficiency of the work of these schools, I do not think they would be improved by absorption into a central body like the proposed Senate of the Professorial University, and my own feeling is that the competition of these schools *inter se* is not an undesirable thing, but that it is really good for the more perfect carrying out of the teaching.

6340. (*Chairman.*) The only thing that remains that you have not dealt with is the Gresham University scheme. Supposing the University of London to be unable or unwilling to take any part in the proposed new University, do you think the Gresham scheme could be so altered and improved as to meet your wishes?—As far as the College of Surgeons itself is concerned, the college stood aside from the Gresham scheme, regarding it as being rather small; they thought there was a lack of comprehension, so to speak, in the Gresham Charter for a great place like London. The College of Surgeons, although generally approving of it, stood aside from any direct representation upon it, because they considered that the amount of representation that was given was altogether less than——

6341. There was no actual amount of representation fixed, was there? They may come in, but the total number of medical representatives must never be more than 11. That is, that some must be taken away from the Colleges of Medicine, but it does not say how much?—In clause 9 it says, "There shall be representative "members from time to time nominated or elected as "follows, that is to say:—Three members nominated "by the Council of University College, London, to "represent that college. Three members nominated "by the Council of King's College, London, to repre-"sent that college. One member nominated by each "of the above-named Colleges of Medicine, to represent "that college." I am afraid I rather mistook the words "Colleges of Medicine" for the Royal Colleges. Then further on it is said in case the Royal Colleges come in, then these representatives from the colleges shall be diminished by the number of representatives given to the Royal Colleges.

6342. Therefore that would still be open to a good deal of negotiation. You could make terms for yourselves and get perhaps more?—That is true, but at the same time the Gresham University scheme is a scheme very much smaller in its comprehensiveness than the scheme of the University of London. It seems to me that in the scheme of the University of London there is contained the germ of a really great University for London, whereas I cannot conceive that arising out of this Gresham Charter.

6343. Other colleges may be admitted?—But only in the London district.

6344. Then would it not be advisable to keep the London Teaching University to the London district?—As far as the teaching element is concerned, yes, certainly. Then I think there would be a distinct disadvantage in having two Universities.

6345. You think that London with its enormous population could not stand two Universities?—I think it could stand it very well, but I do not think it would be advisable.

6346. There would be more working difficulty in having two distinct Universities than having one University with two distinct functions, one for the United Kingdom, the other confined to London?—I do not think they are distinct functions. It seems to me that they give two kinds of degrees. Many other Universities give two kinds of degrees; they give a poll degree and an honours degree, and I do not see why the University of London cannot do the same thing.

6347. I will not go back to that part, but you think there would be even more objection to having two distinct Universities in London, even though they have different names?—I do. As far as my own profession is concerned, I think our students would value a degree which was conferred (even although it might be a poll degree) by the University of London, rather than a degree to describe which they would be obliged to put "M.D. Gresham."

6348. That would only be for a time. By the time Gresham had established itself that would gradually disappear, and they might be as proud of the name of "Gresham" as they are of that of London?—Then in that case, supposing the Gresham University were so successful, I think it would be a distinct injustice to the present University of London, because it would take away the best men from our London schools who go to the University of London, and it would leave them those who were outside the metropolitan pale. At the present time, although a very large number come from the colonies and the provinces to the University of London, yet the great bulk of the medical degrees which are given by the University are no doubt given to students from the metropolitan area. It would be a distinct injustice to the University of London to take these men away.

6349. They would not take any of these colonial or provincial people; they could only take the Londoners?—But still, the Londoners constitute the bulk of the University medical graduates at the University of London at the present time.

6350. Then another of your objections is that the Royal Colleges have not sufficient power. Are there any other objections you have to the Gresham Charter which you wish to mention?—I think those constitute the chief ones. As regards the colleges in the University, I think the inclusion of these colleges in the University in the Gresham scheme is altogether a too limited one. The Gresham University is simply constituted out of University College and King's College and the medical schools, and although they take power to admit others, it seems to me that in any revision of the scheme there are many other institutions which should be very seriously considered in it.

6351. We have power to put in other institutions independently of any power that there might be afterwards. You think it might be amended?—I think there are many other institutions; for example, the graduation by women at the present time is becoming a very marked feature indeed in the present degrees of the London University, and especially in the arts degree. The only representation of women's education here is the School of Medicine for Women. That is a most partial representation. It seems to me that some representative college, such as Bedford College, should be represented. Then there is no representation of the Government School of Science, South Kensington.

6352. Do you think the Government School of Science could be affiliated to a University and yet retain its connexion with the Government?—I have no connexion with South Kensington, and I should be sorry indeed to say anything positively about that. I think it is more for those who represent it, but I should have supposed that a connexion might be made. I have had opportunities of conversation with a good many of the South Kensington professors.

6353. They could be put in by us if we chose, and also supposing we passed the charter without putting them in they could be added on?—Yes.

6354. Therefore, that is not a fundamental objection to the scheme of the charter?—No, it is an illustration showing that the charter was confined within very narrow limits for a Metropolitan University.

6355. I do not think anything was mentioned except the question as to there being two Universities, which really goes to the root of the charter. The rest is really more for alteration than rejection. This applies to both the objections you have mentioned about bringing in other institutions, and about the Royal Colleges being given more representation, and also to what you have mentioned about the Council. I think those are the chief objections you made?—Yes; and I want to say I am not authorised to raise any very serious objection to the Gresham Charter, inasmuch as the college that I represent has not seriously raised any very great objection to it. The college regarded its position as being rendered quite perfect by the provision which there is in the Charter, if that provision remained permanently—that the degree in the Gresham University could only be given to those who had already obtained the license.

6356. Do you agree to that?—I agree to that as regards this charter; I think that is an essential.

H. G. Howse, Esq., M.S., F.R.C.S.

30 June 1892.

6357. That would especially mean the Royal Colleges?—It means the conjoint diplomas, and it means of course the Apothecaries' Society Diploma also. It does not confine it to our own diploma.

6358. Then it is obvious that you represent no very great hostility to the Gresham Charter. They have preferred the other scheme, but supposing that scheme to fail, they might be inclined to fall back and come into the Gresham?—I think they would greatly prefer the London scheme.

6359. Is there any other point you wish to mention?—One has to remember that the agitation for a teaching University has been greatly strengthened, if indeed it has not almost entirely grown up from the cry of the medical students in London for a degree. It seems to me that considering the absolute value of the opportunities of clinical instruction in London, and that only such a very small number of students can obtain a degree through the present University of London, the cry for a degree upon easier lines than the present University is inclined to give is a very reasonable one. Then, if one is to make a new degree, the colleges are in a better position to satisfy that claim now than any new body can possibly be; they have all the teaching plant—they have their buildings ready erected at hand; and, speaking generally as an examiner at both places, I should say most emphatically that, although the examinations are rather different in the two institutions, the practical and professional part of the examination of the college is in every way equal, if indeed not rather superior, as far as the practical part is concerned, to the examinations of the University.

6360. You would like to have power to give the degree yourselves?—No. I should not. I think it would be of the greatest value if it were joined to the present University; but the value of the degree of the present University very largely depends, not upon the superiority of the practical examination, but in the science subjects which are added to the examination questions. There are additional and perhaps rather tougher questions given in science than at present in the examinations for the license given by the Corporations.

6361. What makes the great difficulty of the present London University degree? Is it the amount of knowledge required? It is certainly not the amount of medical knowledge required?—I think not.

6362. But the amount of knowledge required in other subjects?—I think so. There is a considerable impediment to our students obtaining the degree in the matriculation and the preliminary scientific examinations. I do not consider the standard of the matriculation examination too high, as it at present exists; but I think there are one or two things in the preliminary scientific examination—botany, zoology, mechanics, and chemistry—in which some of the subjects of examination are unduly pressed—made too severe.

6363. You hope that if they have an enlarged scheme such as is suggested by the plan of the Senate of the University of London this would be modified?—I mean modified not in the regulation, but in an important way which is scarcely understood at the present time. It is this: that the scheme of the University of London really implies a total reconstruction of the Senate. Under this scheme, especially with Boards of Studies, teachers would have a very much larger influence both in the conduct of the examinations, and as regards the the kind of papers set. In that way there would be a very much greater control over the kind of questions that are set. I do not think there is so much wrong in the syllabus of subjects required, as there is in the examiners in the subjects. Unreasonable questions are sometimes set, and I think the influence of the teachers would come in in this new scheme to a much greater extent—that they would hold a virtual control over examiners and thus prevent what I think is rather an abuse in the kind of question which are occasionally set. This has been a subject very serious consideration several times before the Annual Committee of Convocation of the University of London, and I think I am quite authorised to say so much.

6364. (*Professor Sidgwick*). I understand you would be prepared, to take the plan of the Gresham University supposing it were so far modified as to give the Royal Colleges the degree of influence over the administration of the University which they have in the scheme of the Senate?—As far as the College of Surgeons is concerned, I think I may say, Yes.

6365. In that scheme do you attach importance to the method of standing committees as in clauses 13 to 17?—You are speaking now of the University of London scheme?

6366. Yes?—I think the question of the standing committees is an important one. The committees are an important element in the organisation.

6367. Do you think it would be easy to carry out a plan by which what one might call a pass examination in medicine—I suppose you are speaking mainly with regard to the department of medicine?—Yes.

6368. Do you think this pass examination is required to meet the needs of London?—The matriculation?

6369. No, the pass examination. I thought you said that the examination for the students trained in London would be in the nature of a pass examination for the M.D. degree as compared with the examination of the existing University of London, which would then take the place of the honours examination?—Quite so.

6370. Your view would be that the existing M.D. degree should be called M.D. honours?—Just so.

6371. Does that seem to you a very satisfactory arrangement, assuming, as I understood you to maintain, that in the degree given by the local side the medical subjects would be examined in with as high a standard as in the present University of London. It would seem to me to be not according to the analogy of the distinction between pass and honours in other departments to say that by honours is meant not that the so-called doctor of medicine in Honours knows more of the subjects in his own department, but that he knows more about certain other preparatory auxiliary subjects. That would be a very odd and novel meaning to give to the distinction between honours and pass, would it not? I suppose you are acquainted with the distinction between honours and pass in various other departments in science and arts. In no case that I am aware of is it understood to mean that the man who attains a degree in honours does not know more of the particular subject in which the degree is given, but knows more of other subjects which I understand to be the scheme of which you now approve?—I think perhaps the question might be elucidated to a certain extent in this way. When a candidate at the University of London presents himself for examination he is asked to choose between two papers. He is asked to say whether he will go in for the honours degree or simply the pass degree. The two papers are completely different. He must choose the one or he must choose the other. If he chooses the honours he may fall below the honours standard, and the examiners may recommend him simply for a pass, but he is expected beforehand to elect for one or the other, and it seems to me that would be a very similar arrangement to the one I am now proposing.

6372. I am afraid I have not made my point clear. I understood that you maintain that the examination which you think it desirable to institute, and for which you think it desirable to give the degree of M.D. on the local side, would be an examination which in respect of strictly medical knowledge would maintain as high a standard as that of the London University. You do not want to lower the standard of medical knowledge?—Certainly not.

6373. What I understand you to want is to reduce the range somewhat in subjects that can only be said to have an indirect relation to medicine?—The scientific.

6374. Let us say the scientific, but of course among the subjects that are called scientific, there are some that are more closely relating to medicine and some less closely. You would not wish, I presume, to lower the standard in anatomy and physiology?—I should not.

6375. But you might wish to exact a less degree of performance in various other branches?—The subjects of the preliminary scientific I think might be modified—and more especially by the influence of the teaching element—in the direction that I indicated; but I should not wish any modification in those subjects which I regard as semi-professional, such as anatomy and physiology.

6376. The objection I take to your proposed establishment of two degrees is that it would create a confusion in the public mind if one M.D. was called M.D. honours and another only pass. Judging by the analogy of the relation of pass to honours in all other depart-

ments, the public would suppose that the M.D. in honours had attained a higher standard in his own proper subject, medicine, and the sciences more closely connected with it. As I understand, that is not what you wish it to mean. I am urging this because it seems to me still that, if we are to have the two degrees, there would be far less danger of confusion if they were given by two Universities than by one and the same. That would obviate the need of having this, as it seems to me, irrelevant and inappropriate phraseology of an M.D. honours and M.D. pass applied to the two?—You must remember that the M.D. honours really does comprise something more than one would suppose to be given by the M.D. pass. For instance, take psychology or mental physiology. That is examined upon at the present time in the University of London. I do not know whether it was ever thought that that subject would form part of the M.D. pass.

6377. My point is that the term "honours" would convey a wrong meaning. It would convey to the public that the M.D. in honours knew more of medicine, while it would really not be so. That seems to me to be an unsatisfactory way of distinguishing the two degrees, and it seems to me that it would be better if the two degrees were given by different Universities. Then the distinction would be gradually understood, just as I suppose now the distinction between the degree of the University of Edinburgh and the degree of the University of London is understood to some extent?—But probably in process of time the distinction will be quite as well understood between the two degrees of the University of London as it would be between the Gresham degree and the present London degree. The public become educated to understand things, or, at any rate, those who are most concerned in the matter get educated to understand those differences.

6378. Are you acquainted with the financial side?—I am to a certain extent, but only to a certain extent.

6379. What are the fees charged for the examinations?—For the London University degree, do you mean?

6380. No, by the Royal College?—35 guineas, that is the conjoint—for both diplomas, L.R.C.P., and M.R.C.S.

6381. Are both the diplomas normally taken together?—They are taken together; they cannot be taken separately.

6382. Supposing it is agreed that these two distinct kinds of degrees are required, in what respect do you think there is a disadvantage in having two Universities? If you want two degrees why should you not have two degrees if upon other grounds it is desirable to have the two?—I think it is an anomaly altogether to have in one place, however large it is, two Universities working side by side.

6383. Is it not a question of names? Supposing the examining board for the kingdom had been called by any other name than the University of London, your objection would not apply to it. It is a mere question of words?—No, I think not entirely. I think that to institute and to have another University here working side by side with London would draw a large number of graduates from the University of London. The University of London has been doing exceedingly valuable work in past years, and it has very largely done this work through the great influence which its medical graduates have exercised, and drawing the bulk of the London students away from it would very seriously damage, not immediately, but in process of time, the present London University, and I think cripple its usefulness for the future.

6384. Supposing the institution which is now called the University of London had been called an examining board for the United Kingdom, do you say that the drawing away of London students by establishing a local London University could be said to be any more an injustice than drawing away students from Liverpool, Manchester, and Leeds by establishing Victoria University? The examining board for the country naturally has its seat in the metropolis, but the impartiality on which stress has been laid seems to me to exclude any claim that establishing a University in London with the powers of giving degrees is more a grievance than establishing a University anywhere else?—I should object to the statement that the present University of London is a mere examining board. I hold that it has exercised a very considerable amount of influence over teachers both in the curricula which it has established and also in the syllabuses for examination which it has drawn up. I do not think it ought to be regarded merely as an examining board. Of course I know it is an examining board for the kingdom generally and not merely for the metropolis; but still it can scarcely be regarded in that light.

6385. I do not quite see that your answer meets the point I urge, that there is no more grievance in establishing a University of London for London with the degree-giving power than in establishing a University in any other part of England where it has not been in existence before?—I should not agree with that.

6386. If the name had been different, do you think there would have been the same grievance?—Yes; it is London. It is not Manchester, Leeds, or Liverpool. It seems to me that students who come up to be examined are mostly students from the metropolis. It is not so much a grievance that a University should be established in another centre some hundreds of miles away, as side by side or within a mile or two of this.

6387. Do you think that if it is desirable to have an Imperial examining board with the impartiality that the present one claims always to have had, it ought to have been regarded as a grievance that a University in the ordinary sense of the term is established in London?—I think it would be a grievance to the University of London.

6388. Would it be a greater grievance than if an equal number of students were withdrawn by any other University established anywhere else in the United Kingdom?—A University established anywhere else in the United Kingdom could not possibly draw the same number of students that a local University established side by side with the University of London could. They would not be going to the Victoria University, for example. They would not travel northward. It seems to me to be a question of position and locality.

6389. It is only a question of a somewhat larger number more or less. A somewhat larger number of students examined by the new University would be withdrawn from the old University—a considerably larger number, I should think.

6390. But if a claim is raised for keeping it without a rival in the metropolis a claim of the same kind might be raised between it and the rest of the kingdom?—Yes.

6391. Because there would be a grievance similar in kind if a new University were established anywhere in Great Britain?—Yes, but I think it is a question of degree of grievance so very much. The degree is very important.

6392. (*Professor Sanderson.*) Do you think your opinion as regards the adequacy of the practical examinations of the conjoint board, and their equality with those of the University of London, is generally participated in by the graduates of the University of London?—I do not think they have any opportunities of judging. It is only the examiners who can give an opinion upon a subject like that. I, as an examiner in the two institutions, have that opinion very strongly.

6393. Do you think we might take that opinion as generally admitted, and that no further inquiry need be made upon it?—I think you will find that the opinion is held by those who have examined in the two institutions. The character of the examination of the University of London differs to a certain extent from the character of the examination at the conjoint board.

6394. I mean in practical subjects?—Yes. The paper work in the University of London constitutes so much the major part of the bulk of the work of the examinations. Consequently one is obliged to judge by the style in which a paper is written at the London University. The marks are very much larger for the written part of the examination than they are in the conjoint board.

6395. Does not that give some additional value to the examinations of the London University?—It gives, perhaps, an additional value as far as correct writing and spelling are concerned, but I do not think it gives an additional value as far as treating a patient or treating a disease is concerned. I think I would prefer to be treated by a man who had obtained a qualification from the conjoint board, rather than by a man who had only passed the examination of the University.

6396. You quite agree, I suppose, in the opinion that the science examinations are inadequate for academical

T. G. Howse, Esq., M.S., F.R.C.S.

30 June 1892.

purposes?—We must remember that the science examinations of the conjoint board are developing at the present time, and that no doubt, some years ago, they were very much lower in their standard than those of the University of London; but of late years the standard has been going up considerably, and under this new scheme I do not think they would be very much less in value than the examinations of the University of London.

6397. I suppose you would admit, would you not, that the teaching of science in medical schools in general is inadequate as compared with the teaching of Universities elsewhere?—You mean in foreign Universities?

6398. Foreign Universities and English?—There are medical schools and medical schools. For example, at Guy's Hospital we have organised a most expensive series of laboratories for the work of our students going up for the scientific side of University degrees. Although I have no doubt you get larger laboratories and better organised in some Universities, and certainly in the Continental Universities infinitely so, still the provision for teaching there is quite adequate.

6399. Our object here and the purpose which we have in view is to recommend a scheme for establishing a teaching University. In what sense do you understand a teaching University?—I understand a teaching University as a University of federated colleges in which the teachers shall have their legitimate influence in the determination of the curricula and in the determination of syllabuses for examinations; and that they shall have a considerable share in the control of the University. In addition to that I understand also a University which has power to organise lectures upon special subjects—what has been called here a post graduate course—and also to give opportunities for original research. In that respect I think the conjunction of the colleges with the new University would be of such very great value, because we have already, at very great expense, organised the various laboratories for original research and equipped them, and they would be ready for the new University.

6400. Supposing the colleges were to provide for the appointment of professorships in connexion with the conjoint laboratories, would the colleges, do you think, be disposed to place the appointment of professors so far under the control of the University that the University would have a considerable influence?—I am afraid that is a question which I can hardly answer. I am only speaking my own individual opinion now, but I think that they would be likely to give to the University a very considerable voice in the appointment of such a lecturer. Of course, as I have said before, I am only speaking my own individual opinion.

6401. That, of course, would afford a way in which the University could teach pathology?—Yes, I can quite see that.

6402. By arrangement with the colleges?—Just so.

6403. I suppose you in general agree with the opinion that it would be very desirable to bring together the scientific teaching existing in London in some way or other, so as to make it more efficient than it is at present?—Yes. It depends, though, upon what you exactly define as scientific teaching as far as the subjects of the examinations are concerned, say chemistry, elementary anatomy, elementary botany, and pharmacy. As far as these subjects are concerned, I think they might be very well taught at a central institution. Individually, I should be of opinion that the subjects of that examination are best passed, even before the men have entered for the professional part of their training.

6404. These are mere subjects of preliminary examination?—Scientific examination.

6405. What I mean is that the proper training of medical students in science ought to be conducted in a central institution by the best men that could be got and with the best means of teaching?—Which subjects are you referring to?

6406. Physics, chemistry, physiology, and anatomy are the most important subjects?—As regards anatomy and physiology, my view is different to the first two that were named. I think those are best associated with the hospital in which the man is doing his professional work, and for this reason: that anatomy and physiology can be largely learnt while a man is obtaining a certain amount of preliminary acqnaintance with his profession. If you send away a candidate to a central institution to learn anatomy and physiology he may have to go some distance from his hospital which will diminish his opportunities for seeing operations performed, and so on, and thus diminish his opportunities for breaking the ground in the more particular professional subjects to a greater extent than if he learnt them at the institution to which he is attached.

6407. Do you think it desirable that while a man is studying anatomy and physiology he should be also engaged in hospital work?—Not altogether in the hospital work as far as the appointments are concerned, but there is a great deal of other work done besides appointments. There is work done connected with pathology, and work done connected with the out-patient department which a man can very well indeed be making himself acquainted with at the time that he is spending a large portion of his time in anatomy and physiology.

6408. In what is called preliminary drill?—Yes, preliminary drill.

6409. That would be quite possible if a man were attending lectures and receiving instruction at the central institution?—It would limit his capacity for doing this work if he had to go a mile or two or three miles. As far as the subjects of the first examination are concerned, I should quite approve of that.

6410. You do not think that even anatomy is taught under conditions comparable with those which exist in France and Germany?—If you take anatomy as a pure science upon which a man is to expend his whole life, certainly not; but you must remember that anatomy here is taught for a definite object, for a man training to treat disease in the future. If he is merely going to learn anatomy for anatomical ends themselves, the school on the Continent is superior; but if he is going to learn anatomy for professional purposes, I have no doubt that such a place for learning as the demonstration room at Guy's or any of the great medical schools is by far the best place.

6411. But is it not desirable that every medical man shall learn anatomy as a science in the first instance at all events and not with a view to its practical application?—I think they all learn it as a science in the first place.

6412. I thought you said just now that it ought to be learnt with reference to its practical application?—The practical application must necessarily come in when they see day by day the various applications in the wards and operating room.

6413. Exactly; but it is desirable that the subject should be taught as completely as possible, and that means of course teaching it as a science. There is no other meaning to the word?—I think it is taught as a science now. You are referring to human anatomy, are you not?

6414. Yes, I was referring to human anatomy?—There cannot be any question that human anatomy is taught in the most perfect way it can be in our medical schools.

6415. As descriptive anatomy?—As scientific anatomy.

6416. But is it not desirable that in addition to the mere descriptive anatomy you should have the scientific relations of anatomy taught to every student who attends to the subject?—Do you mean in relation to comparative anatomy?

6417. Yes?—Yes, I think it is so taught at the present time.

6418. Do you think the way in which it is taught at the present time is comparable to the way in which it is taught elsewhere?—Well, it is very difficult for me to judge about that, but I think in the examinations on anatomy you will find a much larger number of our London students obtain scholarships than are obtained by students taught anywhere else.

6419. May I ask what you mean by anywhere else?—Students are examined in London from all the world.

6420. You mean students not educated in London schools?—Yes.

6421. All we have been saying applies to physiology in the same way. It seems to many people desirable that physiology should be taught by men who are physiologists in the first instance, and that the teaching

in physiology should be scientific?—I must agree with the last witness in that respect that physiology is tending rather too much to a highly specialised form, which is not best adapted for the needs of the practitioners afterwards. Even the five years curriculum does not give an unlimited length of time for the study of these subjects, and it seems to me that if we compel these subjects to be studied too purely from their scientific point of view without any definite relation to the needs of the practitioner afterwards, we shall not be doing our best for the future practitioner and the public.

6422. Would you mind my asking what you mean by specialised. It seems to me, if I may venture to say so, that specialised would mean specially adapted to medical students?—The specialist is apt to go too minutely upon special subjects and not to look at the subject broadly enough. The general facts of physiology are not understood by the student, while he has studied questions of blood pressure, &c. to an undue extent, and has his mind filled up with a special knowledge of one thing,—part of the subject,—without having any full comprehensive grasp of the whole. That I feel very strongly indeed.

6423. Does it arise from too much teaching?—I think it arises from too much attention being given in one special direction.

6424. What special direction?—To the special subject.

6425. That is, too much teaching of science,—a devotion of too much time to the scientific training of students?—Yes, I think perhaps that may express it.

6426. (*Mr. Anstie.*) You have referred to clause 46 of the Senate Scheme and to the provision in sub-section 3 for examination by a college professor or teacher in the subject, and from the form of your answer I rather gather you to suppose that that meant a professor or teacher who had taught the candidate, or taught the candidates from that college. Was that how you understood it?—I did.

6427. You were not aware, I assume, therefore, that it was put in that general open form at the request of the colleges, and at their express desire that it should not be limited to any particular college, but should be open, as it is here put to any college teacher?—I understood that, certainly.

6428. Any college teacher?—Any college teacher, because it would be quite impracticable for all the college teachers who may have been teaching that individual student to examine him.

6429. Or even that college?—Yes, or even that college, but still it allows for the possibility of the college teacher who had been teaching that student examining him.

6430. That possibility?—Yes.

6431. You as well as the preceding witness and some other earlier witnesses have referred to the extreme complexity of the constitution of the London medical schools. I observe that in the Gresham Charter those schools are made colleges and have to send representatives as such independently of the faculty representation altogether. In the London University Scheme, which you have referred to, those schools are not recognised as sending representatives to the Senate, but the only institutions which send representatives are the two Royal Colleges. Having regard to the complexity which you have referred to in the constitution of the medical schools, would your judgment be in favour on that point of the Senate's Scheme?—I think that is a point distinctly in favour of the Senate's Scheme. There is considerable difficulty in the representation of the medical schools. At the same time I ought to say on behalf of the colleges that the College of Surgeons and I think also the College of Physicians have assented to the principle of the representation of the schools in some direct way, supposing some scheme could be drawn up in which this could be fairly done. Still, I recognise that there are difficulties.

6432. That scheme has not yet been produced?—No.

6433. As far as regards the teachers of the schools, the 24th clause of the Senate's scheme provides for the absolute determination of the teachers, so that no difficulty would in that respect arise from the complex nature of the schools. "On the admission of a con-
"stituent college the following matters shall be
"determined by the Senate, viz.:—(*a.*) The Faculty or
"Faculties to which the college shall belong. (*b.*) The
"number and qualifications of the Faculty or Faculties
"for the college." Then I will refer you to clause 22.
"There shall be determined by agreement between the
"Senate and each constituent college, or, failing agree-
"ment, by the decision of the Lord President of the
"Council, the number and qualifications of the Faculty
"or Faculties for the college." So that that scheme provides for the complete ascertainment of the teaching power of the college and for its representation as part of the Faculty on the Senate?—That is so.

H. G. Howse, Esq., M.S., F.R.C.S.

30 June 1892.

6434. It is, therefore, complete and conclusive, and it has that advantage?—Over the Gresham Scheme? Yes, I think so.

6435. I am puzzled with regard to some portion of your evidence as to the distinction of degrees. Let me understand. I gather that you desire that the London schools should have certain privileges in the way of making their college courses and examinations a mode of entrance to what you call a pass examination in the University?—Yes.

6436. But that right you do not think ought to belong to country schools whether in connexion or not in connexion with other Universities?—I am not authorised to speak with regard to the college about that, but my own feeling is that that should be confined to the local area.

6437. Am I right in thinking that the answer given by yourself and the previous witness as to the jurisdiction, the coercive jurisdiction, I may call it perhaps, exercised by the two colleges over the schools extends to the country schools as well as the London schools?—Yes, I think so.

6438. If then this jurisdiction exists, and is effective over the country schools, on what ground would you deprive the country schools unconnected with any University of the advantages which you think proper to give to the London schools?—Well, that is a question which it is somewhat difficult to answer.

6439. Perhaps you will excuse me for saying that I thought it might be, but at the same time, I should be glad if you could give me a reason why the country schools, subject to the same guarantees as the London schools, should be deprived of the opportunity of putting their students through a pass degree?—I think it depends entirely upon this—that this local side which will practically be——

6440. Excuse me, I am not asking about local side. I do not know anything about sides. The question is why the country colleges under the same supervision and control as the London colleges, and not themselves connected with any University, should be deprived of the opportunity of sending their students through a pass degree?—All but two country schools have got access to a pass degree at some University in their neighbourhood. That is one thing.

6441. You say except two. What are the two?—Birmingham and Bristol.

6442. Why should the Birmingham medical school, so supervised and controlled, be deprived of the opportunity of sending students through a pass degree?—We hope by the organisation of this qualification to attract considerable endowments for the teaching of London students, and for original research of from the London area especially, and, therefore, I think that we may very fairly claim that certain privileges should be accorded to the local area which is contributing these various funds.

6443. Then you do distinctly regard it as a question of privilege to one area over another, and you distinctly do desire to deprive Birmingham of the opportunity of similar advantages to those which you claim for the London schools?—You cannot deprive them of what has never existed.

6444. Then would you let them go without?—You are simply giving a fresh privilege to the London area. You are not depriving Birmingham of it.

6445. Why should not Birmingham have it also?—Because Birmingham does not contribute any of these endowments to our London teaching.

6446. To these imaginary and future endowments you mean?—They are practical at the present time. The Gresham Grand Committee is coming into connexion.

6447. What are these large endowments?—The Gresham Committee has a certain number of thousands a year.

H. G. Howse, Esq., M.S., F.R.C.S.

30 June 1892.

6448. No, we have been already told that the Gresham Committee has no such thousands a year, nor could anything be done with the Gresham funds without an Act of Parliament. I suppose you are aware of that?—No, I did not know that.

6449. And we have also been told that it has no funds; so we may dismiss the Gresham Committee. What are the other sources of endowment?—There are the actual funds possessed by the colleges themselves at the present time.

6450. What colleges are you speaking of now—of the medical schools?—Yes.

6451. In what sense would they contribute to the University funds;—I do not know in what respect under the scheme of the University of London, but here is a clause in the Gresham Charter accepted by the medical schools; "Contributions of colleges. In "case the produce of such fees is insufficient to meet "the ordinary expenses of conducting examinations "and conferring degrees, the council may require "from the several colleges in the University contribu- "tions for defraying those expenses; and in fixing the "amount thereof"——

6452. What is the nature of the amount of the contribution you expect to be thus derived?—That is a question I cannot answer.

6453. As a matter of fact is not the real substantial contribution made to the University, that contribution which has already been made, and which is being made for the establishment of chairs, laboratories and other apparatus for instruction?—Yes.

6454. In the event contemplated by my question would not Birmingham be contributing on an equal or even superior footing to that of many of the London medical schools?—Of course they do contribute in that respect in the organisation of their medical department.

6455. But is not the provision of appliances for teaching one of the most important branches of expense in a teaching University?—Undoubtedly it is.

6456. And would not Birmingham contribute that just in the same way as St. Bartholomew's or Guy's or St. Thomas' would contribute?—Somebody might leave a large sum for Birmingham teaching.

6457. But has it not got it already?—There are funds in that direction. I do not think they are greater, or even as great as the funds in connexion with a large number of schools in London.

6458. But if not so great as some, are they not greater than some others?—Yes, undoubtedly.

6459. Then why should not Birmingham have the same privileges being under the same supervision with these other medical schools?—Birmingham is 120 miles away.

6460. But if they choose to come to these degrees it is they who suffer, I presume?—It has been pointed out that the distance which these colleges are from London makes it very difficult that representatives from them should attend so regularly and exercise the same amount of control over what goes on in the ruling body.

6461. Pardon me, I am not talking of representatives at all. We have not said a word about representation or about their share in the governing body. I am simply talking of their privilege to pass their students through this way—this gate. What I want to know is why, apart from all such questions as you are now introducing, Birmingham should be excluded from the power of doing that which other schools no otherwise endowed, and no otherwise superintended and controlled have the power to do?—I do not know that I can give an answer to it at the present time. I do not know that there is any very strong argument against it if they are willing to come into an arrangement of that kind.

6462. You see no objection?—No, I do not think there is any objection.

6463. (*Sir William Savory.*) With regard to those questions which have been put to you lately they concern an opinion which you are not giving on behalf of the colleges, but expressing as your own?—Quite so.

6464. The colleges are not in any way bound by that opinion?—Certainly not.

6465. With regard to the question which was previously put to you about two degrees in the University, that is merely taken as an illustration of what might be?—Yes; of what might be.

6466. But the colleges are in no way pledged to that?—Just so.

6467. If it was so arranged that two degrees were given in the University, that ought not to lead to any confusion, ought it?—No, I do not think so.

6468. At Oxford and Cambridge the degrees vary very much. Some are taken with honours, some without honours; but they are all degrees, and the only way in which one can ascertain what degree a man took would be by referring to the calendar or getting some information from some authority?—That is so.

6469. So there would be nothing strange or cumbrous in that plan?—No, I think not.

6470. And surely there would be less confusion if these degrees, though of different values, were granted by the same university than if they were granted by two universities?—That is my opinion.

6471. The confusion would be very much greater in the latter case?—Just so.

6472. Is it not the fact that the chief objection taken by the colleges and by the profession, so far as it goes to this scheme of a new University, is the suspicion or doubt whether it will not tend in some degree to lower medical education?—Yes, I think that is it.

6473. You see a danger in the examination being lowered if the new University were placed as a rival to the old one?—Yes.

6474. I believe the colleges withdrew from the last scheme of the Gresham University. They practically retired from it?—Yes.

6475. And the reason they retired from it was not that they cared for the amount of representation as colleges, but they felt that they ought on behalf of the profession to which they are responsible to have such a voice in the government of that University as to secure the degree from any degradation?—Yes.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Twelfth Day.

Friday, 1st July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Rev. Canon BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
Professor BURDON SANDERSON, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
Professor GEORGE G. RAMSAY, LL.D.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir Edward Fry.
1 July 1892.

The Right Hon. Sir EDWARD FRY examined.

6476. (*Chairman.*) I will ask you first of all as to your connexion with the matter before us?—I was for several years on the Council of University College, London; I was for some years Vice-President of it; I took an active part in its affairs. I have been a member of Convocation of the University of London for a good many years; I never took much part in it until this question of the University extension arose; then I was appointed Chairman of the first committee which prepared any scheme with a view to the modification of the existing London University. Shortly after that I was placed upon the Senate by the Crown. Since then I have taken a somewhat active part in this matter and have taken a good deal of interest in it. Therefore, I have seen the matter from the side of the colleges to a certain extent, and the University side; but I felt so strongly the step that was taken by University College in presenting a petition for the Charter that I, in common with the President of the Council and I think about one-third of its members, retired from it.

6477. You can give us some particulars of the present University of London?—Yes; I think I can probably answer any question you may desire to put to me with regard to that. I presume its constitution is known to the Commission in its details.

6478. Yes?—As you are aware, the Senate consists of a body appointed by the Crown; but I think one in every four is appointed by the Crown on the nomination of Convocation. The body consists of course to a certain extent of persons who have never been concerned in education, but to a very large extent it consists of those who have been concerned in education, and therefore, who are competent to form opinions upon the questions which come before it.

6479. Do those who have been concerned in education attend more regularly and take more part and exercise more influence than the others?—I think perhaps as a whole, yes; but still some of those who have never been concerned in education directly are very active members of it. For instance, Lord Kimberley is a very active member; the Chancellor, Lord Derby, is a very active member. Therefore, those who attend are by no means confined to those who have been concerned in education.

6480. But they do exercise a full influence in proportion to their number?—Certainly; and I may mention that they exercise a great influence, not merely by their attendance at the Senate, but in this way: a great deal of the substantial business of the Senate is done in committees, as is almost inevitable; and care is taken to appoint on the committees those members who are most conversant with the particular work to be done. The Registrar consults members to see whether they will be able to attend. Therefore, on the committees which deal with the subjects of science, arts, laws, or medicines, we generally get a good attendance of those members who are interested in the work done by the committee.

6481. And most of the work is done by these committees?—Yes, I think I may say so.

6482. Now as to the external students?—The Commission probably are aware that originally the University was started with affiliated colleges, and that no student could receive a degree without producing certificates of attendance at one of those affiliated colleges; but those who were then the governing spirits of the University were minded to break that down, and to admit all students who were capable of showing that they were deserving of degrees, wherever they had obtained their knowledge, wherever they had studied. That has been the case, and it has produced an enormous number of students who attend no particular educational establishment, and has rendered affiliation a mere matter of name. The establishments which are affiliated have no advantage over the private bodies which are not affiliated. I think I may say at once that it would be impossible for the University of London, as I conceive, ever to give up the idea of examining external students. It has become so large and important a part of its business, and exercises such a wide influence on the non-collegiate education in England, that I do not think the University could attempt to give it up.

6483. In fact, it has now become the great examining University for the whole of the United Kingdom?—Yes; we get students from all the colleges and all the Universities, and it is remarkably little affected by the question of whether or not a college does or does not belong to another University. I believe we get as many students from Owens College of Manchester after it was turned into a University as we did before.

6484. It has no more connexion with London than that its head-quarters are here, and its meetings take place here?—Yes.

6485. The connexion with the colleges is entirely and absolutely dissolved now?—In name it subsists. There is a list of affiliated colleges, but in reality that means nothing.

6486. You have a note as to its indifference to pecuniary results; does that mean on the part of the Senate?—What I meant to indicate by that note is this. I believe the University of London stands in a somewhat peculiar position in that respect. It is absolutely immaterial to the Senate whether we make money or do not make money. If we do not make money we draw from the Government; if we do make money we pay it over to them. Therefore we have no other object than maintaining our examinations at the best standard, and conducting our business in the best way possible. Now, I think that is a very material circumstance to bear in mind if you come to consider the position of colleges which may be turned into Universities, and which may be turned into competing Universities, and may have to struggle for their existence. Even supposing they have pecuniary assistance from the Government, in all probability, in most cases a large part of their income will be derived from fees, and they will be under the necessity of striving to live; to strive to live they must get students, and in many cases to get students, they must lower their examinations. That point is felt, I believe, very strongly by the Scotch Universities. It so happens that a few months ago I heard a discourse in the University of Edinburgh from Professor Chrystal, who is the mathematical professor there. He pointed out that this was one of the real difficulties with which the Scotch Universities have to contend; they have really to come into competition with the secondary schools; if they

Sir Edward Fry.

1 July 1892.

do not, they diminish their number of students; if they diminish their number of students they cut off their own income.

6487. But is there not also a tendency counteracting that, and are not the students inclined to go sometimes to those places where there is the best education and take the degree which is of the greatest value, and which it is the greatest honour to have; might not competition have the tendency, in some respects, to improve education—to improve the value of the degree?—I should be very sorry to deny that there are such persons, but I am afraid that in the majority of cases the result or the tendency would be in the way I have indicated. I do not at all mean that there would not be those who would seek higher education; of course there would be, but, with many men, they want to get the degrees; and especially that is so with regard to medicine. I do not know whether I should be right in reading an extract from Professor Chrystal's address, which was delivered on the 14th April last year. The professor was called upon to give the address at what they call their graduation ceremony. In the course of his address, speaking of the Universities of this country, he says: "They are now come to the parting "of the ways. Either they are to go on competing "with the secondary schools for work which the latter "can do as well or better than they can, or else they "are to specialise their functions and aim at beginning "where the secondary school may be supposed to end. "In my opinion, the latter is now the course to follow. "It is the opinion of so many others that I should "scarcely have thought it worth while to insist upon "it again, if it were not that it is clear that this opinion "has not yet entirely entered the field of practice. "The reasons for this hesitation, to put fully into "action a widely accepted educational view, are not far "to seek, although they are not sufficient. The carry-"ing out of the reform involved will of necessity "largely diminish the number of students attending "the Universities. It would clear the poll men almost "entirely out of the English Universities, and it would "most seriously affect the numbers in every Arts "Faculty in the Scottish Universities and in the various "provincial colleges of England that have been esta-"blished on their model. I trust that those who have "the direction of this matter will cherish no illusion "on this head. Any considerable rise in standard "sufficient to differentiate the functions of school and "University, must of necessity have the effect in-"dicated. Any attempt to tinker the educational pan "by taking a middle course will only make the hole "larger, and may end in the ruin of the Universities "altogether. It follows at once that the main part of "any thorough scheme of University reconstruction "is a financial ordinance. All questions regarding "degrees and courses, however important, are of "secondary consequence. Institutions for the higher "learning can no longer be conducted with profit to "state as quasi-private commercial enterprises; they "can no longer be expected to pay their way by "attracting large numbers of students. If it were "necessary to argue this matter, a reference to the "position of my own Chair would, I think, be con-"clusive." Then he went on to say how, by raising the standard of the education, he had diminished the number of students, offended large numbers of parents, and offended all those who were interested in the University. That illustrates what I mean when I say it is of very great importance to bear in mind that the London University is absolutely free from any of those difficulties.

6488. Therefore, the only safeguard against degrees being steadily reduced in value to any extent, is that the principal Univerity should be independent of money considerations; that it should be either endowed, or so rich that it can afford to keep up the standard?—Yes, that is what I venture to suggest.

6489. And London has that advantage?—Yes. Then there is another point which I see is next on my notes, with regard to the London University, which is this: that being situated in London, it is possible that it may come into relation with the great professional bodies, more especially those connected with law and medicine; and it appears to me that that may exercise a very important bearing upon future education. I think I shall carry the whole Commission with me when I say that the duplication of examinations is in itself an evil; that although it is very desirable we should have a high standard of examinations it is not desirable to keep men perpetually under the harrow. With regard to the degree of Doctor of Medicine, let me take that first We, after a number of conferences with the governing bodies of the two Royal Colleges have hit upon this idea; that it would be possible to conduct examinations for the degree of Bachelor of Medicine in combination with the examining bodies of those two colleges, so that we will say the College of Surgeons should appoint an examiner with us in anatomy; that examination would have a double result for the successful student; it would tell upon his candidature for the Bachelorship of Medicine, it would tell upon his application for the fellowship or the license of the College of Surgeons. The College of Surgeons might put one standard upon it; they might put a lower standard; we might put a higher standard; but A.B. coming up and passing that examination in anatomy would satisfy the two bodies. Now at the present time, as you are aware, a man who gets his University degree in medicine, has to go through his examination in anatomy at the University, and he has to go through another examination in anatomy at the College of Surgeons; therefore he is put through the torture twice; and it appears to me, I confess, that in that way, by diminishing the number of times that a man goes through the same thing, you may keep up your high standard for the degree and yet prevent the great pressure upon the man of going through two examinations. That view was embodied in the 47th clause of the Charter which was presented by the Senate to Convocation. It was the result of arrangement between ourselves and those two Royal Colleges. Perhaps I may read it: "The "Senate shall have power to enter into arrangements "with the Royal Colleges" (that is defined to mean the two Royal Colleges of Medicine and Surgery), "for conducting the examinations in anatomy, phy-"siology, medicine, surgery, and midwifery for the "pass M.D. Degree by a board of examiners, consist-"ing of the examiners appointed by the University "and examiners to be appointed by the Royal Col-"leges, who shall join in the reports to the Senate "on such examinations. The examiners appointed by "the University may be called upon if the Senate so "think fit to make in addition separate reports. These "examinations may, if so agreed on, be conducted in "combination with examinations for the Royal Colleges. "The arrangements for giving effect to this clause "shall be carried out under the direction of a com-"mittee to be appointed in equal numbers by the "standing committee for the Faculty of Medicine and "a committee to be appointed by the two Royal "Colleges. Such arrangements to be subject to the "approval of the Senate and of the two Royal Colleges. "This arrangement for joint examination shall not "lessen or interfere with the duty of the Senate to be "satisfied as to the adequacy of the examinations "in all respects."

6490. This is an arrangement which might, I suppose, be made with any teaching University that might be adopted for London; it is not confined to the London University?—Certainly not; but probably it would be more easily worked in respect of a University whose seat was in London than any other. Then, the same scheme might obviously be possibly applied to examinations in law. It is conceivable that the Inns of Court, which, of course, govern admissions to the bar and the Incorporated Law Society, which governs the admission of solicitors, might combine with a University which had its home in London in the same way to join in the examination, so that one examination should serve the two purposes.

6491. Now we will go on to the defects in the present University?—The defect which I think is the most important one in the working of the present University system of London, is the want of any organised communication with the teachers. Of course I am not going back upon the question of whether or no it was wise to let in external students, that is part of the irrevocable past; it is no use to discuss that. But we do labour under the difficulties I have mentioned; as I have already said, we have a large number of men of distinction who have been connected with various branches of teaching, but at the same time many of them are not actually engaged in teaching at the present time, and we of course from time to time have questions upon which we want to know the feeling and views of the existing teachers. We frequently take informal methods of obtaining that information; sometimes of course we get a remonstrance from some of the teachers, and then we see them; but there is no regular definite system for obtaining their views, no system working automatically. Therefore, I believe we do

very much want for the proper working of the University, to have the assistance of board of studies, and the schemes which have been laid from time to time before the Senate and which have received so much discussion, have, I believe, all of them embodied that view. If boards of studies were formed, I am quite sure the University would be much strengthened in its work.

6492. First of all you establish Faculties, the Faculties electing boards of studies?—Yes, whether the Faculties should have any other power than to elect the Boards of Studies is a matter more of detail, upon which different opinions have been taken.

6493. Do you speak the views of the Senate with regard to this point?—I have, no doubt, expressed the views of the Senate with regard to the last point, the establishment of Boards of Studies; I think there is no doubt of that.

6494. It is the wish of the Senate to establish a closer connexion between the teachers and the University?—Yes, I have no doubt of that. I may say that since the scheme has been rejected by Convocation the Senate have considered the question whether it is not possible without a further charter to form informal boards of studies; that matter has only been postponed really under the pressure of this new inquiry.

6495. Was that scheme which was submitted to Convocation unanimously passed by the Senate?—I think I can answer your Lordship's question by referring you to the minutes; I am not quite sure. No, I am afraid I cannot answer the question. It was passed, if not unanimously, by a very large majority, of course different members had different views upon particular clauses.

6496. But the general principle was admitted?—Yes, I think it was practically unanimous. I am not sure whether Lord Derby would have voted for it, probably he would not; but I think he would have voted for a scheme embodying the idea of Faculties and Boards of Studies; he was apprehensive, I think, of too great influence being given to the colleges.

6497. The next heading is the connexion of this inquiry both with the future and higher education in England?—That is the point upon which I feel most strongly and the point upon which I desire to speak to-day. It appears to me that the result of this Commission may be one of the last importance in respect of the future course of University education, of course I speak specially of University education outside the two great old Universities. It appears to me that one or other of two lines must be taken: we must either look forward to having a considerable number of small Universities, or we must look forward to having one central body which shall subordinate all what are called University colleges under it, endeavouring to maintain one high standard of degree, and at the same time to give them sufficient freedom for pursuing different courses of study. I have great fear of the result of competition between Universities; I think it is obvious that there is the broadest difference between competition between Universities and competition between colleges in a University. The one I have already said I think tends to pull the degree down, the other tends to produce a higher standard in those who are candidates for the degree. I put this matter very fully before the Commission which was previously appointed, I do not know whether it would be irregular for me to read now a portion of the evidence that I then gave.

6498. We are rather taking the previous evidence for granted, but as a great number of us do not remember it as well as we might, I think you might read it?—It is on page 97 of the evidence:—"I think that we must "look forward in the future (at least I hope so) to the "extension of University education, not only in London, "but elsewhere in the country, and I think that you "must take one or other of two courses. I think you "must look either to the creation of a number of small "Universities, or to a federation of the colleges "throughout the country with some central body. So "far as I can see, those are the only two probable "courses of the future history of the higher education "in England, and I think it is very important to consider which of these two is the more likely to be the "better; and whether rightly or wrongly, I have come "to the conclusion that the federal system is likely to "be the better of the two. It appears to me that there "would be great evils resulting from the competition "of Universities in granting degrees. It leads to a "Dutch auction in degrees."

6499. Does this mean a federal system for the whole of England, or only for London?—For the whole of England. Then Lord Selborne said:—"Or it may lead to it?"; to which I ventured to reply:—"It does lead "to it. We are suffering from that in London at the "present moment. And it is very largely due to "the degradation, if I may be allowed to say so, "of the degrees of some Universities not in the south "of the island, that the difficulty arises with regard "to the medical degrees. All the Scotch Universities "qualify for entrance upon the Medical Register; some "of them grant their degrees with greater facility than "some Universities in the south of England do; and "the result is that the students leave the London "medical colleges to go where they can get the degrees "easily. They prefer the appearance of learning and "knowledge to the reality, and the consequence is that "the London medical colleges are grievously suffering "from that competition in degrees, but the evil is not "confined to England or to Scotland; it is known "elsewhere in Europe; it is known in America. Sir "James Hannen, no doubt, knows more about the "German Universities than I can know, but I believe "that something of the same sort occurs there. In "America the evil is felt to have reached this point, "that no degree, I believe, is worth anything." Then Dr. Ball said: "I find in the 'Encyclopædia Britannica,' "under the head of 'Universities,' that there are 370 "degree giving institutions in the United States;" to which I replied, "I was not aware of the total number. "I know that there are 35 in the State of Ohio, and "you can well imagine what the value of a degree in "Ohio is, the lowest of the 35."

6500. Does the lowest of the 35 get more students than any of the others?—That I cannot answer, but I take it that you have reached this stage—that the degree is nothing—nobody cares for it. Then I pursue the subject. Probably I have read you enough to present to you the view which I then presented, and to which I venture to say I still strongly adhere.

6501. Then you would have a federal University for the whole of the United Kingdom?—I should; that is what I should like to see.

6502. That rather widens the question before the Commission. The question before the Commission is the question of a teaching University for London?—But if a teaching University for London can only be rightly accomplished by a larger one, I venture to submit that is within your purview; that is not for me to press, but that is undoubtedly the view which I entertain as to the proper development.

6503. Supposing we cannot absorb the Victoria University, and the Scotch Universities, and all the other Universities of the United Kingdom into one, do you think, that, adding one more University to such a large place as London, would be carrying us towards the American plan?—I do, distinctly.

6504. If we once break the rule and have an additional one for London?—Certainly; you would have the Welsh Colleges next, Birmingham next, Nottingham next. I do not know what political influence may be exercised by particular small bodies, but I do not see what is to prevent it except the forming of one federal University. It is because I think that unless such a body is now formed, you will approximate towards the American system that I am very anxious to impress that upon the Commission.

6505. Then, more particularly with regard to London, which is what we have to do with, I think you put down that in your opinion there are three different schemes which we might consider?—Yes; the first, of course, is that which is the first before you—the scheme of the colleges. I do not know that I desire to say very much about that.

6506. The three are,—the scheme of the colleges, the absorption scheme, that is to have a professorial University for London which will gradually absorb all the existing colleges, and the third is the federal scheme, which I believe is the one you favour?—Yes, and that again would subdivide itself into two heads, of course.

6507. The federal scheme would work through the existing University of London?—Enlarged and accommodated.

6508. Then we will take them in succession, if you please. First of all the Gresham University?—I really have not very much to say about that. It appears to me that the great point is that the formation of two

Sir Edward Fry.

1 July 1892.

Universities in London would be a distinct evil. In the next place I cannot help feeling that the Gresham Scheme has no real body of demand on the part of the public; it is purely a professors' scheme; it is purely a scheme raised by the two colleges for the purpose of improving their position.

6509. May we not look at it with a view to building up and increasing it hereafter by the admission of other institutions?—The admission of other institutions rests with these two bodies in fact.

6510. Supposing we were to decide to take the Gresham scheme as our starting point, it would be in our power to add other institutions before sanctioning it?—Still you would be met with the great evil as it seems to me of two Universities.

6511. One for giving the degrees as it does now for the whole of the United Kingdom, and the whole of the British Empire, in fact, merely an examining body giving degrees to all comers; and the other a teaching University for London alone?—It would not be a teaching University in any other sense than this, that you give the existing teaching bodies a power of giving degrees: there is no real formation of a new University at all suggested; it is only turning bodies which cannot give degrees into bodies which can.

6512. We begin by taking the existing teachers and making them into a University, and therefore establishing a connexion. The other plan would be by starting a University from above, and making it appoint teachers. Does not that come to the same thing in the end?—Except that it is no new form; it is not founding a teaching University; it is not founding anything; it is only giving new power to the existing bodies.

6513. Giving the existing teachers power to arrange for the examinations, which should be in accordance, more or less, with their teaching?—Quite so; a very important change. I entirely agree; but still not the formation of a new University. Then I cannot help thinking that if the matter be looked into carefully it will be found that there is no sufficient body to found a satisfactory Faculty of arts in these two colleges. With regard to University College I know that for many years past the whole of the classic teaching has been done by one professor; they only had one professor of Greek and Latin until a few months ago for many years. I daresay the work was very efficiently done by that professor, but it is obvious that that is a very small contribution towards a Faculty of Arts if classics is to form any part of it. What King's College may have done in that respect I do not know.

6514. Would they not have new life put into them by being made into a University?—I daresay it would increase it to a certain extent, but I cannot help thinking that the main object is to enable the two colleges to increase their number of scholars; and the medical schools have agreed to join in regard to a great portion of the students in the London hospitals. I am quite aware that at the present moment they have not proposed that their degree shall give admission to the Medical Register, but I have no doubt that as in the case of the Victoria University that will follow; otherwise the medical degree will be of very little value.

6515. Do you think the medical degree would sink to the level of the license given by the Royal colleges?—It would tend in that way undoubtedly, I think.

6516. All the extra knowledge, scientific and other, which ought to be required for a medical degree—everything not purely medical—would be absolutely dropped?—I could not go so far as to say that it would be absolutely dropped, but the tendency would be downward, undoubtedly.

6517. Then you would not care to go through the Gresham Charter. Your objection is to its whole principle?—It is.

6518. A great deal of the detail as to the Faculties and the Boards of Studies and the constitution of the Council, and all that is not very different from your own scheme?—I should not propose to criticise its details at all. I object to it, because, I think it is going in the wrong direction.

6519. Then the second plan that has been before us is the absorption scheme?—I should be very sorry to say that there are not parts of that scheme which I think might possibly be useful; but I do not see at the present moment, at all how the London University can undertake really the great business of teaching; it has no financial means for doing it; it has no machinery for doing it; it has no buildings for doing it at all. Therefore, I do not see at present how we can create a new University for teaching out of the London University.

6520. Would you have funds enough to establish a large staff of professors?—If the Crown granted them to us we should, but at the present moment we only, in fact, receive the fees for examination. With a very small exception we have no foundation of our own at all. I believe, our concern at the present moment is a paying concern, and we pay considerable balances into the Treasury every year, but we have no funds of our own.

6521. Some of the advocates of the absorption scheme have stated that if the London University would not join them or could not join them they would be prepared still to go on with their scheme or to attempt to have it gone on with independently of the University of London. Do you think that would be possible?—I should doubt it. I do not see my way to it. If it merely meant altering University College or King's College or both of them into the same body, it practically comes to the old scheme. If it means some new University, at the present moment I do not see the finances or anything for it. Then, it will be observed at once that it will be impossible (I suppose) to compel those two colleges to fuse themselves into a new body. Both of them have considerable endowments. Of course, they have opposite views upon religious matters; the King's College foundations are dedicated, I suppose, to the purposes of the Established Church more or less, University College knows nothing of such religious dedication, and I do not see how practically you can confiscate their properties and confer them upon a third party.

6522. It would be almost worse than the Gresham Scheme?—I think it is not a practicable view. Then another difficulty I should like to mention is this. It is obvious that if such a scheme were prepared it could have no association with the Colleges of Physicians and Surgeons of the kind I have indicated. It would be impossible, it seems to me, to make them work in with the Royal Colleges, which is an important point it seems to me in the other scheme.

6523. They are obliged to make an exception with regard to the medical colleges; they could not pretend to absorb them?—No; therefore I have not yet quite grasped what they propose to absorb or how they propose to absorb it.

6524. It was not put before us in any distinct way, and it was evidently taken for granted by most of the advocates that they must bring in the London University, but they did say they would be prepared to go on without?—I have no doubt the London University would be quite prepared to undertake the management of professorships if endowments were found, and I think it would be a valuable thing to give any new University that is constituted the power to accept that; because it is obvious that there are some branches of learning so unremunerative that no college could be expected to teach them, and professorships founded for matters of that sort would be useful. I do not think the University for a moment would disclaim the trust.

6525. I think we had better, perhaps, pass to what you do advocate, which is the federal scheme?—Quite so. May I venture to say that it seems to me there are two things which are essential to that scheme, and if it cannot answer both those purposes it ought not to receive your approval. The one is the maintenance of the high standard of degrees; the other is giving a sufficient freedom of courses of study to the several collegiate bodies. The question is whether those two things are capable of being harmonised in one body. I venture to think they are. I do not see why you may not have examinations held in reference to the different curricula of the colleges.

6526. We are now considering the federal scheme for London only?—My observation, of course, would apply to London, but it would apply even more, possibly, to the wider scheme, which I venture to put before you as the better one. For instance, let me put it in this way. Supposing, University College wished to pursue a particular subject in some course of studies, and King's preferred another, there is no great difficulty

in examining in those two subjects separately and giving an equivalent value to the examination. That is what is done every day in the case of alternative subjects. I do not know whether I am right in saying that all Universities, but many Universities, admit of alternative subjects; but the moment they do that, they have to meet the difficulty of arriving at an equation between two examinations. And again, in successive years, the same thing has to be done; if a University is desirous of keeping its standard of graduation the same, they do not examine in the same books in successive years and yet they desire to keep the examination at the same level. Therefore, I think by means of an extension of the system of alternative subjects, you give great freedom to the curricula of the colleges, and you enable them more or less with the consent of the University to settle their own course of study and yet keep the degrees at the same level.

6527. There might be variety of subjects that each man might take up; the degrees would all be equal, but they would be attained by examination in different things?—Yes.

6528. I suppose for the Matriculation and any other Intermediate examinations, I do not know whether there is an Intermediate examination, but for anything except the final examination there would have to be the same subjects?—Probably, in every examination there would be some requisites, but there would be opportunity for a large area of alternative subjects. At the present moment we have many alternative subjects in the Bachelor of Science, and Master of Arts, and so forth.

6529. But that would be increased still further?—Yes, that would be still further increased, and it might be so adapted as to meet the requirements or wishes of the different colleges.

6530. It would, I suppose, be practically easier to take degrees in some things than in others, it would be impossible to prevent that?—I suppose it would.

6531. But you would make them as nearly equal as possible?—Yes, as nearly equal as possible; it is a matter of mind in each case, you have no actual quantative measure.

6532. In this federal plan the University of London would take the lead, would it?—Yes, that was my idea. The University of London would take the lead with its existing independence allowing direct representation of the Faculties, and in that way having a direct representation of professors upon its Senate, and then its Senate assisted by Boards of Studies and Faculties.

6533. And if it was a federal scheme for the whole of the United Kingdom, London would still take the lead?—Yes.

6534. Then there would be less difficulty in some ways than if it only acted as the head of the federation for London?—No doubt.

6535. Because in the latter case it would have its two functions: it would be an examining University for the whole of the United Kingdom, and it would be the head of a teaching University for London?—Yes, I think in any event you must look forward to its remaining an examining body for outside candidates. If you applied it only to London, it would be a federation only of the London colleges.

6536. Would there be a difficulty in one body performing the two separate functions of examining for the whole of the British empire and being the head of a teaching University for London?—I think not, and for this reason, that the external students are not injured by the aid given to the Senate by the professors. In fact we have professors on our Senate, we have past teachers. A man who comes from Nottingham or Newcastle is not injured because we have had the aid of the London teacher; there is no competition between them, it is not like a case in which two sets of professors exist, and one set of professors is advising the examining body and the other is not. Speaking roughly, the external students have no interest in any class of professors, and the professors have no opposition to them.

6537. The different colleges which would be in alliance here, and which would form part of the federal scheme, would be represented on the Senate?—Yes.

6538. In fact it comes to very much like the scheme which was rejected by Convocation?—Yes, in that particular; I do not represent that scheme as being the one I should draw if I were an autocrat.

6539. I see in the appendix to the report of the former Commission that several schemes were drawn up at different times?—Yes, a great number.

6540. But all on the same foundation of teachers having representation on the Senate and Faculties and Boards of Studies, all on the same lines?—Yes, the difference between them has been that one or two of them embrace the whole country and others only London, that has been a point of vacillation.

6541. But all keeping London University in its present portion of examining for the whole of England?—Yes.

6542. Do you think there is really any chance of Convocation agreeing to a thing of this kind?—I am afraid you have asked me a question I feel a difficulty in answering. Convocation is a very floating body.

6543. Could they be compelled by Act of Parliament—of course an Act of Parliament can do anything—but would it be practicable to compel them to accept it?—I think so. I ought to say that I think there is very great difficulty in any scheme passing through Convocation. I believe a very large number of members of Convocation are interested in one way or another in opposing every scheme, and the opponents will always be the more active in coming to vote. I have no doubt that the last scheme was largely lost by a combination of persons who expected to be more or less injured by it; though I could not say that I know it, I believe a large part of the vote was derived from persons who were more or less interested in opposing it.

6544. It seems difficult to get a meeting of Convocation?—Yes.

(*Mr. Anstie.*) The number was given by Mr. Busk the other day as 3,350. There has never been anything approaching the size of that at any meeting.

6545. (*Chairman.*) I do not know whether you wish to say anything in support of your views which has not been already said and which is not already known to the world?—I should like to say a word or two about the larger scheme. I have already said why I am desirous of seeing that embodied. I think it is very likely that an objection may be made of this description that it may be said you practically cannot work so complex a scheme of having boards of studies for provincial colleges as well as for the London colleges. I do not think that the thing would work with any very great complexity really, supposing you had boards of studies appointed by the two separately, the way in which they would work would be this: that when the standing committee of the Senate which was entrusted, we will say, with the subject of science met, they would meet the two boards of studies, and they would set syllabuses for the examinations in conjunction with them. In the same way with arts, in the same way with medicine, in fact it would be one conference a year probably between the Committee of the Senate and these two boards of studies, the complexity would be rather in appearance than in reality; I do not think there would be any difficulty of that description; further than that, I think it may be objected that something of the sort has been tried in France, and that the success of the experiment has not been such as would encourage its imitation. Of course it is known that the Université de France is the one University which covers the whole of the country; but there, it must be borne in mind, there exists an amount of concentration which I do not think anybody would be likely to attempt in England.

6546. And in France they are working in the other direction they are decentralising?—Yes, because, as I understand, they forced them up so very closely together that there was no freedom. As you are aware, from a very early time the Minister of Instruction for the time being has always been Chancellor of the University, and the University has been very little other than a government department.

6547. A great many of the appointments are made by him as Minister of Instruction?—Yes, he is always for the time being chancellor.

6548. You would not think of connecting your federal University in England with a government department?—Certainly not; I should like to see it an independent body of the same description as the present Senate.

6549. Would Oxford or Cambridge have anything to do with it?—I should not propose to touch any of the existing bodies.

Sir Edward Fry.

1 July 1892.

6550. The Victoria University or any other?—No, I should leave Oxford or Cambridge, the Victoria and all the Scotch Universities.

6551. They would not be absorbed?—No, I should not suggest that; all I suggest is one body which should arrest the further particularism which will arise if each of these bodies has to struggle. That is the view I present to you as is the statesmanlike view to take of this University question.

6552. Is there anything else you would like to say? I need hardly say that anything you can tell us would be most acceptable?—You have taken me through what I desire to present to you, you have asked me upon all the points I desired to mention. As I have already said, the one single view I desired to present is the one I have been allowed to insist upon.

6553. (*Professor Ramsay.*) Will you allow me to ask a question upon one point which you raised, which is not perhaps very relevant to this inquiry, but which you brought in in two different ways. It was with reference to the Scotch Universities. The first was about finance. Your point was that the system of paying fees in every University institution has proved a cause of degradation of the standard of examination; and you spoke of it as a matter for congratulation that in London you have no temptation because you have nothing to do with fees. In the first place would you contemplate any University doing without fees?—No.

6554. Then is it altogether a useful comparison to compare an institution whose functions are purely examining, and which gets the money it wants for that purpose from the State, with any institution whether in England or in Scotland, or in any other place, which necessarily depends upon fees from the students for its maintenance?—That raises the question whether you are to have a central body, or whether you are to look forward to a large number of fees collected by a number of different bodies.

6555. But as far as finance goes, if we have a teaching University on any plan, we must have financial considerations?—No doubt.

6556. Therefore, even if there were but one University in London, there would still be the competition which the payment of fees involves?—Only between the colleges, not between the University and some other equal body.

6557. Might it not be the case that the London University attract by cheaper fees, students who otherwise would go to Oxford or Cambridge?—By cheaper fees for examinations?

6558. And for living also. Would not any University in London giving degrees upon cheaper terms, whether terms of teaching or terms of living, attract students from Oxford and Cambridge and enter into competition with them?—Certainly.

6559. Therefore it is not altogether a just comparison to make between a University which, as it at present exists, has only examining functions, and teaching institutions which must be subjected to the annoyance and difficulties of having to collect money?—It appears to me to be very just. It is rather perhaps for you than for me, but in the view I am presenting, it is an important consideration. I want to put before you the two alternatives of a body independent of financial considerations, which shall undertake the examination for a number of competing colleges, and of the plan for clothing the competing colleges with the power of giving degrees: and for the purpose of that comparison it appeared to me a very material consideration.

6560. But it is a comparison between a body whose functions are only examining functions, and other bodies whose functions are teaching functions?—Yes.

6561. Therefore, I mean to say that the two functions are on a different plane. You have used the phrase "degradation of degrees." I understood you to say that applied to Scotland?—Well, yes, to a certain extent I do say that.

6562. May I ask in what sense you use the term "degradation of degrees" as applied to Scotland?—I speak here not of my own knowledge, but from information I have obtained from those upon whom I might place implicit reliance. It would go to this extent; that some of the Scotch Universities give the degree of doctor of medicine in a way which is very different from that in which it is given by some Universities in the south.

6563. Then what you say has reference exclusively to medical degrees, or does it embrace other Faculties?—I spoke, I think, only of medical degrees in that passage which I read from my former evidence, but I gather from the passage which I read to you from Professor Chrystal's address that the same tendency is telling upon the Scotch Universities with regard to other degrees. He points out that the moment a teacher endeavours to raise the standard of examination, he finds himself met by these difficulties that the parents complain that the sons cannot get the degree, and that his colleagues complain that he is starving the University; therefore I conceive that that applies also to other degrees.

6564. I am going back to Professor Chrystal's address immediately, because I think I shall be able to show that you have misapprehended his point. With regard to the medical question, do you refer to one University more than another?—I spoke generally.

6565. May I not presume with regard to what you said last, that you probably had reference, or those who informed you probably had reference, to a state of things which existed in the University of St. Andrews?—Yes.

6566. You are aware, of course, that that is quite anomalous?—I am.

6567. That the University of St. Andrews up to 1858 was entitled to give medical degrees to students who had never resided there at all?—Yes.

6568. And that that privilege was not altogether taken away by the Act of 1858, but they are now allowed to give 10 degrees per annum in maintenance of their old right?—I was not aware of that.

6569. For that degree they do have an examination; but inasmuch as they have not a complete medical staff of professors there is no doubt an ostensible and clear difference between a degree granted by St. Andrews and the degrees given by the other Scotch Universities. I think you may take it from me that those remarks read by you had reference to those degrees given formerly, before the recent Acts of Parliament?—I was not familiar with that recent Act of Parliament; but this I do know, that one or more of the Medical Commissioners who sat upon the question of the Medical Register felt so strongly the result of the giving those degrees in Scotland that they regretted not having reported that they ought not to have been allowed to come upon the register.

6570. I think I am quite safe in saying that that referred exclusively to the degrees of which I have been speaking?—That I do not know; it is very probable.

6571. You are aware, no doubt, that this has been made the matter of public inquiry. This is really not the place to conduct an inquiry of that kind, nor do you speak with any personal authority about the degrees of medicine?—Not at all.

6572. This question has often been raised, and very fully discussed in Parliamentary Committees, and especially before the Committee of 1882 over the proposed Medical Bill. I think when you read the evidence given there by various persons, you will see that the question is not so very simple as it would appear from your statement, and I think you will find that those strong statements you referred to refer exclusively to the degrees granted under the circumstances to which I have alluded?—But certain it is that the Medical Commissioners felt very strongly the result of allowing those degrees to pass men on to the Medical Register.

6573. If they felt that, whatever they meant is embodied in some document or report of those Commissioners?—That I do not know.

6574. Can you refer the Commission to the particular conclusions of any such report?—No, I am speaking from personal information given to me by one or more of them.

6575. If the personal information given to you came from a Commissioner, surely the results of that Commission when given to the world must be conclusive upon the question?—No doubt the Report would be the formal thing, but still the opinion is not unimportant.

6576. However, there is nothing you can refer us to as formal evidence?—No.

6577. The term degradation implies that a standard was once higher and has subsequently become lower?—Yes.

6578. Do you mean that to apply to any Scotch degrees whatever?—No; I do not know that it was ever high in some cases.

6579. You used the term "degradation" with reference to low standard?—I spoke here with reference to America as well where I believe there has been an actual degradation. I believe the tendency has been downwards. I am only speaking there from information.

6580. Do you imply from that analogy that there was a similar sort of competition between Scotch Universities?—I conceive that there must be.

6581. In what way?—In the way Professor Chrystal pointed out.

6582. I will come to Professor Chrystal. That address was an extremely interesting address, and it referred to several moot points of University education. You have evidently supposed that it referred mainly to the examinations for degrees?—Not exclusively.

6583. I do not think that he was speaking mainly about examinations for degrees. He spoke about competition not as between two Universities but as between the Universities and the schools; that mainly with a view to the vexed question of instituting a matriculation examination for those students who wish for a degree?—Surely it is the same thing, is it not?

6584. Not so; for the competition referred to was not (as I understood you to imply) a competition between Universities, leading to a degradation of degrees; but a competition between the schools and the Universities, as to which of the two should conduct the preparatory part of the degree course, as contained in the first year of study?—These details seem to me still to leave the matter about as it was. I only used it as an illustration of what appears to me to be the necessary tendency of allowing a large number of bodies to give degrees. You are in this difficulty,—you must either keep up your number of students so as to keep up your fees, or you must increase the severity of your examination, and diminish the number of your students and diminish your fees. For that broad purpose, which is the only one I used it for, I venture to think it is a fair illustration. Beyond that I do not press it for a moment.

6585. It was put, I think in this way, that the examinations for degrees have been as a matter of fact affected by the desire of one University to get more students than another. I have experience of the Oxford system and the Scotch system. I do not think that is at all the case. But no one can deny that in education evils may arise from competition between rival institutions?—That is all I used it for. I hope you do not suppose that I wish to cast any slur upon Scotch Universities. I only wanted to illustrate my point of what appeared to be the recognised tendency in the Scotch Universities.

6586. I have carefully read your evidence given before the former Commission. You do desire a teaching University for London, do you not?—Well, that is a difficult question to answer. May I ask what you mean by a teaching University for London?

6587. A University which teaches?—I desire to see bodies teaching in London. I desire to see closer connexion between the teachers of those bodies and the University of London.

6588. What I would submit is: is not the scheme which you presented to-day rather that of continuing the University of London merely as an examining body, but with this change, that you take pains to connect the examinations with the teaching institutions in London?—That might be one way of describing it. I do not know that it is a very unfair way of describing it.

6589. I do not see that your scheme necessarily adds anything to the teaching resources of London. It is intended to co-ordinate the teaching now given in London, so as to prevent the overlapping which necessarily exists?—I think it would co-ordinate largely.

6590. Would not that depend upon the will of the colleges under the University?—No, I think hardly so. It seems to me that if we had a body of that description they might call attention by reports which we propose they should have the power of making to deficiencies in particular institutions.

6591. Do you contemplate that the Senate should have a direct power over any one of the colleges?—No, not a direct power, but an indirect power.

6592. Would you give it a power of prescribing the curricula in the different colleges?—I should give it the power of assenting to or dissenting from the curricula proposed at different colleges.

6593. That is to say, they should have the power of accepting or rejecting a particular course or a particular examination as insufficient?—Certainly.

6594. You would exercise the same sort of influence over the various colleges which the Colleges of Physicians and Surgeons exercise over the medical schools?—There I pause, because I am not quite sure that I know exactly what influence they do exercise. But as far as I know, I should say, yes.

6595. The University would not appoint teachers or dismiss teachers in any of the colleges?—No.

6596. It would not have power to suppress a particular institution, or to create one or suggest its creation?—Suggest its creation certainly, but with regard to suppressing I do not think the point has been considered.

6597. It comes to this: this is a University which is to exercise its influence over teaching indirectly by suggesting a schedule of curricula and by examining, exactly as the present University does, only that you take care that the teaching element in London shall be sufficiently represented in the governing body, and the body that appoints the examiners?—Yes; and the settlement of a schedule or syllabus would not be made without the assistance of the representatives of the Faculties.

6598. It would remove in short the objection, and it would do nothing more than remove the objection, which has been made by the teachers, that the syllabuses and the examinations of the London University are out of touch with the teaching bodies?—It would do that and more.

6599. What more?—In the first place it would bring actually together, and into personal communication, the teachers, and nobody can doubt that that is a very important thing. In the next place, it would, it seems to me, enable the professors, the body of experts, to point out deficiencies in particular institutions, and though it might have no direct power if it were reported that the teaching in a particular subject was defective, it could easily exert an indirect influence over it. It would tend to bring about, and I think would bring about inter-collegiate arrangements, which I think is one of the great difficulties in the schools of London at the present moment. Let me just illustrate that. I Suppose almost all the medical schools in London have particular professors of botany, and they have particular professors of zoology, yet probably in London there is only one professor who devotes his entire life to botany or zoology. I would by means of giving a power to the Faculties to report, compel them practically to send all their students to the one man who would teach them in that way.

6600. How would you compel them?—I say indirectly by pointing out the deficiency.

6601. And you think the institutions whose deficiencies were pointed out would make them good?—They would be forced to do that, I think. They have been forced to do that. The intermediate examination in medicine which deals specifically with scientific subjects has put such a standard before them that in many cases a student has been obliged to leave his own professor and to go to another teacher. I think that would be facilitated by the deliberations of a body of that kind.

6602. May I ask, finally, do you propose to make any distinction between the examinations of the collegiate students, and the examinations of what I may call the Imperial candidates?—That is a question of detail which I should answer by saying that I look forward to making some difference especially in the scientific branches. As you are aware, the London University does not give medical degrees except to persons who come from accredited bodies, for the very obvious reason that a certain amount of practical knowledge is necessary for the safe granting of a degree in medicine. It seems to me quite conceivable that given very vigilant supervision similar credit might be given for actual work in the scientific laboratory. Therefore I do look, especially with regard to

Sir Edward Fry.

1 July 1892

scientific degrees, to the possible difference between the two classes of students.

6603. You mean by relieving the collegiate student from a certain portion of the examination?—I do.

6604. And accepting courses of study to a certain extent as equivalent to University examinations?—Yes. Supposing I were satisfied that laboratory work was done thoroughly and steadily by students in a particular college where the teaching was thorough, I should hope to be able to give credit for that by relieving him from some examination.

6605. You would probably reserve the final examination in the hands of the University?—Probably. Let me repeat that in nothing I have said do I desire to cast any slur upon the Scotch Universities. I am quite alive to the great work they do, and I should be sorry if anything I said appeared to do that. I said what I did say as evidence of a tendency which I think ought to be guarded against here.

6606. (*Professor Sanderson.*) If it were proposed that with regard to scientific subjects the University should retain a complete control over examinations and hand over as regards practical subjects the complete control and responsibility to the two colleges, would that meet your view as well as the proposal to have combined boards for examination in all subjects? May I just state why I ask the question. It seems to be evident that the colleges are pre-eminently capable of examining on the practical subjects, and the University of London is pre-eminently capable of examining on scientific subjects. Would it be in your opinion as good a mode of combined action that the examinations in the practical subjects should be held entirely by the colleges and the examinations in scientific subjects entirely by the University by examiners appointed as at present?—My doubt about that is this: whether the University ought ever to give up its hold upon any part of the examination. That would be delegating to the two Royal Colleges the examination in all practical subjects, if I understand your suggestion.

6607. Yes?—I think the University must be satisfied from year to year, so to speak, of the sufficiency of what has been done. Whether it would be right to delegate that to any other body seems to me to be open to doubt.

6608. But if the colleges objected to any University examination in scientific subjects it would probably lead to inconvenience?—I may point out there is no proposal in this to hand over any subject to the University so as to shut out the colleges.

6609. Would not that probably lead to inefficiency, because the standard in science is utterly different from the standard of the University; whereas in practical matters we have evidence before us that the standard is the same?—I may point out what was done in framing this clause. We took out of our examination for the M.B. all the subjects which we had in common with the two colleges. I believe that is the way it was done. They were found to be anatomy, physiology, medicine, surgery and midwifery. Those are common to both examinations. Then what we propose is not to hand over the examinations of those to the University or to the colleges, but that A.B. and C.D. should be appointed by the University, and E.F. and G.H. by the two colleges. Then the two examiners of the University would report together or separately if the University desired. They would say that Mr. X.Y. had passed in anatomy at the University, and probably the same report would be made to the colleges. But he might pass for the colleges without passing for the University, that is supposing they accepted a lower standard. In that way the examination would be one, but each body would be satisfied or dissatisfied; so that there is no division of subjects as it were. The subjects are kept the same, and there are two sets of examiners working together.

6610. But would not that lead at once to a difficulty which would not be got over arising from the circumstance that the range of the two examinations is entirely different. The examination in science at the University of London, and the examination at the colleges are examinations of a different sort altogether. One examination is a thoroughly practical examination and the other is a very superficial one which is conducted in a very short time, and so forth?—What would you include in science?

6611. I would include in science everything except the practice of medicine, surgery and midwifery?—I need not say that I am not an expert in the matter on which you are examining me, but it is certain that that scheme was thought practicable by the council of the two Royal Colleges as well as by the medical members of our University. They thought they would have no difficulty in being satisfied by the same examination in those subjects.

6612. May I just ask one other question? Do you see any other fundamental difficulty in the appointment of joint electoral boards for the appointment of professors in institutions with which the University might enter into relation?—No, I do not at the present moment see any difficulty. Your suggestion, I understand, would be this: that the University should have the power of electing together with institutions.

6613. Yes?—No, I do not say that that would not be practicable.

6614. Would you approve of giving the University power of inspection and supervision of teaching arrangement. That, of course, implies a very much more complete control of teaching, and a more efficient control than the mere regulation of examinations, however well that might be carried out?—At the present moment I do not see any difficulty in it. Of course we have been anxious when negotiating to maintain the autonomy of the different colleges as much as possible consistently with being able to put an indirect pressure upon them. But I do not see that we should have any difficulty in exerting that power at all.

6615. That would be a more efficient control than the College of Physicians and Surgeons exercise by means of the examinations?—Yes, and at the present moment I do not see any difficulty in exercising it. Of course it would involve a staff of inspectors, I suppose.

6616. (*Professor Sidgwick.*) I want to ask you with regard to the plan of absorption to which you have made reference. If I understand you, you think that the political aspect of that question presented difficulties. I suppose anything could be done by an Act of Parliament, but the question is whether it is practically possible to absorb an institution against its will in the age in which we live?—It is a thing as far as I know which has never been done by legislation. I do not recollect any case that has ever come before me in my experience in which a body has been, as you say, absorbed against its will, unless it has been found totally wanting in its functions.

6617. I do not know whether you are aware of what has been represented to us in evidence, that a majority of the professors of University College are favourably inclined to absorption?—I have been so told.

6618. Would that alter your view as to the possibility of absorption? Supposing the situation turned out to be that the administrative body of the college was opposed to absorption but the professorial staff in favour of it, do you think that would practically render absorption more feasible?—I doubt whether it would. It seems to me that absorption is very easy to think of when you look at it in a vague and general way, but I do not understand how it is to work. I do not understand what the absorbing body would be. Where are you to get the absorbent?

6619. I think one idea of the professorial University is that the London University should undertake the functions of teaching and should be, therefore, the absorbing body. Assuming that body agreed to come in, what was represented to us was that strong pressure would thereby be put from the outside on the Council of University College, and then that these traitors in camp, if I may so call them,—the majority of the teaching staff—would put pressure from within: so that between the two they would be practically forced to acquiesce in absorption. I should like to ask whether you think that the whole process was one likely to succeed?—I am in this difficulty, I have not been able to grasp from anything I have seen or heard what the exact process of absorption is. Suppose all the Chairs of both King's College and University College were handed over to the Senate of the University of London, no doubt we might be able to fill them and carry on the business of the two colleges as one. But the University of London has no means of doing anything unless these Chairs are given to it, it seems to me.

6620. I think the idea was that if a college was absorbed, the whole of its funds and appliances would

be handed over and that an executive Commission would be appointed to carry out the project with due regard to vested interests. I suppose practically it would be understood and arranged that the existing holders of the Chairs were not to suffer damage, but in a longer or shorter time the Chairs would fall to the University and would be filled up, so far as they were filled up, by the new University. Then the idea was that if University College and King's College were forced to come in by gentle pressure, a more effective economy of labour might be carried out by the new University, which would still retain the two sets of buildings and plant and adapt them to a harmonious system?—Such a thing is conceivable, no doubt, but it does not seem to me at present to be very practicable. Take the two colleges. If they are to be maintained on their present footing King's College must be kept up as a Church of England institution. I do not imagine that the Senate of the University of London could undertake to administrate upon those terms.

6621. I think the idea is that it would change probably under the influence of this pressure. Those who advocate this professorial University represent themselves as on a rising tide of educated public opinion which is supposed to put pressure on King's College. I have heard this rather outside than before the Commission, because King's College has not been before us. But it is suggested that if University college agree to come in, King's College would have to choose between remaining separate in an inferior position and coming in also; and that under that pressure there would be a strong inducement to come in. If it did not come in, it would be placing the University of London in competition with one of the London colleges?—That is not a position that it would assume. I do not think the London University, especially having regard to the interests of the external students, would like to undertake the business of carrying on one college in London in competition with others. I think it might undertake the business of founding professorships or maintaining professorships if any body would found them on subjects not within the colleges. I do not see how it could wisely come into competition with the other collegiate bodies. I think we had better leave them to conduct their own affairs.

6622. I think the idea would be that the bodies left out would still be able to prepare for the open degrees of the University as they do now, only the bodies coming in being re-constituted in the form of the University, their teachers would have advantages with regard to special examinations, and the influence of teachers on examinations, which King's College would not possess. So the bodies left out would be where they are now, and the bodies that came in would be in a superior position, and it is thought that when that was made clear, there would be a very strong inducement on the bodies to come in?—It is conceivable that such a scheme might work, but to use a common expression I do not see it at present. Might I venture just to say this upon that point? I exceedingly doubt how far it would be wise to put the whole of the teaching in London under one control, because as I have already said, though I deprecate any University competition, I desire to maintain a competition in colleges. I think the distinction is probably a reasonable one.

6623. It has been put to us very strongly, that the disadvantages of having two or three inferior laboratories as compared with only one first rate laboratory outweighed the advantages of competition. It was also suggested that though as regards elementary teaching where there are a large number of students, competition may be best, where there are a few students, it would be a great economy if they could all be made to go to first rate teachers?—I quite agree to that, and as I have said, I think that might be accomplished by the University reporting upon these bodies. I think the last scheme proposed to give to the Boards of Studies and Faculties, powers of reporting with regard to the teaching of particular institutions, and if that were done, it seems to me that by the force of a report of that description you would drive them to inter-collegiate arrangements of that kind. I cannot help thinking that there is a great loss of power, and that really is one of the difficulties which the students who come up to London experience in taking their degrees at the University of London, because the Intermediate Scientific Examination which deals with subjects such as geology, and so forth, a little outside the mere medical examination is high, and there are many schools which are not able to give education adequate to meet that examination. That has been one of the great reasons of the smallness of the number of the medical graduates of the University of London.

6624. (*Professor Sanderson.*) May I interpose a question? In that proposal to organise reporting, was the proposal to inspect also included?—No, it was only reporting.

(*Mr. Anstie.*) The clause with regard to the Boards of Studies reporting, is No. 43:—"Each Board of "Studies shall have the following powers and duties; "(*a.*) To elect a chairman every year; (*b.*) to consider "and report to the Senate upon any matter referred to "it by the Senate; (*c.*) to represent to the Senate its "opinion on any matter connected with the degrees "and examinations and teaching of the subjects of its "Faculty; (*d.*) to deliberate, if so requested, in con-"junction with the Senate or any committee thereof."

(*Professor Sanderson.*) Then the inquiry would have to be instituted by the Senate:—"To represent to the "Senate its opinion on any matter connected with the "degrees and examinations and teaching of the subjects "of its Faculty."—It is twofold. It might arise in the Senate, and then would be the subject of a report by the Board of Studies. It might arise in the Board of Studies, and they might represent to the Senate their opinion upon any matter connected with the teaching of the subject. It appeared to us that that power of reporting, properly used, would exercise strong indirect pressure upon the arrangements. But I quite agree that the view put forward by Professor Burdon Sanderson, would be very useful in addition.

6625. (*Professor Sidgwick.*) Do you think it might be advantageous with a view to the better organisation of what we may call the common teaching given by the various bodies that the University should have the power of appointing its own professors, and readers, and lectures might be chosen, and would be in the main chosen from among those bodies, so that in that way, a University teacher especially in the advanced rank or in any branch where it was desirable to keep the students together, might be appointed sometimes at University College, sometimes at King's College, and sometimes elsewhere. Would that seem to you a good way of inducing unity?—I do not quite see how the University professor would differ from the professor of the college.

6626. If he was a professor of the college, he would be a professor of a college raised to higher rank, and by means of that, there would be greater inducement to attend his lectures, and perhaps some special advantages might be given to University lectures?—I do not for a moment see the great practical result. It may be that some advantages are concealed in it, but I do not see them at the present moment.

6627. So far I have been treating the University on the view that it is rather the duty of this Commission to make a teaching University for London. I now come to the question on which you expressed a strong opinion as to how far two Universities are an evil. I quite understand your general view that any multiplication of degree-giving bodies in England is an evil. If there were a teaching University in London, a degree-giving body, do you think there would be any special advantages owing to the fact that there was another body called a University, but really an examining board for the United Kingdom also?—I do not think it would touch the University of London much. I think we should get probably just as many students from the colleges as we get now. Therefore it is not in the interest of the University of London, but it is an opinion which I have strongly formed as to the interests of University life in the future. As I have already said, from Owens College, which is a very important centre, we get quite as many students as we used to. I do not think it would touch us much. Of course we are very desirous of not allowing anybody to come into existence whose name should in any way be possibly confused with our own.

6628. The difficulty of the name has been rather overcome?—I think it has. I wish just to observe that we should feel strongly about any confusion of names.

6629. Now with regard to your objection to the increase in the number of degree-giving bodies. You said the degrees in America had no value, but according to my information, although that is true or almost true of the mere fact of a man having obtained a B.A. degree or any degree, it is by no means true that the degrees

Sir Edward Fry.
1 July 1892.

of particular leading Universities are of no value, say for instance the degrees of Harvard or Yale?—No doubt. I do not mean that, but the fact of having a degree is practically of very little value.

6630. Do you think that the very fact of Gresham University being in London, a University for London having maintained a very high standard, the new University would be placed on its honour in a certain way to keep up the degrees. I am now speaking rather of arts than science. In the single department of medicine, it seems to be admitted, or at any rate very largely held, that the degree of the University of London is too much like an honours degree as now given, and that something more like a pass degree would be desirable. But apart from that, speaking only of arts and science do you not thing that the fact of its being in London would place it to a very peculiar degree on its mettle in that respect?—I do not wish to say anything disrespectful at all, but I have my fears that the degree would not be a very high one. I may be wrong about that, of course. Perhaps I may say with regard to the medical degree, that no doubt the feeling which you have referred to is very strong, and I venture to think to a certain extent just. You will observe that the plan of arrangement between the two colleges and ourselves as we propose appears to us to go a long way towards the solution of that difficulty, because by preventing the necessity of the man going through two examinations, it would enable him to give more thorough study to the subject; therefore we hope to be able to maintain the position of the degree, and yet make it more accessible to a greater number of persons.

6631. You are no doubt aware that in what we call the general type of a University the teachers have a preponderate control over the examinations, though it is carried out in very various ways, it is equally true of the older English Universities, and Scottish and German Universities?—No doubt.

6632. Therefore if we are to have a teaching University for London, it is pressed upon us with great force that this preponderate control should be given to the teachers in some form or other. Suppose we were to agree to that, do you think there would be a serious danger that the impartiality of the examinations of the London University for the kingdom would be questioned?—I think if a predominant power were given to the teachers it would be fatal. I think the University of London would greatly prefer to be left alone, and have any number of competing Universities rather than allow the predominant power to rest with the professors of any college. I think we must maintain at any price perfect independence as regards our degree to outside students.

The witness withdrew.

O. Henrici, Esq., Ph.D., LL.D., F.R.S.

OLAUS HENRICI, Esq., Ph.D., LL.D., F.R.S., examined.

6633. (*Chairman.*) I believe you are a member of the body that has been formed for the purpose of promoting a professorial University?—Yes.

6634. We have had several witnesses already from your association. You have had no opportunity of knowing what they have said, I think?—I have heard something about it. I have had a talk with Professor Karl Pearson after his examination.

6635. Do you think, from what he told you, that he represented your views very much?—I think he did, decidedly.

6636. And that paper which was put in was drawn up by your association, and you agree with it?—Yes.

6637. You would like, in fact, to see a University started in London which would appoint its own professors, carry on its own teaching, and either gradually or immediately absorb the different existing colleges?—Yes.

6638. With the exception of the medical schools which would have to be treated differently?—Yes.

6639. I think you contemplated working your scheme by means of the present University of London?—I have always kept that as a separate question. I have formed in my own mind an idea of what I thought a professorial University for London ought to be, and if such a scheme could be assimilated with the present University I should think that would be a great aim, but if that should prove not to be possible I see no objection whatever to forming a second University.

6640. You do not think there would be an insuperable objection to having two Universities for London?—I should prefer having it united with the one, but I do not by any means see that that is a necessity.

6641. You would want a good deal of money for the endowment of those professorships. Of course, the professors would have to be men of considerable position?—Yes.

6642. Would you get that from the State?—Of course there is a great deal of money available. Several of the colleges have a good deal of money.

6643. Then you would take possession of that?—I think if there is to be a really good University that can promote true higher teaching money ought to be in the hands of the governing body of the University absolutely.

6644. And go towards the payment of professors and making laboratories and buildings, I suppose?—Yes.

6645. Do you think from what you hear that these existing bodies would be willing to be absorbed?—I suppose the answer to that depends upon what one understands by the different bodies. I believe that the essential bodies, the professors, are willing, but it may be quite different with the different bodies, the Councils.

6646. I suppose the professors would be to a great extent chosen out of the existing professors of the colleges?—I do not see how it would be otherwise than by accepting existing professors and gradually making changes as vacancies occur.

6647. So that personally, as far as their own interests are concerned, they would not mind whether they were professors in their own colleges or in the University?—Their interests in many matters would not be affected, only we hope that the better professors would get the higher income and be made more independent.

6648. Their own position would be improved by the change?—That I should hope, but that of course is not the reason for wanting a new University.

6649. This might reconcile them to the contemplated change?—Yes.

6650. But those who are not professors in the University, the governing body and the outside people, are rather opposed to your scheme, are they not?—I do not know. Of course I am not any longer connected with University College, and therefore I do not know what the ideas of the Council are beyond what I have just accidentally heard.

6651. And supposing they were unwilling to be absorbed, how would you manage that? Would you have it done by Act of Parliament? What pressure would you put upon them?—I believe that it would be impossible to do that by Act of Parliament. I should leave that rather to time. I feel sure that in course of time they would all come and ask to be absorbed. In my idea it must take a long time before anything like an ideal state of a good University can be carried out in London. It would be a long time of gradually absorbing the colleges, gradually improving them, gradually getting rid of some of the Chairs, and concentrating one method of teaching at one place, another at another place, and gradually carrying out what ought to be.

6652. Your chief reason in wishing to do away with the different colleges I fancy from what was said by other witnesses is that there is a great deal of overlapping at present and a great deal of waste of money?—That is partly the case, but I believe there is another much more important reason. That is the influence of the examination on the teaching. Perhaps I may make a statement of my own experience at the University of London. I do not know whether I may make a statement about my own career. I am a German, educated at German schools and Universities, but I have now been in England for a long time. In 1869 I was appointed the first assistant and in 1870 Professor of Pure Mathematics at University College; in 1880 Professor of Applied Mathematics, in 1884 Professor at the Central Institution of the City and Guilds London Institute. I have also been for five years examiner at the London University, and I have been for two years

examiner for the final schools at Oxford, so I have had a pretty wide experience of the English system. I may mention that I was for a long time Professor of Mathematics at Bedford College, at the beginning at University College itself I had, speaking broadly, two classes of students; one class were students who prepared for the London University who wanted two take their degrees, and the others were students who wanted to become engineers, and the difference between them was a very marked one indeed. The one set only looked forward in all that they learnt to whether it would help them at the examination, and the others looked forward to the practical knowledge for the sake of the knowledge and for the sake of applying that knowledge afterwards in their profession. The difference in the working was very marked indeed; I believe I may say that I have been successful with those I prepared for the University, but the teaching for the others gave me much more pleasure.

6653. Those were civil engineers who wanted to earn their livelihood?—Yes, exactly.

6654. No amount of connexion between teaching and examination would supply the motive which existed in the case of the young civil engineers, because their future prospects depended on their progress in learning, which was another matter altogether?—Not altogether; those who studied for the degree wanted of course to pass the examinations, but if the examination for the degree had been in conformity with the teaching the teaching might have been of a much better kind. That is rather the point I insist upon, that the examination shall be controlled by the teaching rather than that teaching shall be enslaved by the examination; every professor can teach best what he knows best, and what he takes the greatest interest in, whilst if he has to follow a prescribed course for examination it becomes quite impossible. It is better for the sake of the professor, for the sake of the students, and for the sake of raising the standard of the teaching, that the teaching should be independent of the examination. The aim of learning ought not to be to pass an examination, the examination should merely be to show that the students have learnt something, and hence the system of education ought to help the system of teaching.

6655. Then you advocate this professorial University chiefly on the ground that the teaching will lead up to the examination, that there would be an intimate connexion between the two?—Yes.

6656. That could be arrived at by other means, could it not, the federal scheme of bringing the different existing colleges and institutions together and enabling them to form a University of their own would have the same effect only in another way?—No, I do not believe so at all.

6657. Could not you get at the connexion between the teaching and the examination in that way?—No, there would in that case be one syllabus laid down for the common examination. There would be one body of examiners which would examine, and there would be in the different colleges different teaching.

6658. If you gave the teachers a representation and a position on the Senate and if you establish boards of studies which would be consulted in fixing the examinations you would get at the connexion in that way, would you not?—I do not think it could possibly be carried out to the full extent. In each branch the different teachers would not be equal, every teacher has his own peculiarity and his own line, even from the very beginning, from the most elementary parts; every teacher has his own strong points and he ought to be able to carry those on. If there are several colleges the common syllabus has to be a compromise between them, and each professor is to be obliged to follow suit to the common syllabus.

6659. Would you allow each individual professor or one or two professors in each particular subject to draw up the examination papers for the degree?—There would be only one set. There would not be different colleges.

6660. But there would perhaps be more than one professor for each subject?—Yes, and they would pretty easily agree.

6661. They would agree and draw up an examination paper?—Yes.

6662. But that would be carrying to an extreme the examination of the pupils by their own teacher?—Decidedly.

6663-4. By their own teacher?—Yes, decidedly. And the more that is carried out the better I think it is.

6665. You see no objection to a teacher examining his own pupils?—I should think that would be a very high aim indeed. There might be for the sake of the public, not for the sake of the education, external examiners added to the final examination, but they must examine in what the professors say that they taught, and must assist in laying down the curricula for the teaching and for the examination.

6666. If the professor had taught all the pupils who came to be examined there would be impartiality. But supposing part consisted of his own pupils and part did not, there would be danger of his favouring his own pupils, would there not?—I do not believe that. On the one hand, I believe, that the professors are a really high-minded set of men.

6667. But they might do it unconsciously?—I will tell you how it was in my case. When I became examiner at the University of London a great many students came up, and I was curious to see the effect it would have on me; I felt sure I should recognise my own men. The effect on me was that when one of my own men gave bad answers, I got very angry with him.

6668. Perhaps you were too partial to the other students?—It was rather more that way than the other.

6669. At any rate you think you could trust yourself on the whole to be impartial between your own students and the others, but if you had a bias, it would be against your own?—It would be against my own. I do not think it has been carried to such an extent that my own students have suffered; but I think that with professors, it certainly will not have the effect of their favouring their own students.

6670. You think, that as a rule, there would be only one professor for each subject?—Of course there must be a difference between the more elementary parts of the examination and the higher parts.

6671. In which would you want external examiners to be brought in for the higher or the lower?—Rather for the lower. I do not mind for the higher. But another important point for the degree examinations is this: in order to make these degree examinations really serviceable for improving the teaching there should be throughout the terms, throughout the time of study, internal examinations by their own teachers not at all influenced by anybody else, and those examinations should count in the final examination.

6672. The intermediate examinations?—The class examinations which might be held every term might count towards the final examination. I think that would be a very great benefit, and if it is thought desirable, which I fancy it would be, not for the sake of the teaching, but for the sake of calming the outsiders, so that they might not say that the teachers were branding their own herrings—I should not object to having outside examiners for the final examination on which the degree is given; but these intermediate examinations in the classes should also count.

6673. Now to go to another point. You would probably have only one professor for each of the principal studies, or would there be two or three?—That would depend very much on the subject. For instance, at the Central Institution I am Professor of Mechanics and Mathematics. I have the whole range of pure and applied mathematics under me. But in other places there are several professors. There is a professor of pure mathematics and a professor of applied mathematics. In German Universities there may be a larger number of them. When I was at Carlsruhe there were four professors of mathematics.

6674. You would not destroy all competition by doing away with the different colleges. Is it not advisable that there should be a certain amount of competition, that there should be a certain number of professors and a certain choice of the students as to which they should attend, so as to keep the professors up to the mark?—There must be some kind of competition, but in the really higher teaching competition can only be detrimental, because there are on the one hand not means enough to endow a number and establish sufficient laboratories for higher teaching, nor would there be students enough to attend them. My idea is that at the different places—I do not like to

O. Henrici, Esq., Ph.D., LL.D., F.R.S.

1 July 1892.

call them colleges, because I think they ought not to be colleges, as such they have not the relation of colleges to to the Universities, but simply different abodes where teaching takes place—it is often found that some subject is taught better at one place and another subject is taught better at another place; each place should be encouraged in the branch of teaching for which it shows itself fittest.

6675. Each individual college would be absorbed and done away with. You would make use of their buildings by the University professors?—Yes.

6676. This system will apply to the ordinary colleges; but the medical schools must be treated differently. They must still continue to have their own autonomy as they do now?—Yes, that I suppose has to be so, but I should like not to say anything about the medical profession or about the medical education. I do not feel at all competent to speak about that, and I have not paid enough attention to that to form any ideas. I agree, as far as my own knowledge goes, with what the executive committee of our association have worked out.

6677. It would be rather on the system of the German Universities?—Yes.

6678. We should be very glad to hear shortly your experience of the German Universities and what their system is?—First of all as to the Government. A German University is divided into Faculties and the different processes of study in the Faculties themselves are absolutely ruled by the Faculty. The Faculty consists of what are called ordinary professors.

6679. Have you seen a pamphlet published by Professor Ramsay?—Yes.

6680. I suppose he gives a fair account of the German Universities?—Yes, he gives a tolerably fair, but not an absolutely accurate account, I think.

6681. The Faculties consist of professors, and the professors have the entire management of the whole University, have they?—Yes. There are three kinds of teachers; there are the ordinary professors, there are the extraordinary professors, and there are the *privat docenten*. The ordinary professors form the Faculties, and they have the business of the Faculties in hand. All those professors together form the Senate of the University.

6682. Then there are no outsiders at all?—No outsiders at all.

6683. Nobody appointed by the Government?—In most of the German Universities there are none, but there are some exceptions. Professor Ramsay, for instance, does not mention a single Prussian University. In some Prussian Universities at least, there is a rector appointed by the Government as a permanent rector. In every University there is a rector appointed for one or two years, selected by the professors, but appointed, I believe, by the Government.

6684. Has this rector much power?—The professors in the Senate and in the Faculties practically rule everything relating to the University, but there is a very strong power over their heads, so strong that it does not often need to interfere; that is the Government of the country. All the Universities are Government institutions. The Minister of Education is the head of the Universities; he has always supreme power; he has also to appoint the professors, but the professors are always appointed on the recommendation of the Faculties. In a Faculty, if it is found that there are not enough professors for all the branches of learning in one particular subject, then they apply to the Government that another teacher may be appointed. For instance, they may ask that the Government should appoint an extraordinary professor or they might appoint a *privat docent* with a salary. The *privat docent*, as a rule, has no salary, but if there is nobody else forthcoming, they might appoint a *privat docent* and give him a salary. In that way there is always care taken that all the subjects are represented once in the larger Universities.

6685. Where does the University money come from? Are those endowments given by the State?—It is all given by the State. There might be endowments in some places, but I think I am right in saying that as a rule the endowments are confined to scholarships. There are some, but in most places the professors, laboratories, and the whole establishment are paid for by the Government by the State.

6686. I suppose there are fees?—The fees go altogether to the professors.

6687. The buildings, laboratories, and all that kind of thing are found by the State?—Yes. There are no fixed salaries to a Chair. There are salaries to each professor. It very often happens that a Chair falls vacant where the professor had a salary. Then if they want to get a man from a better position at another University, there comes a good deal of competition in that way. Then the Government may raise the salary and make him an offer, and when the offer is big enough, he accepts it.

6688. The Minister of Education can interfere in every detail if he chooses, can he?—In the appointment of professors he has the last word.

6689. And in fixing the salaries?—Yes, and in fixing the salaries; but in the process of study he interferes as a rule not at all.

6690. He leaves it to the professors entirely?—Yes, he leaves it to the professors entirely, only if any dispute should arise between the different professors, then naturally he would step in.

6691. Do you think that a system in which Universities are entirely controlled by professors could or could not be carried on without the occasional interference of an outsider in the position of the Minister of Education?—I think it is very desirable that there should be some outside authority, but as in England there is no Minister of Education, and as everything is different, I do not see that it can be done otherwise but by a mixed Senate, but that must be a mixed Senate on which the teachers again are very strongly represented, I should say at least half.

6692. And the other members should be appointed by the Crown?—I should think that would be the simplest, the most natural, and the most efficient on the whole.

6693. Members partly appointed by the Crown and partly appointed by the teachers?—Yes.

6694. In fact, that is what every scheme seems to have proposed. The scheme proposed by the Senate of the University of London and the Gresham scheme would seem to amount to that, a mixed Senate partly appointed by the Crown and partly by the teachers?—Yes.

6695. All schemes seem to have that in common?—Yes, but there is a certain difference it strikes me. In some of them, the professors are not as strongly represented perhaps as they ought to be. There ought to be no less a Senate such as corresponds to the German Faculties. It may be that there are such a number of Faculties created, or it may be that there are Boards of Studies or Boards of Examination created which should then have in my opinion that power which in Germany the Faculties have, of laying down the syllabuses, subject to some moderating control by the Senate.

6696. Supposing you gave the Senate the amount of power you propose, you think Boards of Studies would be necessary?—I think they would still be very necessary, because in the other there is the lay element strongly represented.

6697. Are the Faculties Boards of Studies in Germany?—The professors of the Faculties form the Board of Studies, but I mention it here as an alternative that there might be special Boards of Studies created independent of the Faculties.

6698. But chosen by the Faculties to represent them?—Yes, pure professorial bodies.

6699. You would not give them any power except that they might be consulted or must be consulted by the Senate. You would not give them any initiative?—I should give them greater power than that. I think they ought to have scarcely purely academical matters given them, but the executive power.

6700. Subject to the Senate?—Their resolutions have to be approved by the Senate in the general outline, but not in every little detail.

6701. You would give them more power than has been given in any scheme which has been before us, more power than there is in the Gresham Charter, or in the scheme of the Senate of the University of London. In both those they are only consultative. You would give them more power than that?—Yes; I think it is very important for good teaching that they should have within their limits absolute power, very strong power indeed, always, of course, the Senate having power if

any hitch occurs to regulate the general scheme; but in the little daily details of purely academic matters, they should have executive power.

6702. Supposing the London University to decline, or to be unable to have anything to do with your plan, and supposing you find a difficulty in making a start—in getting a founder or in getting the State to interfere, or in any way launch your great scheme of a professorial University, do you think you can fall back upon the Gresham plan as a substitute?—No, most decidedly not. I should think it would be a very great harm to sound education if the Gresham Charter were carried. I should say, rather leave things as they are till the time is ripe for carrying out a better scheme—a good scheme.

6703. Do you not think that when the Gresham scheme was once started, and you had a University established, ready to receive endowments and in possession of the field, you could greatly increase it, and raise it, and give it more power over the colleges?—I do not think that would be possible.

6704. You do not think it could develop into anything like what you wish?—I do not believe so, because it would simply mean falling back somewhat into the old state of the London Colleges and the present London University. There was also formerly a connexion of that kind, but very soon the colleges fell aloof from it and got separated again. It would be an examining body, but at the top those colleges. I cannot too emphatically express my opinion upon that. That would be detrimental to any sound good teaching.

6705. In fact you are against what might be called a federal scheme?—Absolutely.

6706. Then it would be no use my going through it. Is there anything else you wish to say before I close my chief examination?—I might say a word about the place with which I am now connected—the Central Institution, City and Guilds London Institute, a technical college. That was founded in 1884. There were appointed four professors for the whole of the departments. The carrying out of the whole scheme is on certain defined lines that were laid down before it was left to us. The four professors form a Board of Studies, and we have absolutely, without any outside interference, to lay down the processes of study and carry them on. We created the place as it is now. The City authorities have not interfered at all with our recommendations. They left us with a practically free hand. We have been able to raise the place to the position which it now occupies, and which, I believe, is a very creditable one, simply because we were left alone in the academical matters. Of course with money matters and such things, we have had nothing to do, but the purely academical matter has been absolutely in our hands. If we had been obliged to lay down our scheme subject to outside examinations, and so on, I do not think we should have succeeded as we have done. For instance, if the Gresham scheme should be carried, and we should be taken in under it, I believe the place would be very seriously damaged.

6707. But you would be willing to be absorbed in a professorial University?—I think we should stand for a time quite well alone. We are in a very happy position there. I think our place is the only one which approaches somewhat the professorial University, in its limited sphere.

6708. But still you would be willing for the public good?—For the public good on one hand, and also that I believe in process of time the place could not stand alone outside. Both for the public good, and for general education in London, and of the Central Institution alone, I should be very much in favour of joining the new University, if it is carried out on the same basis. What the City authorities think, of course I know nothing at all about. I speak merely my own opinion.

6709. (*Professor Sidgwick.*) I think, with regard to the professorial University, you said you believed that the professors were in favour of it. Could you tell me on what your opinion is based?—I am best acquainted with University College, and with the members there. There there is certainly a great majority of the Faculties of Arts and Science.

6710. A great majority?—Yes. I have not counted them up, but I believe nearly all the better men and a decided majority are in favour of it. Some have not signed the paper, but they are in favour of it, only they do not feel quite sure about whether they should join. On the whole I believe a considerable majority is in favour of it. And of course there is Bedford College also.

6711. Can you tell me what amount of endowments Bedford College would contribute to the general fund if it did come in? What is the value of the contribution of Bedford College; do you know?—Though I am a member of the governing body I could scarcely tell you that.

6712. It has been suggested that it is not large, and that the willingness of Bedford College to come in is not an important element in considering ways and means?—Perhaps not. It is just supporting itself.

6713. It has no endowments, has it?—It has some funds certainly.

6714. What are the funds?—I should not like to give figures. I could easily provide them of course, but I cannot give them now. But it is a most important ladies' college, and I believe the question of teaching for women could not be left out.

6715. I mean that when we are considering how the scheme of a professorial University is to be carried out it is not perhaps probable that Bedford College would furnish the ways and means to a very important extent?—No.

6716. University College would be an important element, of course?—Bedford College has its buildings and good laboratories, not for high work but ordinary teaching work. It has good laboratories, both physical and chemical, and good studios for drawing and painting.

6717. Are the professors of that body to which you belong, the City and Guilds Institute, in favour of this professorial University?—They all signed the document.

6718. And they all agree with you in desiring to be absorbed?—Yes. Of course there are little differences of opinion in details. Professor Unwin would agree with me, and with regard to Professor Armstrong and Professor Ayrton I cannot say whether they agree in all details, but they would, I believe, be quite willing to be absorbed.

6719. Assuming that these various institutions were absorbed, the University would carry on its work in a number of different places. How, in your view, would the laboratories, say at Bedford College, University College, and King's College, be made of any use? Do you think they would all be used?—I think at places where there is science teaching and arts teaching going on there will be a laboratory, such as there is now for the teaching of the more elementary parts of the subject; but for higher work (and I do not think the University should confine itself simply to the elementary teaching), and work of research, which I consider an essential part of a University, better laboratories are required, and those would be required only in one place, I fancy, chemical laboratory, physical laboratory, and so on, whatever it may be. There ought to be one superior laboratory, one that would show itself in course of time. That is what I meant when I said before that each place will develop itself in a particular direction, and then the Government shall have power to favour them and suppress the higher teaching at one place by not appointing professors or transferring a professor from one place to another.

6720. Then, as I understand you, you think the laboratories that now exist are not too good for the elementary work which you still think would have to be carried on in various places. They are just about what are required for the more elementary work?—Yes.

6721. Only you would be glad to superimpose superior laboratories for higher work?—Yes.

6722. One in one place and one in another?—Yes.

6723. Then as regards the lower work which would still be carried on, would you see any objection to there being competition if there was work of a lower kind carried on in University College, the City and Guilds Institute, and King's College? What objection is there to its being competitive as it is now? I do not see what, in your view, is the gain of doing away with competition, and I strongly see the evil of removing the stimulus to energetic work which it gives. I now speak of the lower work which would still be carried on at the various places?—On the one hand London is too big to have all teaching concentrated

O. Henrici, Esq., Ph.D., LL.D., F.R.S.

I July 1892.

at one place as with the colleges at Oxford and Cambridge. Residential colleges are out of the question, and there will not come as many men as have come in former times, because there are many more in the country. Therefore they would be chiefly attended by people coming from London itself and students who live with their parents, and there is ample room for several places for teaching those.

6724. But my point is, why do you think competition is undesirable if, as far as lower work is concerned, it would still be carried on?—I scarcely said that I considered it undesirable: I said I considered it undesirable in the higher teaching.

6725. You would not regard it as undesirable in the lower?—I would consider it as a thing that cannot be avoided without saying that it may not be better without, it cannot be avoided.

6726. Now with regard to the German system, you spoke in the early part of your remarks of the independence of fees as being in your view an important advantage that ought to be aimed at in any new system; but at the same time, if I understood you aright in the latter part of your remarks, you even laid stress on the fact that in the German University all the fees go to the professors; and I am informed that fees constitute a very important part of the professors' annual income. If that be so, why do you think independence of fees is so important in the new University of London?—I do not think I made any statement in which I dwelt on the independence of fees.

6727. I thought you said the need of earning the fees was a depressing cause?—Yes, so far as the professor if he is not to starve has to look forward to please his students and do what they want. It was aggravated by being bound to teach according to an outside examination.

6728. That is the point to which I wished to come; it has been represented to us by a previous witness that this teaching for an outside examination is, to a very great extent,—I think it was said, so far as regards about three-fourths of the students—exactly the position of the professoriate in a German University, because though no doubt the advanced work is done on the more independent terms that you approve, yet the larger part of the students are being prepared for the State examination in one or other department. It has been represented to us that only a minority of the students have in view the doctor's degree which the University gives, that the majority have in view some career at the entrance to which they have to pass a State examination, and that the teaching the University gives has to prepare them for this examination. What would you say with regard to that?—That is certainly the case, as it also would be in medicine and law.

6729. Is it not also the case in the Faculty of philosophy, so far as the larger classes are concerned. I remember my own experience of a German University where I have only attended classes in the department of philosophy. If one inquired into the motives of the students entering a large class, that supplied a large amount of fees, one always found that in the case of the great majority they were preparing for the State examination for schoolmasters?—Yes, that is no doubt the case, but they are, I believe, conducted in a freer way than schools in England. They are not tied down to such dry and fast rules as they are in England. They are not set down to write out in three hours answers to so many questions, but they are of a higher nature like the higher degrees here, like the doctor of science at the University of London. They have more scope to show their knowledge.

6730. Then we should rather infer from what you now say that if the examinations were more of the German kind the depressing effect on the teachers would be largely reduced?—That might be so.

6731. If the Gresham Scheme or some scheme like that were introduced, and the teachers, holding, as they would largely, your views, were organised into Faculties and had a preponderating influence over the examinations of the new University, they would be free to adopt a mode of examination more resembling that which is approved in Germany. They would start without any traditions such as those with which the London University would, no doubt, be hampered, and why should not they adopt a plan of examination which would leave each of the teachers in the colleges freer?—For this reason, the examinations here are carried on during the time of study. In the most elementary parts they are always examined. In Germany they are only examined when they have finished a course of study, but they are only examined on the aggregate amount of knowledge which they have obtained. The examination is, for that reason, a very much superior one, because it is not carried on every year. They are only examined on the aggregate of their knowledge which they have obtained during the whole University career.

6732. But if we make the new University consist of the leading teachers, and leave them free to institute the kind of examinations which they think desirable, why should not they adopt the view you suggest. You seem to assume that the examinations must have the hard, dry, coercive, and depressing effect of the examinations of the London University; but I am urging that the art of examination is one in which improvement may be assumed to be continually going on, and one country may learn from another. I am asking why should not the new University for London, composed of the teachers in University College, King's College, and elsewhere, be assumed to be capable of adopting an improved system of examination. They will all come, having had the experience of the evil of the other system. I should have thought you might assume that they would have a strong desire to adopt an improved system?—I do not see how the system can be much improved unless there is only one sound University without consisting of several colleges in confederation. I do not see how that can be carried on. It can only be carried on if all the teachers are free in the way the scheme puts it.

6733. With regard to the German examinations for the doctor's degree, according to my information these examinations are not carried on only by the teachers of the men examined; it is carried on by the whole of the Faculty. It, therefore, includes men who have not taught the examinees as well as men who have taught it. Therefore under the scheme of the Gresham University the same plan could be adopted if it were thought desirable. The examination might be conducted by a Faculty or by a representation of the Faculty, with or without external examiners, and the Faculty would consist partly of people who had taught the examinees and partly of those who had not. Surely that is also the case in a German University?—No. It is of course different in different Universities, but in a great many of the German Universities the doctor's degree is given in this way. There are in a great many places theses required, and one is at liberty to send in a thesis which may or may not be discussed. Then there is a *vivâ voce* examination which lasts in some cases two hours, where the whole Faculty sits round the table, and the candidate is examined in three subjects which he has selected. Afterwards each professor may ask questions, but, as a rule, they do not. Practically the examination is confined to three subjects.

6734. Are the questions always asked by the professors whose lectures he has attended?—Yes, and on the lectures.

6735. But it is not always the case, is it, that candidates graduate at the University at which they have studied; therefore, a certain part of their teaching may often have been conducted elsewhere?—A student generally goes to a number of Universities. He may spend a session or two at one place, but, as a rule, he will spend a part of the time at one place and part of the time at another. It is a very rare thing for a student to take his degree at a place where he has not studied at all.

6736. But still a great part of the examination will be done by his own teacher?—Yes.

6737. It was more than once represented to me, when I was in Germany making inquiries that the *privat docent* though no doubt usually taking subjects other than those taken by the ordinary professors, was still potentially a competitor, and that a valuable guarantee of the efficiency of the professorial lectures was given in that way. If the professor was really not efficient, his class might be drawn away by an enterprising *privat docent*. It was represented that it did not frequently occur, but the fact that the *privat docent* could compete, if he chose, was a very effective check on the possible inefficiency of the professor. Would you agree with that view?—I think that could happen only in very rare cases—in very rare cases indeed, I do not believe that the *privat docent* at any Germany University can teach what he likes; with regard to some

subjects it is sometimes said, "We must have these subjects taught." The ordinary professor selects his part, and the extraordinary professor his part, and then the *privat docent* is in many cases ordered to lecture on one subject, and sometimes on other subjects, but he is not allowed to interfere with the professors.

6738. Even if legally admissible such competition might rarely occur, because it is the interest of the *privat docent* ordinarily, to be on good terms with the professors?—Yes.

6739. Would you deny that, although it rarely occurred, a *privat docent* appointed in philosophy would be allowed to lecture on the very same subject as the professor, the only restraint being that he must not lecture at a lower fee. That is what I was told?—Yes, there is an enormous variety of the German Universities, but my impression is as I have stated there is also this to be said upon that point. A German professor has no pension. Therefor a German professor remains at the University as long as he possibly can, and as he gets old and feeble there, sometimes the Faculty allows the *privat docent* to take up his subject while he still goes on and draws his salary as professor. I think that will probably coincide with your information.

6740. (*Chairman.*) In your experience in Germany, has the competition between the different Universities a tendency to lower the degree?—No.

6741. They do not, in order to compete against one another, make the degree easier?—No. There used to be a great scandal about the degree. In some of the poorer Universities they gave the degree on easier terms, for the sake of the fees which were divided among the professors, but that was in times gone by.

6742. Then what is it that keeps up the character of degree?—The general status of the University. The degree is not of the same status at all the Universities. In the Prussian Universities the Government takes it up. They have rules for it.

6743. Do those that give the best degrees collect quite as many students as the others, and attract just as much money into their pockets as the ones who give bad degrees?—Yes, the Universities attract students on account of the good teaching and the professors—not the degree.

6744. Then the competition tends to raise the degree?—Yes.

6745. (*Professor Sidgwick.*) It appeared to me that the degree of doctor of what the Germans call philosophy, and what we call arts and science, was mainly taken by those who were training for the career of a teacher, and by a small number of the *élite* of the schoolmasters?—That may be so. I think on the whole it may be pretty correct.

6746. A *privat docent* is obliged to take the degree of doctor, is he not?—I believe so. I could not imagine a man asking to be a *privat docent* if he was not a doctor.

6747. I was told that some of the leading schoolmasters did it with a view to increasing their rank in the profession?—Yes.

6748. (*Professor Sanderson.*) Of course our object is to bring into existence relations between the central academic body and existing bodies of academic rank. In so far all schemes go together. You have stated your opinion that absorption is essential. That is your view, is it not?—Yes.

6749. And your idea as to the way of bringing that about is by a commission, is it not? You agree with the memorandum which has been put in?—Yes.

6750. And that it could only be accomplished by a commission—a different one from this, of course?—You mean a commission which has power to organise?

6751. Yes. You stated before that you felt convinced that it would be a work of time?—Yes.

6752. And consequently you do not at all intend that the work of absorption should be carried out in an absolute way?—No.

6753. Only by arrangement with the different bodies?—Yes.

6754. So that it would probably more express your view that whatever was done should be done with a view to ultimate absorption?—Yes, in this way, if I may state it, that nobody should join the University without being absorbed. I am not speaking of medical faculties. As soon as a body joins it ought to be absorbed.

6755. Do you not think it would be possible to establish that relation between a central body and the academic bodies of which you speak, by an intermediate process neither federal nor complete absorption?—I should consider that rather dangerous without knowing more about the detail of the process.

6756. In the first instance, would it not be useful to establish such relations, for example, as supervision of teaching and determination of the scope of examinations by Boards of Studies, and co-operation of the central body with the bodies to be eventually absorbed in the election of new professors?—I should always be afraid there that it would not come about, that the present state would simply be crystallised and that the ultimate change would not be brought about in that way.

6757. Do you not think you might place confidence in such a body as you propose to create—I mean a commission which would continue its action for several years—for bringing about, gradually perhaps, the best practicable relation between the central body and the academical bodies?—I am always afraid that public opinion may take a strong grip in one direction which could not be overcome.

6758. Do you think public opinion is improving in that respect, that is to say, that we understand now better than we did before, the necessity of scientific and literary teaching?—I do not think the mass of the people will ever know what higher education means.

6759. Could you not trust the development of that notion or idea to a body such as you propose to create?—Not if it is not started in the right direction and has power to work in that direction.

6760. But if it were started with a view to, as the ultimate object, absorption you would approve of it?—I should feel very doubtful about it indeed.

6761. You think that such a process could not begin otherwise than with absorption. It must begin with absorption?—That is my strong idea. For instance, I should say that for the central institution I do not think it would be at all desirable that we should join under those conditions.

6762. But is not the greatest objection to such a scheme as that of the Gresham University, that if it were carried out you would include in your combination bodies, which are not quite competent to teach along with bodies which are? Is not that one of the strongest objections?—That is one; but I think a much stronger objection is that there is an examination body which stands above the different professors, which stands above the teaching, and which must always depress teaching to the lowest standard in the different places.

6763. If professors were efficiently represented that would be obviated, would it not?—I should doubt whether that would be possible.

6764. Supposing the four bodies to be co-ordinated, were the central institution, the science schools, University College, and King's College, under those circumstances, would you still think that a process of consolidation would be objectionable?—Yes, for the central institution most certainly. The central institution would simply cease to exist and lose all its character if it were joined with others under those conditions. It would have a kind of insignificant representation compared with the others. We have four professors, and the others have I do not know how many. The place would simply go to the wall. We should have to work under the control of some outsiders and not be free to develop ourselves.

6765. But your interests and those of the science schools are closely allied, are they not?—I do not know. We have nothing to do with each other at present.

6766. Do you not overlap each other in your work at all?—No. One is pure science, and the other is applied technical.

6767. You are acquainted with the teaching of physics in London?—Yes.

6768. What do you think as to the actual teaching of physics in London, as compared with the teaching in Germany?—Well, it is all of a very elementary kind. The higher teaching does not exist anywhere, such as Quincke carries on with his laboratories, and teaching, such as is carried out in the Helmholtz laboratories. There is nothing of that kind in London.

O. Henrici, Esq., Ph.D., LL.D., F.R.S.

1 July 1892.

6769. And you think the difficulty is not in the elementary subjects but in the higher teaching?—The higher teaching. The elementary must be reformed in order to get the higher into working order.

6770. You do not think that in the science schools there is enough of the higher teaching of the subject?—I do not think there is much really higher teaching—teaching to make research.

6771. It is quite clear that your main object as regards improving teaching, is to improve the higher teaching and not the elementary?—I will not say that the elementary also.

6772. You think there are as great defects with reference to the elementary as with reference to the higher teaching?—I should not say that there is as great a defect, but I mean they should not be separated, and the elementary will be improved by having the higher attached to it.

6773. (*Mr. Anstie.*) There is an important suggestion made by Professor Burdon Sanderson which I should like to follow out a little further. I understand you to say that, even assuming the state of things, which Professor Burdon Sanderson has suggested, of a standing commission for some time, empowered to adjust the relations of the various schools, you would still not be willing to accept anything short of the professorial scheme, which you have laid before the Commissioners?—Yes.

6774. And one reason, I think, why you said that was because you said the central institution, in which you were deeply interested, would have no adequate position, but would be lost and merged in a higher organisation?—There would be danger in that.

6775. I want to put a suggestion to you of this kind. Suppose that in any constitution of a new University there were an adequate division of subjects, and that in each subject the professors and the institutions which represented and were answerable for that subject, were properly represented, and that that combined representation of professors and resources had substantially the regulation of the teaching within the limits of that subject, would you then see so great an objection to the course suggested by Professor Burdon Sanderson?—Well, I do not see where those guarantees are to come from.

6776. I am suggesting that they should exist in the constitution of the new body by some such regulation as this, that a committee or a separate body—call it by what name you like—should have a practical regulation of the studies within its own department, and that that body should consist of the combined elements, (which, I think, to some extent you have already admitted,) the teaching staff and those who provide the resources for the teaching staff. Would that be an impossible solution?—I must say that I cannot quite see the bearing and the working of your scheme in detail.

6777. Then let me put it in this way. Supposing there was a certain number, we will say five professors, appointed to represent, perhaps I may call them, the applied sciences. Would that be a fair term to use? I want to use a term which would meet the case of your institution?—Yes, engineering, perhaps.

6778. That is near enough for our present purpose at any rate?—Yes.

6779. Supposing you had a committee or a body composed of a representation, say of five, or a larger number if you like, of the teachers in those subjects in the metropolis, and also composed of a certain number of persons, say of an equal number of persons, representing the institutions which provide the pecuniary resources with which those teachers work, would not that give you that kind of independent consideration and due regard to your special subject which you desire, assuming always that that committee had, practically and within wide limits, unfettered control?—It would not give us as much freedom as we have at present.

6780. But excuse me one moment, the freedom which you have at present I think you enjoy by virtue entirely of the goodwill of the corporations who unite to furnish the funds?—Yes.

6781. You are entirely dependent upon them?—Yes.

6782. If the force of the educational impulse slackened that is to say, if the goodwill relaxed you might be left absolutely destitute of any resources?—That is theoretically possible, practically I doubt it.

6783. Well that is a point of view which of course difference of opinion might exist upon?—Yes.

6784. At any rate what I am suggesting is that in exchange for this practical independence which you enjoy, but which really is dependence upon other persons' goodwill there should be an assured position given to such an institution as yours, subject to some lessening of the absolute autocratic or autonomic power which you at present enjoy as professors. May there not be some advantage in union with the University?—Yes, if the University has such a staff as can carry it out.

6785. Assuming the University should be constituted in that sort of way you would not feel any radical objection to it, although you might prefer your own scheme?—I do not quite see this in your scheme whether you mean that the central institution should be ruled in this way or the whole education in the direction of applied sciences in the University.

6786. I mean that the whole of the applied sciences in the University should be brought within one jurisdiction?—That they should form one school?

6787. Yes, that they should form one school, and that the school should be practically for ordinary purposes independent, and conduct the regulation of the education which it was responsible for, by its own determination?—That is to say, all the different schools which exist in this direction would be absorbed into one.

6788. I do not say absorbed, but I would put it thus; that the whole conduct and direction of the education which falls within that class should be under the direction of those who were, in an intellectual sense, responsible for the teaching, and in a pecuniary sense responsible for provision for the teaching?—Unless they are really absorbed into one, I do not see that that would answer.

6789. But I am supposing that they are in that sense, for the purpose of the general teaching of the University, absorbed into one, although they may retain control of the individual funds?—I do not think that would work.

6790. Although it would not fully answer your demands and desires, would not that, at any rate, have a considerable advantage in itself? Would not the bringing together of the professors belonging to the various schools of what for the present purpose we are calling applied science, and the bringing together of those who hold the funds charged with the maintenance, or applicable to the maintenance, of that branch of learning—would not the bringing of those together into one body, and trusting them with the practical control of education in that branch have a distinct advantage?—I do not think so.

6791. No advantage at all you think?—No, not unless the funds are really made into one.

6792. Does your objection really stand upon this, that no advantage can be gained unless the most absolutely perfect system is adopted?—No, not at all.

6793. Then if we allow that an advantage may be gained, although the most theoretically perfect system is not adopted, do you not think that under such a scheme as I have indicated an advantage would be gained by science?—No, I do not.

6794. Not at all?—Not sufficient to——

6795. My question was whether any advantage at all would be gained. You say, I know, that it is not sufficient to balance what you calculate to be your chances in the future, but we must all be governed in our estimation of the chances of the future by our own judgment of the probabilities. You seem to admit now that there would be some advantage gained though not enough to compensate for what in your judgment are the chances of the future. May I take it that that is the position of things?—I should think the advantages would indeed be very small, very small indeed. "Never" is a very awkward word. I should not like to say that offhand without entering into the details of the scheme, but, as far as I can judge at present, I believe the advantage would be very trifling indeed.

6796. May I ask whether you have at any time considered any scheme based upon the lines I have indicated to you now?—No.

6797. (*Professor Ramsay.*) One question with regard to the German Universities. Have they Boards of Studies as well as Faculties?—No.

6798. The whole Faculty serves as a Board of Studies?—Yes.

6799. That is to say the ordinary professors alone?—Yes.

6800. The extraordinary professors are not upon the Faculties, are they?—They are not on the Faculty. How far they are sometimes consulted, I cannot say. That may vary from place to place, but they have no regular right on the Faculty to the best of my knowledge.

6801. Does the Faculty lay down the course of studies for each curriculum inside the University?—There is not a curriculum.

6802. Does it recommend a course of study for different classes of students?—No, there is far greater freedom than there is here.

6803. Does it prescribe the length of each professor's course?—No.

6804. Is a professor allowed to give 100 lectures or 10 lectures a year, as he chooses?—To a great extent. They take care that the most important subjects are fully represented, and they arrange among themselves how they shall be represented.

6805. Does the Faculty exercise any disciplinary power over a professor?—I believe that is very slight.

6806. If a professor were to go outside his subject, and entrench upon a subject which belonged properly to a colleague, would that be taken notice of by the Faculty?—I believe it would.

6807. Can a professor belong to more than one Faculty?—I should fancy he could, but I do not know whether that ever does take place. I could not remember a single case.

6808. The Faculties, I think, are philosophy, theology, law, medicine, and science?—Science, I believe, has been introduced in modern times in one or two Universities, but as a rule there are only, in the old Universities, divinity, law, medicine, and then all the rest included in the philosophical Faculty.

6809. Then in the philosophical Faculty are there no pure scientific subjects?—Certainly. The whole of science is included in that.

6810. Then some of those scientific subjects are included in the Faculty of medicine?—Yes.

6811. Then does it not occur to you that there are professorships which are in more Faculties than one?—I believe that as a rule the professor of physiology, for instance, belongs to the medical Faculty only.

6812. And is that the principle, you think?—Yes.

6813. Would it be thought an inconvenience and an objection, as has been represented to us by a witness, that a professor should belong to more than one Faculty?—I do not see that it should, but practically I do not think it exists in Germany in that form. I do not see why it should not be here.

6814. The Faculties are regulated with regard to the subjects included for the degree?—No.

6815. Or is it upon a quasi-theoretical principle?—They have been historically developed. Formerly the University included everything. Then it was found convenient to separate a branch off, first divinity, then law, then medicine; in modern times in one or two places I believe science, what is in England called science; that means what in England comes to natural science. Then the rest is always left together, which is, of course, a most heterogeneous mass of subjects.

6816. Philosophy?—Yes.

6817. Do I understand that there is no superior body to the Faculties which comprehends and includes them all?—Yes, there is a Senate.

6818. Did you state what the powers of the Senate were?—I am not sure. They have only a general superintendence, not for the processes of the different subjects but the general interests of the University, the general discipline of such questions.

6819. They cannot control the decision of a Faculty inside its own limits?—I cannot say what their legal power there is.

6820. Do they manage finances? Have they funds?—Most of the funds are in the hands of the Government. The funds over which the Senate has absolute control, I believe, are very limited indeed, if there are any.

6821. Then whom do you look upon as the real supreme local authority of the University?—The local authority of the University is the Senate, with the Rector at its head.

6822. He is the president of the Senate?—Yes.

6823. And the Rector is usually appointed by the Government?—That is different in different cases. I do not know about the smaller Prussian Universities. He is appointed for life by the Government at Bonn, for instance. At other Universities where there is a Rector appointed it goes by rotation, but the Government always has to approve of the election by the Senate. I believe the Senate proposes. That is elected for two years or one year. In some places, in Baden, at Heidelberg, the Grand Duke is the Rector. Then there is a pro-Rector elected from among the professors.

6824. Is the Rector responsible to the Minister of Public Instruction?—Certainly.

6825. Are his doings likely to be overruled by him?—Yes.

6826. He can put his veto upon any act of the Senate or of the Faculty, can he?—I should imagine he could absolutely.

The witness withdrew.

Adjourned to Monday next at 12 o'clock.

Thirteenth Day.

Monday, 4th July 1892.

PRESENT:

THE LORD REAY, G.C.S.I., IN THE CHAIR.

Professor H. SIDGWICK, Litt.D.
RALPH C. PALMER, Esq., M.A.

JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

M. AUGUSTE COUVREUR examined.

M. A. Couvreur.
4 July 1892.

6827. (*Lord Reay.*) At one time you were Vice-President of the Belgian Chamber of Representatives?—Yes.

6828. You have also been President of Boards of Examiners?—During three years I presided at Commissions of Examinations for our masters of secondary education.

6829. The number of Universities in Belgium is four, I believe?—Yes, four—two State Universities and two private Universities—free Universities. One, framed in 1834 by the bishops, is a Catholic University, the other one was started in the same year by the chiefs of the Liberal party.

6830. Louvain is the Catholic University?—Yes, Louvain is the Catholic University and Brussels is the Liberal one.

6831. The other Universities are?—Ghent and Liege, both State Universities.

6832. The population of Belgium is six millions?—Six millions, more or less.

6833. There are four Universities for six millions?—Yes.

6834. What number of Faculties are there in each University?—We have four Faculties generally: Philosophy, Law, Science, and Medicine. In Louvain there is a Faculty of Theology. Then we have special schools annexed to each University; schools of engineering; schools for mining purposes and manufactories. At Louvain they have a school of agriculture; in Brussels we have a polytechnic school annexed to the University. The professors of the other Faculties give lessons in these schools combined with the University.

6835. Could you indicate to the Commission the distinctive character of each University?—There may be more or less differences in the philosophical doctrines in the different Universities, but otherwise for the other Faculties the instruction is nearly the same in all the Universities. There are greater differences in the special schools which are annexed to the different Universities. In Liege it is a school more for mining purposes; in Ghent a school more for engineering purposes and the construction of roads and ways; in Brussels we have the polytechnic, which combines mining and ways. Otherwise I should not say that there is a great difference between our Universities in the system of working, because they are all controlled by the examinations.

6836. Is there not a fifth Faculty at the University of Brussels?—It is not a Faculty in the strict sense of the word, as there is no president nor secretary. The lessons are given by the professors of the other Faculties. It was started in 1889, and is called *L'école Sociale des Sciences*. The object of this school is the study of questions which are more or less connected with social or political matters, because these matters are not taught by the *Faculté de Droit*. I am informed that the University of Louvain has also created a school of social and political science. The title of *Docteur en Sciences Sociales Politiques* will only be conferred upon doctors of law who have been in possession of the latter grade for at least a year. The conditions attached to the doctorate are two years' attendance at the lectures, the passing of an examination, and the writing of a treatise bearing upon the instruction received. The subjects of the first year's course are the study of public law in England and the United States, the labour legislation in different countries, a course of parliamentary history, and the study of special questions concerning commercial and international law. For the second year are reserved diplomatic history, the examination of industrial organisation, and of questions concerning civil law and the colonial systems. The programme will be subject, however, to variations, and while taking cognisance of essential topics will allow for examination upon special questions to accustom the pupils to individual research.

6837. And the object of that school is to educate public men?—Yes, to educate public men, and to increase the scientific character of our Universities. The private Universities show more or less the way to the State Universities.

6838. They are pioneers?—Yes. We reproach our State Universities with being too professional, and not scientific enough.

6839. Has this school the right of conferring degrees?—Yes; it confers a degree of *Docteur en Sciences Sociales* only, all the courses are not yet organised. We have not found the professors for it.

6840. Now with regard to the government of the Universities. The government of the State Universities is, of course, different from that of the Universities of Louvain and Brussels?—Yes.

6841. Will you describe the government of the State Universities?—The University is administered by a Senate called *Conseil Académiques*, which consists of a certain number of professors—the oldest professors. Their President is the rector of the University, and they have a pro-rector. Besides that there is what we call an *Administrateur Inspecteur*. He is the delegate of the Government to see that all things conform to the law. He is the intermediate person between the Senate of the University and the Minister. The Minister of the Interior is also Minister of Public Instruction. Some years ago we had a Special Minister of Public Instruction, it was the creation of the Liberal party; that minister was suppressed some years ago when the Catholic party came in office again. The Minister of the Interior and of Public Instruction has a high hand with regard to the State Universities. As regards Louvain, there is also a Senate named by the bishops. The bishops once a year meet and name the Senate of the University of Louvain, the rector, and the pro-rector. The pro-rector in Louvain is named for his life-time. In Brussels a *Conseil d'Administration*, which is composed of the founders of the University, or their successors is at the head of the institution. The town of Brussels give subsidies to the University. It gives some 100,000 francs a year to the four Faculties, and 25,000 francs to the *École polytechnique*, besides the free use of the buildings. The burgomaster of Brussels is president of the Council. The other members, named by the Council, are (1) the *échevin* of public instruction for the town of Brussels; (2) a representative of the county council (*Conseil provincial*); (3) of the town council; (4) of the *Conseil* des hospices; (5) of permanent members chosen by the Council either amongst the professors or amongst outsiders; (6) of five delegates of the Faculty elected by the professors; (7) of the rector; and (8) pro-rector also elected by the

professors; (9) of the administration (*Administrateur inspecteur*) elected by the Council; and finally (10) of a member elected by *l'Union des Étudiants*, a society which gives subsidies to poor students.

6842. The free Universities are not corporations?—They have no incorporated rights; their revenue consists solely of the gifts of the public, subsidies given by the town of Brussels and the Provincial Council; the fees of the students, and sums that may be given to trustees. But these trustees may put the money in their pockets, because we have no organisation. We want an organisation, but until now the Liberal party has been strongly opposed to allow incorporated rights to be conceded to scientific bodies. They fear *droit de main morte*. In Brussels we try to manage things as well as possible. A few private people are very generous to our Universities; recently a large manufacturer, M. Solway, founded at his own expense two institutions, one for the study of physic and chemistry, another for the study of biology. These institutes will cost him more than 20,000*l*. for the buildings, with a yearly budget of nearly 2,000*l*. Another gentleman, professor at the University, son of a wealthy banker, M. Leo Errera, founded also with some friends, an institute for the study of botanies. M. Montefiore, a Senator, showed the way to these liberalities. He created, at Liège, an institute for the study of electricity, although the University of Liège, being a State University, is well provided with special colleges of all kind for the study of chemistry, physics, botanic, physiology, as well organised as the best institutes in Germany. The State gave the building, M. Montefiore paid for the instruments, and provided for the salaries of the professors.

To return to the organisation of the Brussels University, I forgot to tell that besides the *Conseil d'Administration*, manager of the institution, there exists another body called the *Conseil Académique*. This Council is composed of the rector, five presidents, and five delegates of the four Faculties, and the Polytechnical School. The *Conseil Académique* prepares and regulates the studies and courses of the University; it gives its advice upon questions of education to the *Conseil d'Administration*, which may ratify or refuse its consent to the proposals of the *Conseil Académique*.

6843. The Academic Council is entirely composed of professors?—Yes, it is entirely composed of professors.

6844. And in the case of the Administration Council there are outsiders?—Yes, patrons of the University.

6845. And some professors also?—Yes, and some professors also partly chosen by the *Conseil d'Administration* and partly elected by the faculties.

6846. (*Professor Sidgwick.*) If I understood you, the professorial element has no vote?—No, they have only a right of proposing, and a right of advising.

6847. Have the professors in the Administration Council a vote?—Certainly, those amongst the professors who are members of that Council have the same rights as the other members. This *Conseil d'Administration* elects the *Administrateur Inspecteur*, and he is the man who has the direction of the University. Generally it is a Liberal of high standing. During a long series of years it was the founder of the University and president of our House, who held the situation, after him it was a senator, his political lieutenant, but now the Council has appointed M. Grant, a Minister of Finance, in the last Liberal Cabinet.

6848. (*Lord Reay.*) He holds about the same position as the *Administrateur* at the State Universities?—He is the intermediary between the *Conseil d'Administration* and the different Faculties. He is named by the *Conseil d'Administration*, whereas the rector of the University is named by the professors.

6849. And he holds his office for how long?—The *Administrateur* is named for his lifetime. The rector for two years only. He is named by the professors after a proposal made by the different Faculties, and there is a rule amongst the Faculties to have each in turn as rector one of their professors. The pro-rector is always the rector of the year before. The programmes of the University and the regulations of the examinations are settled first by the Faculties, then by the *Conseil Académique*.

6850. The Senate, in fact?—Yes, but their decisions are controlled by the *Conseil d'Administration* in Brussels. In the State Universities this is done by the Minister.

6851. I suppose the *Conseil d'Administration* very seldom interferes?—It very seldom interferes. Professional matters are proposed by the professors and ratified by the *Conseil d'Administration*. It does not interfere with educational and professional matters, but it has the right to refuse its assent. The different Faculties propose the candidates to the professorships, but it is the *Conseil d'Administration* only which names. It disposes of the money. The Faculties are always bound to go to the *Conseil d'Administration* for any improvement. There is only one exception, which is the nomination of their chairman and secretary. Each Faculty has a board.

6852. Who appoints the board?—The Faculty itself. Besides that, in matters of examination and the theses which are presented, their decision is sovereign, though, of course, there is always a right of appeal against their decision. Two years ago a thesis was presented to the Faculty of Philosophy, and as it was not according to the dominant philosophical instruction, that thesis was not agreed to. The young student who had proposed had a right of appeal to the *Conseil d'Administration*, but the *Conseil d'Administration* declared himself incompetent. There it was the majority of the Faculty who decided that this thesis could not be admitted to be discussed. These theses are presented to get the right of having a title at the University, and to be entitled to become professor of the University. I suppose you want to have some information about how the professors are named at our Universities. At the State Universities the Government is bound by no rules at all. It may call to a professorship whom it likes. Very recently at Liège we lost M. de Laveleye, and the different courses which he gave were distributed among different people. A young lawyer, who had no academic title, but who is a man of a real merit, was named professor at the same time as M. Mahaim, M. de Laveleye's preferred pupil, and who had a University title.

6853. What is an *Agrégé*?—It is an honorary title given in Brussels to those who present a *thesis*.

6854. But an *Agrégé* may be considered a candidate for a vacant professorship?—He may be considered a candidate for a vacant course, and if he gets a nomination he is called *chargé de cours*.

6855. Is a *chargé de cours* above or below an *Agrégé*?—He is above. *Agrégé* is an honorific.

6856. An *Agrégé* may become a *chargé de cours*?—Yes.

6857. And may he become a *privat-docent*?—No. We have no *privat-docent*. An *Agrégé* has not the right of giving lectures in the University if he is not called to do so.

6858. But as *chargé de cours* he has?—Yes, as *chargé de cours* he has. He gives those lectures which are assigned to him, and he gets a salary.

6859. Are there *chargés de cours* in all the Universities?—In the State Universities the student takes a doctor degree in a special science. However, the young barrister that I have been speaking of had no academical title, but he was given the right of giving lectures as *chargé de cours*.

6860. Without having presented a thesis?—Yes, but he had written a most valuable book.

6861. That was quite exceptional, was it not?—No, it is the right of the Government. He may call to a professorship whom he likes. In Brussels there are more formalities. Every student when he has finished his studies, may present a thesis and defend it in public. If he succeeds he gets the title of doctor in the science to which he has devoted himself. The *Conseil d'Administration* may then give him the title of *Agrégé* (if the Faculty to which he belongs makes a proposition to that effect) and grant him a chair. He becomes then *chargé de cours*. But the Council is not bound by these rules. It may call to a chair a noted scientific man and name him *Agrégé* or *Professeur extraordinaire*, and, after a certain time, *Professeur ordinaire*. Well-known men may jump over the intermediate stage, and become *Professeur ordinaire* at once. Political influences are very strong with regard to our Universities, and the parties, more or less, protect the interests of their own people. Recently we had a very clever man for science; he was a priest; he merited certainly a professorship, but being a priest he could not get it at the Brussels University, which is a Liberal University. He was of a very independent mind, and

M. A. Couvreur.
4 July 1892.

it was difficult to get him a professorship at Louvain for that reason. The State made him professor at Ghent. It was a very good nomination.

6862. Are the professors at the State Universities and the Brussels University equally free in their teaching?—The Brussels professors, I think, are freer in their teaching than the State professors, and freer certainly than the professors at Louvain, who are bound to respect certain traditions and dogmas of the Church. Some forty years ago M. Huet, a Frenchman, a catholic with socialistic tendency, was professor of Philosophy at Ghent. After the revolution of 1848 complaints were made against his teaching. He was not dismissed but induced to retire on a handsome pension. One of his successors went a long way in the direction of freethought. There was an interpellation and a very strong debate in the House because the Minister, who belonged to the Catholic party, was a liberal-minded man, and refused to limit the freedom of this professor. In another case also in Ghent, a professor of Philosophy, whose teaching was considered as too advanced, was removed to Liege, and given a professorship of classical philology. From time to time we may have these difficulties in our State Universities, but they present themselves only in the Philosophical Faculty. In all the other branches professors are quite free to teach what they like. Now if we had in our State Universities a Socialist, perhaps there might be some difficulty. In Brussels the professors are much freer. Now we have the two tendencies represented amongst our professors; one is a professor of notoriously socialistic tendencies, the other is more Conservative, but the *Conseil d'Administration* does not interfere with their teaching.

6863. Who settles the programme of lectures at the State Universities?—The law.

6864. The minister?—The law provides what are the courses to be given at the State Universities, and the details are left to the minister and the Faculties.

6865. And naturally the free Universities of Louvain and Brussels must be more or less guided by the regulations imposed on the State Universities?—They are more or less guided by the law and by the examinations.

6866. Is there an entrance examination?—No; there was, but it was suppressed, and the Universities were invaded by very young people. They left their private studies, or middle class schools, to come to the University unprepared, and the standard of the instruction in our Universities suffered much by this system. Students could enter the University without knowing Latin and Greek. This allowed girls to be admitted specially in the scientific branches. Recently the law has been changed, the students are obliged to present a certificate of attendance from a school in which a certain number of courses are organised. They present these certificates before a kind of jury which deals with the certificates allowing them to go to the University.

6867. A jury which does not examine?—It is a commission of registration and does not examine the student but his certificate. If the student has no certificate he is allowed to pass an examination before a special jury.

6868. How is this jury appointed?—By the State.

6869. Do they examine those students who wish to attend the free Universities as well as the State Universities?—Yes; but I think the free Universities may allow him to come in without examination.

6870. At Brussels do they require him to be examined?—They may do if they have any doubt about his qualifications. But the question is of importance only for girls who want to take their degrees. At Brussels, to allow the girls to follow the studies of the University courses of Latin and Greek have been added to the program of a middle class girls' school. Parliament would not allow Latin and Greek to be struck out from the matters which a lawyer or a doctor of medicine is obliged to know when he passes his examination as doctor or barrister. There was a great discussion about this in Parliament, but those who were in favour of Greek and Latin had the majority.

6871. Then you admit the close connexion there is between efficient University teaching and the efficient organisation of secondary education?—Certainly.

6872. After the student has reached the University does he at once enter the Faculties of Law or Medicine?—No, the law student is obliged to pass two examinations in the Faculty of Philosophy; the medical student at least one year in the Faculty of Science. The law studies take at least five years; two years in the Faculty of Philosophy and three or four years in the Faculty of Law. It is a great drawback if people enter into a professional career too young.

6873. After he enters his own Faculty he must pass preliminary examinations before he is admitted to the degree examination?—He has to pass in the different Faculties, either philosophy on the one side or science on the other, and medicine or law, a certain number of examinations before he takes his last degree, his diploma, as we call it.

6874. And the degree examination in each Faculty is the same for all the students, is it? You do not, for instance, in the Faculty of Arts make a difference between a man who takes his degree in modern literature and a man who takes his degree in classical literature?—The examinations are the same. If he goes to law or medicine he takes a degree as a candidate. If he wants to become a doctor of philosophy he takes a special degree in that Faculty, and so in science also.

6875. That degree in science is the same for all the undergraduates?—Yes.

6876. It is the same examination?—The examinations are the same for the undergraduates in philosophy or science who have to take their degrees (candidature en philosophie ou en sciénce) before they enter law or medicine. The bifurcation only commences for the doctorate. There the examinations are different according to the branches for which the students are prepared, either philosophy, or philology, or history, and in science for chemistry, mineralogy, botanic, physical, or mathematical sciences, &c.

6877. Might I ask now who confers the degrees. Are they conferred by the Faculty, after an examination before the Faculty, or are they conferred after an examination before the professors of the Faculty and outsiders?—No; the diplomas are conferred by the Faculties, the examination being passed before the professors.

6878. And no objection has been urged against professors examining their own pupils?—Certainly. I am in favour of the pupils being examined—*interrogé*—by their professors, the control of the examinations remaining in the hands of outsiders. We had some years ago very interesting debates upon the creation of what we called a States examination, conferring a degree by persons named by the State and a special jury having control over the different Universities — what the Germans call *Staats examen*. Now we are exposed to the danger of having these degrees conferred too easily by the professors of the Universities, and the State having no control over the proceedings of the professors and specially over the professors of the free Universities. As soon as a man has the degree, let us say, of Doctor of Laws, he may become a barrister, and it is then possible for him to be named a judge. The State want a special control. We had that control in former times for our technical instruction. The engineers could be made only in the two Universities of Ghent and Liege, and could get their nomination from the State only after having passed their examination before a jury named by the Government. Brussels and Louvain both complained of that state of things. Now through the majority of the new Conservative Government they have the right of giving diplomas in the special matters of the Polytechnic Institution and the School of Art and Manufactures; the minister no longer has a right to give nominations only to the pupils of the special schools of Ghent and Liege. That was the principle of the Liberal Government, but it has been changed now, and students of the Polytechnical school in Brussels and the *école des Arts* at Louvain may compete with the students of the State Universities, and may be named to public situations, even if they have only received their degree from the hands of their own professors in the free Universities.

6879. You would not exclude the examination of a student by his own professor?—No, certainly not, because I think that the professor is the best examiner, but the examination (this is my personal opinion) ought to be controlled by some person who is an outsider. I was for three years chairman of a board of examiners. The government generally gave the Chair to a man who was not a professor himself. The jury was composed of professors of the schools. At that time we had special schools for training our teachers for our middle class schools—teachers of Greek, teachers

of Latin, teachers of history, geography, and so on. Under the Liberal Government at that time these teachers were prepared in special schools *écoles normales* and these schools were attached to the two State Universities at Liege and Ghent. There were two boards of examiners, and I was chairman of one of those boards. More than once while in the Chair I was struck by this: the professors were very good examiners, but they were not always very good judges of the attainments of the young students, and in my opinion some of the examiners laid too much stress upon memory, and too little stress upon the real reasoning power and the intelligence of the student. They went too much into details, which of course a man ought to know, but which it is more important that he should know where to find them if he wants them.

6880. Therefore, I may take it that you are of opinion that the professor is, as a rule, the best examiner?—Well, he is the best examiner, but may be a bad judge.

6881. But that to correct any eccentricities which he may have, some outsider should be present?—Yes, to correct the evils of an examination which may be carried by passion or by shortsightedness.

6882. And on partial lines?—Yes.

6883. You are prepared, therefore, at the examinations for a degree, at the University of Brussels, to admit an outsider?—Well, I am not a member of the University, and I think the professors would not be very pleased to have an outsider to control their verdict.

6884. But you think in theory it would be desirable?—I think it would be desirable in theory. I think an examination ought to be considered as a lawsuit, where the judge is not at the same time the counsel or advocate who put the questions.

6885. Would you explain to the Commission the organisation of the jury you had, which I understand was called a mixed jury?—We had great difficulty with our constitutional prescription of liberty of instruction. At first the State wanted to have some kind of guarantee. We had a jury central, and all the people who wanted to take their degrees were obliged to go before the jury central. This jury central was not named by the Government, but selected by Parliament. Of course the proposals were made by the Government, and generally professors of the different Universities, free Universities and State Universities, were called as members of this jury. An outsider might be chairman, but it was the exception rather than the rule. I myself was examined as a student of Ghent before this jury, and I think I had a right to complain about the mode in which the examination was carried on. I passed only one examination before this jury as a student of the Faculty of Philosophy. We had at that time a very meritorious teacher of philosophy in Ghent, and this professor of philosophy, although he was a Catholic, was opposed to the philosophy taught at Louvain. The professor of philosophy at Louvain was chairman of the jury, and all that he did was to show that his philosophy was superior to the philosophy of his colleague in Ghent. My professor was not even allowed to be a member of the jury, because he had not been elected by the majority of Parliament. There being many complaints as to the partiality of the nominations another combination was tried. The government named combined juries of professors of the free Universities and professors of the State Universities. We called them *mixed* juries. There another evil showed itself, one set of professors agreeing to let some young men pass if the other professors were not too stern with other young men. That system was done away with also, and the leader of the Liberal party, Mr. Frere Orban, wanted to suppress all examinations and give professorial freedom. That was not agreed to. Now we have come to the system which has been in use the last few years. The student who wants to take his diploma is examined only by his own professors. The State has no guarantee. In Belgium anybody may start a University if he has the means of doing so. What constitutes a University? The law says that the Universities must have, at least, four Faculties and have a certain number of courses or lectures, but nobody controls the value of these lectures nor the value of the examinations. The only guarantee given to the State is that the diplomas must be registered by a special body, *la Commission d'intérinement*. This Commission has only to see if the University which has given the diploma is really a University, and if all the rules laid down for the examination have been observed. I must say, however, that till now we have no reason for complaining of our free Universities. The competition between them and the State Universities has been sufficient to induce them not to give the degrees too easily. But we complain that the instruction given to the students is too professional; the science is too much neglected.

6886. It is not sufficiently academic?—It is not academical enough, and we are trying to change that. We want to have a *College de France*, or *une école des hautes études* without examinations nor professional aim; but till now nothing has been done beyond a reorganisation of the doctorships in Philosophy and Science.

6887. Therefore, your complaint is not that the examinations are too low, but that the method of teaching is not scientific enough?—It is an examination which is too professional, and obliges even the professors to go in that direction. It is not the fault of the professors.

6888. But the professional examination is conducted by the professors themselves?—Yes; but by the force of circumstances it is in fact more a professional examination than a scientific examination.

6889. And that is caused by the fact that the students come to the University in order to get into a profession after they leave it?—As soon as possible.

6890. But there is no competition between the State Universities and the free Universities to give cheap degrees, and thereby to attract students?—No, happily we have not seen that. On the contrary, I think the competition between our State Universities and the free Universities acts in a beneficial way upon the distribution of science.

6891. The competition would be more to secure the best teaching power in the country, the best professor?—Certainly.

6892. Are the salaries of professors the same, or is there an advantage in the State Universities?—There are great advantages in the State Universities.

6893. Therefore, as a rule, the State Universities get the best professors?—That would be the fact if party politics did not meddle with it. At Louvain the bishops have had excellent professors, and so we have at Brussels, even on low salaries.

6894. Are you in favour of the University giving academic degrees for academic purposes only, and the State afterwards taking its own guarantee for professional qualification?—That was the view I supported in the House.

6895. But you cannot say that, taking the University examination from the professional point of view, it is not on a high level?—It might be on a high level if it were not for the students themselves and their parents being anxious to have their sons earning money as soon as possible.

6896. But if the professors did not feel that pressure from the parents, their tendency would be to give the higher teaching?—Yes, and some of them in the public Universities as well as in the private Universities have spontaneously introduced the German system of gathering the best among the students to show how they are able to prepare themselves, not as professional men, but as men who like to study science for the merit of science itself. We call these institutions *séminaires*.

6897. In the seminaries advanced teaching is given?—In the seminaries the professors induce the students to work by themselves.

6898. Do they get a certificate of attendance?—No.

6899. It has no influence on their degrees?—Well, it may have, but it all depends upon the composition of the jury. The jury may be composed of professors who want to have young men whose memories are well developed. Of course the men who study in special directions may not come out very well at the examinations. It all depends upon the standpoint from which he is judged. Some professors may find fault with candidates who have views of their own, and prefer students who echo their teaching like parrots. It is for that reason that I insist so much on having an outsider in the Chair.

6900. Of course you do not apply that to all professors?—No, certainly not.

6901. There are professors who examine with regard to method rather than memory?—Certainly; but we have all kinds of professors.

6902. You have no *privat docenten*?—No.

M. A. Couvreur.

4 July 1892.

6903. Are the students required to follow the lectures?—They may do so if they like. Of course, as they have to pass their examination before the professors they have a great interest in following all the lectures. As a rule they follow them.

6904. And as a rule the professor who has taught them will be present when they are examined?—The juries are named by the faculties and are always composed of all the professors who have given the course, which form the subject of examination with a minimum of three professors.

6905. It is the exception for a student to be examined by professors who have not been his teachers, is it not?—It may happen, but exceptionally.

6906. Any professor of the Faculty may examine him?—No, only members of the jury.

6907. Therefore this might happen: in the Faculty of Science a student might have made his specialty chemistry; the Professor of Chemistry might not be present, and he might be examined by the Professor of Physics?—Yes, that might happen, but exceptionally, the Faculties and the professors arrange it themselves. They know who the students are.

6908. And as a rule they arrange that the teacher should be on the jury to examine his own student?—That the man who has taught should be on the jury.

6909. Therefore we may take it that public opinion in Belgium is rather in favour of a professor examining his own pupils?—Public opinion take very little interest in these questions.

6910. But the public opinion of those who are experts?—Yes; and the opinion of Parliament was in favour of this system.

6911. There is a question which you have partly answered, but which is of very great importance, with regard to secondary education. I understand that the teacher in secondary schools in Belgium has, as a rule, obtained a degree either in the Faculty of Philosophy, or in the Faculty of Science, at one of your Universities?—He must have a degree of Doctor in Philosophy or Doctor in Science taken at one of the Universities. —We have free education, and any man may open a middle class school and prepare for the University. In these private schools the teachers are named by the Council, or by the patron, or by the people who have started the school—by the Jesuits, if it is a school of that Order. Here there are no other guarantees than the interest of the schools in having good teachers. But in the schools of the State—because we have a State organisation for our middle class education—until four or five years ago no teacher could be named unless he had followed during a term of three or four years one of the schools called *Ecoles Normales* of which I spoke before. There he passed his examination before a special jury. This system has been changed recently by the Conservative majority. Now the Government has suppressed these schools, has suppressed their examinations and their diplomas, leaving to the Universities the task of preparing teachers for middle class schools. Louvain and Brussels as well as the State Universities have been obliged to modify their programmes in order to prepare these men as teachers, and now the State has a right to name teachers in middle class schools, coming from any of the Universities? Our middle class schools inspectors complain of this new system; they say that the teachers were better trained under the old system. But I must agree that it was a check put upon the liberty of instruction, but the new system is too recently applied to be judged.

6912. But as a matter of fact an advantage will always be given in the appointment of the teachers in the secondary schools to a man who has a degree?—Yes.

6913. And you are of opinion that the teacher in secondary schools should have a University degree?—Certainly. He must have a degree.

6914. Even now?—Even now, at least in public schools. If he has been trained outside a University, and has no University degree, he is obliged to go to the *Conseil supérieur de l'enseignement moyen* to have a dispensation than the minister can give him a chair in a public school. But as a rule he must have a University degree.

6915. Therefore the only difference is that whereas formerly he had the certificate of an Ecole Normale, now he has no longer the certificate of the special school, and he has only the University degree?—Quite so. In former times the doctors from the Universities had a right to compete with the people from the special schools, but in fact the Government only gave nominations to the pupils of the *Ecoles Normales*. The State inspectors took from the middle class schools the best pupils they could possibly lay hands on, gave them subsidies, and sent them to the special schools to be trained as teachers.

6916. And at the special schools they got degrees?—It was a kind of University degree, but they had more training. In these special schools, or one of them at least, Liege, they were boarders. They were not at Ghent. At Ghent they were free students, but at Liege they were boarders, and were more kept to their studies than ordinary students.

6917. But as a matter of fact they are not taught less than they were taught before?—No. They are less trained, perhaps.

6918. Less drilled?—Yes, less drilled.

6919. But they get the same teaching?—Yes.

6920. In addition to the doctors of medicine and the surgeons who have taken their degrees at the University, does the State recognise another class of practitioners who have not taken a degree at the University, who have been examined by outsiders?—No. We have no freedom of profession.

6921. Every doctor must have an University degree?—He must have a degree conferred by one or other of our Universities to be authorised to practise as a doctor.

6922. To practise medicine or surgery?—Yes. That was a difficulty in the case of our girls, who wanted to take their degrees as doctors. Where the admission to the Universities was free they could follow the lectures without knowing Latin or Greek. Since the law has been changed they are obliged to present a certificate of a middle class school where Latin and Greek is taught.

6923. Women are allowed to take degrees at your University now?—Certainly.

6924. At the State Universities as well?—Well up to now I do not think there have been any.

6925. Most of the women have been trained at the Free University of Brussels?—Most of them. However, M. Craseustes, who was inspector of the University of Liege, was strongly in favour of the admission of women to the University. During his lifetime some women were admitted to take their degree in science, to be able to practise as apothecaries.

6926. But in Brussels ——?—In Brussels women may take their degrees in all the Faculties. You asked me before if a doctor or lawyer was allowed to practise in Brussels without taking his degree. I said, no. There is an exception, however, if he has taken his degree at the University of Bologna in all the Faculties.

6927. Now with regard to hospitals, are they under the control of the Universities, or are they under Communal authority?—They are under Communal authority; special conventions being concluded between the University and the Governors of charitable institutions, over which the Municipality, has command. In Brussels those doctors who are allowed to have what we call a *clinique* in the hospitals are named upon a proposal of the governing bodies of the hospitals and of the University. It is the Council of the Municipality that names the doctors, who have a right to exercise in the hospitals.

6928. But the professors give their clinical courses in the hospitals?—Yes, they belong to the University, but they have no right to practise in the hospitals unless the Municipal Council calls them.

6929. Therefore the University in that respect is dependent upon the Communal Council?—Yes. At Ghent we have had often conflicts between the State University and the Council of the hospital.

6930. Then with regard to the special schools of civil engineering and the special schools of mining, do the students get degrees in the Faculty of Science?—No. The degrees and examinations are different, but many courses are common or given by the same professors.

6931. They are taught by the professors at the University?—Yes.

6932. And they are looked upon as students at the University?—Yes, but they are not allowed to follow the courses of the special schools before they get a certain number of scientific degrees.

6933. Therefore, there is a close connexion between the training for civil engineering and the University?—A very close connexion.

6934. You have not done what has been done in Germany, where the whole technical education is quite separate from the University?—No.

6935. You are in favour of the system of amalgamation?—I think it works well, because it gives the young men more than a professional knowledge. It enlarges their views.

6936. You are distinctly in favour, therefore, of the higher technical training and technical teaching being incorporated with the University?—Yes, there must be a different organisation.

6937. They must be subject to a stricter discipline?—Yes.

6938. The State Universities, of course, depend entirely upon the money allocated by the State?—Entirely.

6939. And the tendency has been always to increase the grant?—Well, yes. The leaders of the Liberal party wanted to grant as much money as possible, but as that would have obliged the free Universities to follow the movement, they were more or less hampered in their views. The last Minister of Public Instruction spent great sums, not merely in increasing the salaries of the professors of the State Universities, or in increasing the number of lectures, but also to endow these Universities with new laboratories; but even in the Liberal majority he encountered a certain resistance because Brussels could not follow from want of resources.

6940. Therefore, the result is that Parliament out of fairness to the free Universities, knowing that they have not at their disposal of the means which the State Universities have, is not as generous as it otherwise might be?—The parliamentary majorities, and specially the Conservative ones are very anxious to preserve the existence and interests of the private schools and the free Universities against the too strong competition of the State.

6941. (*Professor Sidgwick.*) There are a few questions I should like to ask, arising out of what you have told us. The first is, what exactly are the legal rights of the professor. First, as to whether a professor in a State University may be dismissed. Is that so?—Well, certainly.

6942. He has no legal rights?—He has the legal rights which belong to any functionary.

6943. Can a functionary in Belgium be dismissed without any appeal to a court of administration?—There is no court of administration, but a right of appeal to the law courts or to the Parliament if the rules concerning the dismissal of a functionary are transgressed. But the Government has many means of getting rid of a professor. He may change his attribution sent him from Ghent to Leige, and *vice versâ*, refuse him promotion, make him suffer in his income. Our State professors ought to be more independent. At Louvain the professors are in the hands of the bishops. Louvain lost Mr. Perine, professor of political economy, through a change in the attitude of the bishops. Brussels is more like a republic.

6944. Can you tell me the proportions of the administrative element and the professorial element in the *Conseil d'Administration*?—In Brussels last year upon 21 members the *Conseil* counted 11 professors. There is a tendency on the part of some professors to take into their hands the direction of the University against the *Conseil d'Administration.*

6945. As I understood you, there is a number of professors who are co-opted on to the *Conseil d'Administration*, and have votes like other people?—Yes.

6946. Is that a minority, or is it a majority of the whole?—I do not think these are rules. In fact, now the professors have a majority. But out of these 11 professors five are co-opted by the counsel, and five only are elected by the four faculties and the Polytechnical school.

6947. Then there is an important officer who is, I understood you, intermediate between the *Conseil d'Administration* and the Faculties?—Yes.

6948. He is not a professorial member?—No.

6949. Has he practically a good deal of power?—Well, yes, he has, and he has above all the moral power belonging to his high political situation in Brussels. The University was founded by party influences. It was a man of very high standing who founded this University, with some of his friends—doctors and lawyers. It was a very poor University when it began. Now it is a strong University, because they have good professors, and a great number of students, especially in medicine. But this man kept the whole thing in his hands. He was a great favourite with the students, and as long as he was there things went on all right. After his departure one of his lieutenants took the situation, and kept it too long. He became an old man, and there was more or less anarchy and division between the professors and the *Conseil d'Administration.* Now they have chosen this man, and I think he will succeed in establishing order and peace.

6950. If I understand you aright, you say that the *Conseil d'Administration* very rarely does interfere in the management of educational affairs?—Yes.

6951. Its concern is chiefly financial, I understand?—Yes; but also of preserving the spirit in which the University was founded; it is a creation of the Liberal party. The Radical party and the Socialistic party try to lay hands on the direction. The duty of the *Conseil d'Administration* is to keep the University free from all kinds of petty influences.

6952. Do they do that by overriding the proposals of the Council with regard to the Chairs?—They exercise their right with regard to the nomination of professors.

6953. Do the *Conseil d'Administration* practically overrule the proposals of the Faculty?—They may do so.

6954. But do they practically do so?—No, they do not.

6955. Supposing the *Conseil* found that the Radicals and Socialists were getting a majority, I suppose they would refuse their appointments?—They would only have an opportunity of doing it by a nomination.

6956. Has the *Conseil Academique* no function in appointments?—No, it is the *Conseil d'Administration*, because they have the money, and they pay. The candidates are proposed by the Faculty. Then the *Conseil d'Administration* has to give its consent.

6957. As I understand, in the free Universities the appointments of the professors and the *chargés de cours* is always made from the *agrégés*?—Generally.

6958. Are they bound to be so made?—No, they are not bound. Recently Mr. E. Reclus, the well known socialist, has been called to a chair of geography. He was proposed by the Faculté de Science and accepted by the *Conseil d'administration.*

6959. If I understand, the course of studies in each Faculty is framed by the Faculty, and may be altered?—Yes, it may be altered. The Faculty may alter the course of lectures and the course of examinations.

6960. And the whole curriculum is framed by the Faculty?—Yes, but according to the law.

6961. Does the law impose the number of years?—Yes, the law imposes a minimum of years between the admission to the University, the first and the last degree (candidate and doctor).

6962. For instance, when you said that the law studies took five years, you did not mean that this period was prescribed by law?—It is the law which says that no man can follow the studies up unless he gets a certain number of intermediate degrees.

6963. The law prescribes the number of degrees?—The law says, "You cannot go to a Faculty of Law "unless you are a candidate in philosophy," and it is the same for the doctors. It is the law that prescribes that.

6964. Does the University determine the number of subjects that the candidate has to study for these intermediate degrees? or is that provided by the law?—Yes, that is provided by the law. The only thing which the University can do is to say, "We will divide the examination." In former times to become a candidate in science or a candidate in philosophy you had to wait two years. Then they thought the material was too good, and therefore they have divided the examinations. That the Faculty have a right to do.

M. A. Couvreur.

4 July 1892.

The juries must sit twice a year in July and October to examine the young students.

6965. And may they reduce the amount that he has to learn, or is that prescribed by law?—That is also prescribed by law.

6966. But does the law lay down a syllabus in each department?—More or less.

6967. If the law only prescribes the subject, the amount may be reduced by limiting the syllabus?—Well, my opinion is and many professors complain that the law provides too much.

6968. Then the law controls it a good deal?—Yes, too much.

6969. How far do the students take the degree of doctor? Is that done to any great extent?—Only where the doctorship leads to a profession. Since the suppression of the *école* normaly certain number of young men take a degree as Doctor in Philosophy if they want to become teachers.

6970. At the University?—Either at the University or at secondary schools.

6971. May I ask how far there is within any one University any competition among the professors?—The Universities are not rich enough. As a rule there is no competition; to multiply the chair and we have no *privat docenten*. There may be from time to time competition for certain lectures, but that arises from party reasons or differences of doctrines between the professors. Such was the case in Lorrain, between Mr. Perin and Mr. Thompson both professors in the Faculty of Law. Each has its partisans among the students. Mr. Perin was obliged to leave. In Brussels the competition is more between the Faculty. In the Philosophical Faculty, the professor of philosophy, Mr. Tiberghun, is a spiritualist, whereas in the Faculty of Science the professor of philosophy is a positivist. The same man Mr. Hector Denis is professor of political economy in the Polytechnical School, and his lessons have a strong socialist character. In the Faculty of Science the professor belongs more or less to the old orthodox school. The students are bound to follow the lesson of the Faculty in which they have to take their degrees. In my opinion they ought to have a right to choose.

6972. Are the professors paid by fees?—Their salaries are fixed in Brussels by the *Conseil d'Administration*. These salaries are determined by the resources which the University dispose, and by the fees which the students pay to the University. As a rule the professor gets one per cent. a minimum for his salary, two per cent. the products of the examination, and three per cent. a share in the fees paid by the students if they leave a profit. The students have to pay for their examination.

6973. Has the professor any pecuniary inducement to draw a large class? Is he allowed to gain by it?—I think the *Conseil d'Administration* may increase his salary if it sees that he draws a great audience.

6974. So he has professional inducements to give good lectures?—He has; but it does not work well. The professors are induced, especially in our State Universities, to prevent competition, because it would lower their revenues. I think we should give the professors the highest salary possible in order to let the other considerations stand entirely apart. That is my private opinion.

6975. There are drawbacks on both sides?—Certainly.

6976. Then with regard to the examinations, are they mainly oral examinations or are they written?—We have written and oral examinations.

6977. But the oral examination is the largest part, is it not?—Unhappily, yes. In law and philosophy oral examination is obligatory but the student may ask for a written examination. A candidate to a doctor's degree in philosophy has to go through a written examination in geography and philology. In science we have practical examinations. I am much more in favour of written examinations.

6978. Then the practice is different from that which prevails in England, where the oral examination is always subordinate?—We wanted to suppress a good deal of these oral examinations and come back to the old system, a thesis read and defended by the student before his fellow students and before the public and the professors.

6979. I understand that the competition between the Universities has certainly not led to any lowering of the standard of examination?—Of course there are accusations made of that kind. The Liberal party accuses Louvain of giving degrees too easily.

6980. They are afraid of the reproach of having low degrees?—Yes, and public opinion is strong enough to prevent it.

6981. (*Lord Reay.*) In the Faculty of Law and the Faculty of Medicine students, as a rule, take degrees, because there the degree has a professional value?—At the end of it there is a situation or an appointment. Those who take degrees for Honours are exceptions.

6982. (*Professor Sidgwick.*) Is there any other degree besides that of Doctor in Medicine?—Of course, we may have doctors in philosophy and in science besides doctors in law and in medicine.

6983. Is there an inferior degree?—Yes. We have candidates in philosophy, in science, in law, in medicine.

6984. If, I understand, in law and medicine, and in the profession of the schoolmaster, the student is obliged to take the diploma of candidate, but he is not obliged to take the degree of doctor. He may study for it, but he is not obliged?—Beg your pardon. If he leaves the University without the highest degree, a doctor's diploma, he is not qualified to have any nomination.

6985. You mean in law and medicine?—Yes.

6986. And as regards the middle class schools?—The teacher in a secondary public school must have a doctor's degree in philosophy. If he is only a candidate, or if he has no degree at all he can be named to a situation in a public school only with a dispensation given by the *Conseil supérieur de l'enseignement moyen*. As we are in a transitory state, the law having been voted only in 1890, these dispensations are easily given if they are proposed by the Inspectors of middle class education.

6987. In order to become an *agrégé* he must be more advanced?—Yes, to become an *agrégé* he must pass a thesis before the Faculty.

6988. (*Mr. Anstie.*) There is only one point upon which I should like to ask a little further. You spoke of seminaries in connexion with the University. Could you give us a more full description of what those seminaries are?—Up to now they are not generally organised. It is a name which is given to a tentative imitation of what is done in Germany. Only a small number of professors have tried to support this new institution. They can organise these seminaries only when they have a certain number of good students who prefer making good scientific studies to getting rapidly through the degrees in order to get their nomination to some situation or other.

6989. Then a seminary does not hold any recognised position in the University system?—The law of 1890 in re-organizing the doctorates has given the seminaries a legal existence. The students who want to have a doctor's degree in philosophy and science is obliged to attend regularly the meetings of the seminary. He is invited to make personal researches, to write treatises, to prepare a thesis, the professor indicating the sources. The papers are criticised by the professor or by the students under the guidance of the professor. The tendency is to substitute personal work, conferences, *colloquia* to lessons given *ex cathedra*.

6990. (*Professor Sidgwick.*) If I understand you rightly there is no Faculty of Theology except at Louvain?—No.

6991. There is no free Faculty at Louvain?—No.

6992. Has not that been proposed?—No. All our priests, catholic priests, are all formed in seminaries under the direct authority of the bishops. Some of them may go and complete their studies in Louvain, where religion may be studied as a science. For private Catholic students, for Protestants, or Jews, we have no Faculty of Theology neither in our State Universities nor in our free Universities.

6993. (*Lord Reay.*) One rather interesting fact was that the history of religions is introduced in the programme of the new school in Brussels?—Yes.

6994. Why is that?—Because the University of Brussels is founded upon unsectarian principles and has to take no account of the restrictions which dogmas or

politics or philosophical doctrines may impose. Another reason was the presence in Brussels of a man who was specially qualified to give these lectures. The great difficulty when the University of Brussels started the new School of Social Science was to get professors for it. It was the Radical and Socialist party who wanted this school to be organised. Comte Goblet, who is now one of our Senators for the liberal party in Brussels, and who has given in England a course of Hibbert lectures, was specially invited to give lessons on the history of religions.

6995. You say the Radical and Socialistic party wanted that new school?—Yes, but the Liberals helped them to realize their wishes.

6996. What was their object?—To have these matters studied, because they were insufficiently represented in the Faculty of Laws. It increases the scientific value of the University. Besides M. Goblet's lectures, the other courses of the *Ecoles des Sciences sociales* will be next winter the history of the economic doctrines and of the political conceptions, the history of physiology, of the penal law, the political institutions of England, &c. Every year there may be modifications in the programme. Lectures on the condition and the rights of women are in preparation. In 1893 Mr. Recher is to give lectures on the synthesis of geography.

M. A. Couvreur.

4 July 1892.

6997. That was greatly to the credit of the Liberal party?—Yes, certainly, and to the benefit of the Brussels University which has now more students in its faculties abstraction made of the special schools than any other University. With these special schools Brussels has 1,700 students, Louvain 1,800, Liege 1,400, and Ghent 800.

The witness withdrew.

Adjourned to Thursday, 14th July, at 11 o'clock.

Fourteenth Day.

Thursday, 14th July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir William S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE C. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

Sir ANDREW CLARK, Bart., M.D., examined.

Sir A. Clark, Bart., M.D.

14 July 1892.

6998. (*Chairman.*) You have been kind enough to hand me in a summary of what you wish to say. I may say that we have agreed to take the evidence given before the Royal Commission over which Lord Selborne presided, as part of the evidence here, so it will not be necessary to go over the ground again, except for the purpose of explaining?—May I be permitted to make one remark. Since then the subject has grown and developed, and the evidence which was given then would probably be materially altered now.

6999. In the first place I think the Royal College of Physicians which you represent desires to assist us in our efforts to organise a University which would meet the academic needs of London?—That is our desire, and it has been our desire since our constitution—since there are records of our constitution.

7000. You wish to begin by giving evidence as to the relative positions of the two Royal Colleges?—If your Lordship would permit me a very few words would place the Commission in possession of the exact position in which the College of Physicians now stands, and then I may say how it stands in relation to the College of Surgeons with which it has become in a manner united. The first thing I have to say to your Lordship is that the College of Physicians has been the chief medical authority in London since the year 1518, and it has on all occasions, when the opportunity offered, endeavoured to associate itself with every movement for the advancement of medical education. In 1883 the College of Physicians united with the College of Surgeons for the purpose of forming a conjoint examining board with the view of granting a qualification in medicine, surgery, and midwifery to those persons who presented themselves for examination. Since uniting themselves into this conjoint board they have built and equipped what as known as the Examination Hall on the Embankment. They have built it at a cost, I think, of over 70,000*l*.

7001. (*Bishop Barry.*) Is this done by the two colleges?—The conjoint board, not the two colleges exactly, but what is tantamount to that, namely, the board formed by the two colleges for the purpose of conducting this examination. Having been organised into a conjoint board they built on the Embankment this examination hall at a cost of over 70,000*l*. Furthermore, they equipped it not only for the purposes of examination and for accessory purposes of various kinds, but they equipped it both in the respects of structural arrangements and the provision of instruments for the conduct of original research; and I may add here that they have not only done that, but they have, furthermore, practically endowed original research with a sum of about 3,000*l*. a year; that is to say, they have opened their laboratories to students properly qualified to investigate, and they have made them no charge for the opportunities of working therein. The conjoint board has conducted or conducts, indeed, nearly 4,000 examinations a year. It receives nearly 800 candidates for the qualification, and, furthermore, it grants qualifications to rather more than half that number. The Commission will observe, therefore, that its per-centage of rejections is very high, and, in fact, it is not very much different, if my memory does not betray me, from the per-centage of rejections at the University of London. This question has been occasionally put to us:—"You say that the examinations at the London "University are very abstract and very difficult, and "not suited for practical purposes, and yet your own "rejections are practically the same." The answer to that, as I think, is immediate and complete. The examination conducted at the University of London for its degree is a kind of honours examination, and it deals with abstract subjects—subjects in relation to pure knowledge and pure science rather than subjects in relation to practice. But the conjoint board, regarding it as one of its chief duties to fit them for the practice of the art of medicine and surgery, makes the test of its examination the knowledge of the candidate for the practice of medicine and surgery, and not the mere extent of his abstract knowledge. Hence this conjoint board has done another very important

Sir A. Clark, Bart., M.D.

14 July 1892.

thing. It has enlarged the scope, and it has improved the character of the examination. I would shortly point out to the Commission that it has made these examinations essentially practical. There has been, and I am afraid there still exists, a tendency to make the examinations, at all events for higher honours in degrees, cover the area of mere abstract science, and to forget that in granting men qualifications to practice medicine and surgery they want to make them doctors, and they should require of them a practical knowledge of the art of medicine and surgery. This the conjoint board has strenuously endeavoured to do, and is indeed endeavouring to do in the most practical way that it can.

7002. (*Chairman.*) You do not leave out science altogether, I suppose?—Not at all, but you see there is a certain time allowed to a student to learn what is called the art of medicine and surgery sufficiently to justify the board in letting him be free to practice. The board has necessarily to consider what is the knowledge necessary to justify their permitting him to practice. They conclude that one thing, above all others, is necessary, and that is a practical knowledge of the art of medicine and surgery. It requires, and it goes on increasing its requirements, a good preliminary education, recognising the fact that the students are not capable of learning medicine and surgery properly unless they are properly qualified in the preliminary departments of ordinary knowledge. There is another function which the College of Physicians fulfils at the present time, that is, that it exercises a continuous control over the ethical and professional relations of all the persons affiliated with it. In the College of Physicians there is a board called the Census Board, and that board is almost continuously occupied in dealing with the ethical relations of everybody connected with the college—licentiates, members, and fellows. In the course of this conjoint action, especially the two colleges, have drawn together with the schools in such a manner as to really form virtually a great Faculty of Medicine in London, for it is certain that all the distinguished teachers, I might add all the distinguished investigators, in London are represented at one or other of the colleges, and the colleges conversely are represented in the schools. Thus it has come about that if not actually, yet virtually, there is a great Faculty of Medicine in London composed of these two colleges, and of all the teachers and investigators in medicine. Lastly, we have built up a body of skilled examiners during the time that we have been engaged in the college of surgeons examining. We have gathered together a body of the most competent and skilled examiners.

7003. Are those examiners in any case the same men who teach in the different schools?—There is a feeling in London which I do not think is growing, but there is a feeling, and particularly, if I may be permitted to say so, on the side of the College of Surgeons, that men should not examine their own pupils. I do not share that feeling, and, if I may be permitted, I will say now why I do not share it. It is because, I think, a great factor in the qualification necessary for a young man to enter life as a practitioner in medicine is the course of his life. A teacher knows that there are many students who are very competent in many ways, but who are not good at answering questions. The teacher may know by the course of the student's life, by his industry, by the moral character displayed in his work, and the practical capacity he has exhibited in his work; a great deal of the student which would assist in qualifying him, and which ought justly to qualify him for the practice of medicine which an external examiner, knowing nothing of the course of the life and character of the student would, entirely miss. I therefore feel strongly that the teacher should be associated with some other person usually known in this discussion as an external examiner in examining and qualifying a person for medicine.

7004. But, practically, is it the case that the teachers do ever examine their own students at present?—Practically they do not. Our Registrar reminds me that there is another function, and not an unimportant one, which the College of Physicians as distinguished, perhaps, from the College of Surgeons, has fulfilled and does now fulfil; that is to say, it offers frequent assistance to the State in the conduct of its affairs. We are applied to about epidemics; we are applied to about the formation even of Royal Commissions; we are applied to about various subjects of public health; and we have been doing for years, and we continue now to do services of this kind to the State. It was only the other day that the Minister of War invited the colleges to assist the department by recommending the constitution of a proper examining board for admission to the medical services, and we did so.

7005. Of course, these important duties you will continue to perform independent of any University that might be established?—Certainly, because whatever part may be allotted to us to take in a University, if any, we shall still feel it essential to retain our autonomy, and, therefore, still a right to do work of that kind. Therefore it is looking at the two colleges which have had this history, looking at the work which they have done, looking at the experience which they have acquired, at the prestige which they have achieved, at the contributions which they can make to the organisation of the new University, and looking further to the fact that these two colleges, including all the teachers and investigators, and men eminent in medicine and surgery, we have thought that it would be but just to take in these two colleges, and if they are taken in, to give them a place adequate to the place which they have earned and which also would be just for the interests which they represent. That is all I have to say generally about the present position of the colleges.

7006. The question of taking in the two colleges we will come to later when we examine more particularly the objects of the Gresham Charter.—There is one other point which I should like to mention, which point is a source of great difficulty to outsiders. The two colleges are quite differently constituted, and work on different lines. I will mention that in a word that you may be able to see hereafter that, notwithstanding this different constitution and this different direction of work in which they proceed, they are able for such a purpose as conjoint examination to meet together and to work in perfect harmony with each other. The College of Surgeons is governed by council, which council, numbering some 20 or 30—I forget the exact number at this moment—is elected from among the members of the College of Surgeons. The College of Physicians is governed by the whole body of its Fellows in Commission assembled. There is, therefore, a little difference between the two. There are other differences, but at present it will suffice for me to mention to you that when we speak of the governing body of the College of Surgeons we mean the Council of the College of Surgeons, which is elected by the Fellows, and when we speak of the College of Physicians we mean the whole body of the fellows. There is a council of the College of Physicians, but it has no function whatever except that which is delegated to it by the college itself. There is one other point. In view of the discussion concerning this University question, and other questions allied to it, and springing out of it, the College of Surgeons has agreed with the College of Physicians to work together and only together.

7007. To work together in relation to a University?—To work together in relation to this question, namely, that in the position which we should take in a new University, if we were invited into it, and the work we should do, we have agreed that we should stand or fall together.

7008. You have explained the work done and the position acquired by the Royal Colleges, and their claims to consideration. Now we can go on to the urgent need that there is for the establishment of a University in local relation to teaching and studying in London. Of that you are convinced?—May I be permitted to add one other word?—It is sometimes thrown out as a reproach against the Medical Faculty that it demands too much. We do not demand any more than any other Faculty. Nothing more whatever. But there is something which we seem to demand more which is this. It is admitted on all hands that medical subjects are very difficult of understanding and of settlement. It is admitted by everyone who has touched the subject that some special consideration must be allowed for the complexity of the Medical Faculty, and all that the Medical Faculty, so far as I know, has ever asked, is this: Seeing that laymen have some difficulty in understanding medical subjects, and that too often they have acted wrongly when they have finally acted concerning them, the Medical Faculty or the Colleges rather, would ask that some provision should be made, and that if they are admitted into the University, what we call medical interests should be safe guarded. I use the phrase that was used by Lord Selborne, who saw this point very clearly. By that I mean nothing more than this, for

the sake of illustration:—If nine out of ten medical members voted for a subject, the Senate should not have the power to carry that subject in the face of nine-tenths of the Medical Faculty.

7009. There is nothing more you wish to add on that point, is there?—Not in a general way, unless in reply to any question that your Lordship puts, or that the other Commissioners may ask.

7010. You agree in the general feeling that there is an urgent need for the establishment of a University in local relation to teaching and study in London?—That is my belief, and it is the belief of the college which I have come here to represent.

7011. Have you a preference for a single University in London, or do you think there would be room for two Universities in London, one like the present, which is really more in the nature of an Imperial University, and gives degrees to the whole of the empire; and another which would be connected more particularly with teaching and study in London, or should you prefer those two different functions being carried on by a single University?—There is a strong feeling on the part of the College of Physicians that it would be for the higher interests of education, and for the material success of the new University if there were but one University. I may go further, and say that the college feels strongly also that that one University had better be formed from or organised out of the existing University in London by its dissolution and reformation in such a manner as to form a complete University for London in local relation to teaching and study, but permitting it, at the same, if desirable, to continue its imperial functions side by side with the special local functions which constituted it the University for London.

7012. You would approve of something in the direction of the scheme which was submitted by the Senate not long ago to Convocation, and rejected?—Both colleges accepted that scheme, not as perfectly realising their ideal of what should be, but as the best scheme which had been as yet offered, and which promised in the future a development into a complete scheme.

7013. That would have given you four representatives on the Senate; but, I suppose, you would wish for more than that?—Well, my Lord, we were more anxious to have developed a true and complete University for London than for the exact numerical representation we should get thereon. This scheme promised to make the whole Medical Faculty of London one. It promised to place teachers of all grades in complete organic relation with the University of London. It gave them place, work, and power therein and came the most near, as far as we can understand it, to our idea of what could best be had at this time.

7014. You would have liked to make some alterations in it, but they would have been comparatively few?—They would not have been practically cardinal alterations, except that since then, I think, if we had to negotiate again for the University of London, we should require a distinct department, if I may use the word for a moment, a distinct University for London, quite free from the trammels of the Imperial functions which it has been performing with so much advantage to the State, and which it will, probably, in any circumstance, continue to perform.

7015. You would have reduced those to secondary considerations?—We should have desired to reduce them to a secondary place.

7016. Do you think the Senate would have met you as far as that?—I do. The impression left upon my mind was that the Senate was not only open-minded, but most anxious to form a scheme which would establish a true University for London.

7017. You have no doubt that you and the Senate would have understood one another?—We did understand one another, and we did accept their proposals.

7018. This was drawn up after communication with you?—After frequent discussion; and only one thing set it aside—the unhappy vote I call it of Convocation.

7019. Would there be any chance of reversing that vote of Convocation?—Not except by doing away with it.

7020. It might be done away with by Act of Parliament?—I think so, and therefore, if I may be forgiven for saying so, if I were a strong statesman I would do it, because it permitted emotion to take the place of judgment. It was a cry got up by newly fledged graduates that their degree was in danger, and they rushed to the poll without really knowing what they were voting for.

7021. Your way of establishing a good new teaching University for London would be by over-riding that vote of Convocation by Act of Parliament?—Most decidedly.

7022. And more in the main to adopt the scheme proposed by the Senate?—I think so, my Lord; and in support of that I may call the attention of the Commission to the fact that in any new plan for a University no such powers are given to a convocation as are given to the Convocation of the University of London.

7023. Then supposing this to be impracticable, supposing Parliament to be unwilling to abolish Convocation, as an alternative scheme would you at all be disposed to consider favourably the scheme of the Gresham University?—Before I answer your Lordship's question I would just say that I am not quite so sure that Convocation might not think better of the matter, and still without being destroyed come round to some such proposition for the organisation of a new University as is now in the air. But assuming that the reconstruction of the University of London is found to be impracticable, then I should gladly turn to the scheme of the Gresham University, as it is called.

7024. If you did turn to the scheme of the Gresham University, there are several things in it which you would wish to see altered?—There are some, I think I am free to say that though I should prefer, speaking personally entirely, and indeed speaking for the college to which I belong we should prefer, the reconstruction of the University of London, yet I consider that there is enough in the Gresham Charter, if it were adjustable which might make a University such as we all desire to have—if it were altered.

7025. What would be the principal things in the Gresham University Charter which you would wish to see altered?—Speaking generally, the impression made on my mind on reading over the Charter and thinking over it is, first, that its aim is not quite high enough. I think the scope of this work which it seems to propose for itself is much too narrow. I hope I may be forgiven for saying so. I think they do not seem to consider much beyond the granting of degrees and the giving of such an education as may be necessary for the students obtaining that symbol of their studies. Then I object to the Gresham University Charter on the ground that these two Royal Colleges, considering the work they have done, the place which they occupy, and the materials they could contribute to a new University, have not an adequate place in the governing body of the new University. It is not adequate to their responsibility, and the colleges feel that unless they have a representation adequate to the responsibility which they will incur in joining the University, they ought not to enter it. That is still their feeling.

7026. That they have not sufficient power in it?—They have not power adequate to the responsibility which they undertake in entering the University, considering the place which they occupy and the work which they are doing. Then I think that in the Gresham University there is one other grave fault. They constitute the Faculty of Medicine under the name of the Assembly of the Faculty, and they give to that faculty so constituted no other power than the power of electing representatives and of forming a Board of Studies. Now my impression is very strong that the Faculty of Medicine, either through the faculty as faculty or through the Board of Studies which it has the power to create and set in action, should have further power than that of mere representation and election.

7027. But medicine is very strongly represented on the Senate. Some objections have been taken that it is too strongly represented?—I do not see that.

7028. I think there are 16 or 17 members of the Senate?—That is, assuming that the idea is carried out of placing one representative of each school upon the faculty. I have said to your Lordship that medicine has no desire to dominate in any way, and it has no desire to get any privilege which any other faculty does not possess, except one. That one thing is the safe guarding of medical interests, by securing to the Faculty of Medicine in some way or other this: If nine-tenths of its representatives vote for a particular subject they shall not be swamped.

Sir A. Clark, Bart., M.D.

14 July 1892.

7029. (*Professor Sanderson.*) A subject of examination you mean?—Anything medical. I wish to say that medical subjects, being very difficult subjects, I would secure the interests of medicine in order that they should not be misjudged, by some sort of provision as this. That if nine-tenths of the members of the Medical Faculty vote for a thing it should not be in the power of the supreme council or the Senate, or whatever you like to call it, to refuse it.

7030. (*Mr. Rendall.*) Do you mean to say that if nine-tenths voted for a thing, the council would be bound to accept?—If it were purely medical and administrative.

7031. Absolute control as well as veto?—Yes.

7032. (*Chairman.*) Would you extend that to the other faculties, or do you mean only with regard to medicine?—I am dealing with medicine only, and I have also implied almost that I did not ask with regard to other faculties. Of course, I have no right to speak with regard to other faculties. But medicine is a very difficult subject, and confessedly a difficult subject. Everyone who has touched it always says that medicine must be dealt with in a separate way from the other faculties. Therefore, in carrying out the idea, first set forth, I think, by Lord Selborne, I have said that I think that medicine should be safeguarded (I beg pardon for using the word so often, but it is the only one that comes to hand), in some such way that if nine-tenths of, or if all the Medical Faculty, if you please, should vote for a thing, the council should not have the power to sweep it away.

7033. Do you think that on a subject entirely confined to medicine if nine-tenths of the Medical Faculty were in favour of a thing, the governing body would be inclined to thwart them?—I think it is quite possible in a University organised such as the Gresham. I should say that the Gresham University would have divided interests within itself, or it seems to me to be so, that the Gresham University will be practically in the hands of King's College and University College. They will have, if I remember rightly, some 16 members on the council, they will have a share of the Crown nominees, and they will have a chance of medical members as well; so that I am particularly anxious to safeguard the interests of medicine, because the interests of medicine might be swamped in what are supposed to be the interests of King's College and University College.

7034. That would be one alteration you would wish?—To increase the representation of medicine on the Senate—not to increase the number 10. I must explain myself. If the University authorities, or whoever presides at the birth of the new University, choose to give 10 to the medical schools and none to the colleges, that is a considerable representation.

7035. According to the Charter, if the colleges like, they may be represented on the Council?—We may be represented on the Council, but I think the offer is two. It was originally six.

7036. It says you and the schools together may have 11, and it leaves open how this number is to be divided?—Yes; at present we are out of the constitution altogether.

7037. That is rather on account of your own action, is it not?—Yes, it is on account of our own action, We thought ourselves inadequately represented.

7038. Then more medical representation on the Senate is what you wish, or as an alternative that in anything affecting medicine nine-tenths of the medical part of the Senate should be able to have their own way?—I do not present that as an ultimatum but as a mere illustration. I simply mean that in whatever way the Medical Faculty is to be represented on the Senate if the colleges are to be taken in, and I think they should be taken in, they should have adequate power. That is a question of detail, but I do not wish to say that no subject should be carried in the Senate against medicine if nine-tenths of the Medical Faculty are against it. I mean that some sort of safeguard of that kind should be provided for the Faculty of Medicine seeing its acknowledged difficulties.

7039. There is a clause in the Charter to the effect that any college represented on the Council, or any assembly of a Faculty may at any time after six years from the constitution of the University, ask for an increase of representatives. So the Charter is an elastic one, and even if it were passed as it is there would be power to increase the representatives at some future time if it were found advisable?—There is another point about the Gresham University. I said at the beginning, speaking generally, that I did not think its aim was high enough, and that I thought the scope was rather too narrow. I think some provision should be made for what is, I think, justly called higher education Even we poor old colleges make provision for that, I think, by virtue of our endowed lectures. Professor Burdon Sanderson, one of Her Majesty's Commissioners, delivered to us a most interesting and important course of lectures as one of the functions of our college. We have a number of endowed lectures, and through these endowed lectures we carry on a kind of higher education. Though we are a poor body, as I have said to you, we not only carry on higher education by means of these endowed lectures, but we provide for the continuance and advancement of research by giving out of our pockets 3,000*l.* a year for this purpose. I think it is a great defect in the Gresham scheme that no more direct provision should be made for the establishment and maintenance of the higher education and of research.

7040. There is a power at the end of the third clause for the Gresham University to appoint lecturers independently of a college to give instruction in any subject, whether it be or be not included in the Faculty?—Yes; but it seems to me to be thrown in as a thing that might take place.

7041. It might be strengthened?—That is what, I think ought to be done, and I do not think it would anything like satisfy the body of persons interested in higher education in London unless something of that kind were done; unless it became a teaching as well as a mere examining and degree-granting University.

7042. If we put the word "shall" instead of "may," or something of that kind, that would meet your view?—It would if carried out sufficiently.

7043. What is the next thing you would like to mention?—There is a point which I should like to mention which I omitted to mention when you were examining me with respect to the scheme of the University of London. It is this: When the scheme of the University for the conjunction of the Royal College of Physicians and Surgeons with the University of London was accepted it was accepted simply provided that the conjoint examination of these bodies to which I shall allude immediately, should be crowned with the degree of M.B., namely, that the examination to be conducted by the College of Physicians, the College of Surgeons, and the University of London together should, when passed, secure two things, the license of the College of Physicians or the membership of the College of Surgeons and the degree of M.B., leaving the candidates to go further if they chose.

7044. Is that in this scheme?—It is, but now we wish to go further. We wish first (and this is the further step, which I have not yet mentioned to you), that the examination of the two Royal Colleges should, up to a certain point at least, be organically associated with the examination of the new University, and that they should be associated up to the point of obtaining pass M.D.

7045. That your examination shall be sufficient for a pass?—Yes. Hitherto we have been content, as the best that we could get at the time with the degree of M.B., but the M.B. has this great disadvantage—I do not know that we would not be satisfied with it still if it had not this grave disadvantage—a man goes to Aberdeen or Glasgow, and at a cost of time and study, and at a demand of knowledge not greater than he would have in passing the conjoint examination in London, he obtains the degree of M.D. He goes down to a country place to practice, and he is Dr. So-and-So. Our man has passed through an equal curriculum, perhaps a larger one; he has passed an equally strict examination; he has satisfied his examiners that he possesses the requisite knowledge to practice the art of medicine and surgery, and when he has passed our examination he gets a qualification, but not a degree. He goes down to the same village. He is "Mr." and the other is "Dr.," and the Mr. who has the same right to consideration from a medical point of view, loses both in status and qualification for local appointments because he is not a Dr.

7046. This would amount practically to your being able to give a degree?—No, most decidedly not. That was attempted to be put into our intention before, but we have no such intention. If we are to join with this

new University we become part of the University so far. It is the University which grants the degree.

7047. But you conduct examinations?—In part, only in part.

7048. You would have the University examination in addition?—Certainly, and the University would determine the conditions, the curricula, the extent of examination required; everything. Only we should be acting as part of the University.

7049. You would be conducting the examinations?—Not necessarily we would be conducting. That is the University and the colleges. There is this difficulty in bringing the matter before you—you cannot sponge out a thing and begin *de novo*. Here are a very awkward pair of institutions called the Royal Colleges; they exist; you cannot brush them out entirely; the proper way is to take them in, and in taking them in to assist the new University in granting degrees; the colleges are not doing it, the University is doing it; but doing it in union with those two bodies which have established, as at least we think, a sort of right to be associated with medical education.

7050. Would you allow the new University to dictate your curriculum or to have a voice in it?—Together for the degree. We would not allow them to dictate the curriculum for our license, because we must preserve our autonomy. If we wanted to take a share in granting a degree we should be acting as part of the University, and should be acting as any University would do, being subservient in the extreme point to the University.

7051. You would insist upon their acting through you?—For the degree of M.B. there are a body of examiners; here is Examination Hall, and here are the materials and appliances for examination ready to hand. We have built them up and we say that they are proper to be used on this occasion. The great body of the practitioners of England are qualified by us.

7052. Do you think the Senate would meet your wishes in that way?—That I do not know. The Senate of the University of London was willing to do so, and I cannot myself see any reason why the Senate of the New University, the incohate University at all events, should not do so. You will find it set forth fully in clause 47 of the University of London scheme.

7053. (*Professor Sidgwick.*) I presume from what you have said that you would be satisfied with clause 47 if only the pass M.B. were pass M.D.?—You put it exactly. We would be satisfied if that were carried out to the degree of a pass M.D. as distinguished from the honours M.D.

7054. (*Mr. Anstie.*) Perhaps you will remember that it was limited to M.B. on the suggestion of the colleges themselves at that time?—At that time. I cannot pretend to say that I exactly remember that, but I will accept it from you.

7055. (*Chairman.*) It is the clause as it stands with the M.D. substituted for M.B.?—Yes.

7056. And that you think they would agree to?—There is another point upon which the college feels very strongly indeed. That is there should be no delegation by the University to any particular school of the power to grant qualifications of any sort whatsoever. There has been, at least we think there has been, a tendency to grant to constituent colleges, and separate schools whatever you may call them, for instance, the right to grant the matriculation qualification, namely, that on an examination conducted by the professors of a college, and, at all events, with the assistance of an examiner from the University they should have the power to grant the matriculation degree, if we may call it so.

7057. That ought to be kept entirely in the hands of the University?—The feeling on the part of the College of Physicians is most strong, that the function should not be delegated to any schools whatever. We feel it strongly on this account, if on no other, that a certain amount—a considerable amount and a growing amount—of preliminary education is necessary to the right learning and understanding of medicine. We who are teachers feel that more and more, and if it came to be the habit of permitting private schools to determine the amount of education necessary for that preliminary examination it would be a very various one, and we fear that it might become very often an unsatisfactory one. We feel strongly in medicine that the preliminary education should be raised and not lowered, and if it does keep people out of the profession we should be happy if it did, because we want men who are capable of understanding and thinking out things properly for themselves.

7058. That is all you wish to say about the revised scheme of the Senate. I think you have already told us your principal objections to the Gresham Charter, or do you wish to go back to them?—I do not know that I have anything further. I think the Gresham Charter is the nucleus of a good University if it were sufficiently enlarged, though on the whole, like my college, I prefer having a single University, and that University developed out of the existing University of London. There is an objection which has been raised, if I may be permitted to allude to it. That is, what are you to do with the provincial colleges. It might be said to us:—"You, the Royal College of Physicians, "accepted the provincial colleges in the scheme." We did, but we accepted them as a compromise, rather than ruin a scheme which we thought important. But now we have returned to our former convictions, and object to the admission of the provincial colleges as part of the new University for London. We think it very hard that because Birmingham has not chosen to ally itself to one of the other Universities, and because it has not got a University itself, that this city with five millions of people in it should not have a University. Besides the Bristol, Birmingham, and Sheffield people have still open to them, and will probably have always open to them, the Imperial side of the University of London.

7059. You would take away the four representatives of the provincial colleges?—Most decidedly as having nothing necessarily or justly to do with the University for London.

7060. But the University of London would still be able to go on giving degrees to outsiders, pretty much as the University of Dublin does?—Certainly; that is my contention.

7061. You do not think the provincial colleges would be put at an unfair disadvantage?—Not an unfair disadvantage.

7062. But they would be at a disadvantage?—They would be at a disadvantage, but not an unfair one, and certainly not a disadvantage which would justify refusing a University to London. It seems to me that London has the right to have its own University upon its own terms, and the disadvantage is very small when the Imperial side, if I may still so call it, of the University of London is open to them.

7063. You do not think practically it would make any difference to the pupils coming up for examination from the provincial colleges?—It would make this difference. My college contends strongly for the duty of requiring from candidates for degrees a certain amount of residence in London. We do not define the exact time. We think about two years should be the term demanded from persons who wish to take the degree of the University for London. We think they should be required to stay about two years.

7064. That would be the chief re-constitution of the present University of London which you would recommend, shutting out the provincial element altogether?—Taking the University of London I should recommend that the University be constructed on the lines of the last proposal of the University of London, excluding the provincial colleges, and carrying the candidates to the Degree of a Pass M.D. Failing that I should endeavour to re-constitute the Gresham Charter in such a way as to enlarge its scope, and increase the representation of the colleges upon it.

7065. Clause 14 would come out too:—"There "shall be a standing committee of the Senate for the "Faculties of Arts and Science in connexion with the "Provincial Constituent Colleges, who shall discharge "such functions in relation to the Provincial Con-"stituent Colleges, and the examinations of students "therefrom, in Arts and Science as the Senate may "from time to time delegate to them"?—It would come out as respects the University for London.

7066. It would come out altogether in fact?—Well, they may do what they like in respect of the Imperial side of the University.

7067. You would keep up the Imperial side still?—I think it would be necessary. I fear that the University of London could not be re-constituted if you required it to give up entirely its Imperial functions.

Sir A. Clark, Bart., M.D.

14 July 1892.

(*Mr. Anstie.*) I do not know whether your Lordship has observed that clause 14 has nothing to do with medicine. The Medical Committee is distinct, and was not affected by the provision for provincial colleges, except to the extent of putting on one member, which, of course, would disappear if there were no members to put.

(*The Witness.*) The Registrar reminds me that it was intended for the Medical Committee of the Senate to take provincial members.

(*Mr. Anstie.*) One.

(*The Witness.*) Yes, one. That we now reject.

7068. (*Chairman.*) The London University in its new form may have any other function it likes, but as regards what has to be in London, you object altogether to any provincial representation, or any provincial element?—Unless the University of London is reconstituted in such a manner as to form a complete University in and for London, I object to having anything to do with it.

7069. But it may still continue to have an Imperial side?—It may still continue, but in a secondary and subsidiary way, the Imperial functions which it now discharges, that is to say, the reception of persons for examination for degrees who have got their knowledge anywhere.

7070. Then with regard to the relation of examining to teaching, would you like to say anything more on that point?—Not more than this, which perhaps I have already said. We approve of the union of two examiners, one who may be a teacher of the pupil, and the other who shall not be so.

7071. That is, I think, the idea of the Gresham Charter?—The College of Surgeons, which has tried the question in various ways, feel rather strongly against the introduction of the teachers in examining at all; but I think in order not to block the way they have conceded, as I understand, at least that the teacher may be present, but should interfere as little as possible with the examination.

7072. (*Sir William Savory.*) That is not quite correct?—I am not sure of it.

7073. There are two questions mixed up; the question of teachers examining, and the question of teachers examining their own pupils?—That is the question that I did not make clear.

7074. There was a little confusion that I noticed before on that subject. They are two distinct questions, of course?—Certainly.

7075. The College of Surgeons takes no objection to teachers examining, but takes objection to teachers examining their own pupils?—That is what I meant to convey to Lord Cowper, but failed to do so distinctly.

7076. (*Chairman.*) Do you wish to say anything more with regard to the relation of the Medical Schools to the University?—I have nothing to volunteer. I feel strongly that the Medical Schools should be in some organic relation to the new University, whatever that may be, though I do not think for a moment that any of the medical schools would assent to have their autonomy destroyed, or their individuality absorbed, as is proposed, for instance, in the case of the professorial University.

7077. I think even the professorial University is obliged now to say that as regards medical schools they must make an exception?—It would be impracticable to carry it out with respect to that, and it would be disastrous if it were practicable.

7078. Have you seen any of the schemes or suggestions of those who advocate a professorial University?—I have read their manifesto.

7079. Do you think that could be worked out at all?—I do not. I do not think it is practicable in the present state of education and of society.

7080. Then I take it that it lies between in some way compelling the Convocation of the University of London to accept the scheme of the Senate with a few alterations on the one hand; and, on the other hand, taking the Gresham University scheme, and improving and enlarging it?—Yes, that is so; precisely.

7081. There is no third course?—There is no third course which seems to the College practicable or desirable.

7082. Of the two, you prefer the scheme of the London University?—Yes.

7083. With the elimination of the provincial element so far as London is concerned?—We do not encourage the idea amongst us of having two Universities in London. We think it would cripple both.

7084. It seems to me that on the one hand you must either have two Universities, one entirely for London, and the other Imperial; or, on the other hand, you must have one University, part of the functions of which would be Imperial, and the other part local?—But the main portion London.

7085. You must choose between having one University half or three-quarters for London, or having two Universities?—I do not like it to be put in that way in my mouth. There must be a University for London, which shall in all its parts and in all its functions be complete, and if it can, in addition to that, discharge an Imperial function, well let it; but its *raison d'être* must be the fulfilment of the duties of a University for London. If it cannot do that, or if it will not do that, then I for my part should turn to the Gresham University.

7086. (*Lord Reay.*) I should like to ask a question with respect to what you said about higher education. Do you contend that the provision for higher education at this moment is not sufficient in London, and that more money should be spent and more professors appointed for higher medical research?—That is my opinion. There is a great deal of higher medical education already existing. I have shown your Lordship that the two colleges are acting in that direction, and that within the last 2 or 3 years they have given 3,000*l.* a year for the promotion of research. If I may explain it to you, this question of research is a very important question. It is necessary, I suppose, that there should be examinations, and some sort of qualification granted to persons who are to practice medicine to give assurance to the public that they have gone through some sort of course which, as far as such course will enable them to judge, qualifies them for discharging the duties of practitioners of medicine and surgery. But the time at their disposal, though now extended to five years, is short. The subjects treated in that time must be treated within narrow bound, and though not superficially, yet inadequately. There remain, therefore, over and above a great many questions in medicine which cannot be adequately handled, even for the purpose of instruction, or, what is much better, for purposes of education in the course of undergraduate study; and many people feel that it is desirable to encourage that higher education in order that we may be able not only to train their minds further than the mere qualification routine will carry it, but also for original research. For instance, some time ago it was discovered that the cause of consumption was a microbe; this discovery led to a great many experiments for the cure of the disease, and all over the world professors of medicine were in confusion as to what they were to do with reference to this discovery. If we had had a school for higher education in London we should have had this subject handled there, and some conclusions come to in regard to it, and knowledge would have been given to medical practitioners which they had not got for want of this higher education. That is rather a rude illustration, but it is sufficient to show that there is great room and a necessity for the development of this higher education in London as well as research.

7087. Do you think the new University ought to recognise, as members of the Faculty, the teachers of all the medical schools in London, although the teachers of the medical schools in London have not been appointed in any way by the University itself?—I think it would be necessary to do so. I am one of those who advocate what is now beginning to be known as a federal University for medicine. I am not speaking of any Faculty outside medicine. We think it necessary that the federal idea should be carried out, viz., that there should be centres of teaching, and we even realise that with the existence of these centres of teaching the competition which will necessarily arise in the study of medicine and original research will not only keep them active, but advance them. London brings the best men in the country to its schools, and we think that a healthy rivalry between the different schools in respect of their work is subservient to the advancement of medicine. The new University would have to recognise all the teachers of whatsoever grade in each school of medicine in London.

7088. And you have no objection to the Board of Studies of the medical faculty laying down certain rules for the curriculum of study in the medical faculty?—It must do so, that is to say, if you form the Faculty by the assembling together of all those engaged in the teaching of medicine, that Faculty so constituted will have to elect a Board of Studies for medicine and that Board of Studies for medicine will determine the course, character, and duration of the curriculum undoubtedly. But I think that Board of Studies should get allotted to it more power than under the present Gresham Charter it is offered.

7089. I should like to call your attention to the answer you gave to the former Commission on account of the importance of the words there used. At page 74, answer No. 780, you say, "I myself, and many with me, "share the opinion that in the matter of education, "time, training, and discipline, and thoroughness "count for a great deal, and that the mere answering "of particular questions, and especially of hard ques- "tions, is not the true business of any sort of educa- "tion, particularly medical education." I suppose you adhere to that opinion?—Substantially yes.

7090. And you emphasise it in the answer to question 791. "I and many others who are more capable "of judging than I, feel most strongly that the "examination is no conclusive test whatever, and "that in order to know that a man is qualified to "be entrusted with the exercise of the art of medicine "we ought to know something of his life, of his con- "duct, of his mode of working?"—That is my conviction still, that is to say, that I draw an organic distinction between the acquisition of knowledge and true education. By this I mean true education; I say this with respect, at the London University itself in some of these faculties they do not care where or how the men get their information—they may get it in the gutter—so long as the candidates are able to answer the questions put to them the University is satisfied. I consider myself that that is not education.

7091. Therefore you want to have a close connexion between the functions of teaching and examination, and that is one of the reasons why you want the University?—Yes. I am obliged to your Lordship for reminding me of that. I feel it strongly, and I think I may go so far as to say that a majority of the college to which I belong feel it strongly also.

7092. May I ask why the new University should not be placed in the same position with regard to examinations which the Scotch Universities enjoy, and which the Victoria University enjoys. It is obvious that if the conjoint board directs part of the examinations the University will not have the autonomy which the other Universities enjoy?—Because the conditions of its genesis, its birth, growth, and development if it is ever to be developed, are totally different, and if I may be excused for saying so, you must take the facts as they now exist, complex as they are, because it seems to me that it is a law of historical development that any new thing like a new University must come naturally, and, if possible, necessarily out of the circumstances which now exist. You cannot take a sponge and wipe the old thing out, and say, "Now we will found a new University." You have these two troublesome colleges here, and you must deal with them in the best way you can.

7093. In your evidence before the previous Commission at page 75, Question 783, you lay down what ought to be the course of examinations for medical students. I suppose you would adhere to that?—I adhere to that strongly; that is, that the examinations in medicine should be divided into three parts; that they should be kept quite distinct, namely, the preliminary scientific side; the scientific side of medicine and the practical or clinical side. It seems to me that it is a disregard of that condition which I have attempted to formulate which has brought about so much confusion, namely, that the scientific parts were often brought side by side with the practical parts, and the result has been that the practical part has gone to the wall in order that the student might acquire the ability to answer hard and difficult questions.

7094. You do not contend that the new University would not have the capacity of undertaking these examinations. You only contend that as its genesis is complex, therefore the colleges should be recognised for the purpose of these examinations?—I do not deny that it is quite possible for a new University to undertake all these things in and through itself; but I think it would be gravely unjust and gravely unwise, for here are these two colleges which have built up, so to speak, a faculty of medicine which have provided themselves with a splendid body of examiners and materials for examination, and which have all their long experience. What have they done now that you are going to throw them aside? Why do they deserve it?

7095. The result would be that the London University would lose the power which it now has of giving a degree which confers a registrable qualification?—I do not quite apprehend the question.

7096. The London University at present conducts its own examinations?—Yes.

7097. This culminates in a degree which confers a registrable qualification?—Well, certainly. If the University of London were to be reorganised, and were to be reorganised in such a manner as to be the University for London, and to confer in union with the Colleges of Physicians and Surgeons the degree of M.D., I do not see why it should not continue to possess a registrable qualification. The Gresham Charter has made a happy provision for not ruining the colleges by saying it will not pass any person who does already possess a qualification. Very good; but I do not see why the University of London should not continue to grant a pass degree which shall possess a registrable qualification, inasmuch as the persons must pass through the portals of the Colleges of Physicians and Surgeons to that degree.

7098. Quite so; but whereas now they do not pass through those portals in future you would oblige them to pass through them?—For the pass degree; but the door through the Imperial side is still open on any conditions they please. It does not limit the functions of the University as it now exists; it enlarges them; but it does put out of its power the granting of degrees. It simply takes us bodies in and makes us part. We think we are entitled to the privilege, and, after all, what the University wants to do is to make the best possible Faculty that they can make.

7099. But the result would be that on the Imperial side the University of London would confer its degrees through itself, and on the London teaching University side your colleges would claim part of the power?—That is a way of putting it but logically it is not so. Logically for this purpose we are part of the University. We are not apart or away from the University. If on re-constituting this University of London, the University of London wishes to say, "We will take "you into our body to join with us in doing this work," that is not destroying the power of the University.

7100. It is an alteration?—Yes.

7101. That you admit?—Yes.

7102. Might I ask what is the cost to medical students at the schools, the annual average cost?—I am ashamed to say that I do not know at this moment. Dr. Allchin is a dean at one of the schools and he may have the information.

(*Dr. Allchin.*) Does your Lordship mean for the education?

(*Lord Reay.*) Only for the educational course.

(*Dr. Allchin.*) It is varying from 120*l.* to 150*l.* sum total. It is difficult to say per year because it is frequently paid in one or two sums. That is the total cost.

(*Professor Ramsay.*) That is the purely educational part?

(*Dr. Allchin.*) Yes.

7103. (*Lord Reay.*) Now, Sir Andrew, with regard to the fees paid for the examinations of the conjoint board. The fee for admission to the first examination is, I understand, ten guineas, and for re-examination after rejection in each of the three parts, three guineas?—I accept that, but my memory will not bear me out.

7104. For the second examination there is a similar fee of 10 guineas, and for the whole of the third examination there is a fee of 15 guineas, so that this totals up to an amount of 35 guineas that the medical students have to pay to obtain the license through your conjoint boards. You mentioned, I think, that you had 4,000 candidates?—No, I said that putting one examination with another we actually conduct about 4,000 examinations in the course of a year. But we have not 4,000 distinct candidates for qualification. We have not more

Sir A. Clark, Bart., M.D.

14 July 1892.

than about 800. Every year about 800 come up to obtain qualifications, and of these 800 somewhere 450 are passed. We make up the 4,000 examinations by saying that of these 800 persons some will come up for one examination at one time and some at another, and so on. There will be four or five examinations sometimes for one candidate. That is the way in which the examinations are multiplied. Permit me to observe that when you mentioned 35 guineas I may be mistaken, but I interpreted the expression on your countenance as if you implied that it was rather a large sum. I wish to say that there is no other profession in which a qualification to practise can be obtained so cheaply as in medicine taking the whole course of it, and one of the results is that it is overborne in numbers.

7105. But you would not propose to increase the cost?—No; but my proposal would be to narrow the gate through which they enter, not by money but by qualifications, by requiring of them qualifications suitable for the practice.

7106. You think that at present they are not quite suitable?—I think they are not so well as they ought to be, some of them.

7107. What is the deficiency?—Some of them cannot write English.

7108. You think the preliminary education is deficient?—Yes; and that is a very important part. Continually in the wards of the hospital as teacher, I was foiled in my endeavour to make the pupils understand by their ignorance of simple mathematical problems.

7109. That is a stumbling block?—Yes.

7110. (*Professor Sidgwick.*) You drew attention to the large sums that the conjoint board devotes to the work of examination and research. Can you tell me from what source the funds are derived?—The College of Surgeons I cannot speak for. You will have to consult some other witness with regard to that. The College of Surgeons has some endowed property. It is mostly in land, and most of it has gone down very much. One part of the College of Physicians' income is derived from property in the City which has increased in value of late, but generally our income for the purpose of promoting research and higer education comes from the examinations.

7111. From the fees?—Yes, from the fees; that is to say, we have a certain number of endowed lectures, what are called the Croonian Lectures, the Linuleian Lectures, and the Gulstonian Lectures and others, which exist through benefactions long since bestowed upon the college, and which remain. These lectures constitute one of the forms of our higher education. We appoint men who are eminent in the profession to deliver lectures, but all the other money which is used, 3,000*l.* a year, is obtained from our fees.

7112. You mentioned a number of about 800 candidates whom you examined annually. Can you tell me how large a majority of those come from London?—I am afraid I am unable to answer that. The Registrar tells me about five-sixths.

7113. If I understand you rightly you do not want to give the pass M.D. degree on precisely the same terms as even in your improved examination you would give the qualification?—We desire certainly to rectify a just complaint that the London students have of their inability to get the degree of M.D. on terms on which it can be got elsewhere, but while we are anxious to meet the students on that point we are equally anxious to improve, particularly the preliminary education.

7114. If we may consider the question, rather in the abstract, and without any scheme before us of the University of London, do you think it desirable that the degree of M.D. should be given for the same training and work in examination, for which you think it desirable that the qualification of the conjoint board should be given. Do you think that in the future the two ideas should coincide?—A great body of the college did at one time think so, but though the subject has not been voted upon lately in the college, I think I am right in saying that the college would now require something more. They would require an addition made to that examination.

7115. With regard to the proposal you made to safeguard medical interests by a clause that prevented nine-tenths of the Medical Faculty being over-ruled on medical questions, can you tell me whether any safeguard of that kind exists in any University now?—I have endeavoured to ascertain, and I cannot discover that there is any form of safe-guard, but I am told by several persons connected with the Senate of the University of Edinburgh that the Senate there never meddles with the medical matters. That is the answer they gave me: "We never interfere with the medical matters." The Registrar very properly reminds me that that very safe-guarding did not emanate from us, it emanated from Lord Selborne. He himself thought it would be desirable under the circumstances. We also wished it at the time, but we did not press it.

7116. What I was desirous of suggesting was, that if in all other Universities the Medical Faculty manages to do without this safe-guard they might, perhaps, do without it in the new University for London?—My answer is, that the conditions are totally different from those in any other University that I know.

7117. Why do you think the other Faculties would be more prompted by a vicious desire to meddle unduly in the affairs of medicine?—They would imagine they understood the medical affairs better than the doctors themselves, which, I think, they do in London sometimes. They do not give the Medical Faculty the credit of understanding their own affairs, and they make a mess of it very often in consequence. I may give an illustration. If the recommendation of the Committee of the Lords were carried into effect to destroy all qualifications of physicians except that of obtaining a degree, you would have the most popular persons engaged in medicine put in as physicians and surgeons. Where would medicine and surgery be if popular persons (I do not like to mention names, but I could) were put into these places of high responsibility as teachers? It would be done immediately.

7118. But, still, you could hardly infer from that what the conduct of the Faculties would be in the University. Their opinion may be reasonably expected to be more intelligent than average outside opinion?—I cannot infer from it, but I would like to make sure of it all the same. My experience of London leads me to be anxious to make sure that the interests of medicine are not to be at the mercy of people who, however good their intentions, could not be brought to understand. I do not think now the public understand how important it is to have a physician to a hospital who has passed through certain tests with regard to his capacity for teaching instead of taking him from the gutter. Of course, a man who is made physician to a hospital is under constant ethical control.

7119. When you spoke of your objection to admit provincial colleges to any share in the control over the University for London——?—As provincial colleges.

7120. You said that they would have the Imperial side of the new University still open to them?—Or any other University.

7121. Do you not think that they might have a just grievance at being placed in a position inferior to that in which they are now if the new University gave control over the medical examinations, as I presume it would do, to a Faculty composed entirely of representatives of the London schools?—I do not see that. I do not see why London should not have a University as well as Edinburgh.

7122. I was now speaking rather in regard to the Imperial side of its work. I suppose under the scheme that you suggest the Medical Faculty for London would have practical control over the examinations on the Imperial side?—No, not at all. It might or might not have.

7123. Then if the two sides are to be entirely distinct why should you not have two Universities?—The reason why is, I think it is better that one body should conduct the great functions of a University for London, and admitting what I contend for, that you cannot wipe out the past, let the Imperial side go on as it hitherto has done performing a separate part. I do not see why I should not call it a University with two functions, a greater and a less.

7124. It has not only two functions but two administrations?—A committee of the Senate.

7125. But the Senate of the whole, I understand, would have no control over the Imperial side?—The Senate of the University, certainly not. But the University may make grand committees as it does now. If you will allow me to say so, I cannot see that you have put before me sufficiently the injustice of a provincial

college not being allowed to come up here without residence or anything else and take our degree.

7126. I may, perhaps, explain that the view that I am inclined to take is that there should be two distinct bodies, on the ground that the two distinct functions of a University for London and an examination board for the empire will be more satisfactorily performed if they are given to entirely distinct bodies?—Where would be the injustice of saying, "We are going to "have a University in and for London, and if you are "going to get a degree you must conform to the con- "ditions of it."

7127. It is if you give the London teachers control over the imperial examinations that I think you will create a grievance. Now could you give me a clearer idea than I have been able to gather of the relations which the colleges now hold to the London schools. You said that together they practically constitute a Faculty of Medicine. Do I infer, from that that the colleges as such, as bodies, exercise any influence over the schools otherwise than determining the examinations?—They have no organic alliance. I will begin by that. There is no federation, but the colleges do exercise a visiting power over the schools. They sometimes exercise it; not very often, but sometimes. They do determine curricula, and through determining curricula, they determine the extent and the character of the education. Beyond that influence, which is a moral influence, they do not go. I would remind you that all these schools are represented on the respective colleges, at all events all the schools are represented in the College of Physicians. Some of the schools only get represented in the College of Surgeons, because the College of Surgeons is governed by a council which is elected from among its fellows, and is of a limited number. The exact number I forget at this moment, but I think it is under 30.

7128. Can you tell me why you regarded the professorial scheme which has been laid before us as altogether impracticable?—If I understand it aright it would require that every medical school in London should be abolished.

7129. I think they gave up that idea?—Then I do not understand what the professorial scheme is, because I understand that, as far as its government goes, it has no right to pretend to be different from any other, because it admits other people than professors to the government of the University. As far as I can understand it, its leading idea is the abolition of all independent institutions, and the constitution of a University like the University of Edinburgh.

7130. The plan they laid before us was that the Medical Faculty should consist of representatives elected by teachers in recognised medical schools; that the recognised schools should be determined from time to time by the Senate, and that a certain number of the members of the Medical Faculty should be nominated professors of the University?—By whom?

7131. By the Senate of the University. That would be the only control, the only mode of unifying, if I may say so, the administration of the schools. It would by that a certain number of their members should be made University professors. Do you see any objection to some such unification as that?—I think any scheme which has for a part of it the destroying of the individuality of the medical schools would be disastrous to medicine.

7132. I do not myself understand that that would be the effect of the scheme here proposed, but rather perhaps to give a prestige to the good schools by giving distinguished teachers in them the title of University professor?—I do not think any medical school in London would allow the University to establish its Chairs; and, besides, I think it would be impracticable because if they do away with these colleges and so on they immediately begin to do away with the Chairs. I do not see in what respect it essentially differs from the scheme of the University of London or the scheme of the Gresham University if they do not abolish entirely the colleges. It seems to me that the distinguishing feature of this professorial University was to abolish entirely individual institutions and have no institution but the University.

7133. You are quite right as regards the general idea: only in the form in which the scheme was laid before us they were quite prepared to give exceptional treatment to the medical department?—I have not had that before me, and I do not know how I can answer it. I think it would be a very difficult and delicate matter indeed to interfere with the individual right of the schools in the teaching of the practical part of surgery. I think there is great room—and probably any new University will occupy that room—for the teaching of scientific subjects in some co-ordinate manner in the elementary schools, but that is not now before us. The Registrar reminds me to say that we have never discussed the professorial scheme because it has never been presented to us at our college.

Sir A. Clark, Bart., M.D.

14 July 1892.

7134. (*Professor Sanderson.*) In using the term "pass degree" I understand you to mean the degree of the existing University of London?—That is so; and that it should be a degree adequate to express an amount of qualification, scientific and practical, equal to that, for instance, which is granted at Edinburgh or Glasgow.

7135. Would you make a difference between that degree as regards dignity and value and the degree which would be given by the Imperial examining board?—I should leave that to be determined by the force of circumstances. I apprehend that the pass degree would be ranked by the public and perhaps by the profession as on a lower level, but that would be to my mind no objection to the granting of a degree of M.D. upon adequate education and examination.

7136. It is the opinion of the college, is it not, that any teaching University for London in order to be successful must co-operate with the two colleges, and that the two colleges must not lose their autonomy?—That is so.

7137. And that the University so constituted should give a registrable qualification. That is also understood, is it not?—That depends. If the University is to act independently of the colleges, no. The college naturally would bring all its forces to bear to prevent their being practically ruined. It would be a very cruel thing for the State to grant to the Gresham University the qualifications associated with the degree in medicine, which would ruin the colleges who have done everything they can to advance medicine and education, and place it in the high position it holds. I do not know what the Government might do, but Parliament would certainly never pass such a measure.

7138. I should like to ask a question as to the mode of association of the examinations of the colleges with those of the University. You said just now that the connexion would be organic. First of all, I should like to ask whether you think there is any substantial difference between the examinations in the practical part of the conjoint board and the University of London?—I wish only that some of the Commissioners would attend one of the examinations, and see how thorough, how complete, and how searching the practical examinations of the conjoint board are. They are going on now, and if any of the Commissioners would like to inform themselves, and to see with their own eyes what the examination is, I think it would be a kind of revelation to them.

7139. So that as regards any difference in the standard of the examinations there is no obstacle to conjunction between the two?—So far as the professional examination is concerned, none whatever, but I was going to reserve myself with respect to the demand for scientific information.

7140. Do you think there ought to be any difference between the standard of examination in the practical subjects, and the standard of examination which men would be called upon to pass by the imperial board of examination?—As regards the relation of their knowledge, the practice, no. From the practical side and that of familiarity with the aspects of desease, morbid changes, and chemical changes, which are brought before them, I do not believe the examination could be improved.

7141. I suppose we include under the term "practical subjects" not only medicine and surgery, and midwifery but also such subjects as medical anatomy and clinical pathology?—Yes.

7142. If any arrangement were to be come to by which the colleges and the University should in matters of examination join together, would it not be possible to accept the present scheme of examination as part of the University system?—I myself would object to that, because I should say it is the University which is to grant the degree. We do not wish that our examination shall be crowned with a degree, but we wish

Sir A. Clark, Bart, M.D.

14 July 1892.

that the examination of a new University shall be crowned with a degree; and for the purpose of furthering that end we would unite ourselves with the University, and the University should have a right to exercise its influence upon the course of study to be pursued, the character of the examinations required, and the final conditions on which the degree should be granted. I object to our having the power ourselves. It would be unacademic. It is not what the majority of us desire. We wish to continue the granting of the degree by the University, and all that we ask is that, having entitled ourselves by experience, work, present place, and powers, we should form a part of the University for that purpose.

7143. That is to say, that the examination board would not be entirely appointed as it is now by the colleges?—No.

7144. But partly by the University?—Yes. The University would dominate and justly so. We have no wish to put ourselves before the University.

7145. (*Mr. Rendall.*) Your own preference lies for a single University in London, I understand?—My own preference, and the preference of the college to which I belong.

7146. I am not quite clear in what way you differentiate that new single University from the present University of London. One point I understand—that you want a direct representation of the Royal Colleges upon the new University. Beyond that the present University admits only the students of recognised medical schools to its examinations in the case of medicine?—In the case of medicine alone.

7147. They are not able to get their education haphazard, or, as you phrase it, in the gutter, at all?—That is true.

7148. You would adhere to that?—Most strongly, believing that it is impossible to get the knowledge required for the exercise of the art of medicine in other ways than it is now got—in an academic manner.

7149. But besides the direct representation of the Royal Colleges you would also look to some modifications of the examinations and degree tests?—That is the second condition of joining the University of London; the first is representation on the Senate, the second is an organic union of the examinations.

7150. The fault you find with the present examination of the University of London being that they insist too much on what you speak of as abstract science?—I do not find fault with it; but I say that it is not the proper examination for those who are called upon to exercise responsibly the art of medicine and surgery.

7151. And not proper for a University to make an indispensable demand for a degree?—For its ordinary degree. I think the University should grant a degree of M.D. Then, I think, it should have two departments, one in which the degree should represent a full and complete qualification to practice, and another which should represent a far higher and wider range of study in which, in addition to the qualifications necessary to a mere practitioner, a man has acquired distinction or at least advancement in the various departments of human knowledge.

7152. Hitherto the ordinary degree or pass degree has been designated M.B. speaking generally?—The degree of M.B. of the University of London is quite distinct from the M.D., and had it carried with it the permission to use the title of Dr. there would never have been this disturbance at all.

7153. For ordinary purposes it does carry that title, does it not?—No.

7154. I mean in the popular sense a gentleman can call himself Dr.?—Then he is acting against a distinct statute of the University, which requires that he shall not call himself Dr. That was one of our great difficulties in our negotiation with the University of London.

7155. I am not sure about the University of London. It is true, is it not, of Cambridge?

(*Dr. Liveing.*) If I may be permitted to say so, it is usual to call a Bachelor of Medicine Dr., but not within the precincts of the University.

7156. (*Mr. Rendall.*) I was speaking of the popular usage. You would wish to put in the place of the pass M.B. the pass M.D., and distinguish it from the honours M.D. Do you think that is a distinction that it would be possible or easy for the public to seize?—I am not sure that it would be, but here is a difficulty, and the only way I can see out of it is to establish two M.D. degrees. It is a recognised method of distinguishing in other Universities.

7157. It can only be distinguished by reference to the examination lists, or the Calendars of the University?—I presume every man who took the honours degree would take care to place it against his name.

7158. "M.D. honours"?—I think so.

7159. And you think the public could learn to distinguish between them?—I think so.

7160. But it would be departing from the present practice, and the pre-supposition of the public at present?—It would be a new method of marking a distinction, but I do not at present see any inherent objection to it. Here is a difficulty. We must get out of it if possible somehow, and the least objectionable way that I can see at present is by making such a distinction.

7161. With reference to the students at present training for the conjoint board examination, you have spoken of the great fairness and efficiency of the conjoint board examination?—From the professional point of view.

7162. It is the case, is it not, broadly, that the more gifted students of the medical schools do train for the degree course, and that the less gifted, or in some cases the less wealthy, train for the conjoint board examination?—I think that is substantially true, but a great many cannot go up to the University degree who are capable of going up for it, and who would distinguish themselves in it for want of time and means. I think there are two great classes of qualification. We not only want a man of education and of culture but we also want a practical man. The two do not always go together. Sometimes a man has a great practical gift like, say Mr. Liston, with no capacity for acquiring culture and large knowledge.

7163. I suppose, at the present time, it is the case in the London medical schools as in the provincial medical schools, that students for a degree take the conjoint board examination and tests on their way to a degree?—I should think so, but I am not prepared to give you an answer. The conjoint board examinations open to them a great many things that the degree does not give to them.

7164. Considering the point of registrable qualification you approve of the provision in the Gresham University Charter that makes such qualification a necessary preliminary to a degree?—I do. I think it is very generous and just,—generous on the part of the promoters of the Gresham.

7165. It is not so much a question of generosity, is it, as legal necessity?

(*Lord Reay.*) It was a legal necessity.

7166. (*Mr. Rendall.*) Do you approve of it specially in the case of the Gresham or London University as contrasted with other Universities?—No, I approve of it simply as I am all along speaking in relation to the nature and difficulties of things which you find now in attempting to establish a University.

7167. I suppose you value it as giving the conjoint board of the Colleges of Physicians and Surgeons really an indirect power of controlling the University curriculum?—We thought it might be so, but I cannot say that that was a direct object with us.

7168. It would compel all the students of London or Gresham University to pass the requirements of the conjoint colleges?—And it would be a protection against a down grade degree if such a thing should ever enter their minds. The Apothecaries' Hall qualification is equally valuable for the purpose.

7169. In so far it would put the University curriculum to a considerable extent in the hands of the conjoint colleges?—It could scarcely be said to be in their hands. They could not determine the duration of the curriculum; they could not determine anything but that it should rise to a certain level.

7170. But more in their hands than the present University is, which has the power of giving medical degrees which carry qualification?—Pray forgive me, but I do not like to say that it is putting it into their hands. It is establishing a curriculum of a certain kind.

7171. It involves students of that University passing that particular test?—I see no necessity involved in it. I think they might go below it if they liked.

7172. But if they went below it, they could not gain the qualification for that degree?—The Apothecaries' Hall.

7173. The alternative would be to associate themselves with the Apothecaries' Hall?—They are associated now with Apothecaries' Hall.

7174. Then they could fall back upon that as an alternative?—Yes, or any qualification in the United Kingdom. The licentiateship of the College of Physicians and Surgeons in Glasgow might do as quite sufficient to admit him to the portals of a degree.

7175. As regards professional subjects for qualification you think the tests of the conjoint board are quite sufficient, the professional tests?—The practical professional test to which candidates are submitted at the conjoint board is as good as any that I know in this kingdom.

7176. Then, on the whole, you would be in favour of the new University approximating its professional tests to or identifying them with those of the conjoint board?—I do not like to put it in that way. I still repeat that if we are to take part in this new University, we become a part of the University, and the University, not we, determine the extent, character, and the bearing of the curriculum.

7177. But you would not wish to see the present examination in any important respect modified?—Not modified by being lessened. Our influence would be quite the other way.

7178. But modified by being raised?—We should have no objection as regards the M.D. We should wish it to be raised.

7179. You think they suffice for the M.D., but you would not object to its being raised?—I say that so far as the professional subjects go, they could not be improved. But they might add to that cultural subjects in order to show that they are men of larger culture than those who merely obtain the conjoint board qualification. I do not think they could improve the practical subjects.

7180. The students of the provincial medical schools are subjected at present to exactly the same tests in every respect, are they not?—Certainly.

7181. There is no distinction made?—None whatever.

7182. Do you think it would be quite fair or just to those medical schools, that if they submitted to tests as severe as those you desiderate from the new University, they should be excluded from the privilege of a degree?—I see no injustice whatever. The London pass degree of Doctor of Medicine is to be granted on certain conditions. Cambridge says the same thing, and Oxford says the same thing. Why has not London the right to say that? Why have they not the right to say, "Come here for two years, submit to the "class and you will get your degree."

7183. The point is that you give the Conjoint Board with all the weight of its influence a very special connexion with the University of London, and none at all with the provincial colleges. The whole powers of the conjoint board are Imperial, and not local. That is so, is it not?—That is so.

7184. They practically give the main registrable qualification for the whole of the country?—They do.

7185. And yet the scheme would associate them very expressly with a local metropolitan University, and treat them, as far as I can see, very differently from the provincial colleges?—Not in the smallest degree. We retain our autonomy. Our doors are still open. If you do not want the degree of M.D., come up and submit to the conjoint board examination. Edinburgh, Glasgow, Aberdeen—every Scotch University—demands a certain amount of residence. Why should not London? Why should we be put to the disadvantage of being obliged to give degrees without residence?

7186. When you say "we," do you speak of the Royal Colleges of Physicians and Surgeons or of the new University?—I have no right to say "we." I said "we," meaning for a moment the University of London.

7187. You said that the University of London would still be open as regards its Imperial functions. "The "door on the Imperial side would still be open" I think was your phrase; but if you reconstitute the University, do you not go very far to close that door?—I have said again and again, and we all say so, we do not wish to close the Imperial door if the University of London is still disposed to keep it open; but what we want of the University of London is that before all things it shall be dissolved and reformed to a University in and for London, and provided it fulfils completely that function we shall leave it to go along with its Imperial function.

7188. But it seems to me, by the language you have used that you seem to foresee that the Imperial function would be secondary and subsidiary, and, if necessary, altogether dropped?—No, I never contemplated that.

7189. Did you not go so far as that?—I did not mean to do so.

7190. You would make it secondary and subsidiary?—Subsidiary.

7191. I suppose you admit that that would tend to injure provincial medical schools. It would be a very powerful attraction to students from Birmingham and Sheffield to the metropolitan schools?—It might be so; but I do not see why, necessarily, it should be so if they like to prepare for the degree of M.D. I do not see why they should not come here. We do not cry out because a great body of graduates go to Edinburgh, though we do think it is very hard.

7192. But you do cry out, do you not?—Not directly. We do not cry out against the number of people who go to Edinburgh, which is steadily increasing; but we cry out against the fact that we cannot give our men a degree. Why should we in London be deprived of the power of giving a degree because Birmingham does not choose to do what is right?

7193. You suggest that they should have a University of their own?—Or affiliate with some of the Midland Universities.

7194. Do you think they would be strong enough as a medical school?—That is a difficult and delicate question to ask of a London doctor. We think the clinical opportunities in London are unsurpassed in the world, and really on public grounds we are anxious to keep up the schools in London, because we have opportunities here that they cannot get anywhere else.

7195. Would not the profession in London feel that on the whole a Midland University would not constitute a good University for giving medical degrees?—We do not quarrel with the Victoria University.

7196. I am not speaking of the Victoria University. I am thinking of a Midland University, say of Sheffield, Nottingham and Birmingham, which include really only one good school, together with a weak one at Sheffield. Would it not be better to affiliate that with the London University than give them a new one of their own?—Then, I think, you unnecessarily complicate the founding of a University for London and put it in peril. It does not seem to me to be absolutely necessary. They might affiliate themselves or form a University.

7197. (*Professor Sanderson.*) In the proposed co-operation of the college with the University the conjoint board would be the Faculty of Medicine?—I am not sure of that.

7198. I mean virtually?—Very well, virtually, but I am not sure because the University authorities or whoever is to organise the University might determine the Faculty to be someone else.

7199. In that case the conjoint board or the Faculty of Medicine would have to keep control over the examinations in so far as any control was exercised over teachers of the practical subjects?—Subordinate to the veto of the University. Of course if the University, the Royal College of Surgeons, the Royal College of Physicians, and perhaps the College of Apothecaries, were to be admitted together to form this board of examination then I apprehend we should have the power to regulate the extent, the duration, the character, the opportunities, and the curriculum, subordinate to the final veto of the University.

7200. Especially in the practical subjects?—Altogether. There I should be sufficiently sanguine to imagine that they would not push us, in the question of practical study and examination, out of what was right.

Sir A. Clark, Bart., M.D.

14 July 1892.

7201. In that case would the colleges approve of education in science, that is to say, all other subjects excepting the practical subjects, being in the hands of the Faculty of Science?—No. I am not justified perhaps in speaking comparatively as a representative in this matter, but I think the Faculty of Medicine would wish to have in its own power the determination of what amount of scientific knowledge was necessary for the learning of medicine. We practical teachers feel acutely the necessity for a better preliminary examination than they now have. On the other hand, we are exceedingly afraid that the scientific cultivation of a department of knowledge may be carried so far as to interfere with what after all is the reason of their being there. I can imagine the subject of physiology by an enthusiastic physiologist so pursued through all its ramnification that it would occupy the whole four years to the exclusion of every other subject. The point we have to remember is that we are to make doctors. We wish then to be scientific in their method of doing the works, and they must have enough scientific education to give them capacity to learn and use their knowledge; but on the other hand we must not seek to indoctrinate them with abstract science so that it shall take the place of practical knowledge.

7202. Do you think it is desirable in the study of medicine that a man shall complete his scientific examination before he begins his practical?—Yes, I do most strongly. I would have every man have a degree in arts if I had my way.

7203. Take the case of Cambridge. Do you think the scientific examination exaggerated there?—No, I do not. I think it is right that every man who is going to proceed to a degree in medicine should take some sort of qualification in arts.

7204. Consequently, if he had gone through a course of scientific education analogous to the Cambridge one, which I merely take for illustration, and if this course of instruction were completed before beginning the practical subjects, that would constitute a good system of medical education?—I think so. I think the Medical Faculty would accept it and place the responsibility on the University. They would say, "Bring us your *testamur*." If they have had this preliminary education, we place the responsibility on the back of the University. I think the Medical Faculty will do that.

7205. In that case, of course, the responsibility would be reciprocal, because virtually the men who now take part in the examinations of the conjoint board would still do so, and be the most important persons in carrying them out. They would have the most important responsibility as regards the sufficiency of the practical examination?—Certainly; but may I be permitted to add something else. I have all along tried to divide the medical education into three. First, the preliminary scientific which would be necessary for the degree of B.A.; secondly, I would have them controlled in what I call the scientific side of medicine, quite apart from the other, and I should require a qualification in that before they went on to the practical side. Having finished the scientific side then the Faculty of Medicine would deal with them in relation to the practical side of medicine and surgery. For medical education to be thorough, complete, and capable of being used it should be divided into three stages.

7206. How many years do you think is a reasonable time to devote to scientific preparation including your first two stages?—I think myself I should give three years to what I should call the scientific side.

7207. Before beginning the practical side?—Yes, I would give three years to the study of the scientific side of medicine, and require some sort of *testamur* at the end that the student was sufficiently qualified in those studies to go on to the practical study of medicine and surgery and midwifery.

7208. Including chemistry and physics as well as anatomy and physiology?—Yes, certainly.

7209. (*Mr. Rendall.*) How much may one understand that the present conjoint course involves?—Five years.

7210. But as compared with the three years' preliminary study?—It is very nearly that, I think. It has just been altered, and it is not fresh in my mind. There are two years devoted to anatomy and physiology, and any other branch that may come in—chemistry—and there are three years given to practical study.

7211. And that new programme would meet your requirements for practical study?—Yes.

7212. (*Mr. Anstie.*) The position I understand you to take in this matter, so far as your own wishes and the wishes of the college are concerned, substantially is this——?—They are not necessarily identical.

7213. We may sever them afterwards perhaps, but so far as they are identical substantially they are these: Supposing the provincial element of representation to be excised from the Senate's scheme, the constitution of the medical committee substantially retained, and the provisions of the 47th clause enacted, substituting only the letters M.D. for M.B.; that is the position you would support?—Yes, so far as I can carry it in my mind. I am not sure that I have it fully and adequately before me at the moment.

7214. The difficulty that arises upon it is this. I understand you now to say that you consider that a body which would perform the functions referred to in clause 47 would have no control over what you have described as the Imperial side of the University?—No.

7215. Then, further, I understand you to say that, so far as clause 47 is concerned, it relates to the pass only, and that on the other side nothing should be dealt with but what you have described as honour degrees. Am I right?—Yes, substantially. But may I and that what I regard has to be done by the 47th clause is, that it shall be so modified as to constitute in fact a complete University for London, and shall have to deal only with the things pertaining to teaching, examining, research, higher education, and so forth; those things which belong exclusively to a University for London.

7216. I do not think that affects the bearing of my question. That will appear in a moment. Appropriating that clause to London students and excluding from it all but London students——?—Certainly, all but London students who do not reside. If they reside it is no matter where they come from.

7217. But if they reside they are London students?—Well, if you choose to call them so.

7218. Then it excludes all but London students?—Yes. Now I understand what you mean by a London student.

7219. By residing you mean taking courses at the hospitals, do you not?—I shall now mean always by a London student, a student who comes and resides for his two years at a London school. That is a two years' minimum.

7220. It includes only London students, and, therefore excludes provincial student?—Yes.

7221. (*Bishop Barry.*) May I ask, in order to be quite clear, whether Sir Andrew means that they must take the whole of their medical education in London, or whether he would be satisfied with their taking the last two years?—I should be satisfied by their having two years, which two years to be determined by the University.

7222. (*Mr. Anstie.*) You, therefore, separate the pass and the honours degrees. The pass degree you limit to the London students, the honours degree you limit to the provincial students?—No.

7223. Then forgive me, I misunderstood you?—I think that London students may, if they please, go in at the other door and get honours.

7224. But that other door, or that course, as we will more accurately call it, which ends in an honours degree, is to be one kept distinct from that course which ends in a pass degree?—Certainly.

7225. Then if a London student desires to go in for the honours degree it will be necessary for him to go through that course which leads to the honour issue?—As at present.

7226. No, pardon me, not as at present, but in the future?—Yes, but I must guard myself by saying that these are all hypothetical conditions.

7227. I am speaking of what you desire. But that honour course, leading to that honour result, is a course which upon your present statement is one with which the body dealing with the matters comprised in clause 47 would have nothing to do?—Certainly.

7228. Does not that appear to you a somewhat strange position?—Yes, but it is inevitable.

7229. If it is inevitable we must accept the inevitable, but I should like to see if it is so. Does it not appear to you to put the London students and the Royal Colleges in a somewhat strange and inferior position; that the London colleges, on the one hand, who are a body of such highly respectable, eminent, and learned persons, should have nothing to do with the determination of the honours' course, and the London students, if they desire to have the honour result, should be compelled to go through a course with which those colleges, or that body which determines the pass course of examination, has nothing to do?—It puts them in a very awkward position.

7230. Why should they be put in a very awkward position?—Because at present I see no alternative. At present my eyes are not wide enough open to see an alternative position. What I want to say is that if a London student wishes to take honours he must declare that from the commencement, and he must begin his career on the other side of the University.

7231. Is that really a course which would, in your judgment, conduce to the good organisation of the medical schools—that there should be in study in the medical schools in London two sets of men, one set who follow that course which, in conjunction with the schools, is laid down by the London body which deals with licenses and passes, and another set of men who have entirely divided interests, and who follow an entirely different course?—I do not see the difficulty that you raise before me. A London student can continue his usual course in his college under his own teacher, and so on, but he does not go up for the Pass M.D. Degree at all. His examinations are conducted in another place.

7232. Precisely, but we have had given before us by an almost unanimous consent of medical witnesses who have at present appeared, a statement of the great disadvantage to medical education and to the institutions which conduct medical education in having two courses which are, to some extent, more or less in conflict with one another, one leading to one result, and the other leading to another result, and following different lines. I want to know whether it is not possible to get rid of these difficulties and continue the courses upon a single line?—I do not admit, if you will forgive me for saying so, that there is any conflict, or could be any conflict, between the courses pursued by the two persons. I apprehend that the course to be pursued by the man who wishes to obtain the M.D. degree with honours simply is a more extended course, and nothing more. I further apprehend that he must continue to be a student in his own college pursuing his studies and so on, with this sole difference. It is not a difference of education, it is not a difference of instruction, but is a difference of examination. He must enlarge his curriculum in order to obtain the degree of honours. I see no reason for conflict, and no reason for difference.

7233. If there is no reason for conflict and no conflict in fact, and if there is no reason for difference, and no difference in fact, why is he to state beforehand his intention to go in for the larger distinction of honours?—Simply because a particular student wishes to take the highest honours that this University can give him. If he is to take the highest honours that this University can give him he must engage in the pursuit of a greater variety of subjects, and he will do that from the first, but exactly under the same conditions as any other person who does not wish to go in for honours.

7234. Then if there is no other difference at all I do not see the distinction which you draw between the sides. You say, as I understand you now, that the man who goes in for honours is to go through the pass course or to go through that same course which will lead to the pass, and without any conflict or any difference which will be of educational moment or mischief will qualify himself in that course and through that course for the higher degree?—The difficulty is inexpressible. We will suppose a student who wishes to take honours to be a London student; he goes through the same course of study as a man going for the pass degree, but he adds to it, for he will be examined on a greater variety of subjects and perhaps to a greater extent than the other one will. And furthermore this Imperial door is open to let Jack, Tom, and Harry from all quarters enter.

7235. I am dealing now with the London student?—But you cannot deal with the London student in reference to this Imperial side alone because we keep the door open for other students. If there were no other students there would be no need for the distinction whatever.

7236. Then am I right in supposing you to say that the honours student will do this. First deal with, attend to, pursue, accomplish himself in, all those matters which belong to the ordinary pass; with this further addition that not varying his attendance and pursuit of those matters he will superadd to them as he goes along certain other studies.

7237. (*Sir William Savory.*) Just as a man reads for scholarships now?—Yes.

7238. (*Mr. Anstie.*) Then there is no greater or other distinction? The only distinction is that he will have to pass through a larger and more varied curriculum, and will be examined upon a greater number of subjects and to a greater extent?—That is the only difference.

7239. That is the only difference?—That he will belong to one side of the University which will admit everybody else on the same terms.

7240. That is only an accident. I am talking of the esssentials of the matter?—I know of no other difference.

7241. Then there is no other difference?—Not that I am aware of at this moment.

7242. That being so, will you tell me for what reason the University of the future refuses to give to a provincial student the pass degree?—I will answer you in two ways. The first thing is that we are now desiring to have a University for London. In this University for London we are desirous to procure for the great body of students in medicine a degree in medicine upon what we call practical conditions, upon conditions which are more easily fulfilled though they may be of equal value to this London University stipulation. If we are to have a degree and grant the degree upon adequate examination, I do not see why we have not a right to determine the conditions upon which that degree shall be granted. We require that it shall be granted upon certain terms of residence and capacity to pass a practical and theoretical examination in certain subjects. We say that will constitute a degree, and if you want to have a degree which affords a higher character not on account of the professional character of the degree, but on account of the greater variety of subjects which are included in the curriculum, and the larger extent to which you are examined in the subjects, you must go to the other side of the Imperial University for that degree.

7243. With great deference, a right involves some pre-existing law upon which that right is founded. We are here a commission of inquiry, not into any pre-existing law, but we are here to consider what in point of reason and good sense ought to be done, and the question I am venturing to put to you is this, why, in point of reason and good sense, should not the University of the future confer upon students of schools like that of Birmingham as long as it is not connected with any other University, the doctor's degree under similar conditions?—Certainly, if they come to stay two years in London.

7244. And why should they? Is not Birmingham equal in its value to some of the London hospitals?—We do not know that.

7245. Might not the University know it?—It might.

7246. Then supposing for the moment that the University did know as a matter of fact that Birmingham was equal to some of the London schools, which is not a very large assumption, do you then see any reason why the Birmingham student should not get his degree on similar terms to those on which the London student gets his?—That is just what he is going to get.

7247. Pardon me. You are only going to let him get the honours degree. Why not a pass degree?—If he will come and fulfil the same conditions he shall have it.

7248. Why should he?—We hold that there is an organic distinction between mere acquisition and a test. We think the medical education is a most important thing for a man to fulfil the duties of doctor. We have in London in the first place the greatest clinical material that can be produced anywhere in

Sir A. Clark, Bart., M.D.

14 July 1892.

world. We consider that it will take two years tuition the world. We have the biggest clinical school in the under our own eyes to give him the requisite education which will fit him for the practice of the art of medicine. We say "If you want our degree you must receive our "education. We will stamp you with our mark. You "shall come up here and stay two years under our train- "ing, and having received that training, which is the "London training and not the Birmingham training, "then if you are sufficiently qualified we will give you "the degree but not otherwise, because otherwise we "should be stamping the London degree upon a "Birmingham production; and we might think that "the Birmingham production is not equal to the "London production." Furthermore, every other University, as far as I know, demands a certain amount of residence and it demands it for some good reason probably—at all events it is now an established custom. Edinburgh, Aberdeen, Glasgow, Cambridge, Oxford, all require a certain amount of residence. They require it for some purpose: I think probably for the purpose that we require it, namely for the high purpose of education.

7249. But accepting all that you say with respect to the importance of practical qualifications what I wanted to know was why, assuming Birmingham to commend itself to the University of the future as a school competent to give such clinical instruction as is given by many of the London hospitals, and by other hospitals belonging to Universities which confer degrees, degrees which hold high rank, and which I understand from previous witnesses are even more valuable than those of the London University, my question was why the University of the future should not give to Birmingham, assuming it to have no other University connexion, that recognition which is given to the London schools?—The first reason is that we are not going to give Birmingham degrees. We are going to give London degrees. If a Birmingham student comes here to be examined, all the knowledge he has got has been got say at Birmingham. We are not going to give him a London degree for Birmingham products. Let him go, as he can go, and get it at some other University with which he is affiliated, or let him fulfil the conditions which we require here.

7250. Then I understand you distinctly to waive the discussion of the question on the ground of reason, justice, or good sense, and to put it simply upon the ground of nomenclature and personal demands?—I say that on the grounds of justice, reason, and truth, I refuse to give the provincial student a degree unless he fulfils the conditions which I have appended, affixed, to the London degree.

7251. What I was trying to get at is, what is the reason of that?—The reason is simple.

7252. I am asking you to assume that Birmingham, I take that only as one instance, has opportunities and resources which would justify the University of the future in accepting Birmingham training as fulfilling that practical requirement which in every point except the name of London is the same with that which is attained in London. Then assuming all that, what I am asking is, assuming the Birmingham student not to be, by connexion with any University centre, able to get the degree elsewhere, why should he not be able to come and get the degree in this University?—Simply because he is not a London student, and has not fulfilled the conditions required to obtain the London degree.

7253. Is that all the reason?—That is my reason.

7254. Is that the only reason?—That is my only reason.

7255. The reason you give us is that he is not a London student, and does not satisfy certain conditions, but my question is why in point of reason those conditions should exist?—You may ask why does Edinburgh University demand the same? Why does Cambridge? Why does Oxford?

7256. We are not concerned with Oxford or Cambridge. We are concerned with the University of the future?—Then I say as we want this to be a truly educational University, and as we want to stamp with our own mark the students in medicine, whom we train and educate to be doctors, we decline to put a false mark on them. When a Birmingham student has learnt all he has learnt in Birmingham, and comes here to be examined, he is not a London student and he will not be a London graduate. We will give him a degree, but he is not a man of our making. He is not a London doctor, but a Birmingham doctor.

7257. What I am asking you to assume is that the educational resources of Birmingham —— ?—I say it has nothing to do with resources. We are professing to make London doctors.

7258. Then it all turns on the name?—It does not indeed. It is a question of truth really.

7259. No, it really is not a question of truth really I am assuming the Birmingham training resources to be equal to those, of not all, but some of the London hospitals and schools, and, therefore, I get rid of your educational difficulty. The educational requisites I am assuming. Now, assume that the educational powers of Birmingham are equal?—I assume that with you.

7260. Then if we assume that, the educational reason vanishes; there is the educational requisite fulfilled?—The truth of the thing does not vanish.

7261. What do you call the truth of the thing?—The truth of the thing is that he is given the degree by the University. If a man says he is M.D. of the University of London it shall mean that he has been trained in London. It shall mean that he has been educated in London, and that accordingly London has stamped him with its mark.

7262. Why should it mean that?—I do not know why two and two make four, but they do.

7263. My apprehension is not very clear that your position is the position of absolute truth and justice?—I think they are the same.

7264. (*Sir William Savory.*) I should like to ask you a question, first of all with regard to this matter which has been discussed. The question turns on residence in London, does it not?—Residence covering the education.

7265. By residence and education you mean residence and education in some institution, some college?—Not necessarily any college, but within the limits recognised by the colleges. There may be schools in London which have no residence attached.

7266. You would go to this extent that the University by insisting upon two years residence means two years under the supervision of one of those colleges which it recognises?—And, pardon my repeating it, for the purposes of education.

7267. May I take it that the chief reason for insisting on its being confined to London, is that the clinical material in London for teaching is greater than elsewhere?—Than anywhere else in the world.

7268. So that it might be argued, perhaps on general terms, that if a student were educated in the provinces, he would not be likely to get such good clinical training as in London?—I would not like to argue so, but it might be argued so.

7269. Would not you feel it to be so?—I would feel that a student in the provinces or Birmingham, or any other town, has not the same opportunity of seeing the same amount and variety of disease as he would have in London, and it would be a considerable loss to him probably in his practical life.

7270. That would be really the ground upon which the restriction is made?—As to residence you mean?

7271. Yes?—Yes, and also, you must think me odd, but I cannot help but cling to the question of education, not only the opportunity of having at his command so much clinical material, but also the opportunity of being educated in the presence of men dealing with it.

7272. That might be included under the head of clinical instruction?—Only I was anxious to emphasize it.

7273. Now this difficulty comes in. Could we assert that all students in London if attached to those colleges which the University would recognise, would of necessity receive a better clinical education than any student would in the provinces?—That would be a difficult question to answer. All that I should say would be that it gave the opportunity of acquiring a larger and more varied knowledge of disease than elsewhere.

7274. Could it be asserted that at the smallest and least efficient of our London hospitals, a man would receive better clinical education than at the best of our provincial hospitals?—I do not like to say that.

7275. If we could not say that as far as the reason of the claim went, would not the reason of this restriction

disappear?—I do not think so. I still think the restriction may be maintained on the ground that we establish a University for London, and through that University we propose to grant degrees in medicine, but we are not going to grant them to Edinburgh people and Cambridge and other people. We are to grant them to London students and the conditions under which they are to be granted are set forth.

7276. Of course, if we have the power, we can do as we like with it in one sense; but would it not be well to have reason on our side in the matter, and if we insist on those restrictions to London students, ought we not to have good ground for the restriction. Ought not we to be able to show to the public generally the reasons why we do it, and if it could be said that a man in the provinces could obtain a probably better education clinically and surgically than he could at some of the London hospitals, would not that weaken our case very considerably?—Certainly, but what I have said I think meets it. I think that in a London hospital, the student has the opportunity whether he avails himself of it or not, of seeing a greater variety of disease than elsewhere.

7277. In any London hospital?—I think in any London hospital.

7278. You think that in any London hospital a student would have an opportunity of a greater quantity of clinical material than in any provincial hospital?—Will you mention any provincial hospital?

7279. I should mention, for instance, Manchester, Birmingham, Liverpool?—Well, Manchester of course, does not come in because it has its own University.

7280. But a man might like to work at Manchester and graduate with us?—Then I must confess I cannot answer for every hospital, because I have not got the returns of the hospitals.

7281. But if we would insist upon such a restriction as that, ought we not also to be sure that the least efficient of our London hospitals was more efficient for teaching than the most efficient of the provincial hospitals?—I do not know that that would be so in my eyes especially.

7282. You think it would not appear illiberal?—Then every other University in the country is illiberal. They all demand residence.

7283. There is no University in the country, perhaps, however great, that is not susceptible of some degree of improvement. However, I will not trouble you any more upon that. I am sorry to have pressed you so much?—I am glad to be pressed, and I am sorry to say I cannot see it in the same way. I justify the course for myself in two ways. In the first place the clinical material in London outweighs in quantity and variety the clinical material of all the other places in the world and, therefore, the student in London, if not in his own hospital at another hospital to which he may go has the opportunity of seeing an amount and variety of disease which he cannot see anywhere else.

7284. We know, as a matter of fact, students keep to their own hospitals?—I think on a great many occasions they go to other hospitals.

7285. You can hardly use that as an argument can you? Ninety-nine out of one hundred are educated at their own hospitals, and however small a hospital is a student does not seek instruction elsewhere?—A good many students come to my hospital.

7286. Would you not consider that teaching is thoroughly represented at the two colleges?—Most completely represented.

7287. It would be quite a mistake to say that any improvement could be made in the direction of teachers being represented at our two colleges in the mode of governing the colleges and in being active in all the work at the colleges. The men who examine at the colleges either are or have been teachers, so that whatever defect there might be in certain institutions on that side it could hardly be alleged for our two colleges that teaching was not thoroughly represented?—It could not. I think it is represented, too, in a way that is sometimes forgotten, namely, that persons who are immediately and now engaged in teaching are represented there, and also people who have been teachers and who have acquired an amount of experience which is invaluable to younger teachers.

7288. There might be a difference about that with men of different ages?—I have a theory that a man who has taught, is in the position to see better than a man teaching at the time what is best.

7289. You and I would agree in that at all events?—I certainly think I am of some use to my hospital.

7290. And without raising the vexed question of teachers examining their own pupils, certainly the pupils of our two colleges are examined by teachers?—Yes. Scarcely any but teachers examine.

7291. So that they are thoroughly represented there?—Yes.

7292. Professor Burdon Sanderson put you a question with reference to whether preliminary subjects, taking for example, physiology and chemistry, could not be taught at some central institute. I do not know whether you have thought over that?—I did not notice it. Yes, I have thought over it.

7293. It does not matter to some great schools, but it does matter to some of the smaller. If physiology and chemistry were taught at some central institute, and the hospitals left for the work of clinical teaching there would be in that way again a concentration of force, and larger classes instead of small classes which would encourage the enthusiasm of the teacher?—I have always advocated that.

7294. If any change of that sort could be made, it would be in the right direction?—Yes, but I think it ought to be made through the University. My feeling is that the University should be completed, federated, and that then the action of the University through the college should bring about that co-ordination of work—especially of scientific work, chemistry, physiology, and such like subjects, which would be economical and probably would better advance the education of these subjects and also research.

7295. That concentration of classes would be attended with considerable advantage?—Yes, I have always advocated that view of the question.

7296. At the beginning of your examination you spoke of the examinations of the London University as differing from those of the conjoint scheme in not being so practical?—I said so.

7297. By not being so practical, do you mean that the examination is less severe in medicine, surgery, or in clinical work with patients?—I am not prepared to say that. I think there is much difference between the professionable examinations in every case. I think they are very much on a par. But where I think the difference lies, and in my eyes it is a very grave difference, is that in examining for the degrees of the London University as they stood a little while ago (they are now altering a little), the questions put were of such a recondite character that it required the student to have travelled over a great area of knowledge which is of little use to him in order to enable him to answer the questions, whereas in the examination of the Conjoint Board the question had a more direct bearing on the exercise of the art of medicine and surgery, that recondite questions as to the dynamics of muscles, and so forth.

7298. If you intend the distinction to apply only to what the University was, I will not trouble you?—It is improving steadily in that direction.

7299. Do you think the examinations of the London University are in any sense less practical than the examinations of the Conjoint Boards?—I do not say so, but I say that added to the ordinary professional examination, there is an examination on a variety of subjects which may sometimes tend to divert the mind of the student from those practical subjects which will require his immediate attention the moment he enters into practical life.

7300. While the examination of the University of London is equivalent to that of the colleges, there is added to the University of London something more?—Yes.

7301. I suppose you would further agree that in order that a student should obtain a degree, something should be added to the conjoint examination?—Yes, I have always said so.

7302. What would you add?—I am not prepared to answer off-hand, but I am prepared to say that I advocate the principle of adding to the conjoint examination certain subjects for those who wish to acquire in addition to passing the conjoint examination the degree of M.D. even the pass degree.

7303. But what those particular subjects should be you are not prepared at this moment to say?—I am not

Sir A. Clark, Bart., M.D.

14 July 1892.

prepared to say at this moment, I have not prepared myself for a detail of that character.

7304. (*Mr. Anstie.*) I think you said a matter of that kind would be one that would be properly left to the Board of Studies?—The Board of Studies to represent the University.

7305. (*Sir George Humphry.*) At the commencement of your examination you compared the rejections of the University of London with the rejections of the Conjoint Board, and I think you indicated that they were about the same?—Or nearly the same.

7306. I suppose that is not quite a fair comparison. It is the more highly educated and more talented students who chiefly resort to the University of London?—That is so.

7307. And therefore the comparison of rejections, there is not a quite fair one with those of the Conjoint Board?—It is not, but it is a superficial comparison which is constantly made. I think I explained it on that ground. The men who come up to London are picked men, and we would not reject the same number of those that we do of the men who come to us. I deal with it as a superficial objection which is constantly bandied about.

7308. At the present time the Colleges of Physicians and Surgeons are happily united in the conjoint board?—They are happily united and harmoniously working together.

7309. And that union is cemented by the construction of that great building on the Embankment for examination and research?—Yes.

7310. Can you give us any assurance that that union is likely to be of a permanent kind?—I can give you none.

7311. We must not forget perhaps that the duration of the union has been rather questioned by the body of fellows. They have indicated rather some disapproval of that union having been permitted without their assent, so we may have perhaps a little hesitation with reference to the security of that union?—Certainly. As far as I can define the present governing body of the College of Surgeons and compare it with the college to which I belong, I should say that there is every probability of a closer union. I think the surgeons are trying more than they used to to keep in harmonious working order with us. Perhaps we too are trying.

7312. To whom do those premises belong?—To the Conjoint Board.

7313. (*Mr. Anstie.*) Has it a charter?—No, there is no charter.

7314. Is there a separate body of trustees?—Yes, it is in the name of the two colleges.

7315. (*Sir George Humphry.*) One of the main points that you feel is that at the present time the practitioners of England are at a disadvantage from their not being able to obtain with reasonable facility the degree of Doctor of Medicine in England?—You have put it most happily. That is the more obvious cause, but we also hold that we want in London an educating, teaching, investigating body, who will also raise up the whole tone and character of education. It is not the one thing. That is an incidental thing, and that is a thing which started with us this movement.

7316. Relating to higher education altogether?—Yes, and we have been struggling to carry that out as well as poor people can.

7317. But one of the first points, and one which you feel to be a great duty on the part of this Commission, is that they should arrange in some mode for greater facilities for obtaining the degree of Doctor of Medicine in England?—I feel that acutely.

7318. And, nevertheless, that that degree should not be obtained without some higher knowledge than that which is required for the license?—I agree.

7319. Therefore, suppose this plan to be carried out in future all the higher practitioners of the country will be Doctors of Medicine?—If they please.

7320. We might almost say that it will necessarily be so?—I should not say that, because sometimes they are so anxious to get some sort of qualification, and so anxious to get into practice that they would not wait the additional time and undergo the additional labour.

7321. But it will be very much more so than at present?—Yes. The want of a degree is a grave disadvantage to them.

7322. And suppose any plan of this sort to be carried out those who have not a degree will be under a still greater disadvantage?—Yes.

7323. Therefore, we may presume that by far the larger number of candidates of the medical profession will be almost compelled to obtain this degree?—I am not so sanguine as to say that, but at all events the difficulty will be removed. They will have sufficient facilities for obtaining the degree of M.D. if they choose to pursue the necessary studies.

7324. And we can hardly doubt that such a larger number will seek it that it becomes an important factor in the matter for the Colleges of Physicians and Surgeons as well as for the profession that the colleges should form a part of this University, and should have an important part in the granting of those degrees?—Yes, I think so, and I also think, if I may be forgiven for saying so, that they have a right to say so; that they have won the right by having conducted the business of education for so long a period, and improved the curriculum and the examination, and brought it to the level that it now is.

7325. And it would be a very serious thing to them in all respects if it were not so?—I think the colleges would live without, but I think it would be better for them.

7326. Do you think they would live as well without it?—I think they might not have so much money, but they might live a higher life if they did not live such a luxurious life. It is no such a luxurious life now.

7327. The conjoint board is a conjoint board for England?—Yes.

7328. The University of London is a University for England?—For everywhere.

7329. At any rate for England. It is open to the students of England, and the Colleges of Physicians and Surgeons are open to the students of England. They really preside over the licenses and degrees of England, and therefore, as Sir William Savory put it, it would really require some very strong and good reason that any part of England should be excluded from the privileges they now have with regard to the Colleges of Physicians and Surgeons and the University of London. It would require a very strong reason that they should by their action be excluded from this which you feel to be so important for the practitioners of England, that they should be precluded from a reasonably facile mode of obtaining the degree in medicine?—I think I see a peril in answering you there. First, let me say that there is no process of exclusion intended by the colleges, for whilst for the purpose of granting a degree they will become part of the new University, they will still retain their own autonomy. Their own board will still be open to all comers who fulfil the conditions which they attach to the granting of the general qualification in medicine, surgery, and midwifery.

7330. I quite see that, but that is not the point. The point is that this more easily obtained degree is of such importance to the practitioners of England. The colleges which preside over the education in England, and the University of London, which has this relation to the students of England, would by such a process as you propose be cutting off students in England from obtaining this degree which you and we feel to be so important to them?—But I do not see the injustice to them. You are part of the University of Cambridge, and you exclude a great many Englishmen from your degree of doctor of medicine.

7331. I almost hoped that London would take a wider view of this matter than Cambridge or Oxford?—You allow Cambridge to maintain its University, and you do not allow London to have one on reasonable conditions at all.

7332. The principles of residence in Cambridge stand upon quite a different ground from those upon which residence in London can well do. I think they are scarcely comparable. But as regards education, and as regards attendance upon any kind of lectures or course, Cambridge is perfectly open to the whole world. A student need not ever attend any lecture or any hospital practice in Cambridge. It is quite open to him to go anywhere?—Take the University of Edinburgh. The University of Edinburgh requires residence; it requires the fulfilment of certain conditions. So do the Universities of Glasgow and Aberdeen, and all the others that I know. Then how is it that we in London should

have gone so long without a University, and now have one, but not on the same terms as any other city.

7333. I should like a University to be granted upon some higher terms and a more liberal principle than any other University?—But I think truth comes before liberality. I say, if we go to make London doctors of medicine, they must be London doctors of medicine. I say we will educate them and stamp them and turn them out into the world as our doctors. We are not going to give the London degree of doctor of medicine to people who have not been trained or disciplined in London. One of the reasons we want a University is that we shall be able to educate our own men.

7334. You do educate them now?—But we have not the privilege of stamping them with our degree.

7335. It is a question, of course, whether it is to be a University for London, or whether London is to dominate over England and to let it be a University for England. Is not that rather a higher view to take of the University?—I think there are so many Universities. They are increasing in number. There is no need for a University for England in any sense that you mean.

7336. I do not know why not?—There are large towns in England, Birmingham for instance. Why has not Birmingham a University for itself? It is rich enough.

7337. Then comes the other question. Is it desirable that we should have so many Universities? London, the metropolis of England, one might fairly think might have a great University—the Metropolitan University. One cannot but think with Sir William Savory, that there should be strong grounds for the restriction which seems to be a little narrow, and I might almost use the word mean, with regard to London?—The Registrar asks me to correct a matter which is important. The Royal Colleges of Physicians and Surgeons have never made a claim themselves for residence.

7338. No; they have always been open, and one sees with regret an attempt to make it exclusive. You have mentioned the clinical opportunities of London as being greater than any others in the world, but I do not think that is a fair way of putting it. If you compare the clinical opportunities of London with the number of students in London, are they then greater than the clinical opportunities at such a place as Liverpool?—I should think so, because of the arrangements made for numbers of students visiting and seeing operations performed and cases brought into the clinical theatre. I think the opportunities in London are very much greater.

7339. But I need hardly say to a practical man like yourself that the opportunity of going to another hospital to see an operation, or another case, is of very little matter?—I perfectly understand that, but I am speaking of the capacity of any particular hospital, namely, St. Bartholomew's or Guy's. The number who can visit a patient, and who can examine a patient and benefit by seeing a patient displayed, is very large now compared with what it used to be. There is a larger construction of the theatre.

7340. That, I believe, is the case also in these large provincial hospitals. Of course also in London there are so many special hospitals that perhaps the opportunity of seeing a variety of cases in any one is even greater in the country than in some of the London hospitals?—But all the London hospitals now have special departments.

7341. Have all of them?—That is my belief. Dr. Allchin reminds me of the special teaching which is given at the special hospitals to which students of all hospitals go to prepare for the London degree.

7342. It takes up a good deal of time going from hospital to hospital?—It does.

7343. I cannot but feel that the statement which is made with regard to the clinical opportunities of London, as compared with the clinical opportunities in some of our larger towns is rather an over-statement, and, that therefore, the ground for the importance of residence in London is also overstated?—You must pardon me, but I do not think it is overstated. I should say, for instance, that the number of operations performed at such a hospital as the London Hospital is probably greater than all the other hospitals out of London together.

7344. I am quite aware that the number of operations in the London hospitals is great, but, as Sir William Savory put it, do you suppose that the number of operations performed at some of the smaller London hospitals is greater than, or as great, as the number of operations performed at such a hospital say as Leeds?—I know the operations performed in the London hospitals are enormous. I am not dwelling upon the particular kind of operations.

7345. Now there is one difficulty which has not yet been mentioned, but which has probably occurred to you, and which, no doubt, you would be prepared to give an opinion upon, that is, the difficulty with regard to the Apothecaries' Society?—I have always felt that to be a great difficulty, and have always regretted that it was not taken in long ago.

7346. That is a very important point?—I should like to take in the Apothecaries' Society now; but the Legislature has granted it such great extra privileges that it has got a little proud, and it will not be perhaps so ready to accommodate itself.

7347. Do I understand you to say that you would be willing that the Society of Apothecaries should be conjoined?—I am not speaking for the College of Physicians now, if you please. I am speaking my own private and pious opinion.

7348. But that is very important?—I would not rest myself until I had the Apothecaries' Society taken in, because I think it will be a thorn in our side, and I think it will interfere with the progress of medical education in London.

7349. Then your opinion would be that, supposing this Commission to recommend any such plan as you are proposing, and as was initiated by the Senate of the University of London, it would be well that the Apothecaries' Society should be conjoined in the examination?—Yes, and that it should not be placed in any position of temptation to give a cheap qualification, in order to qualify for the degree of the new University. I think, perhaps, I ought not to have said that. I do not say that it would be tempted, but I think it might be.

7350. Do you think that that would to any considerable extent be the opinion of your college?—I could not answer the question, I think there was until recently, at all events, a feeling that the Apothecaries' Company scarcely merited to be brought in alongside of us, but I think that opinion is decaying. I suspect it is.

7351. For as much as that examination is now conducted by examiners appointed by the Medical Council, and may therefore be considered to be under the jurisdiction of the Medical Council?—As far as regards surgery. The Council surely do not appoint all the examiners do they? I think only those in surgery. I think the examination of the Apothecaries' Company as at present conducted is really a very good examination.

7352. That is an important point, and ought to be considered?—I think it would be for the advantage of medicine as a whole if the Apothecaries' Company could be associated with the two other bodies, the Colleges of Physicians and Surgeons.

7353. You have said that the Preliminary Examinations, that is to say, the ordinary school examination and also the Preliminary Scientific Examination for this degree should be conducted by the University of London itself?—I do, strongly? I may say to you, perhaps you know it, that before the College of Surgeons instituted its Preliminary Examination, some similar sort of examination used to be permitted at the medical schools, and it was given up; it was not found to answer.

7354. That being the case, the University would in all probability exercise a certain amount of influence over the teaching in the preliminary scientific subjects in the several medical schools?—Certainly by framing its examinations according to its judgment of the needs repuired for entering upon medicine.

7355. So thereby it might institute a considerable improvement in the Preliminary Scientific Examination of medical students?—I think so, especially since some of the scientific studies of medical students reaches so far that it diverts them entirely from their great business, which they ought to be occupied with at that stage of their career, namely the acquisition of practica familiarity with disease.

7356. When you speak so much of practical knowledge, you mean, of course the practical application of

Sir A. Clark, Bart., M.D.
14 July 1892.

their prevsously obtained scientific knowledge?—Yes, but there is an empirical knowledge, which in a sense is independent of that; physiology, no doubt, is the just basis of medicine, but if I want to teach a student about an inflammation of the lung, I show him the chest, I show him by tapping and I tell him what I hear; it is the want of that which is felt.

7357. But you would like him to have some little knowledge as to the pathology, and the change that is going on?—Yes, but no pathology and no physiology will enable a man to discover the symptoms of an attack of pneumonia at the bedside. The most accomplished men students that I know, have failed to distinguish between pleurisy and pneumonia.

7358. Still it would be a terrible loss if men were not required to have a knowledge of the causation of disease?—Yes; I would not say or insinuate anything of the kind, but I say all that knowledge is in vain unless you let them know the cause of the sounds they hear when chest is tapped.

7359. There should be practical knowledge superadded to scientific knowledge?—Yes.

7360. Now, to turn for one moment to the subject of higher education, would you not think it would be a great advantage to England and to London also if there were to be means of pursuing higher education and higher research in connexion with this new University?—Most undoubtedly.

7361. If that could be obtained?—On the Embankment you have already got the nucleus of as admirable laboratories as could be built.

7362. And if they can be carried on, still further?—England is distinctly behind every other nation in that very point.

7363. (*Professor Ramsay.*) You spoke about the possibility of the colleges and the medical schools all forming one single medical Faculty, did you not?—I said that practically, virtually, if not really, they did so now.

7364. And there would be no difficulty in their finding a place in the University as the medical Faculty of the University?—None, but the human difficulty of internal jealousy perhaps; but they naturally constitute a Faculty of medicine as they now stand, the colleges and schools.

7365. In the Gresham Charter there seemed to be the idea that the colleges had one position and the schools another position. Your desire would be that the whole medical interest should be represented by one Faculty?—Yes, that they should blend together to form the Faculty which is already made.

7366. We quite understand, of course, the absolute independence of the colleges. Are the schools independent?—The Registrar asks me to distinguish between the technical faculty, and the Faculty in some other sense, which you mean. I am not aware that that would mean it in any other sense.

7367. I only meant it in the sense in which you used the term when you said the colleges and schools together would form, according to your idea, the medical Faculty of the University?—Pardon me, not the medical Faculty of the University. I said if forms virtually, if not actually, the great Faculty of medicine. I did not say of the University.

7368. What I understood you to mean, and which I now ask you about is this: whether the colleges and the schools together would not form in the University sense the Faculty of medicine for the University, having the same privileges with regard to the University as any other Faculties elsewhere?—That has been my pet idea, but it has been pretty well beaten out of me. Here is the Faculty already made; unite, federate, and present yourselves to the University as the Faculty of medicine. It includes every investigator in London, and every teacher.

7369. As I understand, the schools themselves are not academically independent. The schools are the creation of the governing bodies of hospitals, are they not?—Or of the staff connected with the hospital. There are two bodies; the medical and surgical staff, and what are called the governors; usually it is the staff which has originated the school.

7370. The staff is appointed by the governors?—Yes.

7371. Admitting the schools into the University as part of the Faculty of Medicine, you would give no function whatever to the governors?—No, none whatever.

7372. Can the schools be said to be so independent that they can take their place in the University regardless of any consequences that may be visited upon them by the governors?—Yes.

7373. If the teachers were made professors in the University, would there be no possibility of a professor being dismissed by a body independent of the University, that is to say, the governors?—If he were a physician or surgeon to the hospital, then, be he professor or not, if he were a professor of the University and had violated the rules of the hospital to which he was attached, he might quite well be dismissed. He would cease to be a member of the staff of the hospital, and also, in virtue of that, of the school from which he had been chosen professor.

7374. Therefore, he could not be professor in the sense in which the professors are spoken of in the professorial scheme, in which the professors would be independent of everybody except the Senate of the University?—He could not.

7375. You have spoken of the Royal Colleges directing the course of education in the schools. Is there a curriculum laid down by the colleges which the schools are obliged to carry out?—Yes.

7376. That prescribes, I suppose, the number of subjects, and the length of the course in each subject?—The colleges do that.

7377. Is that supervised efficiently from time to time?—I believe so.

7378. In the provinces as well as in London?—I do not know about the provinces. But this I know, that in London there is published by the colleges a curriculum which must be fulfilled, and if a student comes up he must have his schedule filled up according to that curriculum, or he cannot be admitted to that examination.

7379. And care is taken with regard to the courses?—Yes, scrupulous care.

7380. Both in the provinces and in London?—I cannot answer for the provinces; but if a provincial student comes up to London he must bring his schedule with him, and it must be filled up according to the strict requirements of the conjoint board.

7381. Are not those requirements practically the same as those sanctioned by the Medical Council?—Certainly.

7382. Are they larger than those required by the Council?—I think so. The Registrar reminds me that it is only in a partial and incomplete way that the Medical Council meddles with the curriculum at all. It has no right to do so. Practically we are autonomous in our power of determining our curriculum. We have no restriction but our own judgment.

7383. But is it not the case that the Medical Council will not register unless their curriculum has been carried out?—They have a new curriculum.

7384. For instance, they have recently made a rule that the course shall in future extend over five years?—No, it did not originate with them. They have no power to enforce it whatever. They recommended it.

7385. With regard to physics, I understand that the Medical Council have adopted a resolution that a certain amount of physics shall be included in a qualifying course for a medical degree?—It appears that they have the power of dealing with the preliminary education, and it is in reference to that that the question of physics is mooted. But the question of what shall be the curriculum for our qualification is determined by ourselves, and by nobody else.

7386. Is there a schedule of the curriculum as at present laid down by the colleges? It has been talked about, but I have never been able to find out exactly what it is. (*A copy was handed to Professor Ramsay*)?—In other words, we have the exclusive power of determining the conditions upon which our qualification shall be granted.

7387. And there is no power in the Medical Council to refuse to register a name which has been passed by you?—They may refuse to register a name on some other conditions, but they have no power to interfere with our curriculum.

7388. The educational curriculum?—There is a point upon which I wish to be accurate. I will ask the Registrar. Have they not asked us with regard to some-

thing like this? (*Dr. Liveing to Professor Ramsay.*) They have exceptional powers under the Act of 1886, which do not apply to this point. It is not the curriculum which applies to the register.

7389. (*To Sir Andrew Clark.*) It is only something put in after registration?—Yes.

7390. When you spoke about the desirability of the Faculty having final control in the case of its being unanimous, or nearly unanimous, you spoke then of "Faculty" in the University sense?—Yes, in the University sense.

7391. You propose that there should be a Medical Faculty which should deal with strictly medical questions, and whose opinion on medical questions, should be final, and not subject to review by any superior body. Now is it possible to distinguish altogether between what are medical questions and what are not medical questions?—I should think in the medical Faculty of a University it would be so.

7392. For instance, take the preliminary examination in general education for medical students. Can that be regarded as being a purely medical question?—If it is a preliminary examination for entrance into medicine, I should regard it as such. The Registrar reminds me that it should really have nothing to do with that, having handed it over to the University entirely.

7393. I am not asking about what exists now. My question was put with regard to your proposal as to the future University, that the Faculty of medicine should have full power of dealing finally with all future questions, if it is unanimous, or nearly unanimous. My question was would you consider a question as to the character or standard of the preliminary examination in general knowledge a medical question?—Substantially, yes, unless it were arranged that the preliminary examination should constitute the Degree of B.A., which I should like to see for every candidate in medicine.

7394. Is it possible to draw a line between what are strictly medical questions, and what are not medical questions?—It would be drawing the line for medical purposes. It would be a medical affair.

7395. But such a question as that of the amount of preliminary general knowledge with which a student might begin his course for the degree is one which would affect the whole character of the studies in a University; would you find any agreement in a Senate consisting of four or five faculties to regard that as a purely medical question?—I have an open mind with respect to it, but if you ask me my own private opinion I should say that the preliminary qualification for entering upon the medical Faculty should be a degree in arts. If it cannot be that, I should think that the question of what was necessary ought to be decided by the medical Faculty.

7396. And that the medical professors alone should decide how much non-medical knowledge was necessary for students beginning?——In medicine.

7397. Then *a fortiori* you would hold the same opinion with regard to the preliminary scientific requirements?—Yes, for medicine exclusively.

7398 You would not consider it at all analogous to allow a Faculty of Science, if there were a Faculty of Science, to determine how much preliminary science a medical student should possess?—No, because medicine is so peculiar a faculty, so complex, so intricate, requiring so many different qualities of training and discipline for carrying it out successfully, that I think the doctors, who themselves have travelled the same road and had experience both as students and teachers, would know best what was practicable, and what was not practicable to get from them.

7399. You would admit that a difference of opinion might arise upon a Senate with regard to a point of that kind?—Yes.

7400. Then, supposing a question came up as to whether a subject was medical or non-medical, would you agree that the Faculty should determine that?—No, the Senate. Everything must be at last subordinate to the Senate?—I have no doubt you are aware that in other Universities all sorts of questions have arisen between the Medical Faculty and other Faculties. You said, I think, that you were informed that in Edinburgh the Senate never interfered?—With medical matters. So I am told.

7401. Was that statement made in a precise way?—My secretary wrote to the secretary of the University and asked him the question. The question asked him was: Is there any definite arrangement for the protection of medical interests or the guidance of medical interests, and the answer was, There is none, but the Senate never interferes with medical matters.

7402-3. That is that the Senate, having confidence in the medical Faculty, usually adopts their report on any medical subject. Of course the decision really lies eventually in the Senate?—Yes, eventually in the Senate.

7404. You could imagine that a Senate might land itself in difficulties in consequence of relying exclusively upon the Faculty?—Yes, it is quite possible.

7405. The words you used, I suppose, had reference to medicine all through?—Exclusively medicine.

7406. But may there not be a distinction between the interests of medicine and the interests of the profession of medicine? Is it not the case that professional interests of all kinds are constantly coming up in matters of examination, in matters of teaching, and in matters of appointments, in such a way that it is almost essential that there should be an impartial unmedical authority in order to secure that nothing in the nature of a professional job, let me say, should be perpetrated?—I have considered that question, and have always tried to meet it in this way. I, for instance, have always objected to a University which had only active teachers governing in any Faculty. For instance, in the Faculty of Medicine you require to have, first, the teachers actively engaged, men who have taught, and men who represent general culture and education, to complete it.

7407. But, according to your view, the strictly medical questions are to be determined by none but medical men. That excludes the very arrangement which you are proposing now as necessary?—The Medical Faculty would include a great variety of persons, and that great variety of persons—a great variety of doctors—would not be likely to be at war with their profession.

7408. But they would be all doctors. Or would the Medical Faculty include any except medical persons?—That would depend. For my part I should say yes.

7409. The teachers of the scientific subjects?—For my part I would have it consist of teachers—persons who had been teachers eminent in science.

7410. Still it would be a professional body?—Yes.

7411. You would contemplate there being other Faculties, such as law and theology, law certainly?—Law certainly.

7412. And would you give them the same powers as regards legal or theological questions as you would give to the Faculty of medicine in regard to medical questions?—I would not like to express any opinion with regard to any other Faculty. I know medicine, but I do not know law. I do not attempt to dogmatise upon matters that I do not know anything about. I have had 40 years' experience in medicine, so I know something about it.

7413. You would not deal with the Faculty of theology in the same way?—It would depend upon what aspect of theology.

7414. Might it not raise a difficulty in the University if one Faculty were treated in one way and others in other ways?—Theoretically it might. Practically there is not the smallest chance of it, I think.

7415. You spoke about Edinburgh. One reason why the Senate very seldom reverses the doings of the Faculty of Medicine is that that Faculty is so large that it almost controls the Senate?—Medicine, I may be permitted to say, is a very important body in London. The functions of medicine are very widespread; they have to do with the birth, the education, and the public health of the people. There is no Faculty which extends its influence so widely and so deeply into the social life of the people as the Medical Faculty. It is also a great Faculty in point of numbers, in addition to being a Faculty of importance in other respects.

7416. I am putting the difficuly with regard to the University as a balanced body—a self-governing body? I do not want it to be an entirely self-governing body. I wish the Senate or the Supreme Council to be the final judges. I have no objection whatever to that.

7417. Is a Medical Faculty likely often to be unanimous?—You see there are book difficulties and practical difficulties. From the book side I would say

Sir A. Clark, Bart., M.D.

14 July 1892.

not very likely; but I must take the question as a man of the world and a man of affairs with regard to what is likely to happen and probably would happen. I think it extremely probable that a predominant lay Senate might determine a question against the unanimous judgment of the Medical Faculty; and I think it would be unsafe to allow them to do so. That is all.

7418. On the other hand, in cases where the medical Faculty were unanimous, might not those be precisely the cases where there would be most need for an impartial lay element to come in and decide?—Theoretically that is so. Practically I have no illustration of it before me.

7419. One important question I should like to ask is this. You propose a pass M.D. and an honours M.D.?—Pardon me, I did not propose that. I mentioned that as a method of getting out of the difficulty, that is all.

7420. Your proposal would come to that, would it not?—It might do so, but our ingenuity is not yet exhausted. I suppose some other method might propose itself to us.

7421. You know there is nothing analogous to that in any other University. There is no such thing in any University in any subject as a degree which is in itself an honours degree?—That may be. That is to my mind no objection. I do not see why you might not constitute it. Of course, I am speaking on the supposition that we are under considerable difficulties. We have a difficult question to solve, and we cannot solve it otherwise than by the spirit of mutual concession, and actually adopting things which are not ideally perfect, but which are practicable under the circumstances that we have to deal with. Without that spirit of accommodation we shall not be able to get a University at all.

7422. There are at present various grades of honours in the examinations for the London M.D. Would you propose by speaking of the degree as "honours M.D." to do away with those various grades of honours?—I merely put tentatively this proposition to tide over the immediate difficulty, namely, that the degree of the new University is to be pass M.D., and that the present M.D. granted from the Imperial side, shall be designated M.D. honours.

7423. And you said I think, that the course for the lower M.D. would be the same course *pro tanto* as that for the higher M.D.?—But there would be something added.

7424. In every subject, an honours course has to be discriminated from a pass course, has it not?—When a man enters London University he has to declare whether he will go in for honours or pass.

7425. And that declaration will affect his whole course?—Yes, it will affect his whole course.

7426. (*Mr. Anstie.*) I understood from Sir Andrew Clark that it would not affect his course?—I said that he may be educated at the same school.

7427. It is important that we should not misunderstand your view upon this matter. I understood from you that the course would not be affected in any other sense than this; that the man who was going in for the honours degree, as it was described, would do something more than the man who was going in for the pass?—That is so. The two are perfectly compatible.

7428. (*Professor Ramsay.*) Then it is not only to be something more, but something different?—Yes, but he would be educated at the same school, taught by the same teachers, and subject to the same influences, except that he would have to fulfil a larger curriculum and a more varied one, and go deeper into the subject, and he would have to declare that from the first.

7429. Let us have no misunderstanding about this. Your scheme is that the external student, the student from the provinces, shall only be eligible for the honours degree of London University?—Yes, what is called the honours degree.

7430. You would confine the pass degree to students of the London schools?—But he will be eligible for any degree if he will come and fulfil the conditions. It is not quite fair to put it in that way and say that the provincial student shall be eligible only for the honours degree. The provincial student will be eligible for any degree provided he fulfils the conditions thereof.

7431. That is to say, by becoming a London student?—Yes.

7432. But my point is that the provincial student, so long as he remains a provincial student, is eligible for the higher degree and not for the lower degree?—Yes.

7433. The London student will have to go through a regular course of training supervised by the University as a condition of his going in for the pass degree, but the provincial student who goes in for the honours degree will have no corresponding course of training prescribed to him?—Yes.

7434. Therefore your plan is that the provincial student shall be eligible for the higher honour degree and not for the lower pass degree?—That is the principle of the London University carried out, which is that they are to determine his degree by the mode in which he answers questions, and not by the way in which he is educated.

7435. Your idea is that it is an unfair mode?—It is.

7436. I think you have stated it to be your opinion that a degree founded upon a prescribed course of study is superior to one conferred upon examination only. Therefore, according to your view, you will admit the student who has gone through a superior course of training to the inferior degree; but the outside student who has gone through an inferior course of study will be allowed only to go in for the superior degree. Therefore honours students are to be developed by an inferior mode of education, and pass students by a superior mode?—If you put it in that way.

(*Mr. Anstie.*) Inferior education and a higher degree.

7437. (*Bishop Barry.*) I should like, if I might, to gather up what seems to me to be the conclusion of your evidence. Your primary object is the creation of a teaching University for London itself, which shall correlate, stimulate, and perfect the education of the metropolis. You consider that any Imperial function, so to speak, ought in such a University to be altogether secondary and subsidiary?—I do.

7438. And if it was found impossible to make it secondary and subsidiary, you would then prefer two Universities to one?—No, I should consider the Gresham University.

7439. The Gresham University side by side with the London University?—Yes, but the Gresham University for the new University for London.

7440. I think we clearly understand each other. Your primary object being the teaching University for London, you naturally prefer one University rather than two; but if it proved that the attempt to make one University do the whole work, both the metropolitan and the Imperial, failed, and if this abortive attempt interfered with the metropolitan work, you would then give up your preference for one University, and you would approve of the Gresham University side by side with the existing London University?—Yes.

7441. That is your conclusion throughout?—Yes.

7442. Then I think that during the examination it must have been present to you that the difficulties of the dual system are very great indeed?—In respect of the re-organisation, do you mean?

7443. I mean in this way—that the difficulties of making one University discharge these two functions have come out very much in the course of this examination?—They do not impress me at present.

7444. We have seen how very difficult it is in respect of between the honours degree and the pass degree, how we fall into a difficulty by making the University fulfil the two duties of examining University for all England and teaching University for London?—Logic is not the measure of the test. It does not distress me at all.

7445. I must confess that the impression upon my mind has been very different. The difficulties of making one University do a double duty (which I have always felt) have been strongly impressed upon my mind in the course of your examination to-day. Supposing, then, it were found, contrary to your opinion, that one University could not discharge the two works, you would then fall back upon the Gresham scheme?—Yes.

7446. I think you said that, in your opinion, the Gresham scheme, with improvements, might be the nucleus of a University?—Yes.

7447. I took down, as well as I could, your objections. The first was that its aim was not wide enough, and that it did not provide for University lectures of

the post-graduate kind, especially for furthering higher research?—Well, speaking generally, I thought that its scope is not wide enough nor its aim high enough; and that it did not provide adequately either for the higher education, or for what is distinct in a manner from that—research.

7448. Hence, if that difficulty were removed by making that provision for the appointment of lectures larger and more obligatory, you would not feel then that the Gresham Charter was open to that complaint?—Certainly not.

7449. In the second place, your objection was that the Royal Colleges were not sufficiently represented upon the governing body?—I ought to have said, to speak more nearly what I mean, that medicine was not adequately represented.

7450. I thought you said that the Royal Colleges were not adequately represented?—I should let it so stand.

7451. That difficulty could be easily removed without interfering with the main principles of the scheme?—And I should like, if your Lordship will permit me, to say that we have no wish, by asking for a greater provision, that the medical Faculty shoud dominate any other Faculty whatever, we do not desire that. We wish merely to be on a level with the other Faculties; but, the medical Faculty being a peculiar one, we do wish that some means should be taken to safeguard it.

7452. That I will come to immediately. You still think that on the council the medical Faculty should hold a prominent position?—Yes.

7453. With regard to safe-guarding, I think you said that your proposition, which is practically that the medical Faculty should have a veto, on all medical subjects, was not an ultimatum?—No.

7454. You desire it, but you do not consider that the whole scheme should turn upon it?—No. The Registrar reminds me that that demand for the safe-guarding of medical interests is not a part of our college programme. I mentioned it as my own view.

7455. And you are not prepared even from your own point of view to make it a matter of life and death?—No.

7456. Lastly, I think your feeling was that the Gresham University was too much in the hands of the two colleges?—That it appeared to be.

7457. Although you are aware that there is a very large and elastic provision for the admission of other colleges?—Yes, in the future, but they do not exist now, and I do not know that they are even likely to exist.

7458. Then supposing we should find other institutions fit to be included in the first scheme of the Gresham University, that would remove a considerable amount of your difficulty?—Certainly; for, as I look at it, and think over it, it appears to me that making allowance for about 16 members which the two colleges would have upon the Council, and also which through the Crown nominees they might get, and also some additional one or two members in medicine, they could settle in their own favour any discussion which arose within the Senate. That is my impression. I merely speak of it as an impression.

7459. All those are points of detail, though important detail?—Yes.

7460. So that from your point of view, *faute de mieux*, the Gresham Charter might be amended so as to meet your views?—Yes. There is one thing which I ought to mention, which I had forgotten. One of the parts of the programme for the College of Physicians is that our examination should form part of the constituent examinations for the degree of M.D. in the new University. That is not provided for in the Gresham University scheme.

7461. But that would be in any case, whichever scheme is adopted. You claim that you should have, not a predominant, but a co-ordinate, voice in the management?—Yes, and that in all these matters the Senate or Council, or whatever it may be called, is supreme.

7462. I do not quite see how that is to be reconciled with your previous provision about the nine-tenths of the Medical Faculty, but I take it that you do not insist upon that?—If it is made a part of the original constitution of the University, and if it be that in every other subject the veto is final, it can scarcely be said to be a contravention of the supremacy of the Council.

7463. Of course every Council with any sense at all would defer greatly to any Faculty on its own questions, but it would preserve its own powers?—I do not make it a *sine qua non*.

7464. You hold that in a proper governing body we ought to have a lay element, as well as a professional element?—Yes.

7465. (*Professor Ramsay.*) You are quite satisfied with that clause in the scheme of the Senate of the University of London?—Not quite—there is the M.D. for the M.B.

7466. I am speaking of the conduct of the examinations?—Yes. I think that is admirably arranged.

7467. It was not to accept the college examination?—Not at all.

7468. But it was to be a matter of joint arrangement between the two?—Yes; and will you forgive me for once again mentioning what I think is not quite clear—that we are not the college; we are becoming a constituent part of the University then. You are founding a University for London. We have been a long while in this field of medical education, and we think we have earned a right to form a part of this medical Faculty. You have assented to that right, and for that time we are no longer the College of Physicians, but a part of the University. Therefore, it is not the College of Physicians doing this or that, but it is the University doing this or that. That is what I am anxious to impress upon you. We have no desire to rule in the University in any way whatever. If we act in the University through the examinations or the settlement of the curricula, or in any other way, we are acting as part of the University, and not in any other sense.

7469. (*Lord Reay.*) I think it is important that one part of your evidence should be put fairly and conclusively, namely, with regard to the admission of institutions outside London. Your position is this: you want the London University to have a purely and absolutely local character?—I do.

7470. You want the Boards of Studies, as it were, of the University to be able to survey constantly the whole of the institutions which belong to a Faculty?—I do.

7471. And you would not exclude the schools of Birmingham or any other town because they are inferior or because they are not efficient, but simply because they would absolutely alter the local character of the University which you want to maintain?—Yes. Your Lordship has just put it better than I was able to put it, not excluding in any sense. We simply ask Birmingham and the other provincial colleges to fulfil the conditions which we believe to be necessary to give the stamp of London doctor, the doctor of London education and training, to our doctors. We should not think it a London degree at all for a man to get his knowledge in Birmingham and come up to London to get his degree. He would be a Birmingham trained man coming up to get a London degree by Birmingham training. There is no injustice, because he can go through the doors which will never be shut to the Imperial side of the London University.

7472. Then may I suggest this alteration in your view. You have indicated very clearly that the London students will be educated at the same institutions and in the same way only in a wider range of studies when they are preparing for the honours degree than when they are preparing for the pass degree?—That is my position.

7473. Then would it not be logical that these honours men should have access to the honours degree on their side, what I should call the Metropolitan side of the University?—If they enlarged their curriculum.

7474. You see no objection to that?—Not at all if the London University will agree to it and if they will enlarge the curriculum.

7475. You have no objection to admit London students both to the pass and honours degree on the metropolitan side?—None whatever. They will declare it at the beginning.

7476. With regard to higher education and research, would you leave it to the University or to the existing medical schools?—To the University; there, I should say, is the function of the University to encourage it, assist it, promote it, maintain it, and gather funds for the purpose.

Sir A. Clark, Bart., M.D.

14 July 1892.

7477. And the College of Physicians which you represent, if it enters the University and the medical Faculty does not enter it with the object of exercising a dominating influence, but of sharing with the other London medical schools the responsibility of keeping up a high standard in the medical Faculty of the metropolis?—Entirely; and with the sole object of bringing to that University as good citizens, the knowledge, the experience, and, I think, I may be permitted to add, the prestige which we have acquired in our long history.

7478. (*Mr. Anstie.*) Lord Reay's question induces me to ask another; I wish to put aside any question of the influence, domination, or participation of any teaching body outside London. Assuming that the London schools alone, or the London colleges alone are represented upon this University, do I understand you then still to say that you think that on some ground or other a Birmingham student ought not to be admitted to its Pass degrees?—Not unless he resides in London.

7479. Although he may be admitted to the honours degree of the University of the same name and which is equally expressive?—But it is performing another function altogether.

7480. I believe the college you represent is the Royal College of Physicians of London?—Yes.

7481. It gives licenses to practise in England?—Yes.

7482. (*Mr. Rendall.*) Assuming the adoption in some form of the scheme you advocate of the Pass M.D. open to London and the Honours M.D. open to the world, do you think the examinations for the Pass M.D. and the Honours M.D. should be organised and detetmined by the same body or by distinct bodies?—By distinct bodies; I wish to emphasize the one word that the functions of the re-organised University of London shall be kept apart from its Metropolitan process.

7483. You would secure that the Pass M.D. should form part of the stage of the preparation for the Honours M.D. How would you secure that the one should serve as a stage towards the other?—By making the student declare whether it was his intention to go in for honours.

7484. You would separate them throughout?—No, they would go on side by side, only they would study a larger number of subjects.

7485. But that would necessitate the acceptance of the Pass Examination as part of the Honours Examination?—It would necessitate it, but if he chose to go through it in that direction it would necessitate it if he were a London student.

7486. But if managed by the same bodies, it would imply, probably, acceptance of the same kind of preparation?—Or it would imply that the Senate, or whatever was the dominating body, should determine that those students who intended to go on to the honours degree should pursue a different course.

7487. (*Professor Ramsay.*) Then, as I understand from your answer to Lord Reay, the course for honours, whether to the London student or to the provincial student, would be under the control and determination of the Senate of the University?—Yes.

7488. That introduces a new anomaly. According to your present view it would be quite proper and possible for the Senate to prescribe courses of study for honours both in London and the provinces, and to give an honours degree upon an equal footing, an equal examination, and an equal curriculum, both to London and the provinces; but, yet it would not be competent to the Senate to provide honours for London students, on what you call its Metropolitan side?—The first answer is that it does so now. It provides curricula for students whether in London or the provinces to pursue who are going to take its degrees. It would do so still, but it would have no right to meddle with the Metropolitan University functions. The Metropolitan University function would be to determine what were the conditions for determining the M.D. Pass degree of London.

7489. The object would be to prevent a certain class of students from poaching on the London preserve?—It would enable the Faculty of medicine of London to be all bound up together in one common work—working together for a particular end without disturbance from without.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Fifteenth Day.

Friday, July 15, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. BISHOP BARRY, D.D., D.C.L.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Lord Thring, K.C.B., and J. L. C. Smith, Esq.

15 July 1892.

Lord THRING, K.C.B., and J. L. CLIFFORD SMITH, Esq., examined.

7490. (*Chairman to Lord Thring.*) I think you appear on behalf of Holloway College?—Yes. I appear as one of the Governors of Holloway College to represent their wishes with regard to this Commission.

7491. Perhaps you would like, before you begin, to give us some little sketch of the present condition of Holloway College and of the work that it is doing?—Yes. I speak from memory, and I must refer for details to my friend the secretary, Mr. Clifford-Smith. Holloway College was founded, as you are aware, by the late Mr. Holloway. It is situated on 96 acres of land in a very beautiful situation overlooking the Thames Valley. The buildings are very large indeed. Including the pictures, they cost 600,000*l.*, I think, and they contain somewhere about 800 to 900 rooms. It is an extremely large building. Those photographs illustrate the interior and the exterior. (*Copies of photographs were handed to the Commissioners.*) We have an endowment of 200,000*l.*, and it brings us in about 7,000*l.* a year. As you may conceive, the expense of keeping up the building is enormous. The building was opened by the Queen in 1886, but we did not set to work until 1887. We opened with 28 students, and now there are about 80, so I think that on the whole we made very respectable progress.

7492. It is calculated to hold how many?—It is calculated to hold 250. The reason why we have so large a space is this. Each student has a bedroom on one side of the corridor, and a sitting room on the other side of the corridor to herself. Besides that there are lecture rooms and a few common rooms; a large lecture theatre, chapel, dining hall, gymnasium, library, reading room, museum, and a picture gallery containing a valuable collection of modern British paintings. So that the accommodation is very much better than your Lordship and I had at college. That is a fact. Then with respect to the education, the full fee is 90*l.* a year. The only exceptions are painting, music, and singing. I may say at once that for 90*l.* a year I think as complete an education is given as can possibly be given. The female staff is a Principal with 11 lady professors. Then we have as non-residents, but living in the neighbourhood, Mr. Donkin, classical professor, and Mr. Loney, mathematical professor. Then we add at all times any teachers from London that the Principal may tell us are required. We have a laboratory on which we spent about 2,000*l.*, which has been furnished with the best possible apparatus; and lately we have, at the request of the science teacher, voted 240*l.*, or thereabouts, for more apparatus. I mention these things because I think they show that we are provided with every possible requisite for complete education.

7493. What are the subjects taught?—It really involves the whole curriculum of education. I ought to state that the exact terms of the trust are—"To "afford the best education suitable for women of the "middle and upper middle classes, and is intended to "be mainly self-supporting." Therefore, I would only observe that the Trust is for women of the middle and the upper middle classes. Of course there are a great many ladies there who intend to follow the profession of teachers. The Trust is created by settlement, not by will, but the settlor expressly states that he did not intend it to be exclusively for teachers, but he wished to improve the education of the mothers of England.

7494. (*To Mr. Clifford-Smith.*) Will you read us the exact words?—"It is the founder's desire that "power, by Act of Parliament, royal charter or other-"wise, should ultimately be sought, enabling the "college to confer degrees on its students after proper "examination in the various subjects of instruction. "Until such power shall have been obtained, it is "intended that the students shall qualify themselves "to take their degrees at the University of London, "or at any other University of the United Kingdom "where degrees may be obtained by them, or to pass "any examination open to them at any such Univer-"sity, which may be equivalent to a degree examina-"tion."

7495. (*Professor Ramsay to Mr. Clifford Smith.*) Would you kindly give us the words of the original clause containing the words "middle and upper middle classes"?—"The college is founded by the advice and counsel "of the founder's dear wife, now deceased, to afford "the best education suitable for women of the middle "and upper middle classes, and is intended to be mainly "self-supporting." [*Lord Thring.*] So we consider the college to give the best lady's education in the widest possible form that money can supply, and I think we do it. Then with respect to providing for the *mens sana in corpore sano*, we have the best possible tennis grounds; we are going to put up a swimming bath, and we encourage in every possible way outdoor exercise. There is one material point which I ought to mention with regard to our scholarships. As I said before, the full payment is about 90*l.* a year, but about 40 out of the 75 hold scholarships, and these scholarships vary from 30*l.* to 75*l.* So that in many cases a clever girl really and truly gets her education for from 30*l.* to 40*l.* a year.

7496. (*Bishop Barry.*) Are the scholarships obtained by competition?—They are obtained by competition. The only expense which we do not provide for in maintenance is this: the students pay for their own washing. I believe that is really and truly the only thing. The governing body consists of 12 governors. The secretary will read them. [*Mr. Clifford-Smith.*] Prince Christian, the Archbishop of Canterbury, the Bishop of Rochester, Lord Thring, Mr. A. J. Mundella, Sir William Hart-Dyke, Sir Joseph Savory, Mr. R. C. Christie, Sir George Martin-Holloway, Mr. Henry Driver-Holloway, Mr. David Chadwick, and Mr. Walpole Greenwell. And there are three honorary governors who have been appointed by the governing body very recently, viz., Sir Henry Roscoe, Mr. Bryce, and Dr. Moulton.

7497. (*Chairman, to Lord Thring.*) With whom does the government really rest? Does the governing body meet often?—Yes. Of course, like all governing bodies, some of us take more interest in it than others, but, on the whole, we are a most diligent governing body. We meet once a month, sometimes at Holloway College, and at other times, to suit the convenience of the London members, by the kindness of the Archbishop, we meet at Lambeth. As a general rule I should say the attendance is very good. Of course now and then there are only three or four of us, but as a general rule the attendance is very good indeed. The greatest possible interest is taken by many of us in the subject—indeed by all who are not too much occupied by business. As you know, Dr. Moulton has been unwell, and the other two honorary governors, Mr. Bryce and Sir Henry Roscoe, have been occupied by other matters lately, and, therefore, we have not had the benefit of their attendance.

7498. (*Mr. Anstie.*) They were only recently appointed, I think?—We only appointed them two months ago.

7499. (*Bishop Barry*) They have the same powers as the other governors?—No; they have no power of voting, but as a matter of fact they sit with us.

7500. (*Chairman.*) You began really to get to work you say in 1887?—Yes. There was a great difficulty at first. We were a long time in selecting the Principal, and the governing body was not fully constituted.

7501. Before we leave the question of the governing body, will you tell us how they are appointed, how a vacancy is filled up?—There are three trustees, Sir George Martin-Holloway, Mr. Driver-Holloway, and Mr. Chadwick. The two first are the brothers-in-law of the settlor, and the third was a confidential adviser of the settlor. The three trustees are perpetual, and they were appointed by the settlor. The settlor intended, I think, to appoint the others, but there was no appointment made. He died before he had made any appointment. The Charity Commissioners decided that the trustees had the power of appointment; they asked the trustees, at all events, to nominate, and they did nominate, the gentlemen whose names have been read to you, with the exception of those three trustees. Then with respect to how we are to be succeeded, I can only ask the secretary to read the power of appointment. I ought to state that Lord Granville was originally nominated a governor. He died, and under the power contained in the settlement, Sir William Hart-Dyke was appointed by Lord Cranbrooke, who had the power of appointment, as Lord President of the Council.

7502. (*Mr. Clifford-Smith.*) Perhaps you can tell us what it is?—The answer is very simple after his Lordship's explanation. Five governors are to be appointed by five public bodies when vacancies occur, namely, one by the Lord President of the Council, one by the Chancellor, Vice Chancellor and Senate of the University of London, one by the Court of Aldermen of the city of London, one by the corporation of Windsor, and one by the corporation of Reading. Four are to be co-optative.

7503. Are the trustees co-optative?—They are *ex-officio*; they are perpetual, being governors in their capacity as trustees.

7504. (*To Lord Thring.*) Then to go to the next point. As the college has been now in existence for four or five years, I suppose several of your students have taken degrees?—Yes, we think we have been very successful. The secretary will tell you the result.

7505. (*To Mr. Clifford-Smith.*) Do they generally go to the University of London?—They are mostly prepared for the University of London, and some of them for the examinations of Oxford. I have in my hand a list of the examinations they have already passed since the opening of the college if it is the pleasure of the Commission that it should be read. (*For this document see Appendix No.* 10.)

7506. You might give us the heads; how many have taken degrees, and where they have taken them?—Since the college was opened, 38 students have passed the matriculation examination. I am speaking only of the University of London now.

Lord Thring, K.C.B., and J. L. C. Smith, Esq.

15 July 1892.

7507. (*Mr. Rendall.*) How many years does this cover?—Five years. 18 students have passed the intermediate arts examination, four students have passed the intermediate science examination; 17 students have taken their B.A. degree, and one student has taken her B.Sc. degree. Then in honours at the London University in matriculation, four students have been placed in the honours division. One was placed first in the honours division. That was a very great success. One was placed tenth in the honours division; one was placed 50th in honours division; one was placed 100th in the honours division. In honours again, in intermediate arts, in French one student was placed first in Class I., another was placed first in Class II., another second in Class II., another second in Class III. Then in German one student was placed second in Class I., one student was first in Class II., one student was placed first in Class III., and one student was placed second in Class III. Then in the examination for the degree of B.A. in French Honours one student was placed second in Class I. Then in the examination in German Honours for the degree of B.A., one student was placed third in Class I., and one student was placed first in Class II. Then in English Honours one was placed tenth in Class II. In classical Honours two students were bracketed first in Class I., one student was placed seventh in Class II., one student was placed fourth in Class III. Then Oxford honours have been taken. In 1891 two students passed Honour Moderations in mathematics, Class II.; one student the same in Classs III.; and this year, 1892, we have one in Honours Moderations in mathematics, Class II., two in classics, Class II., one in classics, Class III., one in the English final school, Class I., two in the English final school Class II. And there are several who are now going up for their London matriculation and intermediate in arts and science.

7508. (*Mr. Anstie to Mr. Clifford-Smith.*) Can you tell me in what way those ladies take honours at Oxford, under what head?—Oxford honour moderations.

7509. Not in any college connected with the University?—No, but outsiders can go to Oxford and take the examinations.

7510. Do they take them as *nonascript* students?—Yes. Cambridge, moreover, requires residence, Oxford does not.

7511. (*Chairman.*) The greatest number go to London University?—Yes.

7512. Are they satisfied with the examinations there, and the degrees there?—Perfectly, so far as I know.

7513. Is there any wish, do you think, on behalf of the governors or the teachers to have any change in that way, and to have any other University to go to for a degree, or to have any change in the examinations of the London University?—I am not aware of any such wish, and I do not think it exists.

7514. (*To Lord Thring.*) Therefore, so far as the representatives of Holloway are concerned, I suppose they are satisfied with the present state of things?—They are. Our application to your Lordship is a very narrow and restricted one. The abandoned Gresham Charter was restricted in area to the administrative county of London. All we come here to ask this Commission is, that you should so far extend the area as to include the area within which Holloway College is situated, so that in case Holloway College should wish to affiliate itself it would have the power of application. We do not wish to commit ourselves at all at present. We only ask that you would not put in any clause which would prevent our being affiliated if we wish it.

7515. But you have not at present made up your minds whether you wish to be affiliated?—No, undoubtedly we do not want to be absorbed, which I see is a term that has been used.

7516. Those who are in favour of a professorial University wish to absorb everybody. You would not wish to be absorbed?—I cannot bind my colleagues, but I state at once my own private opinion, certainly not.

7517. (*Bishop Barry.*) What is the distance of Holloway College from London?—It is 19 or 20 miles, I believe. It depends from what part of London you mean. From Hyde Park Corner I should think it is as nearly as possible 19 miles.

7518. Then from the centre of London, say, Temple Bar, it would be about 21?—Well about that.

7519. (*Chairman.*) You wish the definition of area to be altered in order to give you an opportunity of coming in if you wish it?—That is our only application.

7520. At present I gather from the secretary that you are perfectly well satisfied with the present state of things, and you do not wish for any change?—Not at the present moment. But we do not wish that there should be an excluding clause.

7521. You do not wish that your teachers should have a more direct voice in arranging the curricula of the examinations than they have now?—My only authority is to ask you to extend the area, so that, if Holloway College should resolve to affiliate itself, or whatever term you use for forming a connexion with your University, they should not be excluded by the limitation of the area of the administrative county of London.

7522. But you are not prepared at present to say whether you are in favour of the establishment of the Gresham University or not?—No, we have not considered it. It has not been considered at all.

7523. Then, except the question of distance, which would enable you to be brought in, there is no other point upon which you would wish to give evidence?—No, none.

7524. No other point you would wish to enter into?—No.

7525. (*Professor Ramsay.*) The teachers have no voice whatever in the government of Holloway College, have they?—No, none whatever.

7526. Neither the resident nor the non-resident. They are merely the servants of the governing body?—Yes, of course practically the Principal is always called in and consulted, but she has no authority.

7527. I suppose that the tenure of office of the teachers is quite at the will of the governors?—I think it is absolutely at the will of the governors during pleasure. We do not actually engage them during pleasure. At a term's notice, I think, it is in our engagements.

7528. Can you tell us the amount of salary you give to the professors, male and female?—There is no objection to stating that.

(*Mr. Clifford-Smith.*) They vary from 600*l.* a year paid to the non-resident head of the mathematical department to 100*l.* a year paid to one of the resident lady lecturers. So that the scale is from 100*l.* a year to 600*l.* with gradations between.

7529. (*To Lord Thring.*) You have visiting professors, have you not?—Yes.

7530. If there were a teaching University constituted with a body of University professors, would it suit your arrangements that University professors should go to Holloway College and teach like Cambridge professors go to Girton?—I can only give you my personal opinion, because, as I have before told you, I am limited in my application to you. Personally, I am inclined to think that it probably would suit us.

7531. There is nothing to exclude it?—It is a question which would provide us with the best literary goods.

7532. I have heard that one of the objections to the college as it now is is that in consequence of it being remote from any academical centre they cannot get the same class of teachers that they get at Newnham or Girton?—I maintain that we can get the best teachers in the world, and that we do get the best. We try to give these ladies the best possible education we can give them. I have stated what our means are, and I think they are ample. It is only a question how to get the best teachers.

7533. (*Sir George Humphry.*) A very important point to which you have incidentally referred in connexion with the education of women is the *corpus sanum*. Have you any reason to think that the women educated in the Holloway College undergo any deterioration in health in consequence of their study, and more particularly in their competition for the scholarship examinations?—I should say none whatever; but, if you ask me my private opinion, I think in almost all the ladies' institutions the girls are inclined to work too hard. The difficulty is this—I am only giving my personal opinion, and not that of my colleagues. Girls or women appear to be exactly contrary to what boys and young men were in my days. The difficulty is to prevent them working, while in the case of the male animal the difficulty is to make him work. If you ask

my private opinion I think the girls sometimes overwork themselves, but undoubtedly there cannot be greater care taken of them than is taken at our college. I have not the remotest reason to think that they are either injured or deteriorated in their work.

7534. I need scarcely say that that is the most important point in connexion with the gradual increase of the education of women, whether they physically are at all suffering from it?—You are asking me now my private opinion.

7535. Yes?—My private opinion is that, although it has been proved that young women of ordinary strength are perfectly competent to have the advanced education, if you are pleased to call it so, that women now either have, or which it is supposed they ought to have, on the other hand I think there ought to be greater care exercised in preventing over-work with girls or young women than in the case of young men.

7536. And you have done at Holloway College what has been done at other educational institutions for women, endeavoured to institute outdoor exercises as a compensation for the liability to overstrain in their work?—Yes. I think we have done everything the governors can do to encourage outdoor occupations.

7537. As far as we know at present this education in the various centres for women has, I believe, not been shown to be attended with any distinct deterioration, and this is in consequence of the great care and attention which is paid to outdoor exercises, and the institution of a variety of outdoor games?—I have always been anxious, and my colleagues also are very anxious, I think, to undertake, in addition to what may be called learning, ambulance lectures. We offered them quasi outdoor exercises, for instance, gardening. We gave them gardens, and I believe they have cultivated them to a certain degree.

7538. (*Chairman.*) What are their ages in general?—That I cannot tell you. They cannot come in till they are 17. That is the minimum. The secretary tells me there is no maximum stated in the prospectus. I suppose the maximum would be 23 or 24, but I do not know.

7539. (*Sir George Humphry.*) You would institute teaching in the useful art of cooking, I suppose?—Yes; and I also want dressmaking, if you ask me.

7540. You do not want to assimilate the education of women to that of men?—Not altogether. Wood-carving is also taught.

7541. (*Mr. Anstie.*) The question of the governing body has been gone into a little. Perhaps we had better get it quite clear. As a matter of fact, I believe the case is this. Of the representative members of your governing body no one has yet been appointed, with the exception of Sir William Hart-Dyke, who was appointed by the Lord President of the Council, but the other representative places are now filled under the Scheme of the Charity Commissioners by nominated members who as they go out will in turn be succeeded by representatives appointed by the bodies named in the deed of foundation?—That is so.

7542. Professor Ramsay has called your attention to the fact of the distance from London. I do not know whether your attention has been called to this position in the deed of foundation. Under the 13th clause the resident teachers must all be women?—Yes, they are so, of course.

7543. If you want men teachers you have to fetch them from London?—Yes.

7544. The nearest place from which they could get any men teachers would be London?—Certainly.

7545. I suppose it would be answering what you wish if, instead of such a phrase as "the administrative county of London," such language should be used as is used in the Senate's scheme, "in or near London," which would allow reasonable latitude to the governing body?—Yes; or you might say the county of Surrey.

7546. That would lead us into minute considerations, but if you use the phrase "in or near" that would give a little latitude?—I think "near" would cover it, but it is rather a vague phrase.

7547. That is the object of using it. It enables the governing body to form a judgment as to whether the nearness is such as to allow the inclusion. If you go into the question of counties, perhaps, you would have to include Essex or Middlesex?—Of course it is not for me to suggest, but I should not have thought it was very important if you did include Middlesex. I should think "in or near" would answer the purpose, the more so if it is understood that it is in the mind of this Commission that "near" includes Egham.

7548. (*Professor Sidgwick to Mr. Clifford-Smith.*) How far are the students preparing, or how far have they prepared, for the more advanced examinations? So far as I have observed the preparation is only for the B.A. or the B.Sc. at London, and Moderations at Oxford?—That is so.

7549. Have you prepared for "Greats" at Oxford?—Not yet. There has not been time.

7550. Has there not been time since the college was founded to prepare for the "Greats" at Oxford?—Well, practically there has, but it was not looked forward to at the opening. (*Lord Thring.*) But we intend to do it.

7551. (*To Mr. Clifford-Smith.*) What proportion of students prepare for the examinations mentioned? Speaking broadly, are they in the main prepared for the B.A. and the B.Sc.?—Yes, those who are studying for London.

7552. And those who are not are preparing for Moderations at Oxford?—Yes, in the main, but some take the examinations at both the Universities of London and Oxford.

7553. Then as regards the laboratory, I suppose, from the account of it at page 14, it is not qualified for a course of advanced teaching. You say: "The apparatus needed for the B.Sc. course." What about the more advanced teaching?—That is going to be undertaken, and the ground has already been prepared.

7554. (*To Lord Thring.*) You said that in your opinion in all the colleges for ladies there was a tendency to over-work. May I ask if you have given any attention to the state of things in the ladies' colleges at Oxford and Cambridge?—No. I ought not to have said in all the colleges. What I really had in view was this: I take very great interest in the Royal College of Music, and also in Holloway College. This is only my private opinion, but I think the difficulty in both those colleges is to prevent women from over-working themselves. I ought not to have said that I knew it in all the colleges.

7555. I do not know whether you are aware that as careful an investigation as could be made was made a little while ago with regard to the colleges of Oxford and Cambridge?—No, I am not aware of it.

7556. You do not then know, the result did not tend to show that there was any serious tendency to over-work in the main?—Undoubtedly the health of the girls at Holloway College has been good, better, perhaps, occasionally than it has been at home, but they have been most carefully tended. I must not be misunderstood as accusing Holloway College of over-working its girls. All I wanted was to point out the difference that appeared to me to exist between women's colleges and men's colleges and girls' schools and boys' schools, and to say that it was essential to watch the one more carefully than the other with respect to over-work.

7557. As I understand, you prepare the students both for Oxford and London. Is there not inconvenience in having a course of study that must adapt itself to two examinations?—I believe not, but I really cannot answer, because that is a question of tuition in which I am not sufficiently versed.

7558. As two Universities have opened their degree examinations to you there is no pressing need for a third?—No, there is no pressing need in one sense at all. I hope that my University of Cambridge will open its walls to outside students. Then we shall send them to Cambridge as well as to Oxford and London. It is only that we do not wish to be shut out from what may be one of the greatest institutions of the country.

7559. (*Lord Reay to Mr. Clifford-Smith.*) May I ask whether there is an entrance examination?—Yes, a pretty strict one, I believe; but others that have been passed may exempt students from taking it.

7560. I read this at page 13: "Students may select "their course of study, subject to the approval of the "Principal." Does that mean that they may take a very limited number of subjects?—If they are not desirous of taking an examination at Oxford or London they naturally take fewer subjects.

Lord Thring, K.C.B., and J. L. C. Smith, Esq.

15 July 1892.

7561. They may take an absolutely modern course?—Quite so.

7562. (*Chairman.*) I should like to ask Mr. Clifford-Smith one question. You said you were quite satisfied with the present state of things in London, that the London University examination suited your needs very well, and that you had no particular wish for any alteration?—Quite so.

7563. I suppose you are aware that one of the numerous plans that have been put forward for a London Teaching University is to re-model the constitution of the London University, to bring it into more immediate connexion with all the different London colleges, and to give the teachers of those colleges more power and more influence in the governing body. Perhaps you have heard that?—Yes.

7564. Supposing your distance of 20 miles from London to be a bar to your being included in the London district, and that this London district was so modified, would you, do you think, be at any disadvantage compared to the different London colleges in the examinations when they were so altered and modified as is suggested? Has that occurred to you?—I do not think I am prepared to answer that question. It has not been considered.

7565. Supposing you not to be included in the new scheme for this modification of the London University, and that it would be a disadvantage to you to have the present imperial character of the London University altered or reduced to a secondary position; you have not considered that?—I am not prepared to give an answer.

7566. Because it strikes me that it would be worth considering. It might affect your position rather seriously if you were not included?—We look forward to the future, but can now only hope that an opportunity may be afforded to us for inclusion if and when the governors should think fit to apply for inclusion.

7567. But supposing you should not be included, you might wish the London University to retain its present imperial character, and not have it injured in any way?—Quite so.

7568. (*Mr. Anstie.*) I think that last answer is a little inconsistent with the witness's previous statement, that the question has not been considered?—The question as to whether Holloway College should apply to be included has not been considered.

7569. Nor has the question you answered been considered, as to what effect would be produced upon the college by any re-modelling of the University of London which would give greater influence to teachers?—It has not. (*Lord Thring.*) Of course we are only here to answer specific questions, but if you put it in that way I can conceive that you might alter the London University in a way that might be very detrimental to Holloway College, and, therefore, I conceive that it might still be more desirable for us to be included in the new University. But we have not considered it in the sense that I have any right to speak for my colleagues.

7570. (*Professor Ramsay.*) That is to say, you would consider it a misfortune for Holloway College if what you call the imperial side of the London University was entirely struck out, and it was reduced to the level of a local University?—Yes, I should consider it personally a great disadvantage if we were shut out from London University, or if London University lost its glories, unless we had substituted for it such a University as this Commission may possibly construct, which may be of an equal imperial character, and of equal consequence.

7571. (*Mr. Anstie.*) In fact, if the London University were constituted on the lines suggested you would like to take a part in the play?—That is why we are here. We wish to have an opportunity of being heard against being shut out from what may be a very great institution.

7572. (*Chairman.*) If you were shut out you had rather the imperial side of the London University was not interfered with?—Of course, because undoubtedly such interference would put us in a worse position.

7573. (*Mr. Anstie.*) It would put you in a worse position if it were weakened, and if it were strengthened your position would be better?—In proportion as we can get a proper connexion with a very great University the better pleased we shall be. As I stated before, if my own University of Cambridge were to open its doors to outside students we should endeavour to send our students there also.

The witnesses withdrew.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S., examined.

7574. (*Chairman.*) I think you gave evidence before Lord Selborne's Commission?—I did, on behalf of certain of the schools.

7575. You now appear on behalf of the College of Physicians?—I do. May I be permitted to say that in the natural order of things the registrar and then Dr. Moore would have come before me, and it had been arranged that we should give evidence in that order. I am the junior of the four representatives of the College of Physicians.

7576. The registrar will be here to-day?—Yes.

7577. You were present when evidence was given yesterday by Sir Andrew Clark. Do you agree with it or with the greater part of it?—So far as he spoke for the College of Physicians, I quite agree with it. There are one or two points which I should like to supplement, and this, I take it, is what most of us will do on behalf of the college.

7578. You agree with Sir Andrew Clark in being willing to accept the revised scheme of the Senate which was rejected by Convocation as the basis of the best solution of the difficulty in providing a teaching University for London?—Yes, I do.

7579. Then with regard to the modifications of that scheme, do you take the same view as Sir Andrew?—I do entirely, because he repeated what was the feeling on the part of the college as expressed in regard to it.

7580. One of the things you attach most importance to is the introduction of the Royal Colleges into having a voice in the arrangement of the examinations for the M.B. degree, and you would prefer it to be extended to the M.D.?—Yes.

7581. I think it would save time if I asked you to tell us in what way you differ from Sir Andrew Clark, and after that I should be glad if you would tell us your views on anything omitted by him, or any point on which he did not touch. In the first place I will ask you where you differ from him?—It will be difficult to put it in that way, because where I differ perhaps is rather in regard to Sir Andrew Clark's expression of his own views. May I be permitted a few words to supplement what I conceive to be the views of the college, which is primarily what I am here for. I should like to say that amongst the grounds upon which the colleges would claim any position such as is indicated in clause 47 of the London University scheme are these. We do claim to have a very considerable experience necessarily in the art, if you like to call it so, of examining. As examining bodies over many years there has grown up knowledge of examinational methods for our profession. Examinations have improved in their character, and in their method, just in the same way as we know education has improved, and we wish to emphasize that. We conceive that any newly-formed University, whatever its character might be, which, so far as regards medicine did not include the Royal Colleges, would be placed at a disadvantage in so far that it could not possess at once the materials for or the experience of conducting those examinations. Then the next point which I should like to add, and perhaps to express in a different way from that in which the President put it before you, is that the position which we seek in any scheme whatever it might be is not only representation on the governing body, but also some examinational association with the University. Both those requirements were met in the revised scheme of the Senate of the University. Only one was met in the Gresham scheme, even had the Royal Colleges accepted the position which the Gresham scheme offered them, which they did not. The Gresham scheme only offered representation on the governing body; it did not provide for any examinational association such as clause 47 of the revised scheme of the Senate does.

7582. But it refuses to give a degree practically to anybody not qualified by you?—No, it is not qualified

by us, but it is to anyone who does not hold a qualification to practise, which qualification might be obtained anywhere; and there would be very strong reason to believe that in the nature of the case the qualification, in so far as the qualification only to practise would be required, could be obtained from some licensing body that has not the same position as that occupied by the Royal Colleges. If a candidate for a degree under the Gresham scheme simply has to have a qualification, which is what the scheme provides for, it does not follow that he would not get the easiest and cheapest obtainable. Naturally he would, and there is no reason why he should do otherwise.

7583. Then you do not think the majority of them would go to you?—Your Lordship quite sees that it is impossible to furnish grounds for the formation of that opinion, because nothing like it exists. But it is not easily conceivable why they should go in for the more difficult and costly examinations when the easier and cheaper will equally answer the purpose.

7584. Sir Andrew Clark thought they would. He thought it was a concession?—I think that view was with regard to the concession the scheme offered to licensing bodies in general.

7585. (*Bishop Barry.*) What would be the other licensing bodies?—The other licensing body in London would be the Apothecaries' Hall.

7586. And what others?—The licensing bodies in Scotland and Ireland.

7587. (*Professor Ramsay.*) There are 19 licensing bodies, I think?—Yes, I think that is the number.

7588. (*Chairman.*) But they would not take degrees in other Universities?—No. But there is the Faculty of the College of Physicians and Surgeons in Glasgow, Apothecaries' Hall in Dublin, and so on.

7589. Do you think London students would go to the Irish bodies?—No. I think they would go to the Apothecaries' Hall in London.

7590. The Apothecaries' Hall is practically the body you think they would go to?—Yes. May I add that by the representation on the governing body that the colleges would claim as part of their position in any University they would so far become integral parts of the University; and, to emphasize what Sir Andrew Clark said yesterday, the subsequent acts that were carried out would not be performed independently by the Royal Colleges, but by them as part of the University, they being represented on the governing body.

7591. They would only be joined to the University with regard to that one particular part; they would still retain their autonomy, and all their other functions; and they would only be joined to the University for the purpose of assisting in the examination?—Quite so. But if certain representatives of the colleges are on the Senate there they remain, and are part of the University so far, which gives the colleges a *locus* in the constitution of the University.

7592. You do not attach so much importance as Sir Andrew Clark does to the clause in the Gresham University Charter which requires a license from some licensing body. You do not think that is so much a boon to you as he seems to think it is?—To the Royal Colleges—no. May I say this also, to put the position as we conceive it to be, only I am now using my own words in order to put the position as I think it ought to be put. We conceive, and we keep that steadily in view, that what is wanted is a degree of a high character, and on accessible terms for London students. On the medical side of the question that is the one point that has moved us entirely. Without going into any description of what a University should or should not be, we recognise that for practical purposes at the present time we want some federation of what already exists, the two things that supply the essentials for the degree, viz., education and an examination which carries degrees, leaving it perfectly open to the University to take steps to supplement that in any way by provision for higher education in all branches of arts and science. The schools as places of education already exist; the examining body already exists in the person, so to say, of the combined colleges. So far the schools have hitherto supplied the requisite education, and the Royal Colleges have supplied the requisite examination, though not able to give a degree; what we conceive to be wanted is some federation of these bodies under University control involving the colleges to an extent sufficient to supply the examination element of the degree. On that basis, therefore, we claim necessarily to take a predominant share in the examination of students for the London degree, assuming that it is a University to be founded primarily or London.

7593. You would wish, first of all, that this revised scheme of the University of London should be adopted with the few alterations you have suggested. Do you agree with Sir Andrew Clark in thinking that the objection of Convocation may be got over in any way?—Are you asking my own view of the matter? Of course the college cannot express an opinion upon another body.

7594. I shall be glad to have your own opinion?—I think Convocation should hardly be allowed another opportunity of expressing an opinion.

7595. Supposing this not to be feasible, would you be inclined to fall back upon the Gresham scheme sooner than leave things as they are now?—Yes, sooner than leave things as they are now.

7596. Because I believe you are strongly of opinion that the present degree of the London University is not sufficiently practical, and does not meet the requirements of the profession?—Is not sufficiently available. I should prefer that word to "practical," because it involves a reflection upon the character of those examinations which as a graduate of the University I should be hardly willing to cast.

7597. You would confine yourself to saying that it is not sufficiently available?—Yes.

7598. Therefore, sooner than leave things as they are, driving students to go to Edinburgh, Glasgow, Durham, and elsewhere to take their degrees, you would be willing to accept the Gresham plan?—Yes, I would.

7599. Then if we were to take the Gresham Charter as it stands, what would be the principal alterations that you would suggest?—Obviously the first objection that the college would have to the Gresham scheme, and which I think I am justified in saying influences them considerably in refusing to take part in the Gresham scheme, is that the Royal Colleges were omitted from the scheme, or were admitted on terms which we regarded as inadequate to the responsibilities to be incurred and to carry out the examinational function that is required. The Gresham Charter simply gives the Royal Colleges representation, and, as I say, no examinational association, and that representation was one that the Royal Colleges did not consider they were in a position to accept. Before the Privy Council they proposed a way which they conceived would meet their views, but which the Privy Council did not see fit to allow.

7600. They were to be the Medical Faculty?—Yes, they were to constitute the Medical Faculty. May I say in explanation that that unfortunate word is used in various senses, and was used yesterday in various senses. I have got myself into a habit of using it simply in the sense in which the words "Assembly of Faculty" have been used in the Senate's scheme and in the Gresham scheme.

7601. Meaning the body of teachers?—Yes. In that sense the Royal Colleges were to form the Faculty of the University in place of the body of teachers.

7602. In your capacity as representing the schools would you endorse that? Would the teachers agree to that?—They did. They went before the Privy Council with the acceptance of that position. But may I be permitted to remind your Lordship that under the Gresham scheme, then, the medical schools had each a direct representative on the governing body, and consequently, therefore, the schools got quite all they asked for, and could have had no conceivable ground to object to the Royal Colleges occupying that position.

7603. They already had representation?—That was provided for by the Gresham scheme, which was a totally different condition from what was existing when I appeared for certain of the schools before the late Royal Commission.

7604. As long as they had that representation on the Senate they were willing that the Royal Colleges should form the Medical Faculty?—Yes.

7605. Would you attach much importance to securing the medical body from being outvoted on the Senate on anything attaching to medicine if nine-tenths of the Medical Faculty were in favour of it?—Again that was an expression of the President's own opinion. Obviously nothing like that could have been passed by

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

the college. My answer will be individual opinion also. I should not seek for anything like that.

7606. You do not think it would be necessary?—I do not think it would be necessary. If I may say so, that is a point to which Sir Andrew Clark has attached great importance in our many discussions on the matter, but personally I do not see the danger that he anticipates. Of course it is only fair to say that the suggestion of Lord Selborne, at the inquiry before the Privy Council, gave colour to some proposal of the kind in so far as he did suggest a safeguard.

7607. Is there anything else in the Gresham Charter that you would like to deal with?—We felt another objection to the Gresham Charter, was, with all respect I say, the predominant influence possessed by University College and King's College, that is by two teaching institutions.

7608. That is as it at present stands, but there is power to bring in other colleges and other institutions, and if we did that to any extent and could find sufficiently good bodies to bring in that would rather swamp their power, would it not? If we were to bring in other bodies that would tend to rectify the scheme in that regard?—I think there would be a difference in that alternative you have suggested, my Lord. Of course with the predominant influence of King's College and University College on the Council, the inclusion of other bodies would remain entirely at their discretion.

7609. There is an appeal to the Privy Council if any college wishes to come in?—Yes, no doubt; but as it stands we felt that that was an objection to the scheme, the predominant influence of two teaching institutions. I do not mean to push the objection with regard to the names, but I mean two teaching institutions. I am not objecting as to two places with certain names.

7610. (*Bishop Barry.*) Do you mean predominance upon the council?—Yes, I do. Then there are other points that were mentioned by the President. One, if I may say so, was the slight provision for higher education, which, as your Lordship pointed out yesterday, was only tacked on as it were to the end of paragraph three, and did not give it predominance. That is an objection, but we can conceive that would be easily rectified. And similarly what one might speak of on the whole as the restrictive scope of the University—the restricted view that it took altogether. It did not promise the same power of development and extension that the London University revised scheme appeared to do.

7611. (*Chairman.*) That would rather go to the root of the Charter, would it not, or do you think there are any alterations which could be made which would increase the scope or widen it?—I can conceive such alterations by making more provision for higher education. I am speaking for medicine, of course.

7612. Having more professors?—Yes, for higher teaching. That would be one method, and of course there would be the inclusion of other bodies so as not to allow it to be so much in the hands of particular places.

7613. Those would both tend to widen it?—Those would both tend to widen it, of course.

7614. Is there anything more in the Gresham Charter that you wish to dwell upon?—No.

7615. Then I will go back for a moment to the other idea of enlarging the London University, and remodelling it. Do you agree with Sir Andrew Clark in changing its character, so far as putting its London work in a more prominent position, and putting the provincial work connected with other parts of the United Kingdom in a more subordinate position than it occupies now?—I should say yes entirely to that question, with the exception of the word "subordinate." I would not adopt that word myself. I would say "another" position. But keeping our view, our primary requirements which I mentioned just now, viz., the need for another university for London students, naturally I should wish to see, if this scheme of the Senate were that which was adopted, an alteration in the direction of giving it an especially metropolitan aspect, leaving a cosmopolitan aspect as well.

7616. Would you strike out the clause about provincial representatives, which was, I think, Sir Andrew's idea?—I, of course, listened to the discussion which took place yesterday. This is a point upon which I speak with all submission, but I do entertain a very strong idea that if the University is to be primarily for London, it should be managed by London teachers, and I conceive that it is perfectly possible to superadd to that a cosmopolitan aspect as well.

7617. The cosmopolitan aspect would be, I will not use the word "subordinate," but an accessory?—Yes.

7618. But still you would have to keep two separate functions—two sides—one for London and one for the provinces?—Yes.

7619. (*Bishop Barry.*) One for the world?—I was going to say that. It is from that point of view that I object to the word "subordinate"; it means over the whole empire.

7620. (*Chairman.*) And you see no difficulty in reconciling these two separate functions? You see no difficulty in two bodies performing these separate functions?—No.

7621. You would still keep the degree as it now stands for the whole empire?—Exactly.

7622. But you would have a different degree for London?—Yes. May I point out that of course such a view as that was held as distinctly possible by the previous Royal Commission in section 22, I think it is, of their report. That view was expressly stated, and if their Lordships thought so, I can afford to think so too.

7623. Is there any other point which you would wish to mention that has been omitted?—No. I have nothing more to add on the part of the college, so far as I can see, to the evidence that was given by the President.

7624. (*Lord Reay.*) The examiners who examine at present for the colleges are mainly taken from the gentlemen engaged in the work of medical tuition in London, are they not?—They are.

7625. Then as these gentlemen who are engaged in medical tuition will form the Assembly of Faculty, and as the examiners would mainly be appointed by the Faculty of the new University, even supposing the colleges were not represented in the University, they would keep an indirect control over those examinations very similar to that which they exercise now?—Do I understand you to mean because they belong to the colleges?

7626. Yes?—I do not think that the colleges would keep any control. I admit it would be the same individuals who were engaged, but in the question that your Lordship has put, I understand that the examiners then would be appointed naturally by the University. It would not at all follow, for instance, that the examination as conducted—in fact, on the contrary, it would not follow that the examinations as now conducted—by the Royal Colleges would become a part of the University examinations. They would not go as fellows of either college to the University to honour examiners.

7627. No, but what I mean is that the University would appoint as examiners the same persons who are now appointed by the colleges?—Yes. I should say certainly. I do not think there is anybody else for them to select from.

7628. Therefore, for purposes of examination there would not be strong reasons for including the Royal Colleges in the new University?—Yes. My view would still remain, because, although the individuals might be employed, it would not be the examinations of the colleges that would be taken.

7629. You think there would be a risk that the new University would make an alteration in the programme of those examinations?—They would have their own.

7630. And you do not wish for any alteration in those examinations?—I want them to use ours. That is what I mean.

7631. Now, turning to your previous evidence, will you refer to page 139 at the end of the second column. There I read: "We do not recognise that the Royal "Colleges exercise any influence of such a kind as he "suggested by endeavouring to compare the medical "schools and the Royal Colleges of Physicians and "Surgeons with a University. The influence that the "Royal Colleges of Physicians and Surgeons and the "University of London exert upon the medical schools "is entirely indirect; and, what is more to the point, it "is not from a teaching point of view that they exert "their influence, but from an examination point of

" view they influence the course of study to lead up to " certain examinations, and they do not influence the " course of teaching as teaching, but only as destined " towards these examinations in question; and in that " way they encourage most distinctly the establish- " ments of education to look to examination as the end " of their work, so that necessarily the teaching in the " medical schools has to be designed specially to meet " these examinational requirements of these examining " bodies. It is from the examination point of view, " and not from the point of view of actual knowledge " of the subject, as we would maintain that the colleges " exercise the influence that they do"?—I am afraid with my extended information since that time, and a more intimate association with the college itself since that time, I must say that, as a matter of fact, the influence of the college in the direction of education is rather more than I said it was then.

7632. Therefore, you want the new University to make the connexion between the teachers and the examiners closer than it is at present?—I did.

7633. You have not changed your opinion in that?—No, I have strengthened it in that.

7634. Then at page 143 I read the words, "It is very " doubtful how far (and as a graduate of the University " one cannot help thinking so) the University of Lon- " don with what it has aimed at, and has done, is " capable of being altered without a complete revolu- " tion in it, whether it has not prevented itself from " becoming local in its character and application." You still are of opinion that such a revolution will be needed to accomplish the object?—I think so. I think the University will have to be entirely altered from what it is at present.

7635. And you also adhere to the opinion given a little lower down on the same page, "It is not with the " examination of those bodies, but it is with the rela- " tionship of the teachers to the examining bodies that " we are not satisfied"?—That is entirely it.

7636. Then a little lower down there is a very important part of your evidence where you say: "And " this position which we regard with dissatisfaction on " the part of the Royal Colleges and their relation to " the question is wholly apart from the question how " far it may be considered suitable or desirable that " such corporations as the Royal Colleges should be " entrusted with the discharge of University functions, " and I may say that is a point upon which some of us " entertain very strongly adverse views." Did you belong to the minority?—I was in the minority in the college entertaining the view that the Royal Colleges should not have that University power conferred upon them, such as was refused by the Royal Commission.

7637. But at present you take a rather different view?—No. May I remind your Lordship that the Royal Colleges were then claiming the power of University functions by themselves.

7638. Is that your objection?—Yes.

7639. On page 144 in the middle of the first column you say: "At present that medical education lacks " such organisation; and the character and extent of it " would improve undoubtedly were it so organised. " Further than that we conceive that there would be a " bond of a satisfactory character existing between the " different metropolitan medical schools, a bond which " would be based upon education, and not, as it is at " the present time, on mere examinational results." That of course you wish to attain by a Board of Studies in the Medical Faculty?—Yes.

7640. And to give that Board of Studies control over the various curricula of the medical schools?—Yes. Assuming the Board of Studies is formed in some such way as suggested either in the Gresham scheme or in the revised scheme of the Senate.

7641. Elected by the Faculty? — Yes. And of course the incorporation as constituent colleges, or whatever term is used, of the schools would also aid that same union among them.

7642. And with regard to the co-ordination of the various schools it would give the students greater facilities in the way of obtaining clinical knowledge in the various hospitals?—I conceive that if they had those bonds of union amongst them there would be far greater facilities and greater inducements to students to make use of the whole clinical advantages in London rather than perhaps be restricted in the way that by custom they are at present.

7643. And such co-ordination would especially tell on the minor medical schools in constituting closer relations with the larger schools?—Yes, speaking as dean of a smaller school, I think it would tend to amalgamate some of the elementary branches which I fully admit is much to be desired.

7644. You admit it with regard to the scientific and some of the medical curricula?—Yes, the earlier medical.

7645. Then will you turn to your answer to question No 1535 on page 145, which is important. "Do you " think that an examination performed by teachers " whether without additional examiners or with, plus " a certificate of definite attendance for a three years' " course, implies more knowledge than the mere " answering of questions in an examination?—(*A.*) " Personally my own opinion is that it undoubtedly " does." You would adhere to that?—Yes, I would adhere to that.

7646. (*Professor Sidgwick.*) With regard to the claims of the Royal Colleges to be included in and forming part of the University, I think Sir Andrew Clark referred once by way of illustration to the College of Physicians and Surgeons at Glasgow, and I think you have referred to that also, as being a body that gives licenses. Can you tell me in what relation that stands to the University of Glasgow?—I have no positive knowledge, but I believe no relation.

(*Professor Ramsay.*) That is so, no relation whatever.

7647. (*Professor Sidgwick.*) Can you tell me why the Royal Colleges of Physicians and Surgeons in London have a greater claim to stand in a special relation to a teaching University in London than the College of Physicians and Surgeons in Glasgow has to control the medical examinations of the University of Glasgow?—I would answer you in this way. I take it that we are starting on something fresh, and that is to make a teaching University. In Glasgow one already exists. Next, the important difference is this: that whereas the greater number of students who study in Glasgow take their University degree, the greater number of students who study in London take the qualifications of the Royal Colleges, and, therefore one would feel that in establishing a new, or, for the first time in London, a real teaching University, the Colleges would have a greater claim in relation to that than the College in Glasgow would have with regard to the University of Glasgow.

7648. If I understand you, you based the claim on the ground of the experience in examining possessed by the institutions you represent?—I did. I added that I emphasised that in addition to what the President said yesterday. I think he urged our pre-eminent claims with regard to our position.

7649. You said, I think, in reply to Lord Reay, that if a new University were founded on the plan adopted in the Gresham Charter, the Medical Faculty formed by the Medical Schools would appoint the same examiners as are appointed now?—I understood his Lordship to say this, and I took it that he meant that the University would appoint them.

7650. The result would be that the same people would be appointed?—I should presume that they would be.

7651. Does it not seem to you that the experience of which you spoke is after all possessed by individuals rather than by institutions, and, therefore if you get the same individuals appointed no material loss of experience would result?—I venture to think so. I think there is such a thing as a tradition in a place. Of course the examiners naturally hold office for a limited period, even if it be said to be too long it is for a limited period, and it is the experience and traditions of those who carry on the examinations as well as the actual examiners.

7652. With regard to those who have the conduct of the examinations, I think in your former evidence you did not express altogether so favourable an opinion of the bodies, but you rather conveyed the idea that they made alterations in the examinations too much disregarding the views of the teachers. At page 140 you say this: "I do not think I can emphasize that more " than by giving the Commission certain illustrations " of the action upon the part of the Royal Colleges of " Physicians and Surgeons, and upon the part of the " University of London, showing that to all intents and " purposes they utterly disregard the medical schools " as schools or the teachers as teachers. For instance,

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

" in the course of study for the examinations for the " qualification of the Royal Colleges of Physicians and " Surgeons, the subject of botany was struck out by " the Royal Colleges without any reference whatever " to the teachers in the medical schools." You give instance after instance of the general proposition. Do I understand that you hold that view still?—Not perhaps to quite the same extent, but I still think it does exist, and that the regulations of the Royal Colleges are made very often without reference to teachers, but I am bound in duty to say that since then many occasions have arisen, especially in the re-arrangement of the five years' curriculum in which the colleges have have far more consulted the schools, so that the condition which existed then, I should venture to say, has been improved.

7653. You also say at page 145 of your evidence that you think the teachers in the medical schools should have preponderating influence over the examinations. Do you hold that view still?—Yes, I do.

7654. It is in answer to questions 1529 and 1530: " Do you think that it would be safe to trust those men " with a preponderating influence in those examinations " either as conducting the examinations or as regulating " the examinations?—(*A.*) I think they should have a " preponderating influence. (*Q.*) Preponderating over " that of external examiners?—(*A.*) Yes, I understand " you to say in laying down the scope and character of " the examination, I do not mean necessarily in the " individual examination"?—Yes, that is what I conceive would be effected by Boards of Studies which would be selected from amongst those teachers.

7655. But, assuming that they appoint the same examiners as the Royal Colleges, do you not think that the loss of experience of which you spoke is really a not very important consideration? Under the Gresham scheme would there not be the same amount of experienced men placed more in the position in which in your previous evidence you seem to desire they should be placed? that is exercising a more complete control over the examination than they would do under the proposed scheme of the Senate?—I hardly follow that because in the proposed scheme of the Senate there would still be the Faculty and the Board of Study constituted in the way we propose, and the Board of Study would lay down and determine to a great extent the curriculum.

7656. As I understand in clause 47, the committee that would conduct the examination would be appointed in equal numbers by the standing committee of the Faculty of Medicine, and the committee to be appointed by the two Royal Colleges: so that half of that committee would be appointed by the Royal Colleges. Then in clause 16 the standing committee contains four representatives of the Royal Colleges as compared with five fellows elected by the London Faculty of Medicine. Therefore, speaking broadly, we may say that the influence of the teachers representing the schools on that committee—which, as I understand, would have the control of the examinations—is scarcely more than one-third of that given by clause 47 and clause 16 together to the Royal Colleges. In your evidence given in 1888 you seemed to think that the teachers should have a preponderating influence; but do you not think that in the Senate's scheme preponderating influence is given to the Royal Colleges?—Yes, but I venture to think you have overlooked in that reference to those two parts of the Senate's scheme the fact that the Board of Studies still exists, which will have its influence and which will be essentially teachers.

7657. In what way does the Board of Study determine the examinations for degrees in medicine?—In its relationship to the standing committee of the Senate I regarded it as always meaning an advising board of those practically acquainted with what is required. It seems to me that the Board of Studies in this scheme was the means of bringing the views and wishes of the teachers to bear in the determination of the curricula and character of the examinations.

7658. Doubtless a Board of Studies is likely to have considerable power if it is regarded as a committee of experts, whose view has to be either confirmed or rejected by a body consisting mainly of outsiders. But the difficulty I have with regard to it in the scheme of the Senate is this: the persons who have the practical control are not outsiders but two other committees, a standing committee first and then a joint committee, and I should conceive that the members of those committees would regard themselves individually as well able to judge as the members of the Board of Studies. Does it not seem to you on that ground that the influence of the Board of Studies would be likely to be insignificant? that it would not be really an effective part of the machinery?—All I can say is, I have always understood that it was the intention of those who prepared this Charter, that the Board of Studies should have a real influence. I am afraid I am not in a position to defend the construction of this Charter, and say that it gives it to them, but I think it was the intention.

7659. If the examination for degrees in medicine are practically influenced by three committees, the arrangements must be of an extremely complicated kind?—I think I may say that on the construction of clause 47, my opinion was asked with regard to it at the time with one or two others of my colleagues who appear with me, by the gentleman who was more particularly responsible for clause 47. It was regarded as a working arrangement which was capable of meeting all that was required. It has never been tried, of course.

7660. When you say that you think Convocation should not be allowed another opportunity, do you mean that it should be deprived by an Act of Parliament of the power of rejecting this scheme?—That I explicitly said was the expression of my own individual opinion. What I conceive would be the case would be that, whatever recommendations this Commission should come to, should take the form of an Act of Parliament, under which, so far as I understand the case, the University could be reconstituted without reference to Convocation, I do not think Convocation ought to have that amount of power which would put into its hands the ability to reject a scheme or not.

7661. You are acquainted with the organisation of Oxford and Cambridge, are you?—No; I am not; I cannot speak to that.

7662. Do you think it likely that the graduates of the University of London generally would acquiesce in this high-handed measure, and if not do you think it likely that Parliament would interfere in that way?—Again, if I may express an opinion, I do not think, unless some high-handed procedure of that kind is adopted, an agreement will ever be come to.

7663. With regard to the possibility of competition among the medical schools, it was represented to us by the advocates of a professorial University that in the department of science and arts the financial question—the need of the schools obtaining pupils—would rather tend to prevent the economy which would be on general grounds desirable. Do you think any obstacle of that kind is likely to prevent a combination among the schools in certain subjects; for instance, in certain scientific subjects in which I understood you to regard such a combination as desirable?—May I ask if that was represented to the Commission by those who spoke on behalf of the professorial scheme?

7664. Only as regards arts and science; but it only occurred to me that the same obstacle might prevent the combination that might be regarded as desirable in the case of medical schools?—I think that might be so when matters are firmly settled by whatever University comes to be established. It is only fair to say that we feel a great deal in a condition of uncertainty with regard to the matter. I conceive certainly that conditions of association amongst the schools to some extent will take place.

7665. Voluntarily?—Yes, voluntarily.

7666. You think they will not be prevented by the desire of each school to retain pupils?—I think not among the smaller schools. I think probably the individual larger schools would necessarily, but the smaller schools would, I think, agree to some conditions of association for some of their work—their earlier work. That is an expression of my own opinion, but I have reason for saying so.

7667. I think one of your objections to the Gresham Charter is the dominant position of University College and King's College. How exactly is that the case in the department of medicine? How are they predominant?—I do not know that they are exactly predominant in the department of medicine, but I said in the construction of the governing body of the whole University. That is what I referred to.

7668. Do you think the representation of medicine on that governing body is not strong enough to prevent

any undue interference on the part of the representatives of the colleges? It is a strong representation?—It is a strong representation no doubt. I am quite willing to admit that the representation of medicine in the Gresham Charter is a very strong one.

7669. Do not you think they could prevent any undue interference in the department of medicine?—I think there is a considerable fear that they would not be in that position on the governing body of the University, in the Senate to which matters are referred. Let me illustrate what I mean. It would have been, I conceive, perfectly possible for those two institutions to have laid down regulations such, for instance (I am only giving illustrations, I do not say they would do it), that as a condition for admission to examination the student from a school should attend some class or another at University College or King's College. The influence on the governing body, I take it, was sufficiently great.

7670. (*Bishop Barry.*) You mean to induce the governing body to make such an arbitrary regulation as the one you speak of?—I mean in this sense. King's College and University College with their wealth and endowments were in a position to have certain courses of lectures on certain things at those places only. I only say that to illustrate my meaning of what would have been the possible influence that they could have exerted.

7671. (*Professor Sanderson.*) Do you agree with Sir Andrew Clark in saying that the examinations of the conjoint board are fully equal to those of the University of London? I am right in thinking you are a graduate of the University of London?—I am a graduate and scholar of the University of London, and I am an examiner for the conjoint board.

7672. It is a point of considerable importance in relation to the possibility of co-ordinating the two sets of examinations?—Yes, I think I should be justified in saying that in the practical subjects the examination of the conjoint board is equal to that of the University of London.

7673. Do you think that opinion is generally entertained by the graduates of the University? Do you think it would be generally admitted?—I do not know whether it would be by the graduates generally, but my impression is that a number of those who have been examiners on the conjoint board would entertain that view.

7674. Supposing that the medical schools were to give up their present teaching of science, do you think it would lead to an improvement in the practical teaching of the medical schools?—My answer, if you please, must be taken to represent my own view, and also what my experience, derived from a small school, shows it would be. I wish particularly to guard myself in that because I do think in my own school, for instance, we should be better off if we were not obliged to teach those scientific subjects.

7675. It would make it possible to continue the teaching of the special subjects, would it not?—The special medical subjects, do you mean?

7676. The special branches of practical teaching?—No, I had rather put it in the other way and say that if some combination could have been effected among smaller schools as regards scientific subjects it would leave the smaller schools freer to conduct the purely practical clinical work.

7677. I quite understand that it would be a very great advantage as regards scientific subjects to combine, but would it not also be a considerable advantage as regards practical subjects?—Yes, it would.

7678. And make it possible for the different schools to help each other in particular subjects?—Yes.

7679. Do you agree with Sir Andrew Clark with regard to separating the years of scientific study from the years of practical study?—I would draw that line myself personally, very strongly.

7680. So that in point of fact a course of study which would consist of three years of science, as he suggested, and three years of practical study would seem to you, to be a good course of study for an aspirant to a degree in medicine?—Yes.

7681. Do you think that the whole of the scientific teaching, as it is now conducted for the examinations of the University of London, would be comprised in the three years?—You mean including therein the preliminary scientific, so-called, and the intermediate M.B.?

7682. I mean physics, chemistry, anatomy, and physiology?—Within three years?

7683. Yes, within three years?—Yes, I think so.

7684. Especially if you omitted natural history?—Yes, especially if you omitted natural history.

7685. Which, I suppose, might be included in a previous examination?—Well, I hardly should think that.

7686. But at all events those essential subjects should be included in a three years' scientific course, which should be thorough and satisfactory?—Yes, I think so.

7687. We are all agreed, are we not, in admitting the immense importance of training in the exact sciences to all medical men?—Clearly.

7688. And certainly to all graduates. You would not think of proposing that a man should be allowed to be a graduate in medicine of any kind unless he had received a proper training in physics and chemistry?—Certainly not. The college emphasizes that very strongly, and as an individual I express it in the strongest terms.

7689. You do not think the training in these subjects which is at present required by the conjoint board is anything like adequate for a doctor of medicine?—No, I do not. I may remind you that that has been considerably improved under the five years' curriculum.

7690. I am aware that there has been considerable improvement. We have had the opinion expressed here that the present curriculum shows a dangerous tendency in the direction of science. You would not agree with such an opinion as that, would you?—In the five years' curriculum I do not agree with it.

7691. Do you think the scientific part of the education for the degree in medicine should be in the new University under the direction of the Faculty of Medicine or the Faculty of Science?—I am inclined to think that the working of those Faculties and Boards of Studies should be associated for that purpose.

7692. Act together?—Yes, act together.

7693. It being understood that there are three years' science and three years' practical, do you see any reason to suppose that such a course as that would not be perfectly adequate for all the purposes of a medical degree?—I do not quite understand your question.

7694. Admitting that we had in the first instance an adequate training in science extending over three years and an adequate training in practical extending over three years, six years in all, would not such a course as that would represent be adequate for all the purposes of a medical degree?—I think so. May I add that I imagine the practical working of the five years' curriculum will substantially provide the three years for the one and three years for the other.

7695. So that such a curriculum as is suggested by the five years' scheme would be in your opinion adequate for the education of a doctor of medicine?—No, because I have already admitted that I think the preliminary scientific part should be increased.

7696. But a course such as I was suggesting just now, three years' science and three years' practical would be sufficient?—Yes.

7697. Then I suppose that you would regard this as quite consistent with the proposal to allow a man afterwards to take an honours degree in medicine in addition to the general degree?—Yes, an honours degree in medicine on further work and further examination.

7698. And what would be the subject of such an honours degree? I suppose medical science generally, particularly pathology?—Yes, particularly pathology, and medical science generally, or even some special lines of medicine.

7699. It has been suggested outside that such a degree might be called a degree of doctor of medical science. Have you thought about that?—I have never heard it suggested. It does not at first sight recommend itself to me that there should be a distinction between doctor of medicine and doctor of medical science.

7700. How would you get over the difficulty which at present exists of maintaining the distinction between the degree of medicine as now conferred, and such a degree as we were contemplating just now, the new degree?—I think so far as that is concerned the fact that it is obtained with honours gradually asserts

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

itself. It gets to be known by those whom it concerns and to whom it is a matter of importance.

7701. You would make the new degree with honours equivalent to the old degree of M.D. of the University of London?—Yes. I put it in this way: I should regard the present M.D. of the University of London as an honours examination as compared with the one you are suggesting.

7702. Therefore, if the new University created an honours degree in addition to the ordinary doctor of medicine degree, you would regard that honours degree as equivalent to the existing degree of doctor of medicine?—Yes.

7703. Do you think that would be satisfactory to the medical graduates of the University of London in general?—I think so, because I think one has to bear in mind this important fact. The University has claimed, I think I may say officially claimed, by Sir James Paget, who appeared as Vice Chancellor before the last Royal Commission, that the University degrees were honours degrees. And I think it is, generally speaking, admitted that the present position of the University degree *qua* medicine is distinctly that of an honours qualification. I think that is borne out by the comparatively small number of individuals who take the degree.

7704. And probably about as many would take the honours degree in such a new system as the one we are talking about?—I should suppose so. Of course, as you know, the taking of that means a very large amount of additional work which means additional time and additional expense, and that is the way in which there comes to be the restriction put upon the students taking it.

7705. You think six years would not be too long a period to devote to medical study to make the degree a practically useful one?—No.

7706. (*Mr. Rendall.*) You heard the whole of Sir Andrew Clark's evidence, I think?—I did.

7707. Did you agree with Sir Andrew in preferring a single University to any double one?—I did.

7708. In that single University you would retain what you speak of as the metropolitan aspect and the cosmopolitan aspect?—Yes, I would.

7709. Making them distinct?—Yes, making them distinct.

7710. Do you at all favour or accept Sir Andrew Clark's project for a pass M.D. for the metropolitan side of the work and an honours M.D. for the provincial or cosmopolitan side of the work?—I do.

7711. You think that would be a satisfactory form of arrangement?—Yes.

7712. Letting the students pass in most cases from the pass M.D. to the honours M.D.?—I am not sure of that. I would rather suggest that if they went in for honours, they should take the honours course throughout.

7713. Would you confide the determination of the two courses to distinct bodies?—Partially distinct. I am now expressing my own personal view.

7714. I should like to understand exactly what you mean—two distinct committees or governing bodies, one of which would order the course for the pass, and the other of which would order the further course for the honours M.D.?—I would have the whole under the control of a Senate upon which the Royal Colleges should be represented. For the pass or metropolitan aspect—the metropolitan degrees—I would associate the Royal Colleges with the University for carrying out the professional examinations, leaving the preliminary scientific, and general educational examinations entirely in the hands of the University, and leaving the honours or cosmopolitan degree entirely in the hands of the Senate without that association with the Royal Colleges.

7715. The pass M.D. you would limit to students trained for, at any rate, a part of their time in the metropolitan schools?—Yes.

7716. Excluding the provincial students from taking that pass M.D.?—Yes.

7717. If one had to be subordinated to the other, you would give subordination to the cosmopolitan aspect?—I do not see that it is a question of one being subordinate. They would be parallel. That is my idea.

7718. You would do what you could to make them even and parallel?—Yes, I would make the cosmopolitan parallel with the metropolitan.

7719. If I understood you rightly you take some exception to the present form of the clause dealing with the registrable qualification in the Gresham Charter, or I ought to say rather in default of further provision in the Charter. As the Charter stands, you apprehend that there might be some tendency to take the easiest or the least exacting form of licensing qualification?—I do. I should think it would be so.

7720. Unless there was a special provision securing the licensing qualification of the Royal Colleges, you think the tendency would be to select the easiest form of licensing qualification?—Yes.

7721. And that would be for practical purposes the Apothecaries' Society?—Yes.

7722. May I ask you for one moment to assume that no special relation is established between the new University and the Royal Colleges or between the new University and the Society of Apothecaries? Would you in that case object to the new University degree itself constituting a qualification for practice?—I should, certainly.

7723. Would you tell me on what grounds seeing that every other University degree does constitute a qualification, you would object to the Gresham University degree constituting a qualification?—Because I think, first of all, it would be a grave injustice to the existing University of London.

7724. But supposing that were part of it and that the new University were combined with the University of London?—I understood you to say the Gresham scheme, if that were adopted.

7725. I am now supposing of a new single University?—I think it would be a grave injustice to the Royal Colleges.

7726. Why more than that the degree of the present University of London should carry a licensing qualification?—Because of the character of the University degrees and the conditions under which they are obtained.

7727. Would it be a grave injustice if the present standard of the degrees were retained? Would it be any injustice to the conjoint board of the combined colleges?—Presumably not if exactly the same standard and conditions were maintained.

7728. The injustice, then, or the unfairness, would really lie in the depreciation of the degree, and the assimilating it or even placing it below the present standard of the conjoint board?—Yes, it would. If I may put in this way it would be giving the same article with a higher title which would be a title of degree. That is what is sought for.

7729. Do you think you have any reason to fear that depreciation of the degree if it was confided entirely to the hands of the new University?—I do not know altogether about using the word depreciation; but allow me to say (using your word "depreciation" in the widest sense) I think if it did not do so the University would not meet what was required. Therefore it would fail from that point of view.

7730. And that would be the prime object of the Gresham University as it stands at present. It would satisfy the public desire for a somewhat easier and less exacting degree?—I think that is the public demand, the medical public's demand. If it did not meet it, it would, so far as that goes, fail.

7731. The scheme that you desire and that you yourself advocate is some special fusion between the Royal Colleges and the University?—Yes.

7732. Involving first representation on the governing body, and, secondly, some sort of examinational association?—Yes.

7733. Would you be prepared to grant the same to the Society of Apothecaries? Would you view with favour or disfavour the Society of Apothecaries being admitted to a like representation or association with the University?—I should object to it.

7734. Would you confine it to the Royal Colleges?—Yes, I would confine it to the Royal Colleges.

7735. Would you give me your exact grounds for that?—I do not think that the character of the examinations of the Apothecaries' Society are at all up to the standard of those imposed by the Royal Colleges. That is my answer.

7736. And you think the tendency of giving them that position in the University would be to reduce the standards to their own?—I do not know that at all.

7737. Obviously they would, I should imagine, think it a certain unfairness that your colleges should be brought into relation with the University, and that they who hold also a licensing power in medicine should not have such a relation?—Allow me to say that, however successful the new University may be in meeting the want of a more accessible degree for London students, there will of necessity always remain a certain number of individuals who would not aspire to or be able to obtain a University rank and yet would be able to qualify in a way which the State practically requires, and which will, I take it, be supplied by the examination of the Apothecaries' Company.

7738. You would be glad to see the University accepting in the main the standard now required by the conjoint board?—Yes.

7739. But you would be dissatisfied with its accepting only the test of the Apothecaries' Society?—Yes.

7740. The ground on which you base your claim to admission or fusion is that your position would be strengthened by upholding the standard of the examination?—Yes, that is one reason.

7741. Would you submit the course of training to University control?—If it is arranged for under some such working arrangement as that in clause 47.

7742. That is, securing adequate representation of some kind upon the Faculty or body determining the course?—Yes, and with some representation upon the Senate. That is in the scheme which you mentioned just now.

7743. Would you approve a similar relation, some sort of subordination or incorporation of the Royal Colleges for that part of their work with the University of Oxford, assuming the University of Oxford desired it?—At the moment I do not see the objection to it, but you must excuse my saying that it is such a new idea.

7744. Perhaps it will seem less novel if I put it in the case of another University where the actual question might be likely to occur. Supposing a provincial University, the Victoria or a new Midland University, desired to establish relations with the very powerful, indeed the only licensing body for England, would you be prepared to submit in the same way your examinations to the University direction of the Midland University, Victoria University, or a Welsh University?—I conceive it to be quite possible that a working arrangement similar to that suggested by clause 47 of the Senate's scheme between the Royal Colleges and the existing University might be imposed or come into existence between Victoria University and the Royal Colleges or between any other Universities and the Royal Colleges.

7745. There do you think you at all speak the opinion entertained by the Colleges as a whole?—I assure you I have never heard the question discussed at all.

7746. Of course it is an important point because it would establish inter-connexion between the Universities and licensing bodies?—I quite see that, but the point I have never heard discussed. I should hardly venture to give you my own opinion. I have never thought it out from that point of view and I have never heard it discussed; I am sure my colleagues who are here will tell you that it has never been discussed.

7747. You see that for the provincial colleges it is a very important point?—Yes. I entirely see your point, if you will allow me to say so. Naturally I have looked at it more from a London point of view. We were told yesterday that five-sixths of those who obtain the qualification of the Royal Colleges are London students.

7748. With respect to London students you would give a certain amount of direction, and to some extent subordinate your colleges to the new London University?—Yes, in the working arrangement.

7749. But you cannot say whether you would do so in the case of provincial or extra-metropolitan Universities?—If you ask me my individual opinion, I cannot see any objection to it, but I must guard myself by saying that I have never considered the question, though I quite see the importance of your point.

7750. I am right, am I not, in believing that the Royal Colleges and the Apothecaries are the only licensing bodies for all England?—You mean licensing other than University degrees?

7751. Yes?—Yes, you are right.

7752. And hitherto neither one of them has entered into special relation of favour or disfavour or subordination or dependence with any special University?—No, not as far as I know.

7753. This would establish a special alliance between the dual colleges and the new University?—Yes, it would.

7754. And so far as the influence of the conjoint board went it would tend to favour the concentration of the medical education in London?—I do not know that it would do so more than that at present, would it?

7755. At present it is a question of money. It costs provincial students something like 30*l.* or 40*l.* to come up and attend examinations, and that cost a London student escapes, but otherwise they stand on exactly equal ground: the examination is absolutely impartial; the training at one college is not viewed with more favour than that at another. But this would introduce new direct considerations tending to attract people who are coming under the influence of the conjoint board. They would be additional influences?—Yes. You mean if they were associated with the University for the degree?

7756. Yes, if they were associated with the University for a degree here and nowhere else?—Possibly. I do not think it would be a very real thing.

7757. The main desire would be to strengthen medical education and maintain the standard of medical education in London?—Yes.

7758. There is nothing in your Charter that would preclude your entering into that kind of arrangement and giving up your autonomy?—I had rather you asked that question of my colleague, Dr. Liveing, the registrar. He will give you a copy of the Charter. I really should not like to say.

(*Dr. Norman Moore.*) I can answer that question. The college is competent to do that.

7759. (*Mr. Rendall.*) Would you personally feel that it was not quite consistent that you should in this way ally yourself with one particular University?—I do not think it would be objectionable on that ground in so much as it was to meet the case of the vast number of students that the association is proposed, and it would still leave the College open to grant its license and membership to others not coming for the degree. So it would remain open to a student if he wishes to obtain the qualifications of the Royal College to come and obtain those specially.

7760. Are you in favour, as a matter of general principle, of concentrating medical education in London and destroying provincial schools of medicine? I mean are you a disbeliever in the provincial schools of medicine? Do you think that for the profession and for England it is better to keep them up or gradually extinguish them? You find a difficulty in answering that question?—Yes; I find a difficulty because I think my answer might be misinterpreted. But I may say that I think on the whole the fewer the centres there are the better.

7761. You think London is the paramount centre?—Yes.

7762. And if that were strengthened you would not hesitate to weaken the other parts of the country?—You mean if we did weaken the other by so doing.

7763. If it weakened or destroyed the provincial schools you think on the whole it would be no loss?—I think not.

7764. (*Professor Sanderson.*) I do not quite see why you wish a different course of study for honour students from that which the pass students have?—By the word "different" I implied something extra—something additional.

7765. You would prefer, would you not, that all should go through the same mill as regards scientific training, and that honours should be given, that is to say, for purely medical knowledge?—Yes.

7766. In that case it would be additional?—Yes, it would be additional.

7767. After taking the ordinary degree?—Yes.

7768. Was that what you meant?—Yes, I mean that I cannot conceive that the two courses could be identical.

7769. Would the courses be exactly identical up to the time at which the man took his ordinary degree?—

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

There would be the same difference as exists at present between, say, the pass examination of the University of London and the honours examination.

7770. But would you not allow a man to determine whether he would go in for honours after he had already taken the ordinary degree?—Yes. Then he would have to go in for the additional examination for the honours.

7771. Would you not suggest for the additional examination rather subjects in purely medical science than that he should be called upon to go back to his previous scientific training?—Yes.

7772. (*Mr. Anstie.*) I understand you on the whole, without committing yourself to every detail, to assent to the arrangement laid down by the Senate's scheme?—I do.

7773. I want to point out to you one matter. By that scheme representation was given to (not to use the term which you have very justly described as a very ambiguous one) the teachers in all the London medical schools. A distinct representation is given to them upon the Senate and also upon the Board of Studies?—Yes.

7774. And in addition to that the two colleges, whose interests I may assume you to be jointly representing here, had what I may call an institutional representation upon the Senate, and in addition to that institutional representation on the Senate they had, for the purpose of preserving a harmony, a co-ordination between the licensing and the graduation, a special position assigned to them under Clause 47?—Yes.

7775. May that be taken as a correct description of the idea which governed that scheme?—Certainly I think so, and it is on those grounds that it met with the approval of the college.

7776. Was the position so given, the institutional position, if I may call it so, to the two Royal Colleges in your judgment a satisfactory and right position?—I do not think it was quite right. You put it first of all did I take it in the main.

7777. Yes. Now I want to hear your comment?—My comment would be this: I think it is not right that the Royal Colleges' institutional representation should have been inferior to the institutional representation of two teaching bodies.

7778. Then upon this point what you suggest is not that the two Royal Colleges did not adequately represent the institutional interests of the medical schools, but that they were not sufficiently largely represented to balance the institutional representation of the two colleges, University College and King's College. That is your opinion?—Yes, that is my opinion.

7779. Subject to that objection, do you think that the position institutionally of the two Royal Colleges was correct?—Yes, I do.

7780. Then, recalling to your attention this circumstance, that both before the previous Royal Commission and in the subsequent negotiations, and in evidence given by witnesses before this Commission, there is considerable difficulty in ascertaining the precise position of a medical school owing to pecuniary and other considerations; is it your judgment that a representation of the members of those schools by the Faculty representation contemplated in this scheme, and the institutional representation through the two colleges, would adequately satisfy the fair demands of the schools?—Well, a difference of opinion has existed——

7781. I am asking your opinion?—My own individual opinion is that the schools should not be represented institutionally on the governing body, but should be entirely represented through the Faculties. That is my own view personally.

7782. That I understand you do not give as a representative of any other interest?—It is not a representative view. It is simply my own view. You will probably have the opposite to that put to you by certain of the representatives of the schools who will appear before you. I am only now expressing my own individual opinion.

7783. In answer to Lord Reay you have, I think, pointed out that at one point your evidence given before the former Royal Commission would have to be qualified by events which have since occurred, and I understood you to say that since you gave your evidence a great deal closer connexion has as a matter of fact, though not as a matter of law, came into force between the two Royal Colleges and the schools represented by their teachers than previously existed?—It has done so notably in the construction of the curriculum for the five years.

7784. I ask you, as a person who knows a great deal of the internal arrangements of these things, does that mutual arrangement and concession which may be inferred from your answer tend towards the view that the Royal Colleges might be regarded in the future as fairly representing the institutional interests of the schools? I am only asking for your own opinion?—I hardly think so, because the institutional interests of course are those connected with their funds, with their property, and with the plant, so to say, in the widest sense, which of course the Royal Colleges have nothing to do with. In that sense they would not represent them institutionally.

7785. No doubt they would not represent them as trustees of their funds or as trustees of their resources, but would they represent them in this sense, that being bodies upon which the schools meet on common ground, and upon which the schools are practically represented by their most important members they might be trusted to guard the interests of the schools against any undue invasion?—That is so and the Royal Colleges have more than once lately advocated the position of the schools. They urged the claims of the schools before the Senate, and they also advanced the same before the Privy Council.

7786. They are associated in interest to a large extent with the managers of the schools?—Yes

7787. Then in fact might it be taken, speaking broadly, that the two Royal Colleges may be said so far to represent the interests, demands, and rights of the London schools, that they might be entrusted with the representation of the London schools in the future?—Yes, I think they could be so certainly, excluding, of course, what you refer to as their property and funds.

7788. I do not propose to have that at all?—Their educational interests?

7789. To safeguard the interests of the schools on the governing body of any new University?—Yes.

7790. That might perhaps save any difficulty which might arise, and you are aware that difficulties have been found to arise, and were pointed out by the previous Commission as arising, in ascertaining with any definiteness what is the precise constitution of, and where is the precise responsibility for, the medical schools, providing still for the medical schools (under such provisions as those of clause 22 of the proposed scheme) a definite determination of the teachers of those schools who should be represented in the University as forming part of its Faculty. That clause provides for the ascertainment, and, if I may say so, the scheduling of the teachers?—Do I understand that it should be with the Royal Colleges?

7791. No. I am suggesting rather that the schools should have their individual special position, and be able to maintain their individual and special rights. Each school should make provision for the maintenance of the appropriate chairs. In that respect I am regarding them as distinct from the colleges, and having allowed them all that, and made that provision for their special rights and interests, then as regards the rest of their rights and interests considered in a University sense only, are you of opinion that the two Royal Colleges might be fairly trusted with the representation of their demands and rights?—Yes, I should think so as far as I can see.

7792. Now one question upon a very important point which was raised in the questions of Professor Burdon Sanderson and Mr. Rendall. Two suggestions have been made before this Commission. I do not mean that they are the only ones, but they have been made. One is that an arrangement similar to that in the 47th clause in the Senate's scheme should be come to, and another is that with regard to the subjects described in general terms as practical subjects, the University should accept a testamur from the Royal Colleges as to proficiency in those matters. I do not know whether I am right, but I think I understood Sir Andrew Clark to say that he preferred that scheme which unites the Colleges with the University body, and I understood that he thought that was one which would tend more directly in an educational sense than the other. Have you an opinion on that question?—I should prefer the association.

7793. It is obvious that either course would equally admit of the condition put to you by Principal Rendall of an equal and similar relation of the two colleges with other Universities; whether the principle of union in the examination or the principle of testamur were adopted, it would be applicable equally to London, Oxford, Cambridge, or Victoria?—Certainly, because the Medical Act permits of the association of Universities and licensing bodies. May I be permitted to say this: The Medical Act contemplates the possibility of licensing bodies being connected with the University. That would answer Mr. Rendall's question more accurately than I did.

7794. (*Mr. Rendall.*) And as regards the control over the examination?—I do not know that the Act goes beyond allowing working arrangements between them.

7795. (*Mr. Anstie.*) Would you allow me to point out that the Act allowing those working arrangements provides for exactly that which is carried out by clause 47 of the Senate's scheme?—Precisely so.

7796. And, in fact, without any Act of Parliament, without any power beyond what the Senate possesses, it would be in their power at this moment to enter into arrangements with the Royal Colleges under that statute?—I believe so thoroughly. You mean without reference to Convocation?

7797. Without reference to Convocation or to anybody else?—I am not sufficiently a lawyer to know whether they must refer to Convocation.

7798. I think you take it from me that no such reference is required?—I am satisfied that the present University can work with the Royal Colleges under that Act.

7799. And they might equally work, if they thought fit, with the Society of Apothecaries?—Certainly.

7800. That being so, I should like to know what your view is about the prospect that is presented to us by the constitution of two Universities. Would it be your view that it is expedient in the interests of medical education that there should be a new University created, so that there should be two different Universities in London having the power under the statute of entering into arrangements such as they thought fit?—Would you kindly put the question again?

7801. That there should be two Universities existing in London, neither of which should have any organic connexion with the Royal Colleges, and to each of which it should be open as they saw fit, saw convenient, or saw pecuniarily advantageous, to enter into arrangements with either of the existing licensing bodies. Would that, in your judgment, be an arrangement or a condition of things which would be conducive to medical education?—To have two Universities, you mean?

7802. To have two Universities, either of which has power to treat with distinct licensing bodies?—No, I do not think so.

7803. Therefore, whatever the particular form adopted, would it, in your judgment, be a desirable thing that a union should be established between the University authority and the licensing authority, and that, so far as possible, that arrangement should be single and not double?—It is so, certainly.

7804. (*Sir William Savory.*) Are you satisfied with the relation in which the colleges stand to the medical schools?—No, I am not satisfied. I think it might be closer.

7805. In what respect?—I think it might be closer in the direction which it has lately taken, viz., of consultation with the representatives from the schools to help them and advise them, either with the colleges separately, or with the working body—the conjoint board.

7806. But are not the governing bodies of the two colleges the teachers of the schools?—They are so.

7807. Then how could they come into closer relation by inviting teachers to consult with teachers?—I see your position, but in the framing of the five years' curriculum, as you know better than I do as chairman of the committee of management, you have consulted representatives from the schools—groups of teachers from the different schools in regard to the different departments for this five years' curriculum; at all events, a committee of the College of Physicians has done so, and it is that kind of a further association which is desirable.

7808. That was to get a more general expression of opinion?—Quite so.

7809. But for the ordinary working of the two colleges, teachers are sufficiently represented?—Quite.

7810. I quite agree with you that if extraordinary occasions arise, it is as well to get a collection of opinions and judge from them, but ordinarily, the relation could not be closer, seeing that the governing bodies of the two colleges are the teachers at the schools with very few exceptions, and those exceptions have been teachers?—Yes.

7811. Now I should like to ask you a question with regard to an answer you gave with reference to apportioning the work in the curriculum. You would give three years to scientific work and two years to what you call practical work; is that your division?—Yes; three years to scientific work up to the practical subjects.

(*Professor Sanderson.*) Three to each.

7812. (*Sir William Savory.*) That would be for the degree?—That was what Professor Sanderson asked me.

7813. But at present it would be three and two?—Yes, three and two, it would be.

7814. But you would add another year to the practical work, so you would make it three and three?—I should have added another year to the practical work, which is, I think, what the majority of students will practically do.

7815. I think there is a little confusion. Let us take the five years' curriculum. How much would you give the scientific work, and how much would you give the clinical or practical work?—In the five years' curriculum I would give three to the clinical.

7816. And two to the scientific?—Yes.

7817. Then if you added the other year would you give three to each, is that what you mean?—Yes.

7818. Unless the general subject is thoroughly considered, might not that lead to misapprehension? It might appear to be an undue proportion to the scientific, but is it not to be borne in mind that this period of time is really the only period which the average man gives to scientific work?—Yes.

7819. Practically during the remainder of his life his time is given to clinical work?—Clearly.

7820. So it is necessary to guard most jealously the time which is given in the schools to scientific work, as really the only chance which a man has of paying attention to scientific work at all?—Yes.

7821. Whether a man should give three out of the five to scientific work is not the whole question, but what is to be borne in mind is that really after he leaves his school his life is devoted to clinical work, that is, of course, in the case of the average man?—Certainly.

7822. Now with regard to the Society of Apothecaries. On a former occasion, when the two colleges united to form the conjoint scheme, that was very deliberately considered, was it not?—I believe so.

7823. And the case was looked at all round as far as possible?—I believe so.

7824. And the general conclusion was this—it must be stated—that the Society of Apothecaries did not rank upon a level sufficiently high to induce the colleges to associate themselves with it in the new scheme?—That is so.

7825. There is no challenging the fact that the examinations of the Society of Apothecaries have been of a lower class than those of the two colleges?—Yes.

7826. The Apothecaries' Society has done excellent service in its way, and its examinations have very considerably improved, but all who are acquainted with the Apothecaries' Society would agree that the examinations are distinctly upon a lower level than what the colleges regard as the minimum qualification which a man ought to possess?—Certainly.

7827. Mr. Anstie has put to you a question about a University being quite distinct with liberty to combine with any other body. Now supposing another University were formed—the Gresham University—and in the absence of conjunction with the colleges it was to seek an alliance with the Apothecaries' Society, what would you think of that position?—I think that would be very objectionable.

7828. And the profession generally would hardly accept that as improving the standard of medical education?—Certainly not.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

7829. And after all is not one of the objections taken to the formation of a new University by our profession that there is a great danger, to say the least of it, that the degree might be on a lower level than those of the existing University?—Certainly.

7830. That if the existing University could be modified in any way the chance of the maintenance of a due standard would be much greater than in the case of a new University which had to run its course in the face of such a University as the London University is now?—Certainly.

7831. That in spite of what is said in charters there would be that danger in the case of the two rival Universities?—Certainly.

7832. The newer one having to make its way virtually by an easier access to its degrees?—That was in my mind when I answered Mr. Anstie's question.

7833. Not as a representative of the college so much, but in your own case you have the same view with regard to what is called a professorial University?—I have formed the same view. It has not come to the college officially, but it has been communicated to us.

7834. What is your own view?—My own view of the professorial scheme, so far as one can form an opinion from the syllabus which has been circulated to the deans, and through having had the opportunity of reading the evidence of Dr. Thorpe and Professor Rücker, who, I understand, advocate that scheme, substantially is this. I should entertain two fundamental objections to the scheme as it exists. Do you wish me to express them?

7835. I should be very glad to hear any opinion which you can give us upon that point?—It appears to me at the very beginning to violate its own principles as regards the medical side. If I understand it correctly, one of its fundamental principles is to absorb the existing institutions. Whether that word be a euphemistic one or not I do not know, but they at once recognise that they cannot treat the medical schools in the same way so far as absorption goes. They suggest some step towards it *qua* the so-called pure science part of the medical education, but they must leave obviously the medical schools still existing. I think, speaking as a University man, that to establish a new University in which one of its most important faculties does not conform to the fundamental principles of the University is a grave and obvious objection. My other objection is more of a personal character. If I understand it correctly, the governing body of the University is to consist essentially of professors. The proportion of the professors to the Crown members I have only heard suggested indirectly through conversation with those who advocate the scheme. To the best of my knowledge it has never been set forth; it is not in their prospectus, and I carefully looked through the evidence before the Commission to ascertain. But I understand the governing body is to consist of certain Crown representative and certain professors, and I do not think I should do injustice to their view if I said that they looked upon the Crown representatives as the least important portion of the governing body, while the professors are the most important. Now comes the ground of my objection. These professors will go on this governing body not as the representatives of groups of teachers or groups of institutions, nor of places, or anything of the kind; but they are to go on the governing body, so far as I understand it, because of their individual distinction as extremely able and capable persons as professors. They would be in that sense—I use the word without any intention of giving offence—irresponsible; they would represent nothing but themselves; they would go on as individuals, and not as representing groups of teachers, which it appears to me is the admirable feature of the Senates on the Gresham scheme. They would go on the governing body without responsibility, so to say, to anybody but themselves. That is the great ground of my objection, and I think it would be a most serious matter to medicine to have it under what I should call really the despotism of a group of individuals who represented themselves only. Those are my two great objections to the professorial scheme, speaking as an individual.

7836. Now one final question with respect to the provincial schools. I take it that the colleges have come to no decision whatever upon the matter—that they have not expressed any opinion as colleges adverse to the provincial schools having a place in the new University?—They have not. On the contrary their acceptance of the revised scheme so far as it went implied the contrary.

7837. Whatever views might be expressed by individuals—and they would probably differ—the colleges as colleges have not expressed any opinion adverse to these provincial schools?—I think certainly not.

7838. May we not take it that the evidence before the two colleges, having regard to the candidates who come up educated from the provincial schools, the men who occupy positions in the provincial schools, and the whole course of teaching in the provincial schools, would hardly justify the step of exclusion of the provincial schools from the new University?—No.

7839. If the provincial schools were excluded and the University were to be only for the London schools without any side for the provincial schools, ought not the London schools to justify that by showing that their educational advantages were greater than those of the provincial schools?—Speaking my own opinion, I am not sure that that would necessarily follow, because, although I recognise the difficulty which was raised yesterday, nevertheless do I think that London has a claim.

7840. But how would that interfere with the claims of London? If it in any way acted prejudicially to the London students, and the London students were in any way sacrificed to that, it would be an argument. But if the London students were in no way impeded, and the conditions were met, in what way would it damage them?—I quite admit what you say—that it would not.

7841. And would it not appear almost an unworthy jealousy on the part of the London schools, at least, if they attempted to exclude the provincial schools?—Yes. I think after the experience we have heard it would be so.

7842. Would not the soundest idea of the constitution of a great University be to throw it open to all comers, and whatever superiority might be obtained by particular schools should depend only upon the educational merit of those schools? Would not that be a sounder view?—That is the contrast, if I may say so, between the existing University of London and every other University that I believe has ever existed, except to a certain extent the University of Dublin.

7843. But you see the conditions would hardly be parallel between Oxford and Cambridge and London, because in Oxford and Cambridge, owing to the constitution of the University, there is a much closer supervision exercised over the colleges; they are brought into closer relationship, and the influence is more potent in those Universities than it would be if the colleges were distributed over London?—No doubt.

7844. So that any argument deduced from that would hardly bear upon the new University, would it? The force of it would be greatly lost owing to the different relation in which the colleges would stand to the new University?—Yes, they would stand in a very different relation, and I conceive that their powers would be altered.

7845. Therefore to use the argument of Oxford and Cambridge would hardly do?—But I meant all—such as Glasgow, Edinburgh, and Durham.

7846. Then I should raise the question whether, if such an alteration were made, the London students would in any way suffer by it; if there was ample provision made in the new scheme for the London students, and the new University presented every possible advantage for those students, then, if in addition to that the provincial schools were allowed to come in, where would be the objection?—I do not think it could be urged for a moment (whatever one's preference might be) that the London student would suffer thereby.

7847. Then, if they did not suffer, and the provincial schools wished it, and it might be a gain to them, why should it not be done?—I can only answer that it would not be in accordance with my own personal view as to what would be the desirable thing. I quite admit the force of your argument.

7848. Why would it not be a desirable thing according to your own personal view?—My own personal view is (to repeat what Sir Andrew Clark said yesterday) that, speaking for medicine particularly, I conceive that there is in the metropolis a claim and a right to have a University which should impose its own conditions, provided those conditions are not at variance with general University principles, and here would

be the imposing of a condition which would be in conformity with all Universities, except one, viz., some residence in London or some attachment to London to constitute them as London students. It seems to me, if I may so, the natural thing to do is to limit it to London. I quite admit what you say. I am not prepared to argue that the London students would suffer any injustice thereby. I fully admit that, but I think it is preferable, and it is the opinion that I formed partly as a result of the way in which I looked at the question. I prefer it in that shape. I see the difficulty, but still I would prefer it.

7849. Yes, but under those two words which you have used, "claim and right," might there not be a suggestion that it would be the means of shutting out provincial schools from competition with the London schools?—I do not think more so than at present they are shut out. I am not advocating that a University in London shall not have its cosmopolitan character, which is open to all comers.

7850. You grant that?—Yes, I grant that.

7851. If all that could be obtained by London students, and in addition provision could be made for provincial schools in that way without, in the least, detracting from the good of the London students, then there could be no objection to it?—No.

7852. The provincial schools do play a most important part in the education of medical men in this country?—Certainly.

7853. And any step which would tend to limit their usefulness would be a step in the wrong direction?—Any step to limit their usefulness?

7854. As centres of education?—Yes.

7855. Now let me put this once more to you. If such a step as that were taken it ought to be justified by something stronger than the mere assertion of a right, ought it not? It would be better if it could be justified by any reasonable argument?—It would be better, no doubt.

7856. Now, supposing in London a great central institute as part of the University could be established where all these preliminary subjects were taught, that would be a great advantage to London students, would it not? In preference to physiology, for instance, and chemistry being taught at the smaller schools or even at the larger schools, supposing those subjects were all taught at some central institute, and the hospitals were left free for clinical work, is not that step worth considering?—I think it is.

7857. And if such an arrangement as that could be established London would be justified, perhaps, more than it would be at present in saying, "Unless "the student has the advantage of such education as "this we should not admit him to a University "degree." That would be something like an argument against the provincial colleges which at present does not exist?—I quite see that.

7858. (*Sir George Humphry.*) With regard to the provincial schools you have admitted that the London students would gain nothing by their exclusion?—Certainly.

7859. Might I not carry that further and say that they would lose. The clinical material of London, great as it is, is not at all too great for the number of students who seek its advantages. That I think is quite certain?—I should not quite accept that statement altogether, because, providing that the asylums were used for clinical purpsoes, which was amongst the suggestions made before the recent Committee of the Houses of Lords, and which, I believe, is one of the recommendations, there is more than could be used.

7860. That would be rather additional and special?—I mean the metropolitan infirmaries. I used the wrong word.

7861. The metropolitan infirmaries without very considerable alterations could scarcely take part in the ordinary clinical instruction of students?—I am not aware that they require much alteration.

7862. It is scarcely possible. They have their present staff and their present arrangements. I do not know whether you are acquainted with the infirmaries and poor houses. Have you been over them?—I have been over one or two of them.

7863. They really do not afford very great opportunities for ordinary clinical instruction?—I should venture to say, from my having seen some of them—I do not pretend to any very extensive acquaintance at all, but there is one to which I used to go as a guest of the resident officer—there was excellent first-rate clinical material for teaching (and I speak as a clinical teacher) in the wards of those infirmaries.

7864. (*Mr. Rendall.*) It would include surgical?—I can not quite answer, but I should think so. I have a reason for saying that.

7865. (*Sir George Humphry.*) But still you could hardly expect there would be any great relief to the teaching in the London hospitals from the aid gained in the workhouse infirmaries?—No. I only advanced that because I understood you to lay it down as a statement that the amount of clinical material at present in London was not sufficient.

7866. The amount of clinical material available is not at all more than is used?—No.

7867. Then suppose those who at present study in provincial hospitals are added to the number of students in London, that would be to a certain extent to the disadvantage of the London students?—I think not altogether, because I would remind you that under the arrangement of the five years' curriculum a portion of the extended clinical work applies to a special department, such as the fever hospital department, and so forth. So there would still remain an ample supply for the students of those provincial schools unassociated at present with a University.

7868. But if the students now carrying on their clinical work in the provinces were added to the students in London it would really not be a disadvantage to the London student. Is that what you say?—May I ask you which of the provinces you mean? I should not include all the provinces and Scotland.

7869. No, I mean England. I do not know what the number is, but the number of students who now come from the provinces to the conjoint board is about one-fifth, it has been stated?—Yes.

7870. If that one-fifth more were added to the London hospitals, that would not disadvantage the London students, you think?—I do not think it would.

7871. The London students could with equal facility obtain dresserships and clinical clerkships?—I think so.

7872. With an additional number added?—I fully contemplated that there will be an addition to the clinical material from those infirmaries.

7873. I am speaking as it is at present. However, you are probably aware that it is not quite a straightforward and easy proceeding to enable the students to attend those infirmaries. You do not really mean to say that a London student would with the same facility obtain clinical clerkships, dresserships, and the other advantages of hospital instruction if that number were increased?—Speaking from my own experience of my own school, I should say that we had ample to provide for that.

7874. At present they find a difficulty in obtaining dresserships and clinical clerkships. They cannot always get them, and if the number were increased the difficulty would be increased surely?—I am not aware of the school you refer to where the difficulty is.

7875. In all the schools as far as I hear, there is a difficulty in obtaining clinical clerkships and dresserships?—We have not nearly enough at the hospital to which I am attached to supply the requirements.

7876. Which hospital is that?—Westminster.

7877. I find that my students are not able to obtain them?—I hope you will send me some to Westminster.

7878. At any rate the London students would not be injured, as you have already admitted to Sir William Savory, by the admission of provincial students?—No, they would not be injured.

7879. And they may perhaps be benefited by it. I will say that one-fifth of the students who now present themselves to the conjoint board are provincial students?—Yes.

7880. And your view would exclude those provincial students from this advantage which you feel to be so desirable to the general body of the profession. You conceive that it is very desirable that a degree should be obtained on easier terms?—More accessible terms.

7881. And that that is an important thing for the practitioners of the country?—Yes.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

7882. And you would exclude the provincial students from the advantage of obtaining that degree?—Yes; that is the view I have always taken, certainly—my own personal view. I would exclude them from the London pass degree.

7883. You would exclude them from the opportunity of obtaining that which you conceive to be so desirable for members of the medical profession?—For the students of the medical profession in London—for the London medical students—that is the grievance.

7884. No, that is not the point. The point is that the practitioners of England are under a disadvantage in not being able to obtain a more accessible degree?—I have never heard it put in that way. It has always been said the London medical students and that is what I stated first to-day.

7885. I think it is the practitioners of England. It is the practitioners of England who come to London to obtain the pass degree. All the students who at present pass the Colleges of Physicians and Surgeons are at a disadvantage in their practice in the country from not obtaining a more easy access to a degree?—Certainly.

7886. Of those students who are designated in that way, London sends some and a certain number are provincial students, and that proportion who are provincial students you would exclude from the advantage which you would give to London students?—I should do so in the constitution of the University for London.

7887. And, as Sir William Savory said, there certainly ought to be a very strong ground for colleges to depart in that sort of way from their present plan. I think you will agree to that?—Yes, I do, but the establishment of a University in London for London is what I take to be the original question at issue, which the former Commission was appointed to inquire into, and which in two of the sections of the report they deal with as being possible. It seems to me that asking for a London University for London students only is only asking for what is in conformity with what exists everywhere else.

7888. Did the Commission suggest that a University established in London should exclude those who studied in the provinces?—As I read section 22 of the previous Commission's report, together with section 36, I read it that it distinctly means in its practical application that there shall be some arrangement for London students particularly, and I take it that the Gresham University scheme was the outcome to meet that.

7889. (*Sir William Savory.*) This does not suggest any interference whatever with that. This is only an addition. Supposing the London University were modified, it might have a cosmopolitan as well as a metropolitan side, as you have said?—Clearly.

7890. But this is not to interfere in the least degree with the advantages to be given to London?—No, my view is that the metropolitan should be metropolitan only.

7891. (*Professor Ramsay.*) The words are here: "The "teaching institutions of a University of London, in "the proper sense of those words, a University "intended to have as to teaching a proper metro- "politan character, ought, in our judgment, to be in "or near London. For other parts of the kingdom "(as for the Colonies), it is sufficient that there should "be access, as heretofore, to examinations and "degrees"?—May I read the following parts: "To "bring in from all parts of the kingdom teaching "institutions having no special connexion with London "might have results similar to those of the former "system of affiliation, when in like manner extended. "The powers which might be given to such institutions "would greatly, if not wholly, neutralise the value of "the share in them granted to the colleges in London."

(*Mr. Anstie.*) Read that in connexion with this: "It "is not reasonable that country colleges should have a "negative voice upon the enlargement of the present "University for teaching purposes, especially con- "cerning the metropolis." It has not been suggested in the course of the examination that has been addressed to you that the country colleges should influence that.

7892. (*Sir George Humphry.*) Do you feel, therefore, that it is very important that there should be an easier access to the degree? You have made the remark that the London University is not sufficiently available?—Yes, I meant in the sense of accessible, in the sense the character of its examinations, the infrequency of them, which has been somewhat remedied; the conditions of study for them altogether make the degree not only difficult of itself, but difficult of access.

7893. Then you would agree with the view of the Commission which is given at page 17, paragraph 34: "As to medical degrees, we think that a standard of "attainment appropriate for honours ought no longer "to be required by the University for an ordinary or "'pass' degree"?—Certainly.

7894. Your feeling and the feeling of your college is that that would be best attained by some such plan or modification of the plan or scheme proposed by the Senate?—Of the schemes at present considered that is one that comes nearest in the opinion of the college.

7895. Would you grant the M.D. degree upon that?—Yes.

7896. I think that is a departure from anything at present done in any University. I do not think the M.D. degree is granted absolutely upon the pass examination for the M.B.?—I beg your pardon. I misunderstood your question. I said that clause 47 falls short in so far as it should go on to allow the M.D. degree to be given on terms as arranged for by the combined board.

7897. I thought I understood that the M.D. degree was to be given on the passing of that first examination, which has been the M.B.?—No, we meant that there should be a further examination. We said yesterday that it did not go quite far enough. (*Dr. Liveing.*) I wish to say that I had put that down in a note on my paper to correct in my evidence, because I think Sir Andrew Clark had left an impression which we did not agree with in that respect at all. It was only that the same machinery should be used; not that the M.D. should be given instead of the M.B.

7898. (*Sir George Humphry.*) Then that idea is correct. Now with regard to the Society of Apothecaries; do you agree with the opinion expressed by Sir Andrew Clark? You heard what he said in answer to my question?—No, I should not agree to admit them on an equality with the other colleges. I venture to say it would have been best altogether if they had been merged in our work.

7899. By merged in your work, you mean——?—I mean in this way. You remember the original scheme.

7900. Yes, I remember a great deal about it?—You know the one I refer to which included all the licensing bodies for the purpose of getting a uniform qualification some nine or ten years ago. In that condition the Apothecaries' Hall had a footing, and was merged in it along with the others.

7901. You would be glad to revert to some such plan as that?—Yes, I think so. I am a little doubtful about it, for this reason, that I do recognise the absolute necessity of a condition of practitioners who can never attain to University rank. I think they must be admitted for many reasons, otherwise the large share of prescribing and treating will fall into the hands of chemists and others unsuitable for the purpose. I think experience shows that we are bound to admit that.

7902. But I think the scheme proposed by the Senate of the University of London still provides for that. There would be a considerable number who would go to the conjoint board without seeking the degree, and that meets the requirement you mentioned?—Yes.

7903. Then the question comes that the Apothecaries' Society, if it should be left out of any combination of this kind, will form, as Sir Andrew Clark remarked, a very weak point of the system?—Yes, I think it would be perfectly possible, I ought to say desirable rather than possible, to combine the Apothecaries' Hall with the colleges to deal with the remainder of individuals who do not take the University degree, and there would be this additional advantage that the number of separate examining bodies would be reduced.

7904. Do you suppose the Apothecaries' Society would assent to that?—That is why I substituted "desirable" for "possible."

7,905. The Apothecaries' Society have a very considerable footing in the profession?—Yes.

7906. And perhaps rather an increasing one?—That is quite likely.

7907. It is quite possible that they might not assent to join the conjoint board on terms of that kind?—Possibly.

7908. Do you think it would be wise or not wise that they should be admitted to a full participation in the privileges of the colleges to grant an ordinary licence, and also to take part with the University of London in conducting examinations for the degree?—No, I do not. I understood that to be the drift of Sir Wm. Savory's question.

7909. (*Sir William Savory.*) Do you think the two colleges would consent to take part in a scheme of examination lower than the conjoint scheme?—Oh, no.

7910. (*Sir George Humphry.*) It would not at all imply that the examination should be lower?—Not at all.

7911. One result of it might be that it would raise the examination of the Society of Apothecaries, and do away with that which is at present considered to be a weak point in the medical system. It would be an advantage if that could be combined with the conjoint board in the future scheme?—Yes, I think so.

7912. You are fully of opinion that, on the whole, it would be better for England and London that there should be one University instead of two?—Certainly.

7913. (*Professor Ramsay.*) You have more than once repeated that a main object of the University is to found "a *high* degree on *accessible* terms." To which of those two adjectives do you atttach the most importance?—I really do not know how to answer that question.

7914. Would it not be a very common supposition that they were contradictory the one to the other? Does not the word "accessible" exactly mean that the standard shall not be too high?—I think I can answer you in this way: that what one has meant by "high" is that the standard of the degree should not be a low one. It should not be lower, but should be higher, taking it all through, including this preliminary education and the science education above that at present granted by the qualification of the Royal Colleges.

7915. But lower than that granted by the University of London?—It would have to be so, or else it would not meet what is wanted.

7916. Then should not the phrase rather run in this way: an accessible degree of not too high a character?—Certainly; I would accept that amended phrase.

7917. Or an accessible degree of a moderate standard?—If you will admit thorough as well.

7918. That should raise the question, where does thorough begin and moderate end—a thorough but moderate standard? What you mean is an accessible degree upon a standard not too high?—Yes.

7919. There was a question put by Mr. Anstie with regard to the constitution of the Medical Faculty in the future University. It is a little complicated in my mind. You heard what Sir Andrew Clark said yesterday, and you have said to Mr. Anstie to-day that in your opinion the interests of the schools as separate institutions can be sufficiently safeguarded in the University by allowing the Royal Colleges to form in some way or other the Faculty of Medicine in the University. Was I right in gathering that?—No, I have carefully said, or at least I intended to do so, that when I have used the word "Faculty" I have meant it in the sense in which it has been employed in the two charters, that of the Gresham and the revised scheme. Though they differ a little in detail the Faculty essentially consists of the recognised teachers in all the medical schools; and though these teachers for the most part are Fellows of the Royal Colleges, still the colleges as such, under present circumstances, can only be considered as capable of representing the schools in a restricted sense. The interests of the teachers, that is of the schools, in the University are secured by their constituting the Faculty which is represented on the Council, on which also the Royal Colleges are represented.

7920. Then in that view am I right in supposing that the Faculty would be a body which would have the right of appointing a board of studies, which should consist exclusively of teachers in the medical schools?—Yes, substantially.

7921. That is to say, the Colleges of Physicians and Surgeons, as such, would have no part whatever in the assembly of the Faculty except so far as they happened to be teachers?—Yes.

7922. Therefore your system maintains a double representation of medicine: an institutional representation of the Colleges of Physicians and Surgeons, and a teaching representation of the professors in the schools?—Yes.

7923. And the Colleges of Physicians and Surgeons have nothing whatever to do with the appointment of the board of studies or with the other functions which might be given to the assemblies of Faculties?—No.

7924. Does your scheme contemplate that every teacher in the schools would become *ipso facto* a professor or a lecturer in the University?—When you say my scheme, which do you mean?

7925. The scheme which you had in your view and which I think Sir Andrew Clark expounded yesterday. It was this, that the schools and Colleges together should form in the University sense a Faculty of Medicine. We are talking in a University sense?—In a University sense as defined in the two schemes.

7926. The Faculty, I take it, would be the body which represents the teaching element in that particular department of knowledge?—Entirely.

7927. Then with regard to the Assembly of the Faculty which chooses the board of studies by virtue of which the University is to be called a teaching University, I ask you whether it is to be composed of the whole of the teachers in the schools?—Yes. What we speak of as recognised teachers.

7928. Do you mean that the University would have some power of selecting those teachers in the schools which it should recognise or not recognise? The word "recognise" is a generally accepted term among us, implying the individuals who teach the necessary subjects of the curriculum.

7929. But recognised by whom?—By examining boards and by the Medical Council.

7930. But not recognised by the Senate of the University?—You mean of the present University.

7931. No, I am talking of the proposed University?—It would have to recognise them I take it. They would have to be recognised as the regular teachers.

7932. My point is this. Is the governing body of the University to have any power whatever of appointing, or, if already appointed by others, of approving the appointment of, or, lastly, of recognising or not recognising, the teachers in the different schools?—That question has not been raised so far as I know. The question with regard to Professors has been raised—whether individuals should be nominated by the University as University professors—but I apprehend that in both schemes the recognised teachers would be taken over bodily to constitute faculties. Is that the answer to your question?

7933. Not exactly. You see the essence of the idea of the professorial University is this: that all professors in the University, and none else, shall have the government of the University; and that the governing body shall be the body which shall appoint and recognise the various teachers in the various Faculties. According to your scheme, I want to know whether you would grant to the Senate of the University any control of that kind over the appointment or the recognising of the teachers of the medical schools; or are the schools to be absolutely independent of the University, and to be able to appoint whom they choose?—So far as it has gone at present we assume that they will be appointed as they are at present by their individual governing bodies.

7934. Then it comes to this, that the schools and colleges combined, or the schools alone, according to the plan we take, are to receive very substantial privileges from the University—the great privilege of their students having a Degree opened to them—and they are to concede nothing in return to the University in the way of control?—The authority recognised by the colleges over schools is one thing: that exercised by the University over all its faculties is another.

(*Sir William Savory.*) The colleges at present could refuse to license a school or refuse to accept its schedule.

(*Professor Ramsay.*) But under the system proposed by Sir Andrew Clark the Colleges are to retain their autonomy.

(*Sir William Savory.*) I am not speaking of that; but at present the colleges exercise a check in that way, and if the colleges became a constituent part of the University that control would go with them.

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

(*Professor Ramsay.*) But that control would be exercised not by the Senate of the University, but by the medical part of the University.

(*Sir William Savory.*) Yes, only I wanted it to be understood that the medical schools are not free of the Colleges altogether.

7935. (*Professor Ramsay.*) I am not saying they are. But I want to see what part in the government of the schools the supreme body of the University would have if the idea of Sir Andrew Clark were carried out, which I practically understand you support?—So far as it goes at present no arrangement has been suggested for any share of control by the University in the appointment of lecturers in the school.

7936. But is it not an essential part of the idea of a University that the supreme governing body of the University should appoint and exercise control over the professors of the University and all the University teachers?—That is so, but they are not as at present contemplated the professors of the University; they are recognised teachers.

7937. That is to say, the schools would come in and get all the advantage of forming a part of the University and the University would have no kind of control over them?—I venture to think that hardly represents what is or what would be.

7938. Then would you state exactly what control the Senate of the University would have over the schools under the scheme suggested?—I am assuming that the colleges are combined, of course; that they are represented on the Senate and take part, under some such arrangement as clause 47, in the arrangement of the examinations.

7939. But my question is about the appointment of teachers in the schools or the continuing of them in their office, or supervising the way in which they conduct their duties as University teachers?—For instance, we could not have a teacher at present in one of the medical schools teaching two great subjects. We could not have a teacher in one of the medical schools teaching, say, surgery and anatomy. It would not be recognised by the colleges.

7940. That is not my point. I wish to know whether you do or do not suggest that the University should by its Senate exercise any control whatever?—No, nothing has been done.

7941. Then as regards the representation of medical teachers upon the Senate, did I understand that that representation is not to be at all by the schools but through the colleges?—There a difference of opinion has been expressed to you. In the scheme of the London University the schools have no direct representation or institutional representation. In the Gresham Scheme they have direct representation.

7942. But I am asking now about the scheme you are suggesting to us to-day?—What I understand the gist of your question to be is with reference to the revised scheme, which is the one I have expressed a preference for to Sir William Savory. Dr. Moore has just pointed out to me that the London University at the present moment recognises the medical schools, that means that it has control over the teachers. It can refuse to recognise the schools.

7943. (*Professor Ramsay.*) I have got the answer that nothing more is proposed than the sort of control which would be exercised mediately through the representatives of the two colleges. Then I wish to know how are the colleges to elect their representatives upon the Senate?—The Royal Colleges?

7944. Yes?—Each would elect its own in its own way.

7945. Did I understand that Sir Andrew Clark's scheme was that it should be a combined representation from the two colleges acting conjointly, and that the whole possibility of the scheme consisted in the conjoint idea being carried out?—I venture to think you misunderstood. Each college would appoint its own number—whether two or three, as the case may be.

7946. Then passing from that, would it not be a desirable thing that the University should have, if constituted, some control over the teachers appointed in the various schools?—Of course, I must only express my own opinion now. I think it might be.

7947. Is it not the case that the appointments in each school are very much limited to the students who have been educated in that school?—It depends entirely upon the size of the school. There would be a great difference, for instance, between Guy's Hospital and Westminster Hospital.

7948. But it is the rule, is it not, on the whole to appoint teachers out of the members of the school? I am speaking of the teaching appointments?—It is commonly done. Large schools like St. Bartholomew's and Guy's might do it, having a large staff. At Westminster, with which I am connected, there is not one on the teaching staff at present who was educated at Westminster.

7949. If you have an efficient supply, might it not be a better thing for a Metropolitan University, with a great position, if there were professorships of medicine established that these should be open to all the world?

(*Sir William Savory.*) So they are.

They are open. I do not know that in every hospital the rule is laid down, but it is the general rule when a vacancy exists it is advertised for, and all persons are invited.

7950. (*Professor Ramsay.*) There was a question which came up yesterday with regard to the hospitals in London, and the great clinical material there is in London. Is it not the case that students are practically confined to the hospital of their own school for clinical instruction?—Practically it is.

7951. Is it the case that there are regular means provided to take students to see such special cases as you spoke of—fever cases, skin cases, and the various other specialty cases which are provided for in separate hospitals?—Excluding fever for a moment, which is under a different regulation (fever hospitals are under the Asylums Board), the best amongst the special hospitals perhaps is the hospital for diseases of the nervous system in Queen's Square, which has European reputation. There are arrangements for the instruction of students, who come from medical schools, at that Hospital.

7952. And do the medical schools provide for taking the students round to such hospitals?—No; I cannot say the medical schools make arrangements for taking the students round, but those places are open for students, and students go there.

7953. If they chose to go?—Yes. May I add, to emphasize what Sir William Savory has said, that the staffs of those hospitals are, usually speaking, also teachers in the different schools.

7954. May I ask whether it is the case at all in London that specialisation of hospitals has removed certain classes of diseases from the general hospitals, so that a greater variety of disease might be seen in provincial hospitals where there is not so much specialisation?—Yes, because all the general hospitals where students are taught have special departments in which all those cases can be seen.

7955. (*Mr. Anstie.*) With reference to Professor Ramsay's question allow me to put this. I will refer you to the portion of your evidence to which Lord Reay has called your attention at Question 1535 at page 145 of the report of the late Royal Commission: "Do "you think that an examination performed by teachers, "whether without additional examiners or with, plus "a certificate of definite attendance for a three years' "course, implies more knowledge than the mere "answering of questions in an examination?—(*A.*) "Personally my own opinion is that it undoubtedly "does." Having called your attention to that answer of yours, would you permit me to direct your attention again to the point put by Professor Ramsay? That, you observe, recognises a certain weight in the certificate of the individual teacher upon his own subject, having regard to the fact, that among the University requisites a certain position is assigned, and a certain weight allowed for the certificate of the teacher. Do you or do you not think it a reasonable thing that the University should be called upon to give its sanction to the position of the teacher to whose certificate it is afterwards called upon to attach so much weight?—Yes, I think it would be reasonable.

7956. You agree with Professor Ramsay?—Yes, I may say with regard to one question which Professor Ramsay asked me, my answer implied the same, that I did think that on the whole it would be desirable.

7957. (*Bishop Barry.*) So much has been said on the general subject that I will confine what I have to say very much to a question, as to your preference between the two schemes which are practically before the

Commission, I mean the single and the double University. I understand that your objection to the Gresham University Charter, which represents what I may call the double system is, first of all, that there was a want of proper recognition of the Royal Colleges both as to representation and as to what I may call power over the examination?—The latter I did not say.

7958. There was a want of recognition of the Royal Colleges in respect of control over the examinations?—"Examinational association" was the expression. I prefer to use that word.

7959. Association with the control of examinations?—Yes.

7960. Therefore, if that were removed the objection to what I may call the dual system would so far vanish?—Yes, so far.

7961. In the second place the objection was to the supposed predominant influence on the council of the two great teaching institutions?—Yes.

7962. I cannot quite see how that would be. As ar as I can make out in the whole council they had only six direct representatives, whereas the medical schools had ten, and on the Faculties there were 16, which, of course, would be shared by these two great teaching institutions with all the other admitted colleges. I do not quite see by that where the predominance of the council showed itself?—It was in this way, the total number of the Senate was to be exclusive of Convocation members who were not to come on for ten years.

7963. I am speaking of the Gresham scheme?—So am I, the total number of the council in the Gresham scheme, exclusive of Convocation members, who were not to come on for ten years, was 40.

7964. Does that allow for the Crown nominees?—Yes.

7965. The number of Crown nominees is not here stated?—No, but it came out, if I may say so, in the course of the proceedings.

7966. Then suppose we take it at 40?—You would find that the Chancellor and High Steward constitute two of those, the councils of University College and King's College each send three, that is six more. The Colleges of Medicine send ten, then there are four from each Faculty—Arts, Laws, Science, and Medicine—that is 16; and the Crown has presumably six.

7967. Why presumably six?—Because that was what was suggested as the number by Mr. Rigby before the Privy Council. That has been the number that has generally been stated. I am excluding Convocation members, who are not available for ten years, and who were then to alternate with the Crown. The councils of University College and King's College take six. They have the whole of the Arts Faculty representation. That is four more.

7968. That is ten?—Then the Science Faculty representation, that is four more. That would make 14. They were to have at least half the Law Faculty representation.

7969. Where does that appear? I see nothing of that at all?—They were to have half the Faculty of Law, and they were to have the whole of it, provided that the Council of Legal Education and the Incorporated Law Society did not come in.

7970. Then you think there would be such a great predominance in the Faculty as that?—Pardon me, such a great predominance in the Council.

7971. In those elected by the Faculties, the Council members elected by the Faculties, they would largely come from the two institutions?—Entirely, because they were the only colleges admitted.

7972. In the first instance?—In the Charter. That gave a certain minimum of 16 out of 46, with a possible two more from the law if those bodies did not come in; with a possible member of the Medical Faculty, and I would say a strong probability of some of the Crown representatives representing University and King's Colleges.

7973. That, I should think, would be unlikely, because the Crown would see that the colleges were represented, and would probably put in somebody else, supposing that objection were removed. That, again, would remove your objection to the Gresham Charter as such?—It would remove my objection to the Gresham Charter obviously so far.

7974. Thirdly, you want a greater provision for higher education?—Certainly.

7975. And, therefore, if that element in the Gresham Charter, which allowed the appointment of lecturers to the University, were enlarged, and an improved professoriate were established, that objection would also vanish?—Yes.

7976. Those were the only three great objections to the Gresham Charter, but you prefer that there should be one University rather than two?—Yes.

7977. And yet I cannot help thinking that in the course of the evidence you must have felt that there was an immense difficulty in making the one University do the double work. I mean, for instance, in the examination of Sir William Savory—reconciling the claims of the provincial schools with those of the London schools?—I think there is a very great difficulty, but it is not insuperable.

7978. Then is it not the simpler thing that the present University of London should continue doing its great imperial work for all the provinces and London too, and that there should be another University for London—call it what you will, and arrange it as you will. Is it not better to have two bodies to do two different things than to have one body and to make it do the two different things?—No, I have a preference for one University.

7979. Tell us your reasons for that preference?—Because I do not think the difficulties are in any way insuperable.

7980. What are the great objections to the two Universities?—First of all it seems that it was, to begin with—I am bound to defer to that authority—preferred in the report of the Royal Commission.

7981. But you will remember three members of the Commission intimated their doubt of the possibility in their minority report?—They intimated their doubt of the possibility in their minority report, but I am not aware of their preference.

7982. They said the objections weighed with them far less than their colleagues, hence the report of the old Commission was, to a certain extent, a divided report?—Yes, I admit that. That is the first point. Then it avoids competition of degrees between two Universities.

7983. There is a competition now amongst various Universities. We have the Universities of Oxford, Cambridge, and Durham, and they draw their students from various parts. There is competition among them for degrees. Surely London is large enough for two Universities?—I quite admit the size, but in the instances that you have given they are in separate places. In this case there would be under your proposal two Universities in the same place.

7984. But that place is so enormous that the number of students that come to the two Universities would be so great that I think that objection is not of very great importance?—I hardly finished. One has to accept the fact that the present University occupies the position that it does in the eyes of the world, because of the high character of its degrees.

7985. Certainly?—I think that if you had a second University competing with that there would be a competition in the reputation of the degrees in some place.

7986. Do you mean that would tend to lower degrees on both sides?—I think so.

7987. I want to see why that should be the case any more than competition between two places like Oxford and Cambridge would lower the Oxford and Cambridge degrees, and, after all, what the intrinsic value of a degree is is very soon understood by the world. Let me put it in this way: supposing the existing University of London to remain, and that its degrees were of a higher character than those of the Gresham University, do you not think the world would very soon find that out?—Yes, but I think the practical working of it would be that with this necessarily competing University, the result would be if the Gresham were to be a success it would seriously injure and ruinously damage the London University.

7988. Supposing on the other hand you very largely increased the number of London students, the Gresham University might do its work without injuring the existing University, especially as they take an altogether different line, one being a federal University

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

and a University for London, and the other being a non-federal University, in fact, recognising no colleges at all and being really an imperial University?—Yes.

7989. I do not see myself that their competition would be at all serious. And is it not after all possible that they might supply two different needs?—It is possible, certainly. I think they would be so very different in their constitution.

7990. In that case there would be nothing injurious in their competition. I think the Gresham University would supply the need for London. The present University is not a University for London at all, but the other would be?—Yes. It is an unfortunate name.

7991. I do not mind the name. I think those things would soon settle themselves. The world would soon find out the degree. The senior wrangler at Cambridge can only put B.A. and the last man only puts B.A., but the world soon distinguishes between the senior wrangler and the poll man?—If there were another name it would avoid the confusion. That is a small point perhaps.

7992. That is a very small point. I think, properly speaking, the present University of London ought to be called the University of Great Britain, and the new one the University of London, but as that is not allowed we chose the name of Gresham to show its metropolitan character. I do not think the name is of serious moment?—There is another matter which is an argument derived from experience, namely, that in one town in the kingdom, Aberdeen, there have been two substantially competing Universities under different names, under the names, I believe, of King's and Marshall's Colleges. It was found that that arrangement did not succeed, and in place of those two one exists.

7993. But just consider the difference between the condition of Aberdeen and that of London?—I do. It was an experiment on a small scale.

7994. The experiment was not a valuable one. Having listened to the examinations of Sir Andrew Clark and yourself, I thought the difficulty of making one University do the double work without anomalies and injustice has increased in strength. Has it at all impressed itself upon your mind?—No.

7995. Then our impressions are different. Now one more point with regard to the Faculty of Medicine in the proposed University. Could an arrangement be made by which the Royal Colleges and the institutions —I mean the medical schools—might have conjoint representation—a certain number to the Royal Colleges and a certain number to the schools?—You mean in the Faculty?

7996. Yes. So that you will have one an institutional representation for the medical schools and the other a more general representation through the Royal Colleges?—If you will allow me to say so, that would entirely violate the notions of the Faculties that have hitherto been suggested because it would introduce an element other than the actual teachers. The institutional representation of the Royal Colleges finds its place directly on the Senate. This is my own personal view with which some of my colleagues here—one notably—do not agree. My own notion is that teaching institutions should not be directly represented on the governing body.

7997. Supposing the Faculty consisted of a dozen members, and supposing that out of those half were given to the Royal Colleges, and half to the medical schools, restricting it to teachers of those schools?—I think that would do away with the means of carrying out what is one of the great demands, and what both the Gresham scheme and the other provides for, namely, due representation of all the teachers upon the Faculty. To limit the teachers' representation on the Faculty to anything like six or a dozen or two dozen would quite inadequately represent teachers.

7998. I am only taking that number for the purpose of illustration?—Anything short of all the teachers in the schools would be inadequate.

7999. I will withdraw that. What I mean is this: whatever the number of the Faculty, you propose that the institution, as such, should not be represented at all?—That is my own personal view.

8000. But that the Royal Colleges should guard their educational interests?—Yes.

8001. On the other hand, the Gresham scheme provides that there shall be a representation of each school and there shall be also a representation—a very inadequate one as it appears to me—of the Royal Colleges. Do you not think that that second scheme, if amended, may give you a very good Faculty; on the one hand, the great Royal Colleges having a general position, and on the other hand having an institutional position in the various schools?—But the Royal Colleges did not obtain a representation on the Faculty in the Gresham scheme.

8002. It is not a matter upon which I feel very strongly, but it did occur to me that that might make a very good Faculty?—For myself I think it would violate the fundamental notion that has been attached to the Faculty hitherto, and without advantage.

8003. I think, if I remember rightly, in your scheme you never proposed to exclude provincial students from examination, but only provincial schools from the University?—What you speak of as my scheme I presume is from my speaking on behalf of the college in support of the one scheme which is generally accepted by us. My own view is a little different, but that has not been reached, and it is not worth while going into it.

8004. I do not think it was ever your idea that students in provincial schools should be excluded from the Examinations of the new University?—No, I do not think so, so far as we accepted the scheme of the London University.

8005. That was never contemplated?—No.

8006. But I think you intimated an opinion which has been held that the endeavour to bring provincial schools into the government of the University was an undesirable thing?—Yes.

8007. There seemed to be a little confusion in the mind of one of the Commissioners between provincial students and provincial colleges in that matter?—Yes, I think so.

8008. (*Professor Ramsay.*) May I ask you what you meant by saying the amalgamation of the two colleges with the schools in representation on the Senate would be contrary to the very principle——?—No, I beg your pardon.

8009. Then will you please explain it?—The notion has been in the two schemes submitted, the Gresham and the revised scheme of the Senate (excluding the professorial), that the Faculty should consist of recognised teachers only. In the Senate's scheme the Royal Colleges were to be directly represented on the Senate with a Faculty representation, that is to say, a certain number, five, selected by the body of the Faculty of all the teachers. The teachers only had the representation through the Faculty in the Senate's scheme. In the Gresham scheme there was the same kind of Faculty with minor differences, of recognised teachers; but on the governing body of the Gresham University the Royal Colleges were to be represented directly as in the former, but the schools also and the Faculty representation also, so that in the Gresham scheme there was, so to say, a double representation of the schools.

8010. One of your objections to the professorial University was that the professors on the Faculty would be irresponsible. I do not quite know in what sense you hold that they would be irresponsible under the professorial scheme, but not irresponsible under the Gresham scheme?—In this way, that the notion of representation, so far as I gather it, of professors or of the Faculty in the professorial scheme is that those representatives that go on the governing body in the professorial scheme were to be elected not by the Faculty, as they would be under either of the other schemes, but they would be elected in the first case by somebody armed with powers and subsequently to be co-opted by the Senate.

(*Mr. Anstie.*) There were two views. There was a purely undiluted professorial view and a modified professorial view.

8011. (*Professor Ramsay.*) Then you were speaking about the possibility of two Universities or two educational bodies competing in a downward direction. You of course are very familiar with the great controversy about the 19 portals to the medical license?—Yes.

8012. Is it not a fact, and is it not a notoriously understood fact in the profession at large and in the mind of the public, that the competition of the 19 corporations has been in a downward rather than in an upward direction?—I should say in this way that it has been

with great difficulty that it has been resisted on the part of some bodies.

8013. Is it not the case that there are included among the 19 some bodies which the majority look upon as working downwards with a view to attracting students?—Yes.

8014. And was it not the view of Parliament that the only way of stopping a downward movement of that kind and securing an adequate license was to make one portal for the whole of the three kingdoms?—Yes, I believe it was.

8015. (*Bishop Barry.*) As Professor Ramsay has poached on my domain, I may be allowed to say that that analogy between two great Universities and these numerous competing bodies does not hold?—I understood Professor Ramsay asked as to the general principle.

(*Bishop Barry.*) Of course the inference was obvious.

(*Professor Ramsay.*) Some analogy there certainly is, the case of the two Universities of Aberdeen was exactly analagous. (*The witness handed in, by permission of the Chairman, a copy of a scheme for a new University for London, prepared by himself, which had been frequently referred to in the course of his evidence, and purporting to unite in one University the metropolitan and cosmopolitan requirements. For this scheme see Appendix, No.* 11.)

W. H. Allchin, Esq., M.B., F.R.C.P., M.R.C.S.

15 July 1892.

The witness withdrew.

Adjourned to Tuesday next.

Sixteenth Day.

Tuesday, 19th July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

The Right Rev. the Lord BISHOP OF LONDON examined.

Lord Bishop of London.

19 July 1892.

8016. (*Chairman.*) You gave evidence, as we all know, before the last Commission, over which Lord Selborne presided, and stated your views as to the general subject, would you be kind enough to tell us what your views are on the present situation of matters with regard to a teaching University for London?—I was a supporter of the Charter as it now stands.

8017. The Gresham University Charter?—Yes, the Gresham University Charter, which I understand is referred to this Commission as the basis for their consideration; and I believe that the Charter as it now stands would constitute a University that would do the work that is required, and would gradually be developed into one of the largest and most effective institutions in the whole world. The idea of that Charter is to take things as you find them; that is, to take the present teaching bodies that give what may be called University teaching, and to constitute them into a University in such a manner as to admit of development, as time went on; and I have very little doubt that such development would be certain to follow. The Charter, in my view, did not contemplate the creation of a paper University in which there was to be a great deal proposed which it would be very doubtful indeed whether you could really fulfil; but it was to be a University that would do its work from the beginning, and would do it better and better as time went on, and would be quite certain to attract from those who were interested in the metropolis further endowments of such a character as to make the University a sufficient body for the higher teaching of the youth of the metropolis.

8018. You have not, I am afraid, had any opportunity of reading much of our evidence because it is very much behind time in the printing, but have you heard or considered any of the objections which have been made to this draft Charter?—I have not had the opportunity of seeing any of it at all. I was not even aware that it could be seen, and I am not, therefore, acquainted with any of these objections.

8019. You think that the University part of this new scheme would be gradually developed and strengthened as time goes on?—I do.

8020. That more institutions, besides these two colleges and the medical schools, would be found to join?—Yes, I think so.

8021. And you would wish the University part to be developed. For instance, this is one point. There is only one clause, and that rather feebly expressed, which gives power to appoint university lecturers besides the college lecturers. Would you have any objection to that being developed more and being made compulsory, and that there should be professors instead of lecturers?—I think it would be wiser to develop the University in the form in which it would begin, namely, by the encouragement of the founding of new institutions similar to the two colleges which now exist. I think that what you have to bear in mind is that the University which is needed in the metropolis ought to be a University, the main object of which should be the giving of the highest kind of culture that can be given to those who are to be employed in the various occupations of life. Of course, you might think of a University which had for its aim the advancement of knowledge and the cultivation, consequently, of those who would devote their lives afterwards to that advancement. This is, in my view, only one part of the function of a University, and I think that, for the purpose for which we want a University in London, it must be secondary to the main object of giving the higher kind of education to the great body of the London youth. If you take that as the aim of the University, then I think the more you can develop the collegiate system the better, because I have no doubt at all that for the purposes of education the collegiate system is by far the most effective. If you are to think only of those who will seek for knowledge purely and simply for its own sake, and will devote themselves to the acquisition of knowledge, and to the preparation of their own faculties for still further advancement in knowledge, then the best arrangement would seem to be to leave them entirely to their own choice, to supply them with teachers, and let them go to those teachers and obtain from them what they can get. But if you are to think of the education of the great mass, what is of primary importance is that you supply them not only with first-rate teaching, but with that kind of

Lord Bishop of London.

19 July 1892.

steady discipline which the collegiate system alone really supplies. The young men want not only to be taught, but to be trained—to be trained intellectually, but it seems to me that intellectual training involves, of course, a very considerable amount of moral training: training in perseverance, in observation, in self-restraint, in all those moral qualities which will enable a man to concentrate his intellectual faculties. Those who are naturally bent upon pursuing knowledge for its own sake will train themselves, but the great body of the learners will not, and what they need, therefore, is the kind of discipline which adds to first-rate teaching that training without which a great deal of the first-rate teaching is necessarily ineffective. You would have a very large body of young men who would respond to the necessary drill which is required for their higher education, and although they may, in some degree, kick against it, yet would certainly submit to it for the sake of the advantages which it gives, and would profit by it in a way in which they could not profit under any other system. This collegiate system, I think, is of very high value indeed in such a country as ours. In such a country as ours the most important thing that we can aim at is to penetrate all occupations, and all the educated classes of society, with what we may call liberal culture. This liberal culture implies that there shall be a great deal of real supervision and of control over the students, and I do not think that the simply professorial system will ever give it.

8022. I was not at that moment referring to any idea of a simply professorial system but professors of the University in addition to the college professors who would chiefly undertake the higher branches of study. There appeared rather, at first sight, a deficiency in providing for that in the scheme before us, and I thought it might perhaps be strengthened by improving that clause which provides for the appointment of lecturers:—"The University may appoint "lecturers independently of a college, to give instruc- "tion in any subject, whether it be or be not included "in a Faculty"?—I know the clause well. I could not object to the University appointing lecturers or professors, provided it was so guarded that the collegiate system was not made subordinate. If you distinctly recognise the importance of the collegiate system as the best means of education for Englishmen in the circumstances of England, I should not object to there being a small body of professors who are independent of the colleges altogether, but I think the professors within the colleges ought to be of the very highest rank, that they ought to be men of such rank that there can be no question of their being competent to give the very highest kind of instruction, each in his own subject. And I think that such a University as the Gresham University Charter contemplated would induce men of the very highest rank to accept professorships in the colleges. It is to be remembered that men of the very highest rank have been professors in the colleges. The circumstances have been such that these men have been drawn off to professorships elsewhere, but if the circumstances had been different and their position had been such as to enable them to count upon getting their students recognised and their work appreciated as it should be, those men would stay with us, and probably would be very glad indeed to stay with us inasmuch as London has attractions which neither Oxford, nor Cambridge, nor any other seat of learning, can possibly present.

8023. Would you tell me exactly how the position of these men would be raised by this Charter?—They would have so much to do with the determination of the conditions on which degrees were granted that they would feel that their work would govern the examinations for degrees instead of the examinations governing their work.

8024. And they would be in a more independent position?—They would be in altogether a different position. A man who is teaching to prepare for an examination is in a totally different position from a man who is teaching his subject, and to whom, therefore, the examination simply comes in as recognising the value of his work.

8025. In fact the voice they would have through belonging to the Faculties and their appointing a board of studies to determine the curricula of the examinations would put them in a higher and more independent position than they are in now when they have nothing to do with it?—A very much higher position, because they would determine it; and more and more as time went on would they determine not only the curriculum of study in every case but the examiners and the character of the examinations.

8026. You attach a great deal of importance to the discipline which nothing but a collegiate system can enforce. I suppose it is not very easy to enforce discipline thoroughly without residence, is it?—You can enforce a great deal of discipline without residence within the walls of the college. You can require definite attendance at lectures; you can compel residence during the day, or for a very considerable part of it. There are opportunities for professors and lecturers to become acquainted with those who attend their lectures, of quite a different kind from the opportunities which are given to University professors who simply admit men to their classes and have nothing further to do with them.

8027. But, still, it could never be anything like the discipline of Oxford or Cambridge, where the morals can be looked after as well as the studies?—Well, it is a great deal more like than you would suppose. Of course, it is quite true that the great body of the students at Oxford and Cambridge live within the colleges, and there, of course, are amenable to discipline, and, what is far more important, are living in a kind of community of life which you could not have when students were generally living at home. But for all that the rules which colleges make for the purpose of the discipline of their own students in a place like London would be such as to bring the whole working of the University to a very much greater resemblance to the working of Oxford and Cambridge than you would suppose. Both in Oxford and Cambridge, it is to be remembered, that a very large number of the students, and now an increasing number of the students, do not live within the colleges.

8028. At Oxford they come into colleges first and go into lodgings afterwards. At Cambridge it is the contrary way, but the tutors, in lodgings, keep their eye upon them?—Yes, to a certain extent. But the kind of discipline that I mean is not merely the discipline of rule, but the discipline which necessarily brings the students of the professor into such a very much closer contact, makes each know the other so very much better. And the students themselves acquire a considerable amount of *esprit de corps*; they get acquainted, and very often intimately acquainted with one another,; and the sort of intercourse that goes on amongst them has a very highly educating effect, more especially as, from the nature of the case, they are led constantly to a great deal of conversation about their own studies. They talk over everything.

8029. And this goes on at King's College and University College in the same way as at the Universities of Oxford and Cambridge?—A great deal of it. I am not able to say the same of University College, because I do not know that college so well, but certainly of King's College.

8030. One objection which has been made to the collegiate system in contradistinction to what they call the professorial system, is the amount of overlapping and waste of power; for instance, that laboratories and other appliances for teaching have very often to be doubled if you have two colleges and each college would have to have its own; whereas, in the other system, one would do for the whole number. And in the same way with regard to the teaching, there would have to be a double staff, as it were, for each subject, whereas with the professorial system fewer teachers would do?—There is a certain amount of truth in that, but it must be remembered that you pay heavily for the economy, both of buildings and teachers. There is an economy of buildings and of teachers, but it is very much less than you would suppose, because when you come to buildings the large college will use its own buildings pretty nearly to the utmost of their capacity, and there must be other buildings if there are to be other lessons going on. You would want to teach chemistry; you want, of course, opportunities for every learner to do actually practical work; if you are to supply every learner with that in his turn, you will, of course, make it a little more economical if you have these things all in one great building, it will be a little more economical, but I do not think very much more. And when you come to teach it is to be remembered that a very large class indeed is not favourable to the thorough teaching of those who are not passionately desirous to learn; who do want to learn, no doubt, but have no enthu-

siasm for it. A man who has a class of 50 or 60 average young men will, as a general rule, find that he has quite enough to do if he is to look closely into their work. If you have enthusiasts that is a different thing, because you do not need to look closely into their work, and you may have a class of 1,200; but that is not the sort of class that you would get in a University of this kind. If you abandon the idea of teaching the young men of London, and think of cultivating only those who are by nature scientific students, and mean to be that and nothing else all their lives, then I do not know that you want anything more than a set of professors and proper appliances.

8031. I suppose the inter-collegiate system, one college admitting the members of other colleges to their lectures, would remedy a good many of the evils?—Certainly. The inter-collegiate system, wherever it does not make enormous classes, is an exceedingly good expedient and would be certainly adopted. I am quite sure that at King's College, for instance, there would be no difficulty whatever as far as the accommodation would allow, in admitting students from other colleges.

8032. It has been represented to us that one of the faults of the scheme is that the medical profession is over represented from each of the medical schools having a member, and from other causes. It has been said that there is a great preponderance of the medical profession on the Senate?—Well, the giving of such preponderance to the medical profession follows from the fact that if you are to start with what you have got, the medical schools are already doing University work, and there is a considerable body of them, as there must be in so large a place as the metropolis; but I do not know that I should contend very earnestly for such a proportion being given to the medical authorities. I look upon the medical work in London as exceedingly good, and I think that to give London degrees upon more training and less mere examination would be a gain. But if the medical Faculty alone were concerned, I am not so wedded to the Charter as to think that that is a point upon which I should insist very earnestly.

8033. You think perhaps the representation of the medical schools might be diminished by their combining to choose the members of the Senate or some scheme of that kind?—I confess I have not studied that side of the question very much, but I should not object to any arrangement of that kind. As far as my own view is concerned, upon that particular point I do not think my opinion is worth a great deal.

8034. It has been said that there is now such a large medical representation that they would very much mould the curricula of the medical degrees according as they themselves wished it, and that the tendency would be towards cheapening this degree and making it more and more easy of attainment if it was in the hands of the medical profession. I do not know whether you think that would necessarily be the case?—I do not know that they would. I think they would aim, and I think they would be right to aim, at laying more stress upon the instruction given than upon the examinations passed.

8035. Make it more practical?—Well, insist more upon attendance at lectures and the like, and the students really learning from those who were capable of teaching.

8036. The Royal Colleges of Physicians and Surgeons have expressed a strong wish to have more power in this University and more influence, and would like something in the nature of the draft scheme submitted by the Senate to the Convocation of the London University allowing them to be taken into partnership for the medical examination, would that be feasible?—I do not myself see any objection to it. In that draft scheme prepared by the Senate of the University of London it seemed to me as if the Senate had gone very far indeed to meet the wishes of the Royal Colleges, because they thought that the support of those colleges was worth purchasing, even if nobody else was to be considered at all.

8037. It was not for the good of the public you think?—I did not think it was not for the good of the public. I thought it was rather for the good of the University of London.

8038. And having only the good of the public in view, do you think it would be desirable to associate them with the examinations for the degree?—As far as I can see there is no reason why they should not have a position in the University. The colleges were very anxious that they should conciliate the medical profession, but the medical profession were not very easy to conciliate.

8039. But, perhaps, if they knew that this was the only scheme to be brought forward, they might be more willing to meet you?—Yes, I think so.

8040. At present in order to give a degree, you require that a candidate should have obtained a qualification for practice, which practically would come from the Royal Colleges. I think that is the case?—Yes, I think it is.

8041. But the objections on the other side have been made to us that a University degree, ought, in itself, to give a qalification for many reasons, and that it would be better to have an Act of Parliament to enable this University to be in the position of all other Universities in this respect?—I entirely concur in that view. I thought it always a blot in the Charter that the University should grant a degree and should not be able to grant a qualification. It seemed to me to lower the University, and, as far as I myself was concerned, I consented to it in the Charter very unwillingly.

8042. Then, supposing, for the sake of argument, that this Gresham Charter was to be out of the question, of course, you know the scheme that was submitted by the Senate of the University of London to Convocation, and that was rejected by them?—Yes.

8043. Supposing the objection of Convocation could be overcome in any way, do you think that is the foundation of a workable system?—I do not think you could make the London University into a teaching University, which was the purpose of that scheme, with any hope that the teaching University would take its proper place, short of doing one of two things, abolishing the London University and re-creating it altogether, so as to keep up the name, and in some degree the traditions, giving it an entirely new character; or to do what was a sort of compromise between the colleges and the Senate of the London University—to make the two parts, namely, the teaching University and the examining board practically independent of one another altogether. That last was a compromise to which the colleges assented very unwillingly, because they did not see their way to anything better, but in a University, such as is desirable in the Metropolis, the teaching body ought to be supreme, and the examining board subordinate; and if those who are outside, who come in for an examination without being matriculated in the teaching University and not being resident in London, for instance, came in upon those conditions simply to be examined without reference to how they were taught or where they were taught, it is conceivable that the work might go on. I do not think it would work very well even then. The degree would mean such a different thing in the two cases.

8044. They would have to have a double degree?—Well, practically it would come to that.

8045. Either that or the provincial people would be at a very great disadvantage?—Yes.

8046. You do not think that if you could not get anything else you would be favourable to any scheme of this sort?—I did not like the compromise at all. It seemed to be the best thing we could get in the circumstance if we were to follow the line of the report of the late Commission, and endeavour to come to terms with the London University; but I do not think it was a very good scheme if you are contemplating a real teaching University for this metropolis. The functions which the London University have assumed are in reality Imperial and not metropolitan. A great examining board of the very highest character, which is not to be denied to the University of London simply as an examining board is, no doubt, an exceedingly useful institution; but I doubt the possibility of combining it with a teaching University, except on terms which will either damage the examining board or damage the teaching University.

8047. Do you think that if we establish a second University as is proposed by you, it would injure the present work of the London University at all?—No, there is a very large body who must still look to them. There is a great deal of work which they have to do with which the whole empire is concerned in its degree. There are a great many institutions that never could be made into parts of any other kind of University. So far

Lord Bishop of London.

19 July 1892.

from being a damage to them, I think that their distinctive function would be more clearly visible than before, and that they would stand quite as high in the estimation of the public as ever they did. They would lose a certain amount, no doubt, of the Londoners, but even there there would be a class that would go to the London University, namely, the class of men who study for themselves, who are self-taught, who do not want to be taught at all. It is a small class. I do not suppose that you would find five per cent. of men that are capable of education, who could reach the highest point in this manner, but there is a class, and in its way a very valuable class, and that class would still find the London University as it now exists, as an examining board, the best mode of obtaining the appreciation which they require partly for their own satisfaction to know that they have not been reading in vain, and partly to enable them, if they desire to do it, to get classes for themselves and teach others.

8048. Is there anything more you would like to say, or any statement that you have heard out of doors that you would wish to refute?—No. I cannot say that I have heard anything which seems to me to be worth a great deal. As I told you before I have not read the evidence that you have received, and perhaps after I had read it I might have some point, that I should like to submit to you.

8049. We should like very much to hear them?—But I have not anything of my own to suggest at present.

8050. (*Lord Reay.*) Might I ask whether your Lordship is in favour of the organisation of a theological Faculty in the new University under this Charter?—I think it would be a gain to the University that there should be such a faculty. I should not like to call it a theological Faculty, but I should like to call it a Faculty of theological science. I think there should be a Faculty of theological science. I think it a misfortune that so very important a branch of human knowledge, bound up with the very highest interests of man, should be excluded from so important a University as the metropolitan University ought to be. But it would require to be very carefully guarded of course.

8051. There would be no difficulty in making a distinction between the strictly scientific part and the doctrinal part?—I do not know that there would be any need for any such distinction; I do not fancy that it would be necessary to guard it in that way, but I think it would be necessary to enable every college within the University to forbid its students from attending the lectures of particular professors.

8052. What is your opinion with regard to the difficulty which has arisen as to the test at King's College, the test for instance imposed on professors who are to teach scientific subjects?—King's College was actually created for the purpose of maintaining a college subject to such tests; that it might be strictly the property of the Church of England; and of course, therefore, it would be somewhat of a breach of faith with those who founded it if those tests were to be given up.

8053. Have the tests created no limitation in the selection of scientific professors?—I am not aware that they have ever. I am not aware that the tests have ever created any such difficulty.

8054. Your Lordship would distinctly object to the system under which the colleges would do the inferior work of the teaching University, and that the University itself would undertake the higher teaching?—I should object very strongly to that. I do not think you can part the higher and the lower teaching. You want always, in all those grades of teaching, your very best man, and his teaching must go down to the very beginnings of what you may call academic teaching.

8055. Do you think the colleges would be prepared to supply any deficiency which might be found to exist with regard to the higher education?—I think so. We have had men as professors whom we could not keep because of the position in which they were placed, but who were certainly capable of giving the very highest kind of instruction in the low subjects.

8056. (*Professor Sidgwick.*) With regard to what you have just said about advanced teaching, do you not conceive that both at Oxford and Cambridge there is a certain distribution of the teaching in this way: that the higher part of the teaching is left to the University professoriate and the lower part undertaken by the college tutors and lecturers. I do not say at all that there is a complete separation but a tendency to distribute it in that way?—There is a certain amount of separation which is chiefly due to what was mentioned before, namely, that if you are to teach natural science in the highest form you require buildings and appliances for the purpose and the colleges are not all supplied with such buildings and appliances. But even there I see the tendency is to supply them in the colleges more and more, and as they get supplied in the colleges I think you will find that that kind of distinction disappears. In the subjects where there is no such demand I do not find that there is any such distinction at all. I do not find, for instance, that if you take pure mathematics the professors teach at all on a higher scale than the tutors in the best colleges. Of course you must bear in mind that at Oxford a great many of the readerships are attached to the colleges, and therefore the collegiate system still has its effect as far as they are concerned.

8057. Do you think it would be possible to introduce in London anything like the arrangement that has been brought about at Oxford and Cambridge—I mean the kind of combination between the teaching of university officers and the teaching of college lecturers. That would give the university teaching a more distinct position in the scheme than it seems to have in the scheme of the proposed Gresham University?—I do not think that there is much of such combination at Oxford as it at present works. The best tutors on the whole are as good as the professors, and although there are particular subjects where you could not have instruction in every college and where therefore you must have a professor who can be attended by students from every college, yet for the ordinary work of the University I do not know that you find there is any such combination as you seem to suggest between professors and tutors. The professors in the University now at Oxford have to a certain extent superseded the old private tuition and that of course is a very considerable gain. Provided you do not kill the collegiate system, as I said before, I do not see that it would be at all difficult to have a small body of first rate professors belonging to the University whose lectures of course would be open to students from the University whatever college they were in or to whatever college they were attached; and possibly there might be some system of matriculation for those who did not belong to any college. But I do not think it is at all desirable that you should let the University system supersede the college system.

8058. I think the more moderate of those who urged upon us the advantages of what is called a professorial University, attached a special importance to the gain there would be in respect of the more advanced teaching — what is sometimes spoken of as the post-graduate teaching—especially including preparation for research. I think the idea opposed to the Gresham scheme, is that a purely federal and collegiate system does not and cannot give sufficient encouragement to and opportunities for this advanced teaching and preparation for research; it seems to be believed that that might be given in London by a professorial University, as it is given say in Berlin. Does it seem to you that a University professoriate, having in a general way that kind of function, can be introduced into the Gresham scheme, and if introduced could be made to work along with the other elements of it?—It would be impossible to introduce it on a large scale, and to make it work along with the other elements. Of course, you have to remember that such a professoriate would necessarily imply considerable income to support it. It would be an addition to the cost, and in the Gresham Charter it was not contemplated that we were to obtain grants of money from the Government, for instance. If you wanted to create a purely professorial University, I do not think you would do it on any sufficient scale under something like 100,000*l.* a year. I mean considering all that has to be done, all the payment of professors, subordinate professors, and the like, and considering also the maintenance of all the buildings that would be required for all their appliances and the like. But that you should have a small body of professors who would devote themselves to special subjects, and to investigation in special departments of knowledge, and who would be perpetually prepared to give students who wanted to go a great deal beyond the ordinary course of study in the University, such instruction as would carry them on as far as knowledge has yet advanced, I do not think that would be unworkable at all provided you supply the money.

8059. It has been suggested to us that a great drawback to the federal or Gresham scheme is that any economy of teaching through intercollegiate arrangements is prevented by financial competition; that the colleges cannot afford to give up complete competition in all departments; and that, therefore, even though there might be a great economy in having some subjects taught, say at University College, and some taught at King's College, the financial competition between the two colleges as institutions will inevitably prevent that. Does that seems to you to be a real objection?—I am not sufficiently acquainted with the financial working of the colleges to be able to answer the question. *A priori*, I should not have thought there would be any difficulty of that kind whatever, but you would get very clear evidence on that point from Dr. Wace, for instance, or from those who are more immediately concerned. In my own opinion there ought to be no difficulty at all.

8060. I think you said to the Chairman that where the classes are large competition between two or more colleges would seem to be desirable, but in the case of small classes it would seem to be uneconomical. To have three or four students at one class, and three or four at another seems to be a waste of power. It may fairly be said that up to a certain point the increase in the size of the class brings out the faculties of the teachers, and does good to the students?—I think it is quite true that up to a certain point it is an advantage to have a tolerably large class, but it is only up to a certain point, and in the case you were putting to me just now of professors for more advanced students, you would find that, as a rule, the classes would be very small—probably exceedingly small. And in all these things it is to be borne in mind that though economy is of very great importance you may, if you think of economy only, sacrifice the very best parts of the work.

8061. One point that has been very strongly urged upon us is that under the federal system no attempt to create a single set of fully-equipped laboratories would be feasible; that you would be sure to have incompletely equipped laboratories, and, perhaps, as much money, on the whole, be spent on, say, two or three sets of laboratories as might be applied to equip one complete set. Do you see any way of meeting that objection?—I have not gone very carefully into that question of the laboratories; but I doubt, myself, whether there would be any great economy in getting all the laboratories as it were into one place, because that is very much what it comes to, and, of course, it is conceivable that the colleges, if they found there was something wanting of that kind, might combine for the purpose of establishing a common laboratory for all of them.

8062. Then do you conceive that by that kind of arrangement, the best kind of laboratories—laboratories worthy of the University of London—might be established under the federal system. You do not think that there is any reason why there should not be a combination to do this if it were found desirable?—I see no reason why there should not be a combination to do this if it were found desirable. I am not quite clear that it is really needed, but I cannot say that upon such a point as that my opinion ought to be considered as worth a very great deal. I confess that I have not looked very much at the question of economy, because it does not seem to me that that is the ruling question that such a Commission as yours has to consider. I do not mean, for a moment, that you ought to ignore it.

8063. When you said, in answer to the Chairman, that if the University appointed professors the collegiate system ought not to be made subordinate, I did not quite understand whether you meant to imply by that that membership in one or other of the constituent colleges ought to be a necessary condition of membership of the University or whether you would be prepared to admit non-collegiate students as they are now admitted at Oxford and Cambridge?—I think that the admission of the non-collegiate students at Oxford and Cambridge must always be considered with a recollection that they are very distinctly under the influence of the collegiate system, which was established there before they came, and which is still enormously preponderant in all the work of the University and even there there is an endeavour to bring them into some sort of relations by establishing special officers to look to them and special teachers. I do not know whether it would not have been, perhaps, even better to go a step further, as the then Master of Trinity at Oxford proposed, and to incorporate them into a college which should see to them in the same sort of way as King's College here in London looks after its own students. This was rejected by the University; but I thought it on the whole a scheme which would be very likely to be very beneficial to the non-attached students. The danger in London would be that your non-attached students would be left without any kind of that, as it seems to me, essential discipline, which is necessary for their thorough instruction.

8064. Then do I gather that you regard it as on the whole undesirable to have non-collegiate students?—I do, on the whole, think it undesirable. I think that if you were to have more students, as you would, by-and-by, you ought to create a body to meet them who would take charge of them, and see to the general course of their study, which would be, of course, an additional college—not necessarily implying that you have buildings of the same sort, but implying a certain staff and recognised lecture-rooms, and the like.

8065. Would you be prepared, if the membership of the University was in this way limited to students who were also members of the colleges, to allow the conditions of admission of colleges as may appear in the charter to be relaxed?—I do not quite see what kind of relaxation would be implied in that.

8066. As I understand, the non-collegiate students, in your view, ought to have effective supervision and guidance, but is there any clear reason why, without belonging to an institution having an efficient staff of buildings and appliances, they might not be allowed to attend lectures, partly at the colleges and partly at the University lectures, if there were any, as the non-collegiate students do at Oxford and Cambridge?—I understood the word "staff" there to mean the sort of staff that would be required in order that these men should have their studies properly supervised, and I think the non-collegiate students ought to be put in that position.

8067. You would not require that they should have laboratories of their own?—Those, I think, are matters of detail. It would be very likely that you may not require appliances, I think you would require lecture rooms.

8068. Of their own?—Yes, of their own.

8069. But still if they were allowed to go to lectures at the various collegiate centres they would require only a very small number of their own?—That would be a matter to be judged in each particular case, but provided you have a sufficient staff to see that these men are not only taught but that their study is really guided, and that they are not left really to find out for themselves the best way of getting instructed, I think it is a question of detail what is to be a sufficient staff which must be decided by the authorities of the University in the first instance, and I think the charter allowed an appeal to the Privy Council from those authorities. The supervision of study would necessarily imply professors who would be members of this very staff, because you cannot really supervise study except through those who are actually teaching. I think it is of very great importance that they should be under very distinct regulations as regards their studies.

8070. One objection that has been urged against the Gresham scheme is that though the ground on which the need for the new University is maintained is the desirability of bringing the examinations more into harmony with the teaching, the result will be very incompletely obtained in the federal system, in which there may be a number of colleges, because the examination relatively to each individual college and the individual teacher in the college would still be an external examination?—I do not think there is anything in that objection at all. A University on this federal system would still be a University in one spot and there would necessarily be a great deal of intercourse among the professors of such a University, especially as they would have to very frequently meet to determine things belonging to their Faculty and the like. There would grow up inevitably as time went on a certain tradition of examinations, and that tradition of examinations would be in sympathy with the teachers. The teachers would have, in fact, the moulding of it, and the perpetual remoulding of it as time went on. Everybody knows, for instance, that you have a kind of traditional examination at Cambridge; you have a kind of traditional examination at Oxford. All Oxford teachers will, of themselves, without any constraint, teach in thorough harmony with that tradition. They cannot help it,

Lord Bishop of London.

19 July 1892.

in fact. It is in the air, it surrounds them at all turns, and it is quite easy, therefore, for them to teach in such a way that the examinations shall be sympathetical with their teaching. And the same thing is true of Cambridge. There, too, the tradition of the University which has really been formed by the teachers of the University govern the character of the examination, and the result is that when Cambridge are teaching they inevitably teach in harmony with that character, and the examinations suit the teaching because the teachers have so much influence in the University that they really mould all the examinations. If you were to require an Oxford man prepared at Oxford to go into the classical tripos at Cambridge, he would certainly not show at all in the same way as he would if he went in at Oxford, because the examination would be so alien to all the modes in which he had been accustomed to view all the subjects of the examination. And, *vice versâ*, a Cambridge man going to be examined for an Oxford degree would certainly find that a great deal of his work was not appreciated, and that he would stand very much lower down than in proportion to his true position in the University where he had been taught. I think that although in a certain sense you may say you attain the result only incompletely, you really attain it in the truest sense of the word, because it is not at all desirable that a man should be simply so examined that he should reproduce from memory what his own particular teacher or professor has been saying. What is wanted is that he should be so examined that the questions put to him would be in character and in substance such as his own teacher would put to him if he were examining him at the end of his own course of lectures. The questions would be such very likely as when you come to the words of them, and the precise point of them, the teacher might never have put, because he would not have thought of them. But still they would be in spirit so closely analogous that the man, if he had really attended to the teaching he had received, would be able to answer them in proportion to his ability.

8071. It has been, however, urged either privately or before us (I do not remember which) that the conditions of London are so different from those of either Oxford or Cambridge in respect of the largeness of the Metropolis, and the distance between the colleges, that this community of tradition is not so likely to grow up; that the mere fact of being members of the same University, and occasionally meeting in the faculties, will not produce the same effect, which the much closer social intercourse among the members of the teaching body at Oxford and Cambridge has produced. Do you think there is anything in that?—Well, I cannot say, of course, that London is exactly like Oxford and Cambridge; but I think it is quite certain that really learned men doing the same kind of work within the limits of the same city would find a sort of necessary intercourse growing up amongst them. They would very soon form such traditions as those of which I have been speaking. I think that in London the truth lies in the other direction, because the fault of Oxford and Cambridge is that they are a little too much out of the general stream of knowledge, and it takes a little time before that general stream passes through them as it were, but here in London you are in the very current of it, and all men who are interested in any subject whatever are brought somehow or other into relation with each other with very great ease, and if they have a common work to do, I think in reality they would be more closely associated here than in the Universities of Oxford and Cambridge. And then you must not forget that at Oxford and Cambridge the professors are only there for half the year, and a good many of them do not stay there even through that half when their work is to be done. In London the probabilty is that they would be here a great deal more, and would mix together more in London society.

8072. If we suppose the University has the right of appointing professors, do you see any objection to giving it a power—I do not say that it ought to be exercised—to require attendance on their lectures?—I think that that would be a very great restraint upon the liberty of the student, and a great restraint upon the working of the colleges. It would have a great tendency indeed to compel the colleges to take a subordinate position even in those respects in which it is not at all for the good of the University that they should take a subordinate position; that the University should have a power to say to any college or any man, "You shall not get my degree unless you attend my "professors over and above your own professors," would, I think, tend to destroy the collegiate system very much indeed.

8073. Therefore, you think it ought not to have the power?—I think it ought not to have the power, certainly.

8074. (*Sir Lyon Playfair.*) In the Gresham Charter King's College and University College were put in as colleges of all the Faculties in the University, and then certain medical colleges were afterwards appointed. I suppose you contemplated that there should be other colleges which might not be colleges in all the Faculties?—Certainly.

8075. Such as a Government school of science?—Yes.

8076. Or that admirable institution the City and Guilds Technical Institute?—We certainly contemplated that there would be colleges without the full complement of faculties. I should not like to mention particular institutions, because I have not studied the particular cases enough to say whether in any one particulas case I should consider that they satisfy the conditions that ought to be required of a college.

8077. That is what I wanted to ascertain from your Lordship—whether the fact that they had a high scientific or literary instruction in another college, so as to satisfy the students' requirements, would be sufficient to bring them in under what you understand as the collegiate system?—Certainly, if there were a college in which they were regularly admitted under the authority of the authorities of the college—of the staff of the college.

8078. Would you require a discipline over them with regard to morals and habits outside their collegiate teaching? I think you would have, anyhow, to leave that to the college to determine for itself. I do not think the University should call upon a college to do that.

8079. You would not think that was a reason for not admitting a college?—I should think it a reason, but I should not think it a sufficient reason if I were satisfied that it was doing its own proper intellectual work.

8080. The case that I am most familiar with is the case of the Scotch Universities which are also colleges?—Yes.

8081. They have a thorough academic discipline inside their walls, but they are not responsible for anything that happens outside their walls. To that extent you would consider a college a proper college to admit?—Yes, I should admit such a college myself. I should not require of them to exercise discipline outside their walls, provided that the discipline within the walls was sufficiently close and strong to ensure that the students really did study, and that they behaved properly and academically.

8083. In King's College there are no tests taken, I think, with regard to pupils?—The pupils take no tests.

8084. Are they obliged to attend the church?—No, they are not obliged to attend the church. They are obliged to attend certain lectures.

8085. But not to attend services?—The students are required to go to chapel.

(*Dr. Wace.*) As this is a matter of discipline, perhaps it is a point which I might be allowed to explain more particularly. The students are required to attend chapel unless they are specially exempted by me. The occasional students are not required to attend chapel.

(*To the Bishop of London.*) The test for the professor is simply that he should belong to the Church of England, I think. Would not that limit you in getting some of the most distinguished professors? that they belonged to the Established Church. You could not have got two distinguished men, for instance, like Professor Huxley and Professor Allman, under such tests?—No, certainly not.

8086–7. There are certain professors who would be excluded?—Yes, there are certain professors who would be excluded. When I said that we did not find that it limited our choice I did not mean to say that it never could limit the choice. I only meant that as a matter of practice we did not find that we could not get very eminent men to accept the professorship.

8088. You might, for instance, exclude the most eminent man, but you think you would get another as eminent?—It is possible that we might exclude the most eminent man. I do not know that it has ever happened. But, of course, it is very difficult to say how far it operates, because men will not offer themselves for professorships if they know that there is this test, which they are unwilling to pass; therefore you do not see it in operation. But we certainly have found that we get very eminent men indeed in spite of these tests. Of course, it would be impossible to say that it does not limit the choice. It necessarily must, to a certain extent.

8089. Do you think it is of great importance whether a professor of chemistry is a Presbyterian or an Episcopalian?—I think it is of very great importance that in an institution which has a special character as belonging to the Church of England those who are to work it should be members of the Church of England. You must understand that I should not at all wish that the whole University should belong to the Church of England.

8090. But that particular college?—Yes, that particular college. And I do think that it would be a very considerable gain to have within the University denominational colleges.

8091. Still following out this subject, you said, I think, that you thought there ought to be a Faculty of Theological Science?—Yes.

8092. That is a large and important branch of human knowledge?—Yes.

8093. On what conditions would you pass graduates into such a Faculty. For instance, in Scotland we have no test whatever for taking the degree of Theology. A Roman Catholic, a Mohammedan, or a Protestant may equally come if they possess the theological knowledge. There is no test whatever. Would you go as far as the Scotch Universities in giving a degree for knowledge without any reference to belief?—Yes, I should look upon the safeguards that ought to be provided as lying altogether on another side. I should say that every college must have the power of forbidding its students to go the teaching of particular professors; but when it comes to the examination, then the examination is to pass a man quite independently of whether he believes or does not believe.

8094. I believe with you, that there should be a Faculty of Theology on such terms, as it is an important branch of human knowledge. Then as regards the London University, you said it was Imperial and not metropolitan; that is to say, it is both at present; it is Imperial as well as metropolitan. Do you think, upon reflection, that two Universities could work well in London, large as it is? Has it not been the experience of University history all over the world that where they had several Universities within the same town they have all ultimately been obliged to consolidate into one University?—But I do not think that this past experience bears at all upon the present case, for this reason—there never has been a University before which was simply an examining board.

8095. Except one examining board in Brussels. There are several teaching Universities, with graduation carried on among their students; but there is also an examining jury for graduation open to all candidates. It was found to work badly because all the rejected men of the colleges came and passed after their rejection at the examinations of the teaching Universities. Unless that is very carefully guarded against, would not there be a tendency that there might be a possible Dutch competition between the Gresham University established in London and the London University in order to get the graduates?—I should think it would be something like a miracle to induce two English Universities to run into a competition of that kind, because the men who are to work the University are men who care a great deal more for the prestige of their degree, and who care a great deal more for its being highly valued than for the number of men that they pass.

8096. But do not the medical men of London (I think very unjustly) say that one of the reasons they desire the University to be established is that medical students go down to the Scotch Universities because they get degrees upon lower terms there—that there is this competition?—I think it is quite conceivable that you might get a competition of that kind between Universities separated so far apart, but with two Universities here, close together, as it were in the very sight of one another, I do not believe that it would long be possible for the one to keep a really lower degree than the other. What the medical men complain of, as I understand, is not simply that the rule of the London University is to exact too much knowledge—which, if it is true, is a very legitimate ground of complaint—it may be too high for practical purposes, but also that there is too much made of the knowledge as opposed to that professional instinct which a man gets from actual practice in his preparation.

8097. You are speaking with regard to the degree of the University of London?—Yes.

8098. But what I am speaking of is the general feeling amongst medical men that students go down to Scotland, as we believe, because the appliances for teaching are so much better, and because of the laboratories, but, as the London teachers are apt to say, owing to there being lower degrees?—I dare say there is truth in both allegations. It is quite conceivable to me; I cannot judge, but certainly a great many of the medical men believe that the degrees are granted in Edinburgh altogether on a lower scale.

8099. A lower scale than the London University Degrees?—Yes.

8100. I quite admit that, but the scale of the Gresham University was intended to be lower in order to meet that?—The scale of the Gresham University was intended to be of a more practical and less doctrinal character, if I may say so, certainly. It would be lower in that sense.

8101. So that instead of being a mere honours degree it might be an efficient pass degree?—Yes.

8102. I think your Lordship said you thought it was an anomaly that a new University should not have the power of giving a medical qualification. You are probably aware that the Medical Act rested upon the fact that anybody who could qualify in the three subjects—surgery, medicine, and midwifery—should be enabled to pass for qualification. Your University would no doubt include all these three, and you consider it an anomaly that a new University, being able to give all this, should not be allowed to give qualifications in medicine?—I thought it a great anomaly, and I thought it a greater anomaly if you are contemplating such a teaching University as you want for a place like London.

8103. Do you know the reason that prevented that disqualification being put in? Was it the opposition of the Royal Colleges?—I cannot answer you. I think Dr. Wace could tell you that. I do not know what the reason was, but I know that I very gravely objected to that particular.

8104. Do you think the London University, if it acted separately when the Gresham University was founded, would have a sufficiently large area to justify the Government in promoting two Universities by grants to make them more efficient?—I am afraid I did not quite follow your question.

8105. What I mean is this: the modern appliances for teaching require a much larger amount of money than any of our institutions possess, and must look to Parliament for it, or to the charities of London, and the great corporation. I may instance that abroad now they scarcely build a chemical laboratory without its costing 40,000*l.* or 50,000*l.*, and we have no sufficient resources in this country to give such efficient teaching. Do you think Parliament could be induced to support two Unversities to make them both equally efficient according to the ideas of modern times, whereas they might be inclined to support one University liberally?—If both these Universities should be teaching Universities of course your question arises, but inasmuch as what you contemplate is that there should be one University to teach and that the other should not be required to teach, I do not see how there could be a demand on the part of the examining board for such appliances.

8106. You do not contemplate that the London University should carry out its original idea, that of being a teaching University?—That is an entirely new and distinct question. I should say, if you are going to have a teaching University for London you must not have also another teaching University as a branch of the London University.

8107. You notice that by a small majority it passed the House of Commons that it should not be a teaching University, but that it should be an examining board?—I am quite aware that the original idea of the London

Lord Bishop of London.

19 July 1892.

University was that it should be a teaching University, but it gradually drifted away from that and finally gave up that position, and it seems to me that the work they have done ever since has been of such a character, (acknowledging that it is of very high value indeed) as more and more as time goes on disqualifies it for the work originally intended for it.

8108. Are you aware of the double qualification which Trinity College carries on of being a teaching University and examining its students, but taking external students who have not attended at all?—You mean Trinity College, Dublin?

8109. Yes?—Yes, I know, and I think there is a very remarkable difference between the students who are taught at Trinity College, Dublin, and who get their degrees so, and the students who are not taught, but get their degrees after spending, I think, some considerable time wherever they like in following their own studies.

8110. In fact, that the students coming under the mere examination system are much inferior?—Much inferior.

8111. And do not you think that might possibly come to be the case when you took away the students from colleges in London, and sent them to the Gresham University, thus making the London University a mere examining board for those who had not had the benefit of collegiate training?—I do not think so, because the men who would distinguish themselves in the London University would be very largely the men who could work themselves. There is, as I pointed out, a certain class of such men—the self-taught men—for whom it is an admirable opening.

8112. But they are very few in number, are they not?—They are not very many if you take the proportion of the population, but there is a considerable number in proportion to the number of men who take degrees.

8113. And they would come straight from colleges in other parts of the country?—You would have all the colleges in the other parts of the country, and there are some who would come from the colonies. I do not think it would seriously affect the prestige or the working of the present University of London.

8114. I think you are fully of opinion that there are two things which the University should do to teach its students in large numbers as efficiently and as highly as they can be taught, and also a function of the University is to advance knowledge; to take care that there should be the means of getting professors of high eminence to conduct classes of a high character, and also to assist in research?—Yes.

8115. But you do not think the London University would be a proper body to appoint such professors, even if endowment could be had?—I do not think the University of London is incompetent to do that kind of work. But I think it would be a mistake to separate it from the teaching University, and if you are to have a teaching University at all, it would be better that the whole teaching should be in its hands. But I can conceive an arrangement by which professors of high eminence should be attached to the present University of London for the purpose of teaching those who wanted to devote themselves to study, and for the purpose of themselves advancing knowledge by their own research. You would not want a large body of professors, and I think for the right working of that it would be necessary to confine their students to those who were already graduates.

8116. (*Mr. Rendall.*) You have laid great stress on the collegiate system from the disciplinary side of education. I suppose that essentially that discipline consists of enforcement of attendance?—Essentially, no doubt, but its value does not depend merely upon that. It depends upon the intercourse which arises out of that.

8117. Would you tell me why you would rest that power of enforcement of attendance in the colleges entirely and would refuse it to the University?—You mean, that is, why the University should not itself do this very work?

8118. Why the University should not have vested in it as part of its jurisdiction, the power of enforcing attendance on all students attending University courses?—I should not object at all to its having a power of enforcing attendance on students attending those University courses. What I objected to was the power of enforcing attendance upon those who did not want to attend these professorial lectures.

8119. But it could have no power except over its own students necessarily?—No.

8120. The power it could exercise would be saying that the attainment of the degree must depend upon some kind of attendance?—Yes.

8121. And to that you would take objection?—I should strongly object to its being given to the University professors.

8122. To the future University as a body would you object?—Yes.

8123. That is the ordinary practice in the Scotch Universities, I imagine, and in our own Victoria University it is one very important part of the University jurisdiction?—But in the Victoria University by its charter every professor in a college is a professor of the University.

8124. Yes, in the Gresham, too, I think?—Yes; and consequently the collegiate system dominates the whole University of necessity.

8125. It seems to me it gives what I should say is a valuable support to the college discipline that the University system does make the attendance on lectures a *sine quâ non* of the degree. In fact, on that side it relieves the college from further necessity of discipline of those particular students?—In such a case as that, where you distinctly compel everybody to be a member of the college, and every professor to be a professor in a college, it is not really the University which compels the attendance. It is the united colleges that do so.

8126. It is only compelled by University regulations. Of course, University regulations are drawn up by various representative boards that come partly from the colleges and partly from outside. But all such regulation rests with the University?—There is no objection whatever if the professors of the colleges are *ipso facto* University professors, as in the Gresham Charter, to requiring attendance upon professors of their own colleges as a condition of a degree, but it is quite another thing to say, I will appoint a University professor outside the colleges, and I require the members of the colleges to come and attend his lectures in order to get a degree.

8127. It would be open of course to the University to allow various alternatives. I mean to recognise various courses of lectures just as the University recognises a number of medical schools; I suppose a Federal University would necessarily adopt some such plan as that of recognising courses, but would retain in its own hands the power of enforcing attendance. That is done in German Universities, Scotch Universities, and almost all Universities, is it not?—It is not done at Oxford or at Cambridge.

8128. It is not done at Oxford or at Cambridge except in part?—But there would not be any objection whatever to the University enforcing the attendance of students or professors, provided they did not pick out their own professors, the University professors whom they had appointed themselves to the exclusion of the college professors. If the University steps in and says: "You must attend not only the professor, "say of Greek, in your own college, but you must "attend our professor of Greek, though you have a "professor of Greek in your own college." I say that is a power which the University ought not to have if it is of a federal kind such as the Gresham proposed charter contemplates.

8129. You think the Charter should introduce safeguards to prevent that interference with the colleges?—Yes. There is a clause in the Charter which appoints University lecturers. I think there ought to be an addition made to the regulations. I should put it under the head of the powers of the Council, which I think is clause 25. There ought to be a distinct proviso that the University should not make it a condition of the degree that the students should attend the lectures of some particular professor. If they were to say: "You shall attend the lectures of some professor "of such and such a subject," that I think would be legitimate.

8130. Would it do to say of a professor approved by the University?—It would do to say, provided you recognise that the professors of the college are professors of the University.

8131. But the University is from your point of view to recognise the lectures of every professor appointed by a college?—Certainly. The college cannot otherwise maintain its position at all.

8132. That practically places University enforcement of attendance in the hands of the colleges?—Yes, that is what I meant by saying that I did not think the University ought to have the power of compelling the students of the colleges to come out of their colleges to attend a professor of the same University who was not a professor in their college.

8133. You refer to the collegiate system as encouraging *esprit de corps*. Do you think the *esprit de corps* amongst the students, say, at King's College, is greater than the *esprit de corps* of the Scotch Universities managed on professorial lines?—Is a Scotch University purely managed on professorial lines, because remember the Scotch University is a college as well as a University in every case, is it not?

8134. They meet as a *Senatus Academicus*?—Yes, I think they do.

8135. Do you think that injures in any way the *esprit de corps*?—No, I do not think it does, but I have always looked upon the University of Glasgow, for instance, as being in itself a very big college. I do not know whether Sir Lyon Playfair would corroborate that?

(*Sir Lyon Playfair.*) I do.

8136. (*Mr. Rendall.*) Is it not true that the *esprit de corps* in Germany, for instance, is quite as great, or even more active, than it is at King's College, London?—I think the Universities of Germany have a character which would not at all suit a University like that of London. Here you would want men to be chiefly living at home. In the University of Germany they are almost invariably living in lodgings; whereas here we are contemplating the great mass of young men who are living in their own homes.

8137. I think you said you would not object to the creation of University lecturers, but you lay stress upon the independence of the colleges?—I do. I want the colleges to be independent, and in all cases with the exception of any who might be appointed from what was called just now more advanced work, it would be certainly in my judgment the right thing that all the professors should be professors in the colleges.

8138. Does not that scheme, virtually the Gresham University Scheme, tend to restrict University co-operation to purely examinational functions?—The University would have the whole decision of the curriculum to be followed. There would be boards of studies.

8139. Not even that unless you give it power of enforcing attendance. It is practically drawing up examination papers and examining?—Yes, it is doing those two things, and those two things are a very great part of the work. But I am quite willing to agree that the University should have the power of requiring that the colleges should certify the attendance of their students.

8140. Would you be prepared to give the University a voice in the appointment of the professors? Would you think that a gain or a loss?—I doubt very much whether it would be a wise thing to give them a voice in the appointment of professors, or a voice in the appointment of professors in the colleges. I should not see much objection to the Chancellor of the University having a veto on the appointment of a professor in a college, because he would have to act judicially in exercising his veto; but I do not think it would be very wise that it should be a matter to be decided by a majority of votes in a council.

8141. It would be some elective board, I presume?—Yes.

8142. But might we not hope that the colleges, and King's College in particular, would support, strengthen, and even contribute funds to some sort of University on professorial lines?—I think I have pointed out pretty nearly what they would desire to do.

8143. They would not surrender any part of their powers of free appointment?—What I said before was, that I think it would be conceivable that they would surrender a part of it in that form to an officer acting judicially, as the Chancellor would do. But I should not be very willing to allow it to go to a council where it is a matter of voting.

8144. The tendency at Cambridge has been very strong in the last 15 years—and it has given more life to the University—to place more power in the University's hands, to contribute a definite amount of college funds to University purposes?—Yes.

8145. Might we not hope for anything of that kind in the case of the London colleges?—The contribution of funds, you must remember, would be a very difficult thing in the case of the London colleges. King's College wants more money than it has, a great deal. In Cambridge and in Oxford the colleges all have very considerable property, and out of that property it was quite right that they should contribute to University purposes. But I do not understand that either King's College or University College in London have any such property at all, and I do not know, therefore, where they are to contribute the funds, but under a charter like that proposed for the Gresham University they would do their very utmost to make the University a very powerful body and a great success in teaching; I have no doubt of that whatever.

8146. You say that they would do nothing for the University, but they would do everything to develop their own institution, and only in that way secondarily strengthen the University. That would be your policy, would it not?—That would be our policy as the beginning of such a University as we want. I think the best way to begin is to lay hold of the institutions that exist, develop them to the utmost, and then proceed to add more when more is wanted; and I have very little doubt that as they went on there would be a considerable contribution for the purpose, not from the colleges, but from the citizens of London.

8147. Do you not think it would tend to increase the amount of those contributions, and give more confidence to the public if the central University had control and jurisdiction over the funds. Would not that be a power super-added to that possessed by the independent colleges?—The central University has the power, I believe, under the charter of holding the property. Under the Gresham Charter, I think, it had the power given to it to hold the property, and I think that would quite meet the question you are putting?

8148. But if it might not appoint professors, there is not much inducement in giving to it property to hold?—No, but there is a great deal that might be done in that way, because the University might, for instance, hold common laboratories open to all the colleges as they were founded, and it might in the same way have a certain number of professorships in its hands.

8149. That would be for what I think you speak of as an important but a secondary aim of the University, the advancement of knowledge, and for higher post-graduate studies?—Yes.

8150. You place that in rather a secondary position, but surely for that purpose London is the natural and appropriate centre in all England?—I think it is a very fit centre, but I do not think it is an immediate need. I think all we want now is to teach our youth, and I believe that in the end you get more towards the advancement of knowledge by general diffusion of knowledge, than by trying to pick out a small body of men to carry on investigations. I think that the small body of men who carry on investigations will grow with great diffusion of knowledge. It will come of itself, it will spontaneously arise out of it. And though I call it secondary, I only mean secondary in the sense that it is not our immediate business, I think.

8151. You say it is not an immediate need and that it will grow spontaneously, but is it not an immediate need for England? Is it not said that we are conspicuously behind Germany in that development of research and advancement of knowledge?—Yes, I suppose so; but it seems to me there are branches of knowledge in which I should say that these islands hold their part very well.

8152. We have had evidence showing that it would be a great disappointment, if it were not in some way organised in combination with the proposed University. Do you not think that would be general?—No, I do not think it would be a general disappointment at all. I do not think that London, as a whole, thinks nearly so much of that as it does of the education of its youth.

8153. I speak of educational opinion?—There are certain bodies of intellectual men who think it an im-

Lord Bishop of London.

19 July 1892.

portant thing to do, and no doubt it is an important thing to do.

8154. Do you think it could be organised at all with any prospect of success except through a University? Is not that the natural centre for it?—It is the natural centre for it, no doubt, but I think it will come out of the University if once you get it fairly at work.

8155. And do you think you might rely on private beneficence?—Yes, I think we might rely on private beneficence. In this country, if you will only give it time, I think you get better endowments out of private beneficence than you get out of the interposition of the State.

8156. Is there any instance in England of a research University of that kind which has grown up out of private benefactions?—No; but you have instances innumerable in England of meeting all the demands of England, and the reason why we have not had this created in England is simply because the English people have not hitherto seen the need of it. But now they are beginning to see the need of it, and the more you spread real culture the more will you create the class that will recognise this need.

8157. You think there will be no need for a parliamentary grant, then?—I never object to parliamentary grants of that kind. I think in this country we are too niggardly in our parliamentary grants for all such purposes. But I do not think it would be wise to trust to a parliamentary grant. You do not get enough.

8158. Now, one question about parliamentary grants. Do not you think that the denominational character of King's College would militate rather seriously against a parliamentary grant, unless the control is frankly deposited in a central undenominational University, of which King's College should form part?—It might be so: I cannot say. I think it is very possible that parliament would very distinctly limit its grant to the University as a University, and refuse to recognise the colleges as colleges.

8159. That would be a reason so far for strengthening and supporting the central University jurisdiction and control of funds?—As far as it went.

8160. (*Mr. Anstie.*) I understand your Lordship to be of opinion that the collegiate conditions and methods of teaching are better than any others?—For the class for which I think it is most important to provide.

8161. That class being substantially the great bulk?—Yes, the great bulk.

8162. And the classes left out of account being as you have described them, a small number in comparison?—Yes, in comparison.

8163. As the conditions of collegiate learning are better, I suppose you would say that the conditions of collegiate teaching are better. I mean it is better for the student and better for the teacher also?—I think it is much better for the teacher also.

8164. That is a method which you desire to see widely extended?—Yes.

8165. In fact, so as to make the collegiate opportunities adequate to this great city?—I do.

8166. Then if those hopes were realised, as I think we all desire that they should be, I suppose we may take it that all the higher talent, the best teaching talent, would really be attached to this University?—I think in course of time you would get all the very best English talent, and possibly some foreign talent also, attached to this University.

8167. But at any rate the best London talent?—Certainly, the best London talent.

8168. And you would even go further and say English and foreign. I was at that moment limiting my question to London teachers. Under those conditions can you imagine anybody more capable of directing the studies of those who are not fortunate enough to come within the collegiate system, than so large and important and eminent and skilled a body of teachers?—I think that a very powerful body of teachers would be certainly in one respect very well adapted to guide the studies, but I think that a man who is sometimes the most eminent as a teacher is not the man who is most careful in the discipline and supervision.

8169. I was not speaking of discipline and supervision, that is to say, of what you have described as collegiate discipline and supervision. But can you imagine any body of persons than a body such as I have described of the most eminent teachers in the metropolis, more fitted for regulating the studies of those who have not the benefit of collegiate training?—Do you mean that you contemplate that there would be a considerable body who would be outside the colleges and yet in the University?

8170. You told me it would not be a considerable body, and I am disposed to agree with you, but such body as there is, whether it is large or small, there would be a certain number of students who would not be able to avail themselves of collegiate opportunities. My question is whether with respect to such persons you could discover any body or give us a notion how to form any body more competent to regulate and direct their courses of study, and prescribe their curricula and courses of examination than this powerful body of teachers?—I do not remember speaking of such a body as you now describe.

8171. Which body do you mean?—Such a body as you are now describing.

8172. The body of students or teachers?—Students.

8173. The body of students are those who do not attach themselves to colleges from want of means or for other reasons, but who require learning?—I do not remember speaking of any such body of students.

8174. I think your Lordship a little forgets. You spoke of students who study by themselves?—Yes.

8175. Those are the students I am referring to?—I did not mean by that a body of men who could not enter the colleges from want of means, but I meant a body of students who from their own natural character could study alone, and who did not want guidance.

8176. If you meant those who could study alone, and who did not want guidance, you were speaking of an extremely small class?—Yes; it is very small, but still in a large population you would get a number which is not particularly small with reference to the number who get degrees.

8177. You are speaking of men who study alone, not from want of means but from a fancy or foible of their own?—No doubt there would be men who would make that mistake. I was speaking of men who study privately, and who consequently find an opening in the present University of London.

8178. They would be remarkable men?—They are not so remarkable as to be quite known to the world at large. There are men who take up one subject with enthusiasm, and give all their spare time to it, and learn by quiet perseverance a great deal about it. Such men do find in the London University the proper appreciation of the work that they have been doing.

8179. Do you think it is very much worth while in the interests of the public that a University should exist for the purpose of informing these people that the have acquired a certain amount of knowledge?—I do not think it is, but I think it is well worth while, that a body such as the University of London, which now examines all over the world, should examine these men and give them the appreciation which they wish to receive.

8180. That is, supposing the University of London to remain in its present position and unaltered, it is desirable that they should not shut their doors to persons of that kind, but that is only saying that the present state of things is the present state of things, and will continue to exist?—It is more than that. It is stating that for a certain class the present state of things is the right state of things.

8181. Whether it is the right state of things is what I want to ascertain, and for whom it is the right state of things. I entirely go with what your Lordship says about the advantage of collegiate education, and I think I also understood your Lordship to say that with respect to the great bulk of mankind, the collegiate system is the better system of the two; that in fact those who derive more profit from a recluse mode of study than from collegiate teaching are an extremely small body?—Yes.

8182. With regard to that extremely small body, I should like to know is it not also your Lordship's opinion that a body of competent teachers, as competent and experienced as any in the world, would be the best body for saying in what mode those persons shall have prescribed for them a curriculum, and applied to them a test?—I should think they would be the very best if they are to have the course prescribed.

What you suggest, I presume, would come to this, that in a teaching University the professors might prescribe the curriculum, and apply the test to those who did not come under the ordinary collegiate system.

8183. Precisely. And prescribing in that way, although they could not give to the candidates the full advantage they would have derived from the collegiate system, they would have given to them the best advantage they could have?—Yes.

8184. (*Sir William Savory.*) Do you think if this new University were established and were prosperous, the present University of London would suffer?—I do not think it would suffer. The present University of London has a reputation over the whole world, and I think it would keep that reputation. I do not think that if you look closely into the number of people who get degrees from the London University, who are themselves resident in London, you would find if you leave those out it would make a very serious difference in the classes or in the position of the University of London.

8185. If it continued to work upon its present lines you do not think there would be any serious risk of its numbers diminishing at all?—No, I do not think so.

8186. You would not think it desirable that it should suffer?—I think that it is doing admirable work.

8187. You approve sufficiently of the manner of its work to wish it to continue?—Certainly I do.

8188. For one moment troubling you with a question relating more particularly to the medical profession, supposing the two Royal Colleges were to throw their lot in with the new University which is about to be founded, do you think that would hurt, on the medical side, the London University?—I am not able to answer that question. I confess that I have not very carefully considered the position of medical colleges because the London University has treated medicine in a different way from that in which it has treated everything else, as far as I can see; and really the only thing that we should aim at was to establish some sort of *modus vivendi* with the medical men.

8189. But it would be an important question for both Universities?—It would be a very important question no doubt.

8190. (*Mr. Palmer.*) I think your Lordship said in answer to Principal Rendall that the provision for research and post graduate instruction would be expected to be made by private benefactions?—I did.

8191. Mr. Rendall mentioned the City and Guilds Institute as a good instance of that in providing for technical instruction when there was absolutely none?—Yes.

8192. Of course their funds are only donations given year by year and depending upon the permissive existence of those who give it. It rests upon annual donations only?—Yes.

8193. There would be no means of consolidating the funds or capitalising them in any way?—I think you would find that there would be certain to grow up men who would make bequests, and who would leave money out and out to establish institutions under the Gresham University.

8194. I think your Lordship is commonly familiar with the Gresham bequest and the Gresham College and its professors. Assuming the London University to remain as it is, and assuming under the Gresham charter the various colleges in the Gresham University to be grouped round the name of Gresham, I think your Lordship has some views as to what might be the utility of the Gresham professors, and how far some of them who are connected with Faculties in the University might be utilised. We have had no evidence before of that. Would your Lordship give us your views?—I think the Gresham professorship would be very useful as University professorships and might occupy the position in relation to the colleges which I think was in reality originally contemplated by the founder. His idea was that he would found there professorships, and that they should be open to everybody, and so that he would encourage all sorts of people who cared for study to enter into the study. But the foundation has practically become a failure, simply because it is not in any way connected with any body that has the power of granting degrees, and so proving to those who attend lectures that they have profited by their attendance. I think it would be necessary to remodel in some degree the professorships, but they might be made the professorships of the new University under the control of the new University itself.

8195. It is clear that the Gresham professorships and that the Gresham Institution would be benefited by these professorships being made useful to the University, and I understand you to say that in that way the University might receive some advantage from the professors?—It would have professors of its own as it were, which so far as it goes is a real advantage.

8196. That would not interfere with what your Lordship said just now about the establishment of University professors?—No, it would not at all interfere with what I said about the establishment of University professors. In fact it would be the establishment of University professors at once. But it would be necessary of course to modify the Gresham Charter for the purpose.

8197. Now assuming what your Lordship, I think, said, that it would be necessary almost to abolish and reconstruct the London University if the London University were to occupy the centre of this federation of colleges, would it be possible to contemplate that for a moment, and assuming that that were done either by consent or even by Parliamentary compulsion would it not be possible for the London University to maintain one final degree for its own London Colleges and for its external students?—I think that anything which ended with making the final degree independent of the teaching body would be fatal to the true efficiency of the teaching body.

8198. But if the final degrees were the result of the teaching University, of which the present London University were the mere centre, and with its advantages or disadvantages, those were taken by external students, there might be one single University examination for the final degree in that way?—Yes, there might be. As I said before, if you contemplate practically abolishing the University of London by an Act of Parliament and re-creating it by the same Act with the same name, but with a really entirely different character, then I could imagine such a thing as possible; but it seems to me that you would have practically to sacrifice the present work of the London University altogether. If the London University were to slip back again into the position which it took not long after its foundation, we should have all the old evils return.

8199. There are many people who would make great sacrifices to secure the name of the London University for a teaching University for London. Does your Lordship think that practicable?—I do not see myself that it could be done. I cannot find any means by which it could be done. I do not undervalue the sentiment of which you have spoken, to keep, if possible, the name and in some degree the character of the old University of London. It has not lived long enough to have a great historical position; but, nevertheless, it has done a great deal of good work, and it has obtained a considerable prestige in the doing of that work. I can understand the sentiment which desires to keep it, and I can understand the feeling that there would be a risk if you left it alone and put up a teaching University by the side of it, that the London University would altogether lose its present place. But I do not think that sentiment is enough to outweigh the real need of this metropolis for a thorough going teaching University, and I cannot see any way in which the London University could be made into such a teaching University. I ought to add, however, that in all our deliberations and discussions in this matter, and in all the considerations that we gave to it, we never contemplated such a thing as the London University being reconstituted by Act of Parliament without its own consent. All that we did, therefore, was to consider what should be done with its own consent. We proposed, therefore, a compromise with that view. I do not think it a good compromise, but I thought it was the best possible that we could get, and then it was rejected.

8200. There has been a great difference between the attitude of the Senate and the attitude of Convocation on the matter?—Yes, very great.

8201. The attitude of the Senate would not produce so much difficulty?—No.

8202. (*Sir George Humphry.*) Your Lordship laid great stress upon the advantages of the collegiate sys-

Lord Bishop of London.

19 July 1892.

tem, and that, I think, you feel to be one of the important points in connexion with the Gresham Charter. Is there any reason why those advantages should not all be maintained, and why the present position of the colleges with relation to their students should not also be maintained if they were combined together in and under one central University. There would be no necessary sacrifice whatever, probably, of collegiate system and collegiate advantages?—The very purpose of the proposed Gresham Charter was to combine them in the way that you say.

8203. And those advantages could still be maintained if they were all combined under one great central University?—Certainly.

8204. Therefore that is not an argument at all against there being one central University?—Certainly not, if they are so retained, and if the new central University is not so constituted as to destroy the colleges.

8205. Therefore, there might not be a University so constituted and combining those colleges upon a somewhat broader basis than that of the Gresham Charter, because it would be understood that the Gresham Charter is mainly based upon the two colleges—King's College and University College—and those would be the leading colleges in connexion with it; there is provision for their representation upon the council; and there is no quite clear, or direct, or necessary provision for the other colleges upon the council. Other colleges may be admitted as members of the faculties of the Gresham University, but not necessarily upon the council. They would be in a somewhat inferior position?—If there are other colleges that are really doing University work, they would be admitted under the Gresham Charter.

8206. Each college would be admitted upon the faculty, but not necessarily upon the council. They might possibly be admitted on the council, but it does not at all follow clearly or necessarily that that would be so?—Well, I did not read the charter in that way. I understood they would come in as constituent colleges.

8207. But if you come to read the manner in which they are prescribed by the Charter, you do not find it to be so very clear?—I daresay there may be something required to make the conditions perfectly clear, but certainly I understood that if a constituent college were admitted, it would be admitted to privileges parallel to those that were granted to the original constituent colleges.

8208. I think they are admitted according to their faculties. Each college would be admitted according to its faculty, and then it might be admitted upon the Council.

(*Bishop Barry.*) May I just read the section? It might help to make the matter clear: "On the admis-
"sion of any college other than those above-mentioned,
"its representation, if any, and the number of its
"representatives, not exceeding three, shall be de-
"termined by the Council."

8209. (*Sir George Humphry.*) That is on the admission, but a college would be admitted according to its faculty, and King's College and University are admitted because they are colleges of all the faculties. That is the ground of admission to the council, because they are colleges of all the faculties?—There is an appeal provided with regard to their admission, and, therefore, the admission of any new college does not depend upon the two constituent colleges which are put in at the beginning. The Privy Council is to determine whether or not this college has a right to come in as a constituent college, and when it comes in it is for the Council then to say what shall be its representation on the Council.

8210. (*Chairman.*) There is no appeal as regards the number of representatives, is there?—I do not remember that there is. I think it was considered that if the college was once admitted, the Council would be certain to do whatever was just, but certainly I should not at all object to any arrangement by which the Council should be compelled to do what is just if there is any difficulty on that score. It certainly was contemplated that other colleges should be admitted, and should be admitted on fair terms.

8211. (*Sir George Humphry.*) I think you agree, and most persons do agree, that this University which we hope may be established on one basis or another, will have three main functions: it will have as one of its functions to organise in some way or other the teaching in London, as you have said, of the youth of London; that is to say, of the large numbers in London who would not be able to give their time to belong to a particular college. In what way do you conceive that a University can operate upon and organise the general teaching of London? It would be important to have your view upon that point?—I think a great deal has been done in that way by the University Extension Society, and I think that the University of London, when constituted, would of necessity take up that work. It would, I have very little doubt, do it as well as the University Extension Society, and, from its being on the spot, I have very little doubt it would do it better.

8212. That means would appoint lecturers and teachers?—Would appoint lecturers and teachers for such a purpose.

8213. But that would not operate in any particular manner except organising the teaching which exists?—They could not operate except by consent, any way. Of course, a University is always ready to give advice, and if it is empowered to do so to make regulations for any of the institutions.

8214. There are of course various institutions in London at present occupied in teaching, and your feeling would be that they would assent probably to such suggestions as an important University would make?—I think so.

8215. Then another function of the University is of course to regulate the teaching and the examination of those who are preparing for degrees?—Certainly.

8216. And that teaching must to a certain extent be somewhat different from that higher kind of teaching which would constitute the third function of the University—the higher post graduate teaching—and also the great work in connexion with that higher function, the work of research. So that we will say there would be a higher professorial system and a higher laboratory system as one of the functions of this new University?—Yes, there would be openings for such a system no doubt—a higher sytem as you describe it—to carry on the studies of those who have already got degrees, but who wish to give themselves to a life of study, there would be openings for that, and it would be very proper work for the University to see to.

8217. And for the great work of research, and for the promotion of science and learning?—Yes.

8218. And that would be a separate thing rather from those other functions of the University in preparing and examining men for degrees?—I think you would find in practice, that in many cases the professors who prepared men for degrees, who gave what you are speaking of as the lower instruction, would take a part in giving that higher instruction.

8219. Quite so, but on the whole they really are two separate functions of the University?—They are two separate functions of the University so far as they go.

8220. And it by no means infrequently happens that the man who is greatest in research, and the man who is greatest in higher investigation is by no means the best man in teaching and conducting ordinary examinations?—That last I should not venture to affirm. I think the functions are distinct to a certain extent, but I think you constantly find that the men who do the one best are the men who do the other best also.

8221. Very often it is not so. I think we both know many persons who are very eminent in their repective branches, but who are by no means the best teachers or the best examiners?—I think that is true.

8222. So that on the whole those functions would have to be to a certain extent separate, and this new University we may hope may carry out both. Those functions might possibly, and not improbably be best carried out under one great central University. Perhaps you do not quite agree to that?—I think it is very fitting, very suitable, that this work should be done as part of the work of a University; but I am not at all clear, provided you supply the men with the means of doing it, that they would not do it just as well if they were not a part of the University at all.

8223. It is scarcely probable, I suppose, that we should get an institution of that sort in London, unless it be in connexion with the University?—It would be very suitable and fitting that it should be a part of the University. That I entirely agree with. But generally speaking, all that men of that eminence want is to

be supplied with all the appliances they require, and to be left alone.

8224. If we had one University in London, it would probably act very efficiently in that direction, and also would act with power and force upon the general education of the mass of the youth of London. One University would have greater influence and greater force than if we have it divided?—Yes, I have no doubt at all about that.

8225. With regard to the scheme which the Senate proposed to the Convocation of the University of London, you mentioned, I think, that the Senate had purchased the assistance of the Royal Colleges of Physicians and Surgeons. Is it not almost as important to the Colleges of Physicians and Surgeons that they should be appended to the University as it is to the University to require their aid?—I should think it was, but then I think that the two parties were, as it were, negotiating with one another, each trying to get the best possible terms from the other.

8226. (*Mr. Anstie.*) That is your Lordship's conjecture, I suppose. I suppose it is not founded on any knowledge?—No; it is not founded on knowledge. I am speaking from the impression made upon my mind by the actual proposal that was submitted to us, because it was quite clear that the Senate of the University of London made concessions to the medical profession which they made to no other.

8227. (*Sir George Humphry.*) Therefore there are some advantages in regard to obtaining grants from Parliament and influence in promoting high class teaching and also influence in promoting the general education of the youth of London in having it in one body?—Yes.

8228. There is one remark which as a Cambridge professor I ought not to allow to pass. Your Lordship, I think, said that the Cambridge University professors are away from Cambridge during the greater part of the year. I can assure you that that unfortunately is not quite the case, and at the present time, although it is vacation time, I ought to be in Cambridge delivering two lectures to-day?—I am afraid in that matter I perhaps was a little influenced by what I knew of the University when I was a young man there. Certainly we saw little enough of the professors.

8229. A very great change has come over it in our time?—I think that is true.

8230. (*Professor Ramsay.*) May I ask you one question with regard to the test at King's College. I understand that every professor has to declare himself formally a member of the Church of England?—Yes.

8231. And I think you said that that was the main object with which the colleges was founded, that it should prosecute Church of England teaching. Is that quite so?—It is quite so. It was part of the object with which it was founded. It was founded with the view of giving the highest academical teaching that could be given, but at the same time of making it distinctly a Church of England institution.

8232. I am referring to Dr. Wace's account of the foundation of the college, and he quotes the original document. No prominence is given to the question of its being a college founded for the purpose of promulgating the Church of England doctrines, and as a matter of fact theology was not begun to be taught in the college till 1847, 10 years after its foundation.

(*Bishop Barry.*) Allow me to correct that statement. There was no theological department created before that time, but theology was taught from the beginning of the institution.

(*Professor Ramsay.*) Do you mean to the theological students or to the ordinary students?

(*Bishop Barry.*) To the ordinary students.

8233. (*Professor Ramsay.*) Considering the time and the date when King's College was founded and the persons who founded it, it would be the natural, regular, and constitutional thing to do to bring it into connexion with the Church of England. At that time every college in Oxford and Cambridge was confined to the Church of England. But does it follow from that that the founder of the college made the connexion with the Church of England a main purpose of the College?—I think it is certain, as a matter of fact, that that was the original purpose of the founders. The college was founded within our memory.

8234. But the object of the foundation of the college was, in the first instance, sure by educational, and, then, having founded or projected their college, the founders said "We will connect it with the Church of England"?—I should have inverted it and said connecting it with the Church of England stood first; it was intended to be the instrument of the Church of England for giving to all whom it could bring there the highest kind of education.

8235. You would admit, of course, that the drift of public opinion in London and the country has very much altered since the year of the foundation of the college, as regards the imposition of tests in any University?—It is altered, no doubt, but already the beginnings of the alteration were seen, and, as far I know, the college was founded with the express purpose of resisting that alteration of opinion.

8236. Looking at the present position of affairs in London, where we want to have a great University for the capital of the Empire, a University in which two colleges take, under the Gresham Charter, a prominent place, do you think it is altogether quite consonant with public feeling, and likely to secure the sympathy of Parliament and the public generally, that, out of two colleges joining together to make a London University, one should have a distinctly denominational character?—I should think that a very large number of the members of the Church of England would feel that it is of the very highest importance that this college should keep its denominational character, and I should think it would be a great gain if, while we insist upon making the University everywhere undenominational, we encourage the foundation of denominational colleges.

8237. I want to get your own opinion. You really do attach considerable importance to this point?—Yes, I do.

8238. I understand that students of all religious persuasions go to King's College. Even Jews, I think, were mentioned by Dr. Wace in his evidence before the last Commission. It is not exclusively for members of the Church of England?—No, they are admitted without being members of the Church of England. That is, they make no declaration.

8239. I understand that if any parent or any scholar objects to receive religious instruction or to go to chapel he would necessarily be relieved?—The details you had better ask from the principal. The general rule is this. There are two classes of students, the regular and the occasional. The regular students are required to attend chapel, and if there is any relaxation of the rule, that is made by the principal.

8240. They would, I presume, be exempted on application?—As I say, you had better ask the practice from the principal himself.

8241. That applies not only to the arts and science students, but also to the medical students?—Yes.

8242. All medical students have to attend a certain amount of divinity instruction?—Yes.

8243. Is it ever made a grievance on the part of medical students that they have to submit to that in addition to their ordinary work?—I have never heard of its being felt to be a grievance at all.

8244. Is the test, as now imposed, actually efficacious for its purpose?—It does give the college a distinct Church of England character.

8245. Is it the case, as a matter of fact, that all the staff of the college do belong to the Church of England?—Nobody looks into it beyond the declaration, but the declaration is quite sufficient to secure that there shall be this character attached to the college, which is all that we really need.

8246. But still the declaration made by the professors is such that, as a matter of fact, persons other than members of the Church of England feel themselves at liberty to take it, and have taken it?—That may be or may not be. I cannot answer that.

8247. If that be the case, would you consider it a desirable thing to have a definite test, demanding membership of the Church of England, which is interpreted in such a way that a person is not required to take it in its literal meaning?—That I do not think is really the question. The question is this. You cannot, of course, go into a man's heart and see what he believes or what he does not really believe. The question really is whether this declaration meets the wishes of the founder, by distinctly providing a certain character for the whole college, and even supposing a man accepted it in a loose way, yet nevertheless it

Lord Bishop of London.

19 July 1892.

would have a very powerful effect in preventing him from saying things which possibly he might otherwise say.

8248. But could not that effect be attained more naturally in some other way?—Is it not the case now that amongst all teachers there is a common understanding that it is an improper thing, and contrary to public expediency, that any man should use his position as teacher of any subject as a means of propagating his opinions with regard to religion?—I should not have said that at all, I should have said that a great many men do, for instance, use high positions to inculcate Agnosticism.

8249. You mean high teaching positions?—Yes.

8250. And positions which have nothing to do with religious thought or belief?—Yes.

8251. Would it not be possible, and might it not tend to remove difficulties in the mind of objectors, to devise another kind of test than such a test as that which prescribes that a professor should actually be a member of a particular church?—I do not see any better. Of course if any were suggested to me I could give an opinion upon it.

8252. Until recently, all professors in the Scottish Universities had to make a declaration not as to their own individual opinions, but which simply was this. They undertook not to use their positions as teachers in such a way as to prejudice revealed religion as ordinarily understood in Scotland or the established Church of Scotland. For a man to undertake not to use his position as a means of injuring religion is a very different thing from saying he is a member of a church of which possibly he is not a member?—I do not believe that such a declaration would be equally efficient. I think that a man very often in such a case, having made such a declaration, would do what he had undertaken not to do without being aware of it. He would not be on his guard.

8253. Would you be prepared to consider the possibility of accepting some modification of the present test in the event of strong public feeling being raised with regard to it?—I should be very unwilling to pledge myself not to consider anything whatever that was put before me by a proper authority for consideration; but as things stand, I think I should be very unwilling to make any change particularly because I think the whole current is in the wrong direction, and I think that the right direction is rather to encourage denominational colleges than to discourage them. It has been suggested that we should have a Faculty of Theological Science. Now if we have a Faculty of Theological Science you would have to admit for that purpose the various colleges which now prepare the Nonconformist ministers. No one of them would think of making their colleges undenominational in the slightest degree.

8254. I was not thinking of theology; I was speaking exclusively of chairs of letters and science?—Yes, but you must take each college as a whole.

8255. Might I ask you one question with regard to the great importance you attach to collegiate training. You spoke of Scotch Universities being also colleges. Might I ask you exactly what you meant by that?—What I meant was that they did not merely consist of a certain number of professors who gave a certain number of lectures, but that they did exercise real supervision over their students.

8256. Yes, that is perfectly true so far as the attendance at their classes goes, advising them with regard to their work, and generally seeing that they follow out the curriculum in a proper way. But the superintendence they give is as Sir Lyon Playfair pointed out, entirely confined to the walls of the University itself; and what I do not understand with regard to the statement you made about London Colleges is this. What more do you desire or think possible in the way of collegiate training in London—considering the circumstances of London life, where the great bulk of the students, as I think your Lordship said, would be living at home with their parents—what more do you desire in the shape of collegiate superintendence than that superintendence which is given by the professor to students attending his class? He sees that they behave themselves in the University, and that they keep up to the proper level of study?—Of course it is not my business to criticise the customs of the Scotch Universities, but I should have said that such a University as that of Glasgow is deficient in its working and the supervision of students, because the classes are too large and the professors not sufficiently numerous. The collegiate system as I understand it, and the collegiate system as I should wish to create it in London, would make that supervision a much more real thing by making it much closer, the classes being much smaller, and the number of teachers larger, and the intercourse, consequently, between teachers and classes very much more effective.

8257. That is a matter of degree, it is not a difference in kind. You would not contemplate that teachers in a London College should exercise control over their students during the whole 24 hours, wherever they go?—Not exercise control outside the college except so far as regards this: immoral conduct outside the college would, immediately it became known, bring them under the authorities.

8258. Yes, and so it would in Scotland?—Yes.

8259. When you speak of Cambridge you must remember that the whole of Cambridge is under University government, not the colleges only. Now if that be so, what particular point in the way of collegiate discipline is gained by making the colleges independent of the University? You cannot control the whole lives of your students in London; the teachers in the colleges will, under any system, maintain discipline inside the colleges. What do you gain by removing them from the supreme control of the University?—That is what you mean that the University should have the power of regulating the internal working of the Colleges.

8260. Yes; should have the ultimate supreme power over all University work, internal and external, to regulate, coordinate, and extend that work?—It seems to me that the college ought to have it for two reasons. In the first place the college would do it better than the University, the internal working in the hands of men actually employed only, is far better regulated than if you simply obey rules made outside, which rules have a constant tendency to be inapplicable to the particular circumstances of the case. Then besides that, the position which the authorities of the college hold towards their students is very distinctly lowered if they are merely ministers of an outside body; both those are very serious objections.

8261. Take the first reason. The governing body of King's College is not an academic body at all. It is a body of outsiders, they are not the teachers?—No, they are not the actual teachers, but everything is put into the hands of the principal and almost all the discipline of the college is simply left to him.

8262. He is associated with the rest of the professors in governing the college on behalf of the council?—And the staff.

8263. So far as regards the council, then the college is governed by a non-teaching and a non-academic body?—Yes, in a certain sense you may say that it is a non-teaching body, certainly.

8264. Under the plan which I am suggesting, the rules for the college would be laid down by the Senate, upon which the teachers would be represented. They would, thus, in the college be carrying out the laws which they had helped to frame in the Senate, and they would have precisely the same authority over the students in the college that they now have, and more; because at present they have no place on the council?—In order to do this you will have to make regulations which are to be binding alike on every college. The circumstances in different colleges are different, and the regulations which are good for one are not always good for the other. There is an immense advantage in allowing each college to manage its own concerns for the very reason that the freedom of management is far more effective in producing the result you want than an external regulation can possibly be.

8265. But one main objection to your present system is that the teachers do not manage the concerns of the college; they have no power at all. And would there be any difficulty in the central University body making such rules for each institution as suited that institution itself?—I think there would be very great difficulty in having a distinctly outside body to do it which had no special connexion with the college.

8266. But the proposal *does* establish a special connexion with the college. And further, is not the great purpose of this agitation for a teaching University the desire to make teaching commensurate with the needs of London?—Yes.

8267. Is it not therefore essential that the University should not be confined to two or three of the half dozen colleges, but should be able not only to adjust the work done by the various colleges to each other, but also to go beyond the colleges altogether, and to point out and meet the needs of London outside of them?—That is better if you want to make a great University on paper; but if you want a real living institution it would be far better to let it grow out of what you have got.

8268. I presume you adhere to the evidence you gave before the last Commission with regard to the vexed question as to whether one University could undertake examining functions as well as teaching functions. You doubted the practicability of that combination exactly as you have done to-day, but you finished by the words: "If it were suggested that the University "of London should entirely change its character and "become mainly and permanently a teaching Uni- "versity that would be a totally different matter." Just before you had said, "It is quite true that a "teaching University may act as an examining board, "but it is quite another thing to say that an examining "board can act as a teaching University. If you will "make the teaching University a permanent thing I "quite admit that the teaching University may do "other work also." Granted that, and supposing that the University should have changed its constitution so as to be really a teaching University in the sense in which you desire it, do you see any difficulty in its adding purely examining functions to those of teaching?—If I may say precisely what I think about that mode of proceeding; it comes really to this; that it proposes really to kill the London University and to create another University with its name, hampered with the corpse of the old University hanging about its body.

8269. That does not quite answer the question which I put, which is: Is there any inherent difficulty in its carrying out fairly those two different functions as the Dublin University does now?—This is not a merely abstract question. It is a question how you are to deal with institutions now existing. If you were to alter the character of the London University you would still, unless you mean to say that the London University is to disappear entirely, have hanging about it all its old traditions. Everything I have said will show you how entirely I feel the difficulty of the old traditions. The old traditions of it as an examining board will seriously hamper the new teaching University, I do not see how you are to get rid of it.

8270. Supposing we were starting *de novo* without the traditions, I would ask this question. Do you think that the examinations which would be set by a teaching University, such as you desire to see established, would be suitable and proper examinations to set to students who had not received their training at the University or any particular training at all?—Yes, I think they would.

8271. Do you think such examinations would be at all unfair to the outside students?—I think in certain cases it would be rather hard upon the outside students.

8272. Why would it be hard upon the outside students?—It would be hard upon the outside student because he would be running in competition with men who really were within the system, be himself being outside it.

8273. Of course you acknowledge that the London University standard is a very high one at present?—It is of very high standing at present. I think it is a high standard of knowledge, but I do not think it is a high standard in all senses. I meet sometimes with men who have got a degree. I am not speaking of very eminent men, because in all these considerations men of the highest eminence are out of the purview altogether. Their own individuality dominates their position so much that you cannot argue from them to the institution from which they have come. But I have met with men, ordinary men, who have got a good degree at the London University, and I have been repeatedly struck with the fact that the quantity of their knowledge is out of proportion to the quality of it. It is so constantly wanting in the scholarly instinct. You can see very often that they know, but the knowledge has not penetrated into them, and every now and then they betray themselves by little bits of want of refined knowledge which you would not find in men who had been thoroughly well trained.

8274. Then do you suggest that it would be unfair to put before the inside student, who had been through the University course, the same set of examination papers that could be done by the outside student. Would he not be able to reach the same standard of mere knowledge which the outside student reaches?—That depends upon the time you allow to him. If you lay your stress, not upon his knowledge but upon his having the knowledge penetrating into his whole intellect, it certainly is a little unfair. When you make knowledge the supreme thing, such knowledge as can be produced on paper, you at once let in cram. Even with men who have studied very hard a certain amount of cram is perceptible still in their work. You cannot exclude it from the ordinary working of an examination.

8275. And the introduction of that element would, you think, be rather hard upon those who have gone through the University course?—I would.

8276. (*Bishop Barry.*) Though generally approving of the Gresham Charter, you are not of course committed to all its various details?—No, certainly not.

8277. You would see no objection as I gather, to the greater emphasis of the power of the University to create professors without necessary connexion with any college or Faculty?—No, I should only see a certain risk in it which would have to be guarded against.

8278. It has been suggested to us that in each Faculty there should be what is called a regius professor, not necessarily appointed by the Crown, but occupying the position which the regius professors hold at older Universities. He would probably be the leader in each Faculty, possibly the president of the Faculty, and his appointment would tend to unite the Faculty together. He would be a kind of link of unity between professors from various colleges, and he would carry on the higher and post-graduate courses as well as discharging his duty in the Faculty. Would you see anything in the Gresham Charter inconsistent with that?—No, I would not.

8279. Another objection has been made to the Charter on the ground of the supposed preponderance of University College and King's College, in the council. Do you think there is anything in the Charter inconsistent with our including in the first instance more institutions than were included in the original draft?—No, I do not think there is, provided care be taken that those institutions were really of an academical character.

8280. In which case that supposed preponderance would be to a great degree neutralised. I think you are of opinion that if a college is admitted there ought to be provision for its being represented on the Council?—Yes.

8281. And if necessary an appeal on that subject to the Privy Council?—Certainly.

8282. Now may I ask, for the information of the Commission, whether King's College, looked at as a theological college, has approved generally of the application which was made for the creation of a Faculty of theological science by the Nonconformist colleges?—The council of the college have approved of that application, subject to certain modifications of the Charter to present any risk following upon it.

8283. And to those modifications the whole body of the colleges are in agreement?—All that we could bring together have agreed.

8284. I think I am right in saying that you had yourself communication with the authorities of those colleges?—I had indirectly with all of them, and directly with about half of them.

8285. And provided that there was no power in the University to require attendance of students at the lectures of any particular professor, you saw no difficulty in constituting the Faculty?—I saw no further difficulty in constituting the Faculty. I also wish very much that, inasmuch as theological science stands upon a very different basis from any other science, the appointment of lecturers by the Council should be on the recommendation of the theological Faculty.

8286. But you would not insist upon that as absolutely necessary?—I myself should not insist upon that, but I think it would be better distinctly that the Faculty should take that form.

8287. You are also of opinion that in a University which should be in itself undenominational, the existence of denominational colleges is advantageous?—I think very advantageous.

Lord Bishop of London.
19 July 1892.

8288. I do not know whether you are aware that in the Colonial Universities, such as Sydney and Melbourne, all founded upon a secular basis, that opinion has been held?—I was not aware of it.

8289. With regard to the test at King's College I think Professor Ramsay seemed to imply that it was altogether likely to be an unreality. Does your experience lead you to agree with that?—No, as far as my knowledge goes.

8290. I have a larger knowledge perhaps than even you, and this certainly confirms yours in my opinion?—My opinion was that it was quite a reality throughout.

8291. You think the teaching University as created should take up that work which is generally called University extension?—I do.

8292. And that it should admit to its lectures those who would be called non-matriculated members?—Yes.

8293. And you think the important work of University extension would be rather favoured than injured by the creation of the Gresham University?—I am confident it would.

The witness withdrew.

The Rev. HENRY WACE, D.D., examined.

Rev. H. Wace, D.D.

8294. (*Chairman.*) You will have an opportunity of appearing here again, as you will probably wish, in order to give an answer later on when more evidence has been given, and when you have had an opportunity of reading all the evidence. To-day, therefore, I will only ask you to go to those points which you think of most importance and on which you would prefer to give your opinion. You have heard the evidence of the Bishop. Perhaps you would wish to make some remarks upon the same subjects as those which were touched upon by him, and either supplement his evidence, or, in case you differ from him, tell us in what points you differ?—I had rather answer any questions which may be addressed to me, because, as your Lordship has said, not having had the opportunity of seeing more than two days of the evidence, I am not capable of judging what are the points on which I had best insist in general. The Commission no doubt know what are the points upon which I could best be of any service at this stage. With respect to what your Lordship has said about the Bishop of London I have only to say that I concur very cordially in what he has said.

8295. In everything?—Yes, substantially.

8296. I may take it for granted that you are in favour of the scheme of the Gresham University, and that you had a good deal to do in drawing it up?—Yes.

8297. Therefore it may be looked upon as your scheme. Then with regard to the different objections to it which have been already touched upon, I will take first of all the case of the dangers of overlapping and waste of power which are supposed to attend a federal system in contradistinction to a professorial system. Have you anything to say as to that, whether these dangers are exaggerated or whether they can be prevented. I mean with regard to overlapping, the double sets of laboratories and double teachers, and having a certain amount of waste of power in that way?—I believe that such danger is purely imaginary, because in proportion to the number of students must be the number of teachers, and practically I should apprehend that the provision of two or three laboratories is the very best means of dealing with the students whom we are concerned with. As the Bishop said, they are likely to be much better taught when they are taught in moderate sized classes than if there was one large class. The case is much the same as with the hospitals. I have heard of matters so managed that there was only one professor of medicine or surgery and some hundreds of students going after him. They could not get well taught. The multiplication of hospitals in London tends to break up the students and to provide them with better instruction. I do not think in point of fact that you could avoid duplication. In course of time, as London grows bigger, it may be, and it is distinctly contemplated by the Gresham Charter, that other colleges may from time to time be established. I cannot doubt that they will be established, that they will be needed. Therefore I regard it as a simple advantage, and no disadvantage whatever, that there should be two or three centres for that instruction. In point of fact I go further. It is an absolute necessity; you cannot avoid it. If you are to have a building big enough for all the students who learn chemistry in London it will be perfectly unmanageable.

8298. Then it has been suggested that it is rather a narrow scheme depending entirely upon two colleges, besides the medical schools, and that something for London ought to be broader than this. That objection, I suppose, can be met, to a certain extent, by bringing in other institutions besides the two colleges?—If they are adequate to the position—if they are of academic rank. But I dispute altogether that there is any narrowness about the scheme. The scheme provides for the inclusion of all the institutions which, at the time at which the Charter was instituted, had proved their adequacy to be University colleges. The best test of that was that the Government gave a grant to University colleges throughout the country, and the only two such colleges recognised in London at the time this scheme was drafted, and when it was passed by the Privy Council, were King's College and University College. Since that time Bedford College and Queen's College for women have been recognised. They were not recognised then, and it was stated at the Privy Council by Lord Selborne that he thought it best that in the case of colleges which had not already proved their efficiency as University colleges their admission should be left to the Council of the new University, subject to an appeal to the Privy Council. Therefore the scheme was as broad as it could be made at the time, and there are clauses in the Charter which provide for its indefinite expansion.

8299. You have no objection to alter the scheme so as to carry out this intention?—Certainly not; but I am not aware that there is any need for expansion.

8300. The only doubt is as to whether it is left to the Queen in Council with regard to the number of representatives upon the Senate?—Yes, such an appeal is distinctly provided for. If you look at Clause 9, specifying the duties of the Council, you will see this: "Any college represented on the Council or any assembly of a Faculty may, at any time after six years "from the constitution of the University, present a "memorial to the Council requiring its number of "representatives, or the number of representatives of "any other college or assembly of a Faculty, to be "taken into consideration with a view to its increase "or decrease; and the Council shall thereupon refer "the matter to the several colleges and assemblies of "the Faculties other than that presenting the memorial, "and after receipt and consideration of such of the "reports as may be received within three months from "the date of reference, the Council may increase or "decrease the number of representatives to which "such memorial relates. Provided that within six "months after the promulgation of the decision of the "Council any college or assembly of a Faculty may "appeal to Us in Our Council against the decision of "the Council of the University."

8301. (*Professor Sidgwick.*) The exact point upon which it does not seem to me to be quite clear is this. Any college introduced afterwards to which the Council had not given any representation would have no *locus standi* under that clause. As long as a college has been introduced under Clause 24, but admitted without representation ——?—If that be a weakness in the clause I should be very glad to see it amended for the purpose you have in view.

8302. (*Chairman.*) Are there any colleges which you can think of which might be brought in under the original scheme, and not left to be brought in afterwards, or are there any institutions, such as, for instance, the South Kensington Science and Art Department—could that be brought in in the Faculty of Science?—There is this great difficulty about that. Of course, with respect to its provision for teaching science there can be no question at all, but it is provided in Clause 24 of the Charter, in the rule for the admission of colleges, that one condition should be that the college is under the independent control of its own governing body. It is a matter which, I think, is generally deemed to be of great importance in an institution which is to

form a constituent part of a body like a University. I apprehend that the South Kensington School of Science is by no means under the control of its own governing body, unless you include in that term the Government of the nation.

8303. If it is to be brought in, it ought to be freed from Government control?—I am not sure what is possible in the matter.

8304. Then the city and guilds schools are not independent, are they?—I do not know much about their constitution. If there is any college of that rank which corresponds to these conditions, of course, it would have a claim for admission; but our strong feeling about this, and the way in which Lord Selborne seemed to feel, was, that it was quite clear that King's College and University College ought to be there, and it was not clear that the others ought to be there. He thought the matter ought not to be decided without a full investigation after the University had been called into existence.

8305. And the Women's Colleges, the Bedford College, and Queen's College?—Their position has been considerably altered by the fact that they have now been recognised by the Government, and they were not at the time this Charter was founded. It is possible that they might be considered for that purpose.

8306. As to the appointment of University professors, would you have any objection to enlarging that clause which gives power to appoint lecturers, to make it compulsory, and to put the word "professor" in instead of or in addition to "lecturers"?—I think as the bishop has said, it requires very careful safeguards. The one thing I care for in this Charter is the collegiate basis of it, and that is to my mind essential to any satisfactory teaching University in London. If the appointment of regius professors was authorised in such a manner as would throw the professors of the colleges into any secondary position for the main purpose of the teaching of the students, I think it would be mischievous in the extreme. I think, moreover, it would be found to be productive of the greatest possible jealousies and difficulties. As to the faculty of theological science which is contemplated, I feel even more strongly than the bishop expressed himself, that it would make it necessary for our council, at all events, to be asked to reconsider the consent which they have already given. Of course I cannot presume to say whether they would still assent to it; and for this reason:—The theological department of every college has a very responsible—a peculiarly responsible duty—imposed upon it, almost more responsible perhaps than any other except the Medical Faculty. That is to say, it is our business to train men for the Ministry, and it is essential that those who are so trained for the Ministry should be brought under a harmonious course of teaching for that purpose. If it was possible for the council to appoint what might be called a regius professor of theology, who might teach, with the whole authority of the University, opinions which were grievously out of harmony with those which we were teaching in our college, there would be obviously a conflict of influence over our students which would be very serious. I strongly apprehend that one effect might be that the bishops might refuse to take candidates for Holy Orders from King's College. Let me take another faculty—medicine. What was suggested, as I understood, was that there should be a regius professor. I will not presume to go far into this, because I hope the Commission will hear Sir Joseph Lister to-morrow. The regius professor, I understood, was to be the chief man in the faculty, and the others were to be organised under him. I throw out the question of whether all the hospitals in London would acquiesce contentedly in the chief surgeon or chief physician in one hospital being picked out from all the rest, and his influence being made predominant in the teaching of medicine. In some of the other faculties there are difficulties which have been presented to me by the professors of King's College. There will, I hope, be an engineering faculty in the University. I do not know whether there is one at present in the Victoria University. But if you give to one man, as distinct from the professors of the colleges, or to one man amongst the professors of the colleges, the position of regius professor of engineering, you would be giving him an enormous advantage in the way of making an income above that which is given to the professors of the University. He would be at once the person who would be regarded as the best adviser, say, for the Houses of Parliament, and so on, and a sense of great injustice would, I am perfectly sure, be created among the higher professors in a science of that kind.

8307. The objection to the University professors would seem to be that they would throw the others rather into the shade?—Yes, and, as the Bishop of London has said, nothing is more desirable than that the colleges should not be in any inferior position whatever.

8308. But subject to that you would not object to the experiment being tried in some way which would not interfere with the position?—Of course if the rule were strictly maintained, which is in the Charter now, that no one should take degrees of this University who had not received instruction in the colleges of the University, then all such professors would by the very nature of the case become what I might call post-graduate professors; and the danger would be, at all events, greatly minimised. Perhaps in that case it would not arise.

8309. And would you like that to be enforced—that every candidate for a degree must have been educated in one of the colleges?—That is in the Charter. That is the very object for which we ask for the foundation of this University.

8310. You attach great importance to preserving the autonomy of the colleges as it exists now?—Yes.

8311. You therefore would object as much as the Bishop has objected to the appointment of professors by the University?—Entirely.

8312. You must keep them in your hands?—Yes, we must keep them in our hands.

8313. At present what does the governing body of King's College consist of? It does not consist by any means exclusively of teachers?—No. Its members are elected from time to time from those who are likely to be in sympathy with the work of the college. The Council is composed mainly of King's College men, and the feeling of the staff is always considered in their discussions, and I am always able to report to them.

8314. Do you think they would be more likely to appoint good teachers than the main body of teachers themselves?—Yes, I think so.

8315. At any rate, I take it that you and those whom you represent, would very much object to the University having the power?—I think they would more than object to it. I do not think anything would induce them to consent to it. I may say that I concur with what the Bishop said in this. I should have no objection, and I should be surprised if our council had any objection, to what he spoke of as a sort of judicial veto. When I say judicial veto, I mean to distinguish that from a voting veto. It would be extremely unsatisfactory, I think, that a professor's name which had been proposed by the college council, could be rejected by a vote of the University council. If it were left in the hands of the chancellor, of course he would not refuse his veto except upon some representation being made to him. That representation would have to state its reasons, and then the council who had made the appointment, would have an opportunity of answering those reasons. In that case I should be entirely willing to accept such a check; but generally with respect to that, I may say that the essential value of this movement, to my mind, is to restore and rehabilitate collegiate teaching in London. That is the real meaning of a rather ungenerous way of putting the matter which I have observed in one of the only two days' evidence that I have read, namely, that the object of the Charter is to increase the number of students at the colleges. That was just the ungenerous idea that we merely wanted to increase our own profits, as it were; but it is true so far as this, that our great difficulty, the great mischief and the great grievance which we are trying to remedy, is that the action of the London University, ever since it abolished all traces of affiliation, has been to destroy collegiate life in London. The moment they made the taking of degrees a mere matter of examination, they made it a mere matter of cram. If all that a man has to do is to pass that examination, he will go to it by the shortest and quickest route that he can find. Accordingly there has grown up, and no blame to those who developed it, because the opportunity was open to them, a large and flourishing institution, in which the sole object is to get men through the University of London as quickly as they can, without the trouble of going through collegiate courses. The consequence has been that, especially in arts, which is in some respects the most important of

Rev. H. Wace, D.D.

19 July 1892.

these Faculties, because it is the Faculty on which the general liberal culture of the University depends, the tendency has been more and more to draw men away from colleges to mere private coaching of that kind. It may be interesting to your Lordship and the Commission if I quote something which will show that that is not an unique opinion of our own. What we are trying practically to do, is nothing more nor less than that which has been done in the Victoria University, and the reasons for which we are endeavouring to do it, are precisely the same reasons as those which were alleged by the Victoria University when that was promoted. I have here a document which was issued in March 1876, signed by Professor Greenwood, Professor (now Sir Henry) Roscoe, Dr. Ward, and Dr. Morgan, which set on foot that movement. In that document, which is stated to represent "the views of "the Senate, *i.e.*, the professors of Owen's College, "arrived at after full deliberation and discussion among "themselves," I find this paragraph: "The College," that is to say, Owens College, "if enabled to arrange "its own courses of study without reference to the "requirements of any external degree, would be able "to set some definite aim before all its students, and, "as occasion presented itself, to improve the arrange- "ment of its courses in common with its own wants. "A considerably greater number of students might "then be expected to take prescribed continuous "courses of study, whereas at present the proportion "of students taking the regular three years' courses of "the college, accommodated to the demands of the "London University examinations, is comparatively "small, and exhibits a tendency still further to "diminish." That was felt at Owens College as the effect of the London system, and that is the very effect that we, I do not say complain of, but that we represent as extremely injurious, not so much to the colleges as to London. We are struggling for this collegiate system, not merely for our own cause in the first instance, but because we believe the maintenance and development of these colleges is a most important thing for the good of London and of education.

8316. The close connection between teaching and examination could be preserved equally or even in a greater degree by the professorial University, in which the professors themselves should be the governing body, and should decide the curricula of the examinations, which would be in harmony with the teaching which they themselves gave. That would have nothing to do with the question whether it was federal or professorial?—I should think it would have a great deal. It would not in the case of a small town. Take the small University towns of Germany. There it might come, as your Lordship says, to practically the same thing, but a professorial University in London would have to be so large and so vast that this close relation between the professors and the students could not exist to the same extent. The only way in which you can deal with a great city like London is by breaking it up into separate bodies, and having colleges which work out this system, acting independently, and which then come together and modify and hold in check one another.

8317. On the other hand, if you comprised more colleges than these two, a group of colleges. Then the voice which the teachers of each particular college had in determining the curricula of the examinations would be a very small one?—I do not think so. Let us put an extreme case which we need not contemplate this century, I should think. Let us take half a dozen colleges of the size of King's College and University College. I do not think each of them would have a small voice in it at all. As the Bishop of London said, they would come together, and there would be the general influence of definite habits of teaching and examination developed.

8318. Another great advantage that we have heard of the federal system over the professorial is the preservation of discipline over each particular college. That was one reason for wishing to keep up the autonomy of the colleges?—Yes, and discipline taken in its largest sense. I do not speak merely of moral discipline and moral control, but I speak of that general discipline which comes from men being subjected to strong traditional influences. Nothing is more fully recognised, I think, than that it is a part of the very virtue of English school life and English University life, that each great school and each great University has its own character and its own type; and that to a certain extent it does develop a special kind of influence. At King's College certainly we have that. I believe there is the same influence in University College, and that is the very thing that I am so anxious in the general interests of education to encourage. I was a student at King's College, and I was a student at Brazenose College, Oxford, and, looking back, I know that the general influence of King's College upon my mind was quite as great as that of Brazenose College.

8319. Now I will just go for a moment to the denominational character of King's College. We heard the general outlines of it, but the Bishop of London referred us more particularly to you for some of the details, particularly as to this. You admit many students who do not belong to the Church of England, do you not?—Certainly.

8320. What sort of proportion?—They are a minority, no doubt; probably a considerable minority, but I cannot quite tell. The reason is that our system depends upon a distinction between matriculated students and occasional or non-matriculated students. The matriculated students are those who enter for the whole course which is prescribed in each department of the college, whether it be in arts, medicine, or engineering, and who may desire at the conclusion of the course to obtain the diploma of an Associate of the college, which we are empowered by our Act of Parliament to give. That diploma we only give to students who are submitted to our whole course, and that course includes divinity, it being a principle of the college that education of any kind cannot be complete unless the student has had some instruction in divinity.

8321. But if he chooses to attend it he is not asked any question as to what denomination he belongs to?—None.

8322. And he has no test?—None whatever; but then, besides that, there are occasional students. The name perhaps is misleading; it does not mean casual, it only means that a man may take whatever classes he pleases. He chooses for himself. He may want only to take a certain branch of engineering. As our engineering department has developed, we have found that frequently a man may come to us for metallurgy only, and so on, and then he pays his fees for those classes only. He does not expect the Associateship, and he is not required to attend Divinity. It is merely that we desire to say that we cannot give a man the stamp of having been fully educated at King's College unless he has received Divinity instruction. Exceptions are made in the case of foreigners, and occasionally in the case of persons in a similar position.

8323. Are they obliged to attend chapel?—The matriculated students are, unless I give them a special exemption.

8324. You have the power to give them a special exemption?—Yes.

8325. On any grounds, without giving a reason?—Yes, on any grounds.

8326. Do you exercise that pretty freely?—I have no occasion to exercise it pretty freely. It is very rarely asked.

8327. In fact there would be nothing to prevent anybody joining, even as a matriculated student, if he chose to attend your Divinity lectures?—No.

8328. And as to the others there would be no difficulty whatever?—No. Dr. Priestley, who is here, asks me to mention that Baron Henry de Worms was a student of the college, and is now a Fellow of it.

8329. (*Bishop Barry.*) Is he a Jew?—I believe so.

8330. (*Chairman.*) You do attach considerable importance to your being denominated a Church of England body, and you would not be interfered with in that regard?—I would put it rather in this point of view. As a religious body we take the test of a man being a member of the Church of England as the best practical test. It is quite a sufficiently wide test. It does not of course mean that a man believes all the 39 Articles; all that is necessary for an Englishman to belong to the Church of England is that he shall be a Christian, and all that we think is essential in the college is that there shall be no influence which would tend to the disparagement of the plan of education which we desire to give. It is not merely the case, if I may presume to refer to what Professor Ramsay said, that we expect men to abstain in their lectures from interfering with revealed religion, or the Christian religion, but we do not want men to be in

the college whose influence practically would be to disparage in the minds of the students the importance of the Christian religion. There are men whose mere presence in the college could not help doing that. If a man was perfectly well known to be a strenuous opponent of the Christian faith outside the walls of the college he could not but have an influence over the minds of the students inside the college. It is part of my duty to give lectures on Christian evidences to all the matriculated students in all the departments? and I should feel myself in a false position if a student could go out of my classroom into the classroom of a professor who was known to be attacking the Christian religion in print in every way he could. What we care for is simply that the general influence of the college should be a Christian influence.

8331. There are an enormous number of parents in London who would prefer to send their children to a college like yours, where there would be no danger of that being lost sight of?—Certainly. For instance it is not at all an uncommon thing for a Roman Catholic parent or a Jewish parent to come and say, "I am a Roman Catholic," or "I am a Jew": "I should be "glad if my son might be exempted from attendance "at chapel, but I bring him here because this college "is one in which religion is recognised."

8332. Now I go to the subject of medical representation in the University, which has been by many thought to be too great. That, I gathered from the Bishop, was more a matter of arrangement and a thing to which he did not attach importance. If it could be diminished he would not object?—I do not object to a modification theoretically. I feel, however, that justice is only done in the Charter to the great place which medicine holds in London. I think I am not wrong in saying that medicine holds a larger place in London than any other Faculty, and I think it is likely always to do so. Engineering and natural science are developing, but still the enormous advantages which London offers, with its magnificent hospitals, are always likely to make medicine, as a matter of fact, the largest Faculty in London. I do not, therefore, regard it as a matter of mere arrangement, but I regard it as a matter of justice that the Medical Faculty should have what, under the circumstances, might seem to be an undue preponderance.—I should rather say, what, under other circumstances,—might seem an undue proportion in the council. As the Bishop of London said, it is merely taking facts as they are. I should imagine that in past history there have been Universities which have been mainly famous for one Faculty for some reason or other. I think that is the case in London now. Therefore I am not inclined to be particular whether it is a matter of 10 representatives, or 9, or 11. Of course that is a matter of detail, but that there should be more representatives of medicine than of any other Faculty I think is a mere matter of justice.

8333. Do you think a large medical representation would have a tendency to unduly cheapen the medical degree?—Certainly not, and I think that was a most unworthy and unjustifiable suggestion on the part of the Victoria University. The whole tendency of the schools in London has been to raise medical education; their influence has been entirely in that direction, and they have never done anything whatever which would justify such an imputation being cast upon them, I believe that the strength of the Faculty in the Gresham Charter would materially tend to maintain the standard of the medical degree in the University. I cannot conceive for a moment why it should be thought that the heads of the hospitals in London should be so regardless of the dignity of the greatest Faculty in the world as to cheapen degrees, and make the name of Doctor of Medicine of the University of London inferior to that of any other University.

8334. I think one thing that gave rise to the idea was that it was supposed that the objection to the degree was that it was too difficult?—Yes, it certainly is too difficult; but that is a phrase which means a great many things. It is fully recognised, I think, on all hands that there ought to be Pass degrees as well as Honours degrees. I think that is recognised by the University itself now. It was certainly recognised by the late Royal Commission; but that the Pass degrees of the new University should be in the least degree inferior to those of other Universities in England was never for a moment dreamt of or deemed possible.

8335. Would you like to add anything to what has been said with regard to there being a disadvantage in having two Universities in London and there being quite room enough for two, would you like to reinforce that at all. Do you see any objection to there being a second University in London?—Yes, I think there would be great objection to there being a second University, but I see no objection to there being one real University and one examining board. If you were setting up two teaching Universities, there would be a great objection to it; but that is not proposed; what is proposed is that you should set up a real teaching University, and leave the University of London, which rather corresponds to the Jury of Brussels, of which we have been told, to perform the important function of mere examination. There is an objection to having two competing institutions in one city, but these would not compete.

8336. You think an examining University and a teaching University could go on side by side without the possibility of a Dutch auction?—Yes, and I do not think you can deal with these great public affairs on any other principle than the generally recognised one, that the most favourable construction should be put upon what a responsible body intends to do. To suppose that you would organise a great body of teachers, and that they would proceed to make a Dutch auction, seems to me to be inconceivable.

8337. In German Universities it has not had a tendency to cheaper degrees, has it?—I think Germany recognises too many Universities. You might over do the thing.

8338. But still there is room in London for two, you think?—Certainly.

8339. (*Bishop Barry.*) Might I ask whether, in framing the Gresham University Charter, any regard was had to the constitution of Victoria University?—It was most closely followed. We have practically done what the Victoria University did; so much so, that one member of the Privy Council said to me that the chief fault he found with our charter, was that we had too slavishly followed the Charter of the Victoria University.

8340. In what respect do they differ?—They are alike in their federal system. The Victoria University is composed merely of the colleges. It has no other professors than the professors of the colleges. The clause in the Charter is that the professors of the University shall be the professors of the colleges.

8341. It has, if I remember rightly, a somewhat different government?—Yes.

8342. There is a body called a Court, is there not?—There is a court as well as a council.

8343. Is it not for this purpose that the court may be a very large body, and enabled therefore to provide for a very thorough representation; and the council is a smaller body which is chosen, I believe, out of the court in order to do the actual business?—Yes.

8344. Might not that be a valuable institution in London, where you have to represent a large number of institutions, and yet must not make your governing body too cumbrous?—When you say governing body, the University Court of Victoria University is ultimate the governing body.

8345. I think it only meets once or twice a year, and deals with what you might call fundamental questions. We have been very much struck in regard to the Gresham Charter, with the difficulty as to the cumbrousness of the governing body. Has it ever occurred to you whether some such expedient as is adopted in the Victoria University might meet that difficulty?—You see there is this difference between the two organisations; the Victoria University is composed of colleges which are in different cities, and therefore they may need some other controlling power. But I doubt whether it would be necessary in London to have any arrangement of that kind. I think it is a pity to complicate organisation if it can be avoided.

8346. I have not the slightest idea how the system works, but it did occur to me that it might meet this difficulty. However, as you say, it is a matter of detail. I think you say generally the Victoria University and the Gresham University go upon the same lines?—Yes. We took it as our model in drafting, and followed it as far as our circumstances permitted.

8347. In regard to the difficulty about overlapping and waste of power, of which the chairman spoke, might not that be to some degree met by inter-collegiate lectures and inter-collegiate use of laboratories? I mean in

Rev. H. Wace, D.D.

19 July 1892.

cases where the number of students in each college was not great?—Possibly in that way it might. Part of what was in our minds all through in drafting that Charter was that when these two colleges came together there should be arrangements of that kind. They would not appoint two professors of recondite subjects.

8348. Was it ever contemplated to include the legal institutions of London?—It is provided for in the charter.

8349. Did any of the Inns of Court, for instance, signify a willingness to come into the scheme?—No. We had some indirect and informal negotiations with them, but all that we thought practical was to leave a place for them in the charter, if they chose to come in. The place is left.

8350. Was there not at one time an idea of constituting a law University, of which the Inns of Court should be the colleges?—I believe there was something of that kind, because I believe the definition of a legal Faculty and its actual introduction into the Charter was due to Lord Selborne's remarks in the Privy Council. I think it might be presumed that he saw that means were provided here for carrying out the idea which he had in his mind.

8351. I suppose the promoters of the Gresham Charter would rather welcome the inclusion of great legal institutions?—Certainly.

8352. And see no difficulty in including them?—None whatever.

8353. And if legal institutions were included, and institutions exclusively scientific—I see the difficulty with regard to South Kensington—but that difficulty might be got over—and at the same time theological institutions included under the Gresham Charter, then I suppose the narrowness which is supposed to exist would be greatly removed?—If there is any narrowness it would be less narrow.

8354. The narrowness, supposing it to exist, would be greatly mitigated?—Yes.

8355. And the supposed undue predominance of the Medical Faculty would also be modified?—It would be modified.

8356. Not unduly modified. I quite agree as to the importance of that Faculty. Then coming to the University professors, you have no objection to their appointment, provided that the collegiate basis is not seriously interfered with?—That is so.

8357. You see difficulties, some of which you have pointed out, but those difficulties would hardly, I think, be insuperable?—I think they would need extremely careful watching. Anything which tended to encourage students being educated elsewhere than under a collegiate system would be extremely injurious.

8358. But if there were but one leading Regius Professor in each Faculty, there would be no great danger of that?—If you absolutely limit it to one, I suppose there would not be, because all the students could not go; but there would be other great objections to that, I think. The way I hope any difficulty in that way might be got rid of would be by means of Gresham professors.

8359. That, I believe, has been suggested. Supposing that these University professors, as such, took mainly what are called post graduate courses, that would greatly remove your difficulty?—Certainly.

8360. It would certainly not be inconsistent with the principles of the Gresham Charter to have such an appointment, if it was thought good; provided always that the collegiate basis was not seriously interfered with?—No, I do not think it would be inconsistent with it within reasonable limits. I might mention that the clause to which the Chairman has referred with regard to the appointment of lecturers was not intended for that purpose. That was expressly introduced with a view to enabling the University to take up the work of the University Extension Society. That was the express object with which it was introduced, as explained in Sir George Young's evidence on the first day of the previous Commission. If you simply put in that the University shall have power to appoint professors and lecturers, you have let in a deluge unless you guard it very strictly.

8361. The University would mean the Council?—Yes.

8362. And on the Council the colleges would be well represented?—Well represented, but they would not be predominant, and they would not control it; especially if the Council were enlarged by the admission of other colleges.

8363. I do not mean the two great colleges. I refer to the collegiate system generally, including medical schools. The collegiate idea would be strongly represented on the Council, and I think you might trust them not to let the deluge in?—I do not know. I think if you open the hole it is very apt to go in.

8364. You would hold that this teaching University should take up very strenuously the work that is commonly called the work of University extension?—Yes.

8365. In other words, the dealing with the youth of London who are not matriculated members of the University?—Certainly.

8366. And you believe that this institution would rather help than hinder the development of University extension?—I am sure it would. The present system of University extension seems to me extremely unsatisfactory. They have a Council which is composed of Oxford and Cambridge and London representatives. It seems to me very much the same thing as if, in order to undertake the education of Berlin, you went to Jena and Leipzig, and other places. I do not think you will ever extend University work in London satisfactorily until you get it done by a London University.

8367. And I suppose the professors of the great London Colleges, who already do a great deal of the University extension work, although perhaps not under that committee, would be willing to undertake that?—Some of them do it under that Committee, I think they would admit that no lecturers have been more useful to them than Professor Gardiner, who is now at Oxford, who was professor at King's College in your Lordship's time and partly in mine, and Professor Seeley.

8368. I mention that because in the deputation to Lord Salisbury there was a fear expressed that under the Gresham Charter the work of University extension might languish?—Nothing could be more contrary to our idea. That clause was introduced for the purpose of furthering University extension work. The idea I had in my mind was that when the Gresham University was instituted the Council would form a committee, and that that committee should take over the work of the extension society and devote the energy of the institution to it.

8369. Now with regard to the denominational character of King's College, may I ask whether that power of exemption which is in your hands is found to be necessary for extensive use?—No.

8370. With regard to the chapel?—Very rarely.

8371. With regard to the Divinity lectures?—Very rarely.

8372. Even from Jews or Roman Catholics?—No. Jews or Roman Catholics nearly always ask for it.

8373. For exemption from Divinity lectures or chapel, or both?—I should say from both.

8374. And that permission is granted?—Yes.

8375. Would that interfere with a young man getting an Associateship if the Principal granted the exemption?—It would be a matter dependent upon circumstances. According to the strict rules it would.

8376. But as a matter of fact has not the exemption of the Principal always been held to cover that question? I do not think so.

8377. Still you have the application, but very seldom?—Very seldom.

8378. And always in the cases you have mentioned? It always covers it in the case of foreigners. We get a good many students who come to us from South America.

8379. Am I not right in supposing also that the test of professors is dispensed with in the case of foreigners, for instance, in the case of foreign languages?—By the original Charter it is not applicable to them.

8380. That test is not applicable to the teachers of foreign languages on the ground that they are presumably foreigners?—Yes, that is so.

8381. What influence do you think it has on the character of the teachers of King's College? Has it acted so as to prevent King's College taking a University rank in teaching?—Certainly not, the rank of

professors at King's College will bear comparison with that of any University in the kingdom.

8382. And the names of the professors who have held office at King's College will carry that out?—I will mention a few; Sir Charles Lyell, in geology; John Frederick Daniell, chemistry; Richard Partridge, anatomy; Sir Charles Wheatstone, natural philosophy; Robert Bentley Todd, physiology; Arthur Farre, obstetric medicine; William Allen Miller, chemistry; Sir William Fergusson, surgery; William Augustus Guy, forensic medicine; Sir William Bowman, physiology; Robert Bentley, botany; James Clark Maxwell, physics; Sir Alfred Baring Garrod, materia medica; William Rutherford, physiology; Joseph Bickersteth Mayor, classical literature; Charles Loudon Bloxham, chemistry; Walter Noel Hartley, chemistry; John Wood, surgery; Samuel Rawson Gardiner, history; Peter Martin Duncan, geology; William Henry Monk, music; Francis Edgeworth, economics; and Frederick Denison Maurice, and John Sherren Brewer, history; I might go on further.

8383. Sir Joseph Lister?—Yes, Sir Joseph Lister. I think that is a list of which any college 50 years old has reason to be proud.

8384. All that a University has to ask is that a college is efficiently provided with teaching of a University character?—Yes.

8385. And how it obtains that teaching the University has no right to inquire?—No.

8386. Are you of the same opinion as the Bishop of London that the existence of denominational and undenominational colleges in the University side by side is a gain?—Certainly. I regard our system at King's College as the best system. I think it is the only proper and full form of education that it should comprise religious education; but it is obviously impossible that that should be made universal, and therefore it is of the highest advantage that there should be also a perfectly undenominational college, such as University College; they supplement one another.

8387. You think that this adds to the breadth and variety of the University?—Yes, if that liberty were taken away, it would be to say that that which a very large portion of the public deem a matter of importance in the education of their children should be stopped. It would be a restriction of freedom, not upon the colleges, but upon the public.

8388. You are aware that it has been proposed that, as provided by the revised scheme of the Senate of the University of London, the University, recast if necessary, should be the centre of the new teaching University, and that at the same time it should carry on what has been called its imperial function of examining all comers. Do you think that practically those two functions would be able to work together?—Our experience of the negotiations during the last few years has convinced me that it would be quite impracticable. We made a really honest and an earnest endeavour to come to arrangements of that kind with the University of London. It cost us two long years of negotiation, much longer than it would have cost us if it had been a really possible thing; the result was total failure. The result was that the demands of the Senate to some extent, and the demands of Convocation far more, proved to be incompatible with the frank and fair recognition of teaching and teachers.

8389. The difficulty came from the cosmopolitan function?—Yes. If the work had only concerned the work of the University in London, the arrangement would have been come to with comparatively little difficulty. We all but made the arrangement with regard to London, but the provincial colleges came in and said, "you will be doing us a great injustice."

8390. Hence you think the union will be found impracticable?—Yes. The evidence of Mr. Busk on the second day before this Commission has strengthened that impression on my mind. The whole drift of that evidence was distinctly hostile to collegiate teaching.

8391. It has been said that the function of general examination should be made subordinate. Do you think that would be possible?—I do not think so. The old graduates are strong. I do not think the University of Dublin, to which reference has been made, has done any good by attempting to combine the two functions, but at all events, the case is quite different. There you get a very strong teaching University, doing a certain amount of external examining work, but in this case you would have to turn the University of London upside down, and make it a thing entirely different from what it has ever been before. It would have to run counter to the wishes of the vast majority of its graduates, and the evidence that Mr. Busk gave, I think, shows this.

Rev. H. Wace, D.D.

19 July 1892.

8392. That would be the ground of your impression as to the incompatibility of the two ideas?—Yes.

8393. Can you tell me whether of those who were examined for the degrees in the University of London, a very large proportion come from outside London?—I should think that they did, but I do not know.

8394. I ought not perhaps to have troubled you with that question, but it is important?—You will have Sir George Young before you later on. I think he will be able to give you definite information on that point. I think the figures do give a large proportion outside London.

8395. Hence the duty of examining them must be always an important part of the function of the University?—Yes.

8396. (*Professor Ramsay.*) Can you put in that original document to which you referred before at the time of the foundation of King's College, to show the importance that was attached to the teaching of religion at that time?—I think the Act recites the Charter, and that Charter states the purpose. You will find it in the Appendix to the calendar at page v, and on page vi: you will find this "And it was ordained by "the said Charter that the various branches of literature and science, and also the doctrines and duties "of Christianity as the same are inculcated by the "Church of England should be taught in the college "under the superintendence of a principal or other "head professors and tutors, or such other masters or "instructors as should from time to time be appointed "in the manner thereafter mentioned. And whereas "it was deemed essential to maintain indissolubly the "connexion between sound religion and useful learning "and that in King's College instruction in the "doctrines and duties of Christianity, as taught by the "Church of England, should be for ever combined "with other branches of useful education."

8397. I do not see anything there to confirm what I understood was the bishop's idea, that the religious ideas was the first, and the educational second. I suggested was it not first educational, and then religious, but his Lordship said he would invert the order, and say first religion, and secondly educational? I think that is a matter of terms rather than substance. I think the object was certainly to promote education, but that that education should be in connexion with religion. Remember that it arose in this way. It arose from the foundation of University college. University college was first of all founded, leaving out all teaching of religion. Then the friends of the Church of England said they thought that was mischievous, and they wished to found another college in which the teaching of religion should be, as it says here, combined with other teaching. That was the *differentia* of King's College.

8398. Those words give us as nearly as we can get it, the idea of the founders?—Yes.

8399. Then you said the real use was simply to show that the professors were Christians?—Yes.

8400. Do you not think there could be some other mode of expressing that fact than a definite and absolute statement that a professor is a member of the Church of England?—I do not think you would get anything so wide. That is the difficulty I should feel in answering that question.

8401. I have here a copy of the statement to which I referred just now. It is a copy of the declaration formerly required to be made by professors in the Universities of Scotland at the time of their induction under the Scotch Universities Act, 1889. This declaration is not required of professors inducted after 31st December, 1889: "I do solemnly and sincerely "in the presence of God profess, testify, and declare "that, as professor of in this University, and "in the discharge of the said office, I will never "endeavour directly or indirectly to teach or inculcate "any opinions opposed to the Divine authority of the "Holy Scriptures, or to the Westminster Confession "of Faith as ratified by law in the year 1690, and that "I will not exercise the functions of the said office to "the prejudice or subversion of the Church of Scotland or the doctrine or privileges thereof"?—In one way that is wider, in another way it is very much narrower than our test. There is nothing whatever to

Rev. H. Wace D.D.

19 July 1892.

prevent a professor at King's College from expressing his dissent from one of the 39 Articles, and if the Westminster Confession of Faith was our document, there would be nothing to prevent him from expressing his dissatisfaction with the Westminster Confession of Faith.

8402. You observe that the words are "in the discharge of the said office"?—That is not wide enough. As the name has been mentioned by Sir Lyon Playfair as the best illustration he could give, I will mention it also, although I would not have done so unless some one else had done so first. Sir Lyon Playfair mentioned the name of Professor Huxley. Professor Huxley, as a man of honour, would never in his lectures interfere with the general teaching of the college, but unless you mean by that class of words to prevent a man like Professor Huxley from publishing articles on controverted questions of theology, you would not guard against the difficulty I have in view.

8403. As a matter of fact, there have been professors who have been able to take the test who are not members of the Church of England?—It depends upon what you mean by members of the Church of England. Perhaps you will define that for me.

8404. May we have the King's College formula put in?—I am not going to give you a formula.

8405. What is the actual declaration made by the professors?—I can give you that exactly. "Candidates "for all offices in King's College, London, except only "the professorships of oriental literature and modern "languages, must, by the Charter of the college, be "members of the United Church of England and "Ireland, and must make a declaration to that effect "in their application." I think we should get into very great difficulties if we began to define membership of the Church of England.

8406. I only wanted the words declared by the professors?—My belief is that that is the very widest test you can very well get hold of for the purposes of the college.

8407. But still it would exclude the Nonconformists?—No, not necessarily. That again would depend upon what sort of Nonconformist he is. There may be people who prefer usually to worship in a Wesleyan Chapel, but unless they objected to worship in our Chapel I should accept them.

8408. I suppose it was intended to exclude Nonconformists?—That was not its main purpose; or at least you must begin by defining Nonconformists. I do not think it was intended to exclude such cases as I suggest.

8409. Now passing to the Gresham Charter and the scheme of it, it is your view as well as the Bishop's, and it is the view of the college generally, that one great purpose would be to have a University in which the teaching should have more relation to examining, and in which the teachers would have more to say in the Government than they have at present?—Yes.

8410. Is that quite carried out as regards the constitution of King's College at present?—King's College at present unfortunately is not a University, and does not ask to be made into a University by itself.

8411. But, as I understand, in forming part of the University it does not propose in any way to alter its own governing body?—No.

8412. Therefore King's College would be absolutely independent, having a governing body which gives no powers to the teachers at all; and one of its reasons for asking to be admitted into a new University, or asking for the creation of a new University, is that there may be a University in which teachers shall have a predominant power?—But excuse me. For the purpose of a University the professors have the whole power in King's College. The Council does not examine. The Council does not exercise any immediate control over examinations. All the work is done by the professors in King's College for King's College.

8413. But the authority over the students and over the professors at King's College is exercised, not as at Oxford and Cambridge, but it is exercised by the Council?—The Council delegate that authority entirely to the principal and the professors. The actual discipline and control of the students is entirely in the hands of the professors, and of myself, subject only to an appeal to the Council, which is hardly ever exercised.

8414. But the professors have no powers except such as the Council delegates to them?—No, but the Council have organised the professors in boards.

8415. They take their advice or not as they choose, but they have no constitutional power in the government of the colleges?—The Council is supreme over them.

8416. Is the principal a member of the Council?—No.

8417. But he is admitted to their deliberations?—Yes.

8418. He has no vote on the Council?—No.

8419. Looking at the Gresham Charter, is it clear to your mind whether the representatives of King's College were to be represented as professors or not?—May I ask where your difficulty arises?

8420. "Three members nominated by the Council of "King's College, London, to represent that College." Was it supposed that the Council would choose members of its own body or members of the teaching staff?—They might do what they pleased. You mean the three members nominated by the Council?

8421. Yes?—No doubt the intention was that they should represent the Council, and that the professors should be represented on the Faculties.

8422. That is to say, through four members, four members of each Faculty, 16 members in all?—Yes.

8423. You consider that 16 members of the professoriate was a sufficiently strong representation on the Senate of the teaching body of the University?—Certainly, because members of the Council would be sure to include one or two old professors. They should be quite certain, I should think, for example, to send one emeritus professor of Medicine, and they would probably send the principal. Then there would be two persons representing the academic body out of three.

8424. So there would be a minimum of 16, and there might be more?—There would be sure to be more.

8425. You spoke about the University taking up University extension work. That would be altogether outside the collegiate system?—You mean to say the actual working of it would be?

8426. Yes.—Not necessarily outside, because the evening classes of the colleges ought, I think, for the good of the University extension system, to be worked in with it. We have a considerable system of evening classes at King's College. The University Extension Society have wished to have evening colleges to supplement their lecturing work. Therefore I think it important that the colleges should work with them.

8427. The idea was that the students attending these extension lectures should be attending a course which would qualify for degrees?—I do not think you could wisely go much further in that direction than Cambridge has gone.

8428. That is to say, it is to be a subordinate movement taken by the colleges?—Yes.

8429. Not forming an essential part of the University system?—Yes, forming an essential part of the University system certainly.

8430. But not to the extent of the University graduation system?—It might be to the extent to which Cambridge has already adopted it.

8431. You mean a kind of intellectual charge on the part of the colleges to have these lectures for teaching, but they would lead to no result?—I do not suppose they would lead to no result in the case of the lectures under the direction of the University of Cambridge. Cambridge University said that a certain course of extension lectures shall dispense with one year of a man's residence at the University. It might in the same way be said that it should render the stay at the college shorter.

8432. Certain privileges which might become University privileges would be granted to the University extension students?—It was our full intention, but the University Extension Society would not believe our word in the matter.

8433. Were these extension classes to be conducted by the colleges or by the University? Was each college to have such extension lectures as it chose?—No. I should think it would be better, as I said just now in answer to Bishop Barry, that there should be a com-

mittee of the Council to manage the classes and to use the colleges as they think proper.

8434. Did it ever occur to your mind to have two classes as was proposed in the London University scheme, constituent colleges and associated colleges. When you say collegiate education is essential do you mean to say you would admit nothing as a college into the University that could not come up to the standard of, say, King's College and University College as completely equipped University institutions?—I would not absolutely say no, but I do not think it is really a practical question. Arts, or *literæ humaniores*, may be taught no doubt by mere lectures, but you cannot teach science without adequate laboratories. If a college could come and say, "We can show you that we have "laboratories in which a sufficiently thorough instruc- "tion in science can be given for a degree by evening "classes," I think its admission to some such association as you suggest might be a matter to be fairly considered, but I do not think at present it is a practical question.

8435. It is rather a question of colleges of an inferior status, not merely extension colleges but colleges which have applied to this Commission for inclusion. Would you object to the inclusion?—I think some recognition might be extended to them, but the "Colleges of the University," as the Charter stands, means something very definite. If I may point out, there is this confusion about the word "Colleges." The word "College," with which we are dealing for the purpose of this charter does not mean the same sort of thing as a college at Oxford and Cambridge. With regard to these colleges, King's College and University College, I am speaking quite within the truth when I say that each is as much a University in itself as Owen's College was when it was constituted a University—more so in some respects. Therefore these colleges are colleges in a University meaning, but in the case of a college like some London colleges, doing most excellent and valuable work, but corresponding rather to hostels than institutions for regular University instruction——

8436. You had rather not give them a place?—I think we could do all that was necessary for them. We could give them recognition without calling them colleges of the University.

8437. Such as the Royal College of Science?—The Royal College of Science stands in a different position. Nobody could doubt that the Royal College of Science is equipped in the best possible manner. If it could be recognised as being under the control of its own governing body, it would have a distinct claim to be admitted into the charter as a college in the Faculty of science.

Rev. H. Wace D.D.

19 July 1892.

8438. You spoke of the failure of negotiations with the London University as being a proof that it was impossible to combine these two things in the London University. Was not that failure of negotiations due to the fact that you could not hit upon a plan which was satisfactory to both purposes. Does it lead you to the conclusion that if London University had been more pliable such a scheme was impossible?—I think it proves that they are not more pliable.

8439. Does it not show that during those two years the London University Senate made no scheme which was acceptable by the others who were interested?—The Senate did its best, and we, for our part, did our best. I do not think we are likely to be more successful in any other negotiations, especially after reading Mr. Busk's evidence.

8440. Do you feel any more strongly than the Bishop of London the difficulty of combining the functions?—I feel quite as strongly as he does.

8441. Not more strongly?—That would be difficult.

8442. The teaching University with purely examining functions ——?—That is another thing altogether. It is not impossible for a teaching University, with a strong teaching element predominant, to take over a certain amount of external work; but it is a very different thing to take an institution into the very bone of which it is bred that it shall be an examining institution for the universe, and to say you are going to turn that inside out, and say it shall be a teaching University.

8443. Then you think if the London University could make itself first and foremost a teaching University there would be no objection to its adding examining functions?—Certainly not if it could do that; but I do not think it could do that.

Adjourned to to-morrow morningat 11 o'clock.

Seventeenth Day.

Wednesday, 20th July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., M.A.
RALPH C. PALMER, B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

THOMAS BOOR CROSBY, Esq., M.D., F.R.C.S., examined.

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

8444. (*Chairman.*) You are here to represent Gresham College?—I am Chairman of the City side of the Gresham Committee, and I am prepared to state the resolutions of that Committee with respect to the new Gresham University.

8445. I think there are two sides to the Gresham Committee?—There are two sides: the Mercers' side, presided over by the Master of the Mercers' Company, and the City side. They elect a chairman annually. I happen to be the chairman for the present year.

8446. We should like to hear something about the origin and constitution of the Gresham foundation?—The secretary, acting for both committees, will give your Lordship the fullest possible information, much more ably than I can give it. I think I will confine myself, if your Lordship will allow me, to what has been actually done. On the 29th of January this year, at a meeting of the Grand Committee, it was resolved unanimously, "That this Committee are willing to co- "operate with University and King's Colleges, and "the medical colleges of the great hospitals of Lon- "don in the establishment of the proposed University "in and for London on the understanding that it be "called the Gresham University."

8447. Have you read the Charter which was drawn up in consequence, under the name of the Charter of the Gresham University?—I have.

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

8448. And do you approve of the principle contained in it?—I do.

8449. You think it is a good working scheme, and one which may be the means of providing a teaching University for London?—I do.

8450. There is no other scheme which you would prefer to that that has ever been before the public?—I am not quite prepared to understand the latitude of the word "teaching." Subject to my own explanation of teaching, it would be this: A teaching University like those of Oxford and Cambridge is absolutely impossible; but that the University which grants the degrees should be ably supported and managed by a committee of teachers is essential to the welfare of the students: a student should be examined only as he has been taught, and the proper estimate of his anwers to the questions should be represented by the teacher having something to do with the examinations.

8451. That is carried out in the main by the Gresham scheme?—That I see is foreshadowed by the printed Charter which I have in my possession—the original one—and that does not exist in the present University of London. I am an under graduate of the London University, and I shall be glad to see the London University made useful; but as a medical man I am bound to say it falls short of the requirements of the medical student.

8452. Did you see the draft scheme which was submitted by the Senate to the Convocation of the University of London?—I did.

8453. Did that fall short of what you would wish?—It did, somewhat.

8454. In fact of the two you prefer the Gresham scheme?—I prefer the Gresham scheme. It will take the students in and keep them in London, where the greatest opportunities exist for practical knowledge of medicine, surgery, and the allied sciences, and prevent them going to smaller towns like Edinburgh, Glasgow, and other places to get the degree of Doctor of Medicine, which they cannot get from the London University.

8455. I take it that you prefer this scheme even to the scheme which was submitted by the Senate to Convocation. Besides which we have no reason whatever to know that Convocation will ever change their views, and will even give you a scheme as much in accordance with your wishes as the draft scheme?—I would prefer the new University.

8456. I believe there was some further resolution of your committee besides the one to which you referred?—On the 1st July the committee considered as to giving evidence before your Commission, and resolved: "That this Committee is prepared to support "such an extension of the Gresham Charter as will "ensure the adhesion of the University of London to "such a teaching University for London as may be "established, and that Dr. Crosby, chairman of the "city side of the committee, and the clerk are hereby "authorized on behalf of the committee to give such "information and evidence before the Gresham Univer-"sity Commission as may be desired." That is the last resolution of my committee.

8457. Do you think that the Gresham Charter can be so extended as to ensure the adhesion of the University of London. Do you see any hopes of that?—I do not. I think the University of London is an impracticable body.

8458. And also they would not extend the Gresham Charter. They would have a scheme of their own?—I think that is wrongly worded. Unfortunately I was not present at the committee when that was drawn. The purport of it is that if we could frame a scheme or get the University of London to lower themselves from their stilts and make themselves useful we should not want a new University.

8459. They would have to make very great alterations even in the scheme of the Senate, if drawn up?—I will confine myself to my own profession, of which I have great practical experience. I know the wants of the students, and the expense to which the parents of the students are subjected, and to what loss to himself and to the world in which he is to practise the student is subjected by having to leave London and gain a degree in medicine when it might be provided here on a so much better foundation. I am not for lowering the standard of examination, but I am for making it accessible to the man of intelligence and moderate means.

8460. I will go to the question of the medical degree by-and-bye, but first of all I will ask you whether you think it would be possible for the University of London to meet your wishes and become a real teaching University for London, and, at the same time, perform its principal function of giving degrees to all comers throughout the United Kingdom?—Certainly. I conceive that we should have to do the same thing. We could not limit a University to people to be taught in one district. I do not see how that could be practicable.

8461. Not to a 15-mile radius of London?—I do not think it would be practicable. I think all who complied with our regulations as to Boards of Studies should be admitted, and, if found capable, should take the degree.

8462. Some alteration would be required in the Gresham Charter before that could be done. I think it is confined to certain institutions according to the Charter?—I did not observe anything in the Charter to that effect. It says in and for London, but it does not shut out Birmingham or Leeds, or Brighton, or any place from joining it.

8463. Then it would be your opinion that it ought to admit everybody?—That it ought to be made as wide and liberal and useful as possible.

8464. You see no insuperable objection to having two Universities in London?—I see none. I may take the present University of London as an Honours University, which it assuredly is, for more reasons than one. I would let it alone unless it would give a poll degree as well as its Honours degree.

8465. Now, coming to the medical degree which you were mentioning, you think that the present degree given by the University of London is not sufficiently accessible?—It is trammelled by too many things that are not absolutely necessary for the medical practitioner.

8466. It is not really that it is too high?—It is the time that it takes. The average medical pupil has not the time, if he has the intelligence, to go from the stepping stones one to the other, and right away along. It takes 10 to 12 years to gain the degree of Doctor of Medicine, from its starting to its end. The average medical student has not the time or the means.

8467. It is not to be inferred, on the other hand, that you wish to have too cheap a degree?—I would have quite as useful a degree as that of the University of London, at considerably less waste of time and expense.

8468. But a degree that would be quite as useful, you think?—Quite. I would knock out the Preliminary Scientific Examination to begin with. I do not see why a medical man should be a civil engineer as well.

8469. But still you would require a good general knowledge?—I would require a good general knowledge as well as that which is required for the Royal College of Surgeons; but I do not see why everybody should know the exact amount of carbonic oxide that would make an explosion in this room. That has nothing to do with the medical student.

8470. Do you think that if there were two Universities in London there would be a tendency to cheapen the degree by bidding against one another?—No. The degree is cheapened now by their getting a degree in the northern towns and out of England. I should have a reasonable degree for Bachelors of Medicine and Doctors of Medicine. I should have a degree of which they might be proud, and they would not have to leave our magnificent hospitals and go to little paltry hospitals to finish their education.

8471. Do you think a large medical representation on the Senate of the proposed Gresham University would have a tendency to make the degree too easy?—No. I think it would make it more difficult. They would always keep it up to a proper standard.

8472. In fact the medical element on the Senate would be just as anxious as any other element to keep it up?—It would be absolutely essential to keep it always *au courant* with the day.

8473. It would not have a tendency to cheapen the degree, but rather the contrary?—Rather the contrary. They would be anxious to keep up their own status and the status of their fellows.

8474. Are there any alterations in the Gresham Scheme which you would suggest?—No. I thought it

was an exceedingly good charter. I see there is a question on this paper with regard to the association of the examinations of the Royal Colleges with those of the University for degrees in medicine. It has struck me that that is a very useful thing to think of, whether those who have passed the minimum qualifications of the Colleges of Physicians and Surgeons, and who wish it, should not be after a little longer study, admitted for the examination for the degree of Bachelor of Medicine at the new University. That would meet the requirements of the medical students very widely and largely.

8475. You would be satisfied with the examinations of the Royal Colleges?—No. We should be satisfied with them for the preliminary portion. In the London University examinations it is the preliminary portion the trotting out portion, that we object to. It is not the practical portion. They have been told over and over again that their practical examination is not superior, but it is the scientific part that they bother the student with, instead of letting him be by the bedside of a patient, or in the lecture room. The Colleges of Physicians and Surgeons are legally entitled to qualify throughout Her Majesty's Dominions, but they do not give a degree in the shape of bachelor or doctor. If a further examination in this new University would give to those young gentlemen for a little extra study this degree, all the requirements of the medical student of to-day would be met.

8476. There should be a combination for giving a degree between the Royal Colleges, and the University, you think?—That would be an exceedingly good combination.

8477. They would co-operate together?—Yes, they would co-operate together.

8478. I believe at first they were utterly unwilling to come in at all, or to meet the advocates of the Gresham University. But you think if they were willing to come forward, something might be arranged?—I am not an authority on either of the Royal Colleges, but I think they were only desirous of getting this very privilege for themselves as far as medicine is concerned. They were ready to make application to do exactly as I am indicating to prevent the students going out of London to get their degrees. They were anxious to apply for permission to give this M.D. or M.B. degree, but it would come far better from any University like the Gresham University, or any other University that granted degrees all round.

8479. Are there any other remarks on the Gresham scheme that you wish to make, or any information you wish to give?—The information will be given by the clerk—complete information. He is much better informed on every detail than I am.

8480. Is there anything else you wish to say to us?—I earnestly hope that this University will be established. I think it will be a great public boon, and I hope that if your Commission is not met properly by the London University you will go on with it. It will be a valuable thing. It is essential for the medical students that the University of London should make its degree more easily accessible. I do not say a word about the examinations—the matriculation, the preliminary scientific, the intermediate medical examination, the first M.B. and the second M.B.; all these things are very well in their way, but they take up such a very great deal of time. Therefore I hope we shall have a new University giving quite as good a degree, but more easily accessible.

8481. (*Lord Reay.*) You would not object to the new University degree in medicine conferring a registrable qualification in the same way as the degree of the Victoria University confers a registrable qualification?—Certainly it should. If we take it for granted that the present system of the Colleges of Surgeons and Physicians were allowed to go on if they wished to be allied they would not want any further registering power than they have. The student would be already registered before he came up.

8482. Could you explain the divergence of these two resolutions. The first resolution of January 29th contemplates the Gresham University, and, if I understand it, it supports the Charter. The second resolution of the 1st of July 1892 only supports the Charter "in "case we can insure the adhesion of the London Uni- "versity." What adhesion of the London University? Of course, you mean that the new University would be amalgamated with the existing University of London?—The only explanation I can give to that is the construction of the words used by Mr. Balfour in reference to this Gresham Charter—that he would call for a new Commission with a view of seeing if the London University could not be accommodated. I am not sure whether I am right or not.

8483. (*Professor Sidgwick.*) Can you give us the exact words. What you have said is hardly in accordance with my recollection?—The words "to amend and extend" were stated by Mr. Balfour in the House of Commons as having special reference to the inclusion of the University of London in the proposed teaching University.

8484. You do not quote the words used by Mr. Balfour, and according to my recollection you do not accurately represent them. By whom was that document drawn up?—It comes from the clerk of the committee.

8485. (*Lord Reay.*) Does the second resolution mean that the existing University of London should be incorporated with the new University, and that the University then to be founded shall be called the Gresham University?—No, I do not think it does that. I was not present when it was drawn up. I was abroad. But I think that resolution, as I read it, is rather to get the London University to meet the wants of the students of the day, and then I imagine the Gresham University would remain in abeyance entirely. But I do not quite agree with that. I say go on with the new University; that is what is wanted.

8486. Then you do not agree with it?—Not unless the University of London came down from their stilts. I am sorry I used such a strong expression, but I will repeat it. Unless the University of London becomes very much wider and more liberal, they will not meet the requirements of the medical students of the day.

8487. (*Chairman.*) What is the governing body of the Gresham College? Who passed those resolutions?—The Gresham Committee consists of a committee of 12 member of the Mercers' Company and 12 members of the Corporation of London. In joint grand committee, they are the body which passed those two resolutions.

8488. Were they each of them passed unanimously? Yes. I am chairman of one half of that committee. My committee are anxious to make this as useful as they possibly can for the extension purposes for which the Gresham College was founded, and we thought if they give it the name we would help the new University as far as in our power lies.

8489. (*Lord Reay.*) Does the Gresham Committee propose to enter the new University as a constituent college. At present, you call yourselves the Gresham College?—Yes.

8490. Is it proposed that the Gresham College will in the new University have an independent corporate and collegiate existence?—No; because we are not a teaching college. It is a sort of post-graduate course, and it is not even a text-book teaching college. It has only certain subjects. The will of Sir Thomas Gresham is accurately followed out by paying lecturers to giving lectures on certain subjects. There are seven subjects. I have attended these lectures, and I think I may say that, for instance, the geometry lectures would not qualify for any University.

8491. The lectures are therefore, according to you, not all University lectures, but some of them are?—They are all on scientific subjects, but they are all at the will of the lecturer to please a popular audience. They do not complete a text-book of astronomy or a text-book of music. The lecturer takes his own subjects, what he thinks will amuse. They are not subjects which will pass any test examination for a University.

8492. Then the persons who attend the lectures do not pass any examination after they have attended?—None whatever. They are not intended for that purpose, and are not qualified to fit it if they were intended.

8493. Then what is proposed is that the Gresham Foundation should give part of its funds to the new University, and that the new University should appoint professors, who would be University professors, out of those funds?—No. As far as the Gresham Committee under the will of Sir Thomas Gresham have the power they will assist the new University, and as far as they have the power to do it they will give them the Senate

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

House, or lend it to them until they get one of their own. Following the instructions of Sir Thomas Gresham's will, I do not see how they can be fitted in as a teaching portion of the new University unless they are considerably altered. It might be done, but at present they are not fitted for it.

8494. But you contemplate that the new University could make this alteration so that the funds could be made serviceable for University purposes?—I do not know how that could be done. I do not think that could be done without altering the terms of Sir Thomas Gresham's will, which the Committee have no power to do. The bequest is made for the fulfilment of certain conditions. Those conditions are at present being fulfilled to the letter. I do not think we could do anything further. We are at the limit of our powers now, except that we have a suitable Senate House—a suitable building—called Gresham College which we could lend to the new University, or hand over to the new University to carry on its business until it got some other place more fitted for the purpose.

8495. Then what you could do to assist the University would be to place at its disposal a certain amount of what we may call educational plant?—Yes.

8496. But the lectures would have to maintain the popular character that they have now?—I am afraid they would. I am afraid we should not be able to utilise them to save any other teaching. And, indeed, I should go a little further than that, and say that the teaching will never be done in any Gresham University established. The teaching will have to be done as it is done now at University College, King's College, and the Medical Schools, and all the other institutions will have to be watched to see that they give proper instruction. Then after complying with certain regulations, the young gentlemen, when they are fitted for it, having attended so many lectures, will come up and say, "I am qualified for your examination." Some member of the other Commission saw the defect, which is very wisely provided for us in the Gresham Charter, that questions shall not be put that have not been taught. A committee of teachers should have the supervision of the questions, and should have a power of sitting with the outside examiner, and assessment of the character and quality of the answers given to those questions.

8497. Your lectures might be adapted to serve the purpose of University extension lectures?—Yes. I should think our professors would only be too pleased. You see they are men of high distinction. Now they have to fit the lectures for a popular audience, but then they would fit them for a more intellectual audience.

8498. Do you contemplate that change—that the lectures might be made useful for an intellecual audience?—I do.

8499. Therefore, it is not necessary that they should be adapted to a popular audience?—No, I do not think it is. We have to give lectures, and I believe and I hope that our professors would fall in with the desires and wishes of the committee on that point. We are anxious to do as much good as we possibly can.

8500. (*Professor Sidgwick.*) Will you tell us what the constitution of the committee is?—The committee for the management of the Gresham affairs is this. Sir Thomas Gresham left certain funds to two bodies, the Corporation of London and the Worshipful Company of Mercers, on condition that they followed out the instructions of his will. The Corporation of London appoint a committee of 12, and the Worshipful Company ot Mercers appoint a committee of 12 of their own body. These 24 gentlemen constitute the Gresham Committee, and they have the control and management of the affairs of the Gresham funds that were left them.

8501. Can you tell us what the funds are?—No, the clerk will give those particulars.

J. Watney, Esq.

JOHN WATNEY, Esq., examined.

8502. (*Professor Sidgwick.*) Can you tell me what the funds are at the disposal of the committee?—The funds at the disposal of the committee are the rents of the Royal Exchange and a sum of 500*l.* a year which is paid by the Government as the consideration for the purchase of the Gresham College in Bishopsgate Street in the early part of the reign of George the Third, 1767.

8503. How much does this fund amount to on the whole?—The rents this year are something over 19,000*l.*

8504. Then we may say that about 20,000*l.* a year is at the disposal of the committee?—Say 19,000*l.* a year.

8505. How is that now employed?—It is employed in keeping up the Royal Exchange and in keeping up Gresham College, including the salaries of the professors, keeping up some almshouses which Sir Thomas Gresham left, and certain other small payments for charitable purposes and paying off, so far as the city side of the foundation is concerned, a very heavy debt.

8506. How much is available for the purposes of the Gresham College?—There is nothing available.

8507. What I mean is how much can be employed annually, consistently with the carrying out of the other objects that you mentioned?—I do not think that any more than is already employed could be employed at the moment, because, as I have said before, there is a very heavy debt on the estate so far as the Corporation side of the estate is concerned which is being gradually paid off.

8508. How much is annually employed now?—On Gresham College about 1,400*l.* to 1,500*l.* a year.

8509. How much of that is spent in paying the seven professors?—700*l.* a year.

8510. 100*l.* a year each?—Yes, 100*l.* a year each.

8511. If we may look into the future do you think that a larger sum might be available for the purposes of University work if the scheme of combination is carried out?—There is a debt due by the Corporation of nearly 70,000*l.*, for which bonds have been issued by the Corporation, charged upon the Royal Exchange in the first instance, and charged upon the general estates of the Corporation in the second, and that debt will have to be paid off.

8512. At what rate is it now being paid off?—The interest is over 2,000*l.* a year, and probably about 3,000*l.* to 4,000*l.* a year is a sinking fund for paying off the debt.

8513. When the debt is paid off a sum amounting to about 5,000*l.* a year would be available?—I think I ought to say that the Gresham estates are vested in the Corporation of London and the Mercers' Company upon condition that they make certain payments and do certain things; and after those payments are made and those things are performed the property belongs absolutely to the Corporation and to the Company. I could not say what either body would do with property on which there is no trust.

8514. You mean 1,500*l.* a year is the sum which they regard as required to carry out the duties imposed on them?—That is the amount we find necessary for keeping up Gresham College only.

8515. You do not feel able to say whether the Corporation is likely, if the scheme of a new University is carried out, to give any portion or what portion of what may be available till the debt is paid off?—I could not answer that question. It would be a good many years before the debt is paid off, it would probably not be in the lifetime of a good many of us, and it is impossible to say, what our successors might be pleased to do.

8516. We may take it, then, that for the next 20 years or more the sum available amounts to 1,400*l.* or 1,500*l.* a year?—And any more which the committee think necessary to pay, subject, of course, to the obligations that they are under under the will of Sir Thomas Gresham, because the bond creditors are entitled to have their security, and the committee would only be able (I am speaking now of course only so far as the Corporation are concerned) to spend sufficient money to carry out the reasonable requirements of the college.

8517. Another point to be considered is how far the committee would practically surrender the appointments of the lecturers to the new University?—I cannot answer that question. The matter has never been considered. I can put in, if the Commissioners wish, the statement which I prepared in October 1885 for the use of the committee—of course not for this purpose at all, but for a totally different purpose—which states, so far as I knew then and also so far as I know now, the facts with reference to the Gresham foundation and which,

with the exception of course of bringing the matter up to the present time, so far as the rental of the Royal Exchange go, and the liabilities and Gresham Estate is accurate.

8518. The question I was asking rather related to what was intended in the combination of the new University—how far it was implied, that practically the appointments to the lectureships would be made by some University body?—That is a matter which the Gresham Committee had not considered, and it is a matter which I am not authorised to express any opinion upon. If your Lordship wishes I will put in the statement contained in a report by the City to the corporation *(handing the document to the Chairman)*.

THOMAS BOOR CROSBY, Esq., M.D., F.R.C.S., re-called, further examined.

8519. *(Professor Sanderson.)* You expressed the opinion just now, I think, that the period of medical education was very much too long as created by the system of examination of the University of London?—Yes.

8520. You spoke of 10 years as about the time that was required in order that a man might get a degree?—I believe that is the average time.

8521. Counting from when?—From the commencement of medical study after matriculation examination.

8522. From matriculation upwards?—Yes.

8523. I suppose we should all agree with you in thinking that it would be very desirable that it should be reduced considerably?—The student has settled that point already. He will not do it, and he goes elsewhere and reduces it.

8524. How long do you think a man might reasonably spend in taking the degree of Bachelor of Medicine?—The General Medical Council have now appointed, as you yourself know, five years as the minimum of medical study. I think an extra year should be taken by the student for his bachelor's degree.

8525. Six years altogether?—Yes, and during an interregnum of two years after that he should be able to go as house-surgeon in a hospital, or something of the kind, and take his M.D. degree, as is done at Oxford and Cambridge, the examiners being satisfied that he has kept up his knowledge.

8526. You object to the preliminary scientific examination as much as any other part?—I do. The chemistry is excessive. All the physical sciences are excessive. They are very difficult subjects, and the examiner is changed every two or three years, and there is a new code of examination.

8527. You do not object to the subjects, but to the extent of the examination?—I object to the extent of it.

8528. I suppose you agree that a very thorough study of physics and chemistry is very desirable?—Yes, I think it is desirable.

8529. Can you mention any degree in the United Kingdom which seems to you to correspond with what the degree in medicine ought to be, taking into account the time of study, and the character of the examinations?—I would prefer the degree of Cambridge, of which my son is a graduate. I prefer the mode of giving degrees there.

8530. Then you would approve of the adoption of a system in London which would create a degree similar to the Cambridge degree in standard?—As a medical man, I state with some authority that the standard of Cambridge is not one whit inferior to the London University, but rather higher; but Cambridge facilitates the student taking his examination piecemeal, as it were, whereas London says: "Unless you show a "competent knowledge in all these subjects you are "to be put back for a year."

8531. Is it really your opinion that the scientific training of a London University student is superior to the scientific training of a Cambridge student?—No. It is my opinion that the scientific training of the Cambridge student is the superior of the two, and the examination is facilitated by the division. For instance, a student will take his first half of the second M.B. after he has worked well at anatomy and physiology. Then he will take the practical subjects or the other half of the degree afterwards. London University errs, in my opinion, in compelling the student to take all the subjects up at the same moment, and if he happens to forget a little portion of one of them, even if he should be extra good in the others, it does not compensate. There is the pitfall that the London examination subjects the pupils to.

8532. How long do you think a man spends in the study of science at Cambridge? I should ask you if you know of your own knowledge?—I take the first M.B. of the University of Cambridge as a very excellent examination to meet all the requirements of physics and biology that you have expressed.

8533. It comes to three years for scientific, and three years for practical, does it not?—Yes, and then if he takes his B.A. and the M.A. degree it comes up to the 10 or 12 years of the London University. But he gets the B.A. or the M.A., and he gets the academical life.

8534. What is your principal reason for wishing for a change? I mean in what way do you think the new University will most conduce to the improvement of medical education?—That is already answered by the migration of the students at their third year from our London schools to Edinburgh, Glasgow, and Aberdeen, wherethey have a residence of one ortwo years. They go say, from St. Bartholomew's Hospital withthe shoals of opportunities of information that they have there to a small hospital, because they get their degree in a year or two, and they get their Bachelor of Medicine for the same examination that they get the license of the conjoint colleges for. It is not a bit harder or a bit worse for them and they go down to the country as masters of surgery and bachelors of medicine, whereas our young men who stop in London, with all their practical information, only get their membership of the College of Surgeons and the Licentiateship of the College of Physicians. Then they go into the villages in the country with the title of "Mr.," while the others call themselves "Dr." It is the crying evil of the day, and it ought to be altered.

8535. May I ask what your opinion is as to the clinical practice at Edinbugh?—I believe it to be an excellent institution, but the student who goes there to see one patient where he would see four in London. We have four or five times the amount of clinical work in London for every student to that in Edinburgh.

8536. Then you say you think Edinburgh is inferior in information?—For the information that is most essential to you and to me when we are ill—bed-side information, most decidedly.

8537. Do you think that is an opinion which is largely shared?—Yes, it is the opinion to-day of the medical students, and those who have been medical students.

8538. *(Mr. Rendall.)* The Gresham professors, I understand, receive 100*l.* a year each for salary?—Yes.

8539. To whom are those professors responsible?—They are responsible to the committee who elect them.

8540. Do the committee undertake any sort of direction or supervision of their work?—Yes.

8541. Do they get reports from the professors?—The committee attend the lectures and see whether the lectures are really suitable to the public who attend them. They have no supervision after the lecturer is appointed, except recently over those professorships which have become vacant in the gift of the city side; now the city side elect them annually, so that if we did not think they did their work according to our wishes they would be subject to non-re-election at the end of the year.

8542. The election is for a year, and if the Committee are satisfied, the professors are re-elected?—Yes.

8543. What numbers are there of the committee?—There are 12 on the city side, and 12 on the side of the Mercers' Company—24 in all.

8544. Do a large part of that 24 take an active interest in this particular part of the work?—I believe they were nearly all present at the passing of the first resolution. At the passing of the second resolution I was abroad, so I cannot tell.

8545. I mean rather with regard to the question of watching the work of professors and selecting professors?—Yes. It is often a very close election, and I may tell you that the committee make a selection of a few out of probably a great number of candidates who give a test lecture which the committee attend to find

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

that a candidate is capable of lecturing, and to see the way in which he lectures.

8546. Do you know if it is within the powers of that committee to depute the administration of the funds or the direction of the lectures to another body?—I believe not. I should say that we have followed the instructions given in the will as closely as they could be followed.

8547. And in case of their endeavouring to co-operate with the University they would not be able to hand over, even for a term of years, any part of the funds?—Not without the consent of those who are appointed lecturers.

8548. Do you think it is within their constitutional powers?—I could not answer that question. I think not.

8549. Has it been discussed in connexion with those resolutions that they passed? Did they think over that possibility?—I believe we have thought over that possibility. I think I answered the question of the Chairman that the lectures at present given are not adapted for teaching purposes.

8550. But I think went on to add that they might be?—Yes, but that would be as a superior course, but not in the text-book course to qualify for the Intermediate Examination or Pass Examination. They are not Pass Examination lectures.

8551. But, as far as you know the feelings of the committee, they would not think it right to depute the direction to another body?—As far as I know the feelings of the committee they are anxious to do all that is possible to utilise their present institution for a new University.

8552. They would even surrender some of their rights, would they?—They would do everything they could to facilitate what was considered to be an improvement on the present system if they had the power to do it.

8553. (*Mr. Anstie.*) I understood you to say that the universal opinion of the medical students of to-day was unfavourable to what you have described as the excessive demands of the University of London?—Not the universal opinion.

8554. Do you wish to qualify that?—Yes, I should say the general opinion. I should not wish for those distinguished young men who have got the degree to be called upon to suffer by having the degree lowered. If I said "universal" I withdraw the word.

8555. Are you aware that not long ago a very largely and very influentially signed petition was presented by the London medical students to the University of London asking that what you have described as excessive requirements might not be diminished?—I am quite aware of that. Perhaps it was because they had been able to pass.

8556. It came not from those who had passed, but from students?—From those who had passed any portion.

8557. I do not know whether they had passed any portion, but it was from the students of the London schools?—I knew there was a petition.

8558. (*Mr. Palmer.*) First of all, one word about the resolutions. The first resolution, at the passing of which you were present, I think indicated that Gresham should be as a centre University round which the affiliated colleges were to be grouped?—Yes, that was the feeling.

8559. You were not present at the passing of the second resolution where the words "the adhesion of the London University being secured," were inserted. Did not that simply mean that Gresham might be prepared to abdicate that central position in favour of London, provided that London's adhesion should be satisfactorily secured to the teaching University?—I read the resolution to mean if the London University would meet the requirements there would be no necessity for a new University.

8560. It meant that Gresham might abdicate in favour of London, nothing more than that?—Nothing more than that. No new University would be required if the London University could meet the present requirements.

8561. Now there is another point in your evidence that I should like to call your attention to. That is with regard to Clause 27 of the Gresham Charter: "The London district for the purposes of the University shall be the administrative county of London, "including the county of the city of London." That restricts to collegiate institutions in the London district?—Yes, but my reply to his Lordship was that we should not restrict any person who had gone through our curriculum, whether Brightonian, Eastbournian, or wherever he came from.

8562. But he would be bound to be in a London college?—Yes. I should not even limit it to that, but at the same time perhaps that would be as well.

8563. Now, one word as to the funds. The funds of the Gresham estates are not applicable under any trust, or anything of that kind for general University purposes?—Certainly not.

8564. There is no money belonging to the Gresham institution that is available for University purposes?—All I can think of that we have to offer the University for giving the name of Gresham to it is the use of our building for a Senate House.

8565. (*Chairman.*) You said that there would be a possibility of it, perhaps, at any rate that you would not object to the transferring of the professors?—If it could be done, I would not object to that.

8566. (*Mr. Palmer.*) But there is no money under the Gresham foundation that is applicable?—None.

8567. And any money to be raised would have to be raised voluntarily in some other way?—Yes, from the fees of the students or a grant from the State such as the London University receives at the present moment. Something in a similar form to that.

8568. One word more as to improvements. The Gresham Committee since the year 1857 has made many efforts to improve the Gresham lectures?—Undoubtedly. They were utterly neglected at that time, and now the theatre is filled.

8569. In 1857 there was a report of Mr. Martin on the part of the Charity Commission, and between 1876 and 1887, in the three reports presented to the city side, there were efforts on the part of the Gresham Committee to improve the lectures?—To improve the lectures, and to make them instructive and fit for the public. The public are the best judges; now they go, and before they did not go.

8570. Now the committee would be disposed to co-operate in every way for utilizing the Gresham lectures for University purposes?—We are prepared to do all we can for the administration of the Trust in the best and most useful manner possible.

8571. On the educational side?—Yes.

8572. (*Sir George Humphry.*) I think I understood you to say that you did not wish the degree of medicine to be given to medical students upon the same terms as the license. You wished that there should be a difference?—I quite understood that.

8573. And that is the general feeling, I believe, you would agree, of the medical profession?—That is the general feeling of the medical profession.

8574. That it should not be given simply as the result of the licensing qualification of the Colleges of Physicians and Surgeons?—No; that they should undergo a separate examination, and a separate course of study—something in addition to that.

8575. Then the point is in what direction should that addition be made? Is it to be made in the direction of general and scientific examination, or in the direction of practical education?—I think it should be made in the direction of practical and useful education.

8576. I think it is admitted at the present time that the practical examination of the University of London is very good?—In the report of Mr. Macnamara to the General Medical Council three or four years ago he very severely criticised the examination for the Bachelor's degree at the University of London.

8577. Then do you think there should be some extra general and scientific education for a medical degree. Should not a degree indicate something of scientific knowledge above that which is required for licenses?—Then, you see, that is just the drawback which would prevent what I wish. I wish to prevent the student migrating elsewhere, where he escapes that extra trouble.

8578. But still you would rather, I think, that there should be a higher grade?—I would, and I sent my son to Cambridge; others send their sons to London. That would always be distinct.

8579. There should be a higher grade of general education to begin with?—Yes.

8580. Would you object to their passing such an examination as the Matriculation Examination of the University of London?—No.

8581. Then your objection would be to the preliminary scientific?—That is my objection.

8582. And your objection there is not to the quality of it but to the quantity?—Yes.

8583. Your view corresponds, I think, precisely with that of the members of the last Commission—that the examination for the M.B. Degree should not be so much an honours' examination as it is; that the Matriculation Examination should be required; but that the Preliminary Scientific Examination might be dropped or altered?—That would facilitate matters enormously.

8584. I suppose we may hope that some such climbing down, as it has been called, on the part of the University of London might be obtained?—I hope so. I am an undergraduate of the London University, and have the highest esteem and respect for it, but it is not the University for the people now.

8585. If the London University could be made conformable to the requirements you would on the whole prefer that there should be one London University than that there should be two?—It would be better on the whole.

8586. I think you said or intimated that first an effort should be made to render the London University conformable, and in case of that failing then you would fall back upon the Gresham University?—That would be my view.

8587. You have said that you think the examinations should be quite open to the world?—I think so, provided they have undergone the necessary teaching instruction.

8588. You are aware that in the Gresham Charter it is not quite open?—I think the gentleman on your left corrected me, and said that it was the teaching department—that they were only to come from certain parts of the University. I should leave it open and let them come from Dan to Beersheba so long as they showed the University that they had received proper instruction.

8589. But you do not think it proper that the provincial schools should be shut out?—No, it is an advantage to them as it would be to the London schools.

8590. And on the whole the relationship that it was proposed the Colleges of Physicians and Surgeons should bear to the University of London under the scheme of the Senate would meet your views?—Quite.

8591. I suppose in due time, though as you have said probably not in your lifetime, greater funds will accrue to the Gresham College?—When the proportion of the debt that the City owes still for the rebuilding of the Royal Exchange is cleared off more money will come from the Gresham estate; but what the Corporation will be disposed to do with it then if they have the power I do not know.

8592. Has it occurred to you that it might be a good employment for funds of that sort to institute in the city of London a college for general education corresponding with King's College and University College; that there should be such a college in London as well as in the Strand and in Gower Street?—That is almost met by the City of London School. I had something to do with the physical and chemical laboratories there, and I think the teaching is excellent. It would be almost met by that, and King's College and University College are so near. No, I think not. Space is so expensive that I do not think anything of that sort would be useful.

8593. The teaching of the City of London School is largely open to the youth of the City of London, is it?—It is open to the whole of London.

8594. You spoke in complimentary terms of the University of Cambridge, and you have spoken in rather derogatory terms of the University of Edinburgh?—I have only spoken of the University of Edinburgh on facts which are known to everyone—the size of the infirmary compared with the number of students. I believe those are well known.

8595. As regards the teaching of the University of Edinburgh it is perhaps equal to that of any in the world?—I have not said a word against it; I could not say a word against it. I have not even mentioned the fact of teaching. I spoke with regard to accommodation. I believe the teaching of the allied sciences is as good at Edinburgh as it is at Cambridge itself.

8596. And the drawing of students to Edinburgh is not for the purpose of getting degrees, but for the purpose of getting education?—There I should differ from you. The drawing of students to Edinburgh is not for the facilities of getting knowledge, but for the facilities of getting a degree. I am speaking of the drawing of London students to Edinburgh.

8597. You would not say that that is quite the case, would you? You quite agree that a very large number of students go to Edinburgh, being attracted there by the great reputation of the teachers, and the great reputation of the University for teaching?—Then I take it that they start there and finish their curriculum there. I assume that they start with that view and begin at Edinburgh, and consequently take the degree as a matter of course. But my evidence is mainly directed to the prevention of our students who start, say, at St. Thomas's Hospital here, and get their minimum qualification, wanting a degree, then going for an extra year or two to Edinburgh for residence, which entitles them to get it.

8598. But the number who do that is not great, is it?—I believe it is a considerable number. You may have statistics, but I am not provided with them.

8599. We have had one or two gentlemen here, but they seem to think that not so many commence in London and go to Edinburgh?—I am influenced a good deal in what I have said by remarks made by Sir Andrew Clark to a meeting of the British Medical Association, at the Jermyn Street School of Mines, on this very question of the London student migrating from London for the purpose of getting degrees. I have not made myself master of statistics.

8600. I could not learn from the gentlemen who have been examined before that it was a great number, and on the whole it seems to be granted that the students go to Edinburgh both on account of the teaching and education there, and the cheapness of living, and the benefit of being associated with hard working men into whose company they are thrown?—I am one of those who would rather have a medical man who has been taught with four or five patients round him than one who has been taught with three or four students round one patient. The means for practical instruction for practical physicans and surgeons, such as are wanted in England and abroad, are four times as great in London for the students as they are in Edinburgh, Aberdeen, or other plases. I do not say Edinburgh alone.

8601. For instance, Glasgow, what do you say as to the number of students and the number of beds, as compared with the number of students and the number of beds at some of the hospitals in London?—I believe the comparison is in favour of a London student having more practical instruction than even a Glasgow student. Take Sir Andrew Clark's own words, that probably even at the Glasgow Infirmary the London student has four beds to one there.

8602. I find that some of my students go to Edinburgh because they think they are well taught there, and I find that a considerable number of assistants are drawn from Edinburgh?—I am only speaking as a practitioner of some years' experience of students and otherwise. I am speaking of what occurs to my mind. I have not statistically gone into it probably as much as you have.

8603. (*Professor Ramsay.*) I think you have virtually corrected a statement you made a short time ago in reply to Sir George Humphry. Your statement was, I think, that every student in London sees four clinical cases for one case a student in Edinburgh sees?—That is what I believe it to be on a rough average. I should not like to be pinned down too closely. I took the statement that came from the President of the Royal College of Physicans himself.

8604. There were two very different statements. What is the size of the smallest of the London hospitals where there is a medical school?—I think the statement that was made was, that taking the average number of medical students on the register——

8605. That is not quite my question?—I am not sufficiently *au fait* with the new schools that have been

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

started. I am an old practitioner. I should not be able to answer that question.

8606. There are hospitals in London whose schools are smaller than the schools attached to other hospitals?—Yes, Charing Cross and St. Mary's.

8607. Are you able to say what the proportion of beds is in those hospitals in relation to students, comparing them again in the same respects with Glasgow or Edinburgh?—I am not acquainted with it.

8608. You are not acquainted with the amount of clinical material that there is in Glasgow, are you?—Only from the general statement.

8609. Your statement was that a medical student in London sees four clinical cases for one that he sees in Edinburgh?—Yes, that I believe to be the case.

8610. Then I understood you afterwards to change that remark into this form—that there are four students round one case in Edinburgh to every single student round a case in London. Those are totally different propositions?—What I meant was this: there is four times the amount of clinical material given to a student in London that he would be able to get at the other University.

8611. Four times the information to be given to the student?—That he would have the opportunity of using. You must not confine yourself to the plain simple school of medicine. There are plenty of large infirmaries and institutions all round London which are made available for medical students for special things.

8612. But is it not a fact that the medical student, as a rule, for the greater part of his experience confines himself to his own hospital?—It is so.

8613. Then a large amount of the clinical material is not used?—Not so much as he might use it.

8614. When you spoke about the amount of information available did you mean to say that the number of students round a bedside in cases in Edinburgh is too large for proper teaching?—No. That would be making a charge against the University of Edinburgh. I do not mean to say that, but I mean to say, as a rule, a man goes from an ample field of clinical instruction to a narrow field in clinical instruction. That will define what I mean.

8615. Did you mean to say that the amount of clinical material that a student gets in Edinburgh is grossly insufficient?—No, I did not say that. It is sufficient for his examination purposes, but it is not so great as he gets in London. He goes from the greater to the less.

8616. And it is only one-fourth, you say?—I have not looked up the figures, but, as far as my memory serves me, it is something like that. Taking the number of registered students in Edinburgh and the number of registered students in London, and taking the number of registered beds in London, and the number of registered beds in Edinburgh, at all events in general principle, I say that the clinical instruction for the student in London is considerably greater than it is in other places, and that the migration of the student from London is for the sake of getting a Bachelor's degree on easier terms than he could get it in London.

8617. In short that the amount of clinical instruction on the average that each medical student receives in Edinburgh or Glasgow is less than he receives in London?—The opportunities.

8618. But there is no good in having opportunities if they are not used. I am asking about the amount of clinical instruction he gets, and I ask you—will you commit yourself to the statement that it is four times as much in London?—No; you cannot compare habits of observation, and so on. A good student will see more in some cases than in others. I am speaking of opportunities.

8619. Then I think it is very difficult to say exactly what your statement comes to?—My statement is simply this, that the London medical student migrates to places where he has the facility of getting a degree in medicine, and he leaves opportunities of clinical instruction behind him which are much greater than those that he seeks. He goes mainly not for clinical instruction at the new place, but for the possibility of getting a Batchelor of Medicine degree.

8620. But you do not assert that the student who remains in London gets four times as much clinical instruction as the man gets who goes away?—I say they have the opportunities. It would be impossible for me to make such a broad assertion as that, because I could not prove it.

8621. You have in fact no information about the number of beds in Glasgow, Edinburgh, or Aberdeen?—No.

8622. (*Professor Sanderson.*) I want to correct an apparent contradiction in what you said to Sir George Humphry. Speaking of the Preliminary Scientific Examination you said to me, I think, that you approved of the corresponding examination at Cambridge, viz., the first M.B. examination?—Yes.

8623. And that examination is in chemistry, physics, and biology?—Yes.

8624. The London preliminary scientific examination is in chemistry, physics, and biology?—Yes.

8625. You said you wished the London examination to be abolished, although you approved of the Cambridge examination?—No, I must qualify that further. I agree with Sir George Humphry that it is a necessary thing to have a high degree. At present London, Oxford, and Cambridge are high scientific degrees. They are too high for the average medical student who goes elsewhere for a degree. I approve of it most certainly.

8626. I think you said that if we had in London a degree in London of the standard of the Cambridge degree it would be such a degree as you would approve of?—Yes.

8627. For the Cambridge degree, the preliminary examination in the sciences I have mentioned, chemistry, physics, and biology is required, it is of the same character as the preliminary examination in science in London?—Yes.

8628. Why do you object to the preliminary science examination in London and approve for the same purposes exactly of the first M.B. examination in Cambridge?—I approve of the thing, but I do not recommend it, and I should not recommend it in a larger University, because you would then be creating the same difficulty as exists at the present University. I would not make it imperative.

8629. I thought you told me a short while ago that you considered if we had in London a system of examinations for medicine similar to the Cambridge system that would be satisfactory?—It would facilitate matters very much by allowing a student to take it in terms, and divide it as Cambridge does. That would facilitate matters very much as compared with what the London University at present permits. It would make the degree an easier one to take step by step.

8630. What I want to find out is whether you admit that the system of examination at Cambridge is a satisfactory one for the ordinary purposes of a degree?—It is a very good degree. It is as good a degree as you can make it. I think comparing it with London the Cambridge degree is as good as the London one. But I am not wishing to make the degree of the Gresham University equal to Cambridge, Oxford, or London.

8631. You think the Cambridge degree would be too high for that?—Yes, for the Gresham degree.

8632. I understood you to say before that you considered the Cambridge degree might serve as a pattern for the Gresham degree?—On the same plan of examination, certainly.

8633. But you still think the standard too high?—I still think the standard a very high standard.

8634. Too high for good education?—I would not say too high. I think there should be a general facility for the students getting a degree. The examination should not be made too high in the preliminary subjects.

8635. You do not wish a scientific preparation for medicine. Is that what you mean?—Yes, I wish a scientific preparation for medicine, but not an extreme one as for a Master of Arts degree.

8636. You do not think the Cambridge too good?—The Cambridge blocks out a good number. I daresay Sir George Humphry will tell you that.

(*Sir George Humphry.*) A great many.

8637. (*Professor Sanderson.*) Do you think a great many stumble over it?—I do. I do not think the Gresham University should emulate Oxford, Cambridge, or

London in that way. It should give them a good degree, but at the same time it should not emulate those, or why have a new University at all?

8638. Then is it to have a lower standard than any other?—I should make it as high a standard as the Edinburgh University to begin with.

8639. (*Professor Ramsay.*) You spoke about being perfectly ready to see all students coming from Dan to Beersheba?—Yes.

8640. But your main desire was that students should not go from London to provincial colleges?—I should not go from large clinical instruction to small clinical instruction, put it wherever you please.

8641. (*Mr. Anstie.*) Am I right in saying that you said five years were now required by the Medical Council, and you thought another year should be added so as to have six years for the Bachelor of Medicine, after which a man should be at liberty to come up and take a doctor's degree at any time?—Yes, that he should be able to go on practising after the six years.

T. B. Crosby, Esq., M.D., F.R.C.S.

20 July 1892.

8642. You adhere to the six years for the degree?—Yes. I will not say the exact amount, but equivalent to the amount in work. I would accept that for the degree he should have to do something extra to that which he would have to do for the minimum qualification.

8643. That the new University should impose?—Yes, that he should have to do something extra beyond what is required for the qualification. What that extra might be would be for the Senate to determine.

8644. But you adhere to the six years?—Yes.

The witness withdrew.

JOHN WATNEY, Esq., recalled; further examined.

J. Watney, Esq.

8645. (*Chairman.*) You are Honorary Secretary of the City and Guilds of London Institute for the advancement of technical education?—Yes.

8646. Will you give us some information about the foundation and objects of the Institute?—The Institute was founded in the year 1877, when a few of the Livery Companies of London formed a committee which was presided over by Lord Selborne to consider the best means of improving the technical knowledge of those engaged in the manufactures of this country, whether as principals, managers, foremen, or workmen. The Committee consulted the present Lord Armstrong, Mr. Bartley, Major-General Donnelly, the present Sir Douglas Galton, Professor Huxley, and the present Sir H. Trueman Wood, and submitted to the companies whom they represented a scheme for furthering the objects by the establishment of what is now known as the City and Guilds of London Institute.

8647. What were the companies?—There were about 15. The Institute was registered under the Companies Acts on the 9th July 1880, and the Memorandum of Association sets out the objects for which it was established. The objects are: "(*a.*) To promote the applications of science and of art to productive industry, and for these purposes to found, establish, endow, maintain, and conduct, in or near the City of London, a central institution, and by means of this central institution, and of lectures delivered, and classes and examinations held thereat, or by such other means as the Institute think proper (including, where it may appear necessary, instruction in handicrafts), to train teachers in such applications, to promote the technical education of persons of both sexes engaged in the industries and manufactures of this country, and to provide instruction in such sciences and arts as are ancillary to those industries and manufactures, or any of them. (*b.*) To found, establish, endow, maintain, and conduct in London or in any towns or places in the country, trade schools, and by means thereof, and of lectures delivered, and classes and examinations held thereat, and of technological or other examinations and of exhibitions, or by such other means as the Institute think proper, to promote the objects and provide the instruction herein-before mentioned. (*c.*) To promote, support, or assist, either as branches of or independently of the Institute, any other society or institution having objects similar to any of the objects of the Institute, as mentioned in clauses (*a*) and (*b*) of this paragraph, either by loans or gifts, or by arrangements for mutual co-operation or otherwise; or to affiliate or unite with itself any such society or institution upon any terms that may be considered desirable, and either with or without the purchase or hire of any property belonging to the society or institution." Then there is a clause empowering the Institute to form and maintain museums, collections &c.; to accept gifts; to acquire lands; to erect buildings; and to do other things incidental or conducive to the above objects.

8648. What is the constitution of the institute?—The Governors of the Institute are *ex-officio* the President and Vice-Presidents of the Institute (the President is the Prince of Wales, and there are six vice-presidents); the Lord Mayor, six Aldermen, and the Recorder of London, and 12 members of the Court of Common Council from time to time appointed by the Court; the President for the time being of the Royal Society; the President for the time being of the Institution of Civil Engineers; the President for the time being of the Chemical Society; and the Chairman of the Council of the Society of Arts, or, as the representative of any of these last four persons in his absence, his last living predecessor in the same office. The representative governors are—(*a.*) The Master, Prime Warden, or one other appointed member of each Livery Company of London giving an annual subscription of 50*l.*, or a donation of 500*l.* to the general funds of the institute, or for any special object approved by the Council of the Institute, and an additional representative of each such company for every further annual subscription of 100*l.*, or donation of 2,000*l.* (*b.*) An additional representative of the Court of Common Council, from time to time appointed by that Court in respect of an annual subscription of 2,100*l.*, and of every further annual subscription of 100*l.*, or in respect of a donation of 42,000*l.* to the general funds of the Institute, or for any special object approved by the Council of the Institute, and of every further donation of 2,000*l.* Then there are subscribing governors, namely:—Every Liveryman of the City of London from whom an annual subscription of 50*l.* or a donation of 500*l.* to the general funds of the institute, shall be accepted by the council.

8649. How is the business carried on?—The Council consists of the President and Vice-Presidents; the four Heads of the scientific institutions I have mentioned; the Lord Mayor; four members of the Court of Common Council; and members appointed by the Companies in respect of the donations or subscriptions which they give.

8650. How many does that consist of?—There are about 350 governors and about 80 members of the Council; then there is an Executive Committee formed out of the council. The Executive Committee numbers about 50 members, who are appointed very much in the same way as the Council, only in smaller number, the President and Vice-Presidents; the four Presidents of the Scientific Institutions; and the Lord Mayor being *ex-officio* members.

8651. How many in number?—About 50.

8652. And they do the real work, do they?—Yes, they do the real work. There are four sub-committees of the Executive Committee; one sub-committee has charge of the Central Institution in South Kensington; the second has charge of the Finsbury Technical College; the third has charge of the South London School of Technical Art in Kennington Road, and is also the Finance Committee; the fourth has charge of the technological examinations. These four bodies practically do the work of the Institution. They bring up reports to the executive committee which are considered, or rather their resolutions are read to the executive committee, and the executive committee deal with them, and they then go on to the council.

8653. What is the income of the institute, and from what sources is it derived?—The income for the year 1891 was 22,715*l.* from subscriptions of Livery Companies, and 8,225*l.* fees from students, and other sources.

8654. Then the sources of income are subscriptions and fees. There is no endowment?—There is no endowment.

8655. And there is no certainty that it might not fall to the ground if you did not get subscriptions. It

J. Watney, Esq.

20 July 1892.

is entirely dependent on voluntary subscriptions?—Yes, entirely.

8656. These companies that started it do not give anything as companies, do they?—They give so much a year. Each company contributes so much a year during pleasure. Those grants might be reduced or withdrawn any year.

8657. What means does the institute employ to carry out its object?—By establishing, maintaining, and conducting technical colleges and schools in the metropolis; by conducting technical examinations on similar lines to the science and art examinations throughout the country, and by grants in aid of London and provincial institutions. I do not know whether your Lordship would like me to give you any figures?

8658. I do not know that we care very much to go into particulars. Your principal institution is the advanced college at South Kensington, is it not?—Yes.

8659. Well, give us a few details about it?—The land on which it is built was granted to the Institute by the Commissioners of the Exhibition of 1851, upon condition that a certain sum was expended in building, and that 5,000*l.* a year was expended in giving instruction in the Institution.

8660. The site could be withdrawn from you at pleasure, could it?—No; the site is for a very long term of years, and it can only be withdrawn from us if we cease to carry on a technical college there at a minimum expense of 5,000*l.*

8661. How many pupils have you there?—Accommodation was provided for about 200 regular students, and the actual number in attendance at the present time is 183. The college has been open eight years.

8662. What is the nature of the instruction. Is it chiefly lectures?—Lectures and laboratory work. There are 64 students in the department of mechanical and civil engineering, 85 electrical engineering, 11 chemistry, and 25 special students. In addition to that there are about 200 other students who attend lecture courses, courses for elementary teachers in woodwork, and so on.

8663. Do any of your pupils go from you to take degrees in science at the London University?—A few. We give a diploma at the end of a three years' course.

8664. Merely saying that they have attended, I suppose?—Saying that they have attended and passed satisfactory examinations and are entitled to the diploma of the institute under the Articles.

8665. Have they to pass an examination for that?—Yes.

8666. In science?—In whatever their course is.

8667. How many different courses?—There are three courses and mathematics which is common to all three.

8668. You give diplomas for that number of years attendance and an examination passed in these different subjects?—Yes.

8669. Are the diplomas much sought after? Are they useful to students in after life?—The institution has only been going on for eight years, and it is only about five or six years since any young man went out of the institution; but still the diplomas are of very great use, and we find that the students, so far as there has been an after life for them, have done remarkably well.

8670. Then besides the advanced school, you have a technical college at Finsbury?—Yes, that is an intermediate college, not of so high a rank as the college at South Kensington, and there during the last session were 195 day students, and about 1,100 evening students.

8671. Are they taught the same things?—They are taught the same things only in a lower stage. They are not so far advanced.

8672. Are they younger?—Yes.

8673. Do they receive diplomas too?—They receive certificates when they go through a two or three years' course, but of course those certificates are not of the same value as the diplomas.

8674. The two institutions have no connexion have they? You do not pass on pupils from Finsbury to South Kensington do you?—Yes; it is desirable if a young man is going to make his way in the world, in electrical engineering, for instance, that after passing through a course at Finsbury he should go to the central institution for two or three years and pass through his course there.

8675. But a great number finish at Finsbury and do not go on to South Kensington. Is not that so?—A great many finish at Finsbury and go out into life in one way or another.

8676. Besides that there is the South London School of Technical Art?—That is an Art School which is a much smaller affair. All I need say about that is that the gold medal and 200*l.* travelling studentship of the Royal Academy have been won by students in that school in four out of five competitions which have been held since the school has been established. I mention that to show the school is doing good work.

8677. How many students does that consist of?—On an average about 150, my Lord.

8678. Do the buildings at Finsbury belong to you?—The buildings there are held on a long lease. They cost us about 25,000*l.* to build, and about 15,000*l.* to equip.

8679. How many can they accommodate?—About 200 day students and 1,100 evening students.

8680. Then to go back to the school of technical art and the buildings?—We have two leasehold houses in the Kennington Park Road which are held, I think, on a 21 years' lease. We did not build those. We found them and adapted them.

8681. That is the South London School of Technical Art?—Yes.

8682. Have the Council of the Institute expressed any opinion with regard to the establishment of the proposed new teaching University?—I think I should say as to that that the council has hitherto taken no part in the endeavour to establish a teaching University for London. They were not asked to give evidence before the former Commission and they have not expressed any opinion on the Gresham Charter, nor on any of the other schemes that have been put forward. I was desired to state to the Commission that no authority has been given to any person other than myself, to give evidence before the Commission on behalf of the institute, or to express any opinion on behalf of the institute on the subject which is now before the Commission.

8683. Are you entitled to represent them in any way on this question?—I am here to give information and to answer questions that may be put.

8684. But you cannot give any opinion on behalf of the council, can you?—I will proceed to say what the council think if your Lordship will allow me. They think it desirable that there should be only one University for London, and that that University should be more closely connected with the teaching institutions of the metropolis than is the case with the present University of London.

8685. They would prefer one to two?—Yes, they would prefer one to two.

8686. Have you seen the scheme proposed by the Senate to Convocation, which was rejected by them? Would that meet the views of the council?—The council have not considered any scheme.

8687. Do the institution see their way to co-operating with, or forming part of, any teaching University which might be established?—That is a matter also which the council have not considered. They would be very willing to consider any question which your Lordship might put to them on the subject of the inquiry which is now being made; but they have not yet made up their minds whether or no it would be desirable in the interests of the institute to form a constituent part of a new teaching University for London.

8688. I suppose it would be almost an insuperable obstacle to their being a constituent college that they depended entirely upon subscriptions which may fail them in any one year? That would prevent their becoming a college?—That is so.

8689. But I gather that they are favourably inclined to the establishment of a teaching University for London?—Yes.

8690. But they would rather that the existing University of London was made the means of carrying this out?—Yes, I believe that it so.

8691. Failing the University, either because their Convocation will not agree to the scheme or because the scheme proposed by the Senate itself was not sufficient to meet their wishes, would they be inclined to fall back upon the Gresham scheme?—I think they probably would. It must be a *sine quâ non* if the Institute comes into any scheme of the University that there should be a Faculty of applied science in it.

8692. Do you mean there would be a separate Faculty of applied Science, as distinct from science in general?—Yes.

8693. Would not the Faculty of Science comprise the other?—No.

8694. You think it would be necessary to have a distinct division?—Our work is all applied science and not pure science.

8695. I suppose they have not got so far as to have looked through the Charter of the Gresham University?—Yes, they have.

8696. Are there any practical objections which they make, or any amendments which they would like to propose?—I am not instructed to offer any opinion, as I said just now, as to the Gresham Charter, or any other suggestions which are before the Commission.

8697. Have you anything else to say on behalf of the Institute that you have not already said?—No, I have not.

8698. (*Sir George Humphry.*) I think the education given at South Kensington is mainly of a technical kind?—Yes.

8699. And that although it is, as I believe it to be, first rate in that particular direction, yet that does not go at all, or at any rate not much, into the principles of the science of the several subjects. It is mainly technical, practical, and to prepare men specially for various branches of practical work?—Yes, that is so.

8700. And therefore its work rather lies outside that of an ordinary teaching University?—Yes, that is one of the difficulties that the Institute feels in forming part of a teaching University.

8701. Although its teaching and its work is first rate yet it is rather technical, practical, and adapts persons for entering upon various branches of practical science?—Yes. Perhaps I may read from the programme of the Central Institution what they profess to do:—"The object of the Central Institution is to give "to London a college for the higher technical educa- "tion, in which advanced instruction shall be provided "in those kinds of knowledge which bear upon the "different branches of industry, whether manufactures "or arts. In order that this instruction may be "efficiently carried out, the Institution, in addition to "the lecture theatres and class rooms, is fitted with "laboratories, drawing offices, and workshops; and "opportunities are afforded for prosecution of original "research with the object of the more thorough "training of the students, and for the elucidation of "the theory of industrial processes. The courses of "instruction are arranged to suit the requirements of "(1.) Persons who are training to become technical "teachers. (2.) Persons who are preparing to enter "engineers' or architects' offices, or manufacturing "works. (3.) Persons who desire to acquaint them- "selves with the scientific principles underlying the "particular branch of industry in which they are "engaged."

8702. Not only is the teaching excellent, but the equipment of the Institution is also very good?—We think so.

8703. And apparently as far as can be judged, very efficient for the work, so that it is doing really good work in connexion with the practical carrying out of the practical work of the country. That is its main point?—Yes, that is its main point.

8704. (*Mr. Palmer.*) The main point was to supply teaching and laboratories that would meet the want of apprenticeship in trade?—Yes, to a certain extent; but the Central Institution goes a little higher than that. The education given at Finsbury probably meets the want of apprenticeship, to a great extent, but the Central Institution gives a higher education even than that.

8705. How far beyond the trading requirements are the aims of this Institute. I mean "trading" as contrasted with higher education?—That is a question I hardly know how to answer. I am afraid I do not quite understand it.

8706. Do you consider that the Institute is devoted to higher study, such as might be called higher University education?—In one of its branches, yes.

8707. Would that apply to the whole Institute or to one out of the three schools?—To the Central Institution, not to the other two schools, certainly.

8708. So that to a certain extent you are giving the higher scientific education?—We think that we are giving the highest scientific technical education to be obtained in this country.

8709. It is said that there will be a great waste of power in competition in laboratories. Do you find that the improved laboratories that have been set up in King's College and University College lately, in any way affect your laboratories at the Central Institution?—No, I do not see that they do, because the numbers at the Central Institution are gradually increasing, and we have now almost as many as the Institution will hold. The Institution was built for 200 regular students, and we have now, after eight years' work from the commencement, 183.

8710. Then having regard to the number of your students you are not afraid of competition?—I should not like to say that. Every institution is afraid of competition.

8711. Would co-ordination with a University tend to remove that danger?—No doubt.

8712. It would probably be an advantage if you were in some form a member of a University?—There would be this question which would have to be considered: that as we are nearly full it would be impossible for us to take, say electrical engineering students, from either King's or University Colleges.

8713. Then your laboratories are not too great for your own requirements at any rate?—No.

8714. You have sufficient students to fill your laboratories?—Yes, the Institution was founded for 200, and we have 183 now, and they are rising gradually.

8715. Can you give what was the cost of those laboratories, roughly?—The cost of the equipment of the whole building was 30,000*l.*

8716. That is not building and equipment?—No; the building cost 80,000*l.*, the equipment 30,000*l.*, and the annual expenditure is between 11,000*l.* and 12,000*l.*

8717. Now, with regard to the constitution, you have a body of governors, a council and an executive committee?—Yes.

8718. Those are all composed of representatives of the subscribing bodies, more or less?—Except the four scientific governors.

8719. Are they professors?—I believe some of them are professors. There is the President of the Royal Society, the President of the Chemical Society, the President of the Institution of Civil Engineers, and the Chairman of the Council of the Society of Arts.

8720. Your own teachers are not represented on any of those three governing bodies?—No; there is a distinct provision in the Articles that no professor or no teacher of the Institute shall be a member of the Council; and if he is not a member of the Council he cannot, by the constitution of the Institute, be a member of the Executive Committee.

8721. On the other hand, the separate schools are entirely in the hands of their deans and a staff of professors?—Yes; there is a Board of Studies at the Central Institution, headed by the dean, who is one of the professors. This Board, consisting of the four professors, practically manages the instruction given at the Institution. At Finsbury there is a principal, and I am not quite sure whether it is two or three others who are professors or teachers there, and they form a sort of Board of Studies there. They are responsible to the Sub-Committee managing the Finsbury College, for the education there.

8722. And the South London School of Art?—The South London School of Art is a much smaller institution, and that is under a superintendent.

8723. These bodies have the entire direction of the studies, subject to the Sub-Committee that deals with them?—Yes.

8724. (*Mr. Anstie.*) One word as to the nature of the education given at the various institutions belonging to the City and Guilds. I understood you to say, in answer to Sir George Humphry, that there is a great deal of a practical character belonging to it?—Yes.

J. Watney, Esq.

20 July 1892.

8725. But that it may be described, I also understood, as applied science?—Yes.

8726. Is it a fact that of recent years it has been found necessary in almost all places of scientific instruction to add largely to their means of practical instruction, and to give to the instruction, to a considerable extent, a practical direction—such places, I mean, as University College and King's College?—I had rather you put those questions to a witness a great deal more scientific than I am. I do not pretend to a knowledge of science, and I am afraid that any answer I might give you to a question of that sort would be of no use to the Commission.

8727. However, I may assume, may I not, from the evidence you have already given, that not only is the practical instruction supplied of a very high character, but that the purely scientific instruction which is connected with it is also of a very high character?—Yes.

8728. That you can say?—Yes.

8729. And, in fact, is it not true that your students, speaking specially of South Kensington, are, to a large extent, those who are sometimes described in Blue Books, and elsewhere, as "Captains of Industry"—men who come to you in order to acquire that scientific equipment which will enable them to give a new course to the development of Arts and Science?—We hope they will be.

8730. That is your design?—Yes.

8731. That, of course, will involve a high degree of scientific knowledge?—Yes.

8732. You also, I understand, provide for the lower grades of technical acquirement, such as might be more suitable to the journeyman, in your Finsbury College?—Yes, but for purposes a little higher than those of journeymen.

8733. You would not exclude them?—No, I should not exclude them; but I do not think journeymen would come to us.

8734. Do they not, to some extent?—Very likely to the evening classes.

8735. When I say "journeymen," I include men who occupy the position of foremen and leaders in works?—At Finsbury very few come to us, except boys of 15 or 16. They go on till they are 18 or so. Then they either go into works or they go on to the Central Institution.

8736. And if they go into works, I assume they would there take a higher place than the ordinary workman would, by virtue of the scientific training which they have undergone?—We hope so; if they have taken advantage of it.

8737. There are, of course, levels of technical instruction which are very useful for workmen which are hardly up to the level of the less important of your institutions. By the less important I mean the Finsbury College. We have evening classes at Finsbury, at which apprentices and workmen can attend to improve themselves, and we find that those classes are very well attended. We have at the present time 1,100 students attending.

8738. Then when you were speaking before of the work of the Finsbury College, you refer rather to the day classes than the evening classes?—Yes.

8739. So you do, in fact, at Finsbury provide for the two classes—the more advanced who take the day instruction, and those who are less advanced who take evening instruction?—I do not think I should put it quite in that way. The day classes are for young men who give the whole of their time to the work of education. The evening classes are for those who are in some occupation during the day who wish to improve themselves and who are willing to devote so many evenings a week to it.

8740. But, as a rule, I suppose I may take it that the evening instruction would be on a somewhat lower level than the day instruction?—Yes.

8741. Would it be true to say that in the work of this great institute you touch two sides. On one side you touch institutions like those of University College and King's College, and on the other you touch institutions like the Polytechnics which are now being established throughout London?—Yes.

8742. You touch them both?—Yes, we touch them both.

8743. Now, I should like to draw attention to some provisions that perhaps you are to some extent familiar with. You are aware that a scheme has been established under the City Parochial Charities Act?—Yes.

8744. And that a governing body has been constituted which, among other elements, contains a strong educational element; one member appointed by the Senate of the University of London, one member appointed by the Governing Body of University College, one by the Governing Body of King's College, and which has also representation of the School Board. You are aware of that fact, are you not?—Yes, and there is representation of the Institute also.

8745. That body, as you are aware, also has the control of large funds which are under the scheme made finally applicable to those institutions of a technical kind which belong to what I may call the lower level — the Polytechnics. I find under Schedule 5 to the Scheme, excluding those that are not purely Polytechnic, there would be nearly 20,000*l.* a year applicable to those purposes under the scheme?—I will take it from you. I have not read the scheme.

8746. That is about right. That constitutes a very large permanent fund devoted to purposes of this kind, and that fund is under the management of a board constructed as I have described. I do not know whether you have further heard any rumours as to the mode in which that body is at present arranging for the distribution of its funds. Apparently, if one can judge from what one hears, they are taking a very large and comprehensive view of the subject, and are applying still larger funds than they are compelled to by this scheme to this object?—I am not a member of the body, and I know nothing whatever about it. I do not know what they are doing.

8747. You have not seen anything in the papers about it?—No, I have seen nothing.

8748. I should like to direct your attention to one provision in the scheme which, as I gather from looking at it, seems rather to have in view some action, in future perhaps, connected with your body. In Clause 45, Sub-Clause 5, amongst other things there is this: they may apply, or join with any other body or bodies in applying for a Charter empowering them to grant diplomas for proficiency in technical or mercantile skill and knowledge. I do not ask you to give an answer as to what your governing body would do, but do you conceive it as a possibility that this great, important, and, as I may call it for the present, largely endowed institute might on the one hand be associated with the University teaching for the purpose of its higher levels, and at the same time be associated with another body in the lower teaching. Under such a provision as that which I have read to you, can you conceive that as a possibility?—Yes, it is a possibility.

8749. And if that could be done you would immensely increase the strength of the conjoint bodies. It would be better than having a diploma given by two separate bodies, would it not?—I am not prepared to assent to that altogether, because I do not suppose that the City Parochial foundation would devote its funds to the purpose of our Central Institution, for instance.

8750. I am drawing a distinction between the kind of work carried on at the Central Institution on the one hand together with the higher work at Finsbury, and the lower work which is carried on on the other side?—I was going on to say that it does not occur to me that the work we are doing at present at Finsbury is worth a diploma.

8751. Not at all?—No. If the highest reward the Institute can give to a man who has gone out of the Central Institution is a diploma, a diploma would certainly not be a proper reward to give to a boy who goes out from Finsbury.

8752. But what I am suggesting is that the highest thing should be a degree; that there should be a union of the higher branches of your teaching with a University so that your highest scholars should go out, if they pleased, with a degree of a suitable character; and, that on the other hand, there should be diplomas of a less valuable kind for those who do not attain that standard in conjunction with a body more suited to provide and control that form of instruction?—We think that for the purpose of our work the diploma of Associate of the Institute which may be followed, after a certain number of years, with our Fellowship, is as good as, or perhaps for the men who go through our Central Institution, better, than any University degree they could obtain.

8753. Possibly; but what I am contemplating is that this Institute should form part of a University, and then it would add to the University degree the advantage which you have indicated as belonging to the diploma. I am proposing that the future University should be able to grant a degree with the same sort of effect that now belongs to your diplomas?—There would be the question which the Chairman has mentioned that being a voluntary body and being dependent upon voluntary subscriptions there would be considerable difficulty in the Central Institution becoming a constituent college of any University.

8754. That is the only objection you feel?—That is an objection.

8755. Are there any other objections?—I do not know; I am not prepared to say.

8756. At present you are not prepared to state any other objections?—I am not prepared at present to state any other objections. I know there is a very great difference of opinion among the members of my Council and among our professors, as to whether it would be desirable or not that the Central Institution, which is the only one of our institutions that could become a constituent college of a University, should become such.

8757. Now to go to the question you have referred to with regard to the somewhat precarious nature of its funds. Do you think it an impossibility or even an improbability, that adequate funds might be provided for the permanent endowment of the institution from the same sources from which it is now maintained?—I do not think it is possible. The subscriptions coming to the Institute are 22,000*l.* a year or thereabouts.

8758. At the present moment I am only considering the higher branches. There is a good deal of work that you do which would not come within the scope or the functions of the University, and all that we should have in view would be the adequate endowment of such part of the whole work as entered into the University system?—I cannot tell what the companies would do, but my impression is that they would not capitalise their subscriptions.

8759. Of course I did not ask you to answer for them, because you have told me you cannot, but let me draw your attention to a circumstance that I daresay you are familiar with. As I gather from the Report of the Charity Commissioners for the year, a scheme has been formed under which the Drapers' Company provide 7,000*l.* a year for the maintenance of the People's Palace. If that Company can go and provide 7,000*l.* a year for a permanent scheme for the management and conduct of that institution, do you not conceive it to be a possible thing that these numerous and wealthy companies might go so far as to provide an adequate permanent endowment for your highest kind of teaching?—I cannot say. If you ask me for my private opinion I should say, "No."

8760. One company has already given 7,000*l.* a year?—The companies are doing great things. The Goldsmiths have spent 80,000*l.* on an institute at New Cross. My own company, the Mercers, are spending a very large sum of money in scholastic work now in various parts of the country and in London.

8761. And I think the Skinners' Company has also given a permanent endowment of 1,000*l.* a year to one of the City Polytechnics?—1,000*l.* a year is only a small sum. If you come to 22,000*l.* a year, it is a large sum.

8762. That is only one company?—Certainly, that is only one company.

8763. These circumstances certainly might give one the impression that it was possible that a permanent foundation might be secured?—I should say it is possible, but not probable.

8764. (*Mr. Rendall.*) Your institute, I think you said, would prefer one University for London?—Yes.

8765. But you went on to say that failing any one University they would be prepared to come into some such scheme as the Gresham University?—I think they might.

8766. But I understand you to say that there were difficulties felt about coming in as a constituent college?—The difficulties are principally, I think, the question of funds.

8767. And financial status?—Yes.

8768. What would coming in mean? Would it mean direct representation on the governing body?—I do not know.

8769. You do not know whether any part of the powers that they would have to hand over, if they had such representation, would be powers concerning the appointment of the professors, directing of studies, remuneration of professors, and so forth?

(*Professor Sidgwick.*) I thought Mr. Watney said they had not made up their minds to come in on any terms at all?—They have not made up their minds at present to come in on any terms at all. They wish to have time to consider more carefully what the new University is to be, because at present of course none of us know.

8770. (*Mr. Rendall.*) Are they actually considering that?—I do not think so. I think they will wait to hear what the constitution of the University is before they will pledge themselves.

8771. Do you say that none of the teachers or professors are upon the council?—None. By the constitution of the Institute no professor can be on the council.

8772. Have they been consulted or asked to report at all upon the Gresham scheme or any other scheme for a new University?—No.

8773. Are the council aware of their views officially or unofficially?—Officially not; unofficially only in the way that anybody else knows.

8774. You spoke of differences of opinion among the members of the council and the professors. Do you mean between the council and the professors?—Differences of opinion, in what way do you mean?

8775. In answering Mr. Anstie you said there was a great variety of differences of opinion among the members of the council and the professors?—Yes, as to whether it is desirable to affiliate ourselves to a University or not.

8776. Does that represent a difference of view as to main policy between the council on the one hand and the professors on the other?—No, there are no differences of opinion between the council as a body and the professors as a body.

8777. But the professors have not been invited at all to express their views collectively?—No.

8778. (*Professor Sanderson.*) One principal object of the new University would be to promote what is called the higher studies; that is to say, to give men the opportunity of pursuing that kind of study which is allied to research, under the most advantageous circumstances, that is to say, with all the advantages which excellent laboratories afford. What I want to ask is whether, in the event of the new University having as its function to promote that higher education, the Institute would be willing to accept suggestions, for facilitating such higher studies, and to give opportunities, which perhaps do not as yet exist in your laboratories, for studies of a different kind from those which are now carried on, as, for instance, relating to other subjects than those which are at present studied but also technical?—So long as the research work which would be done would not interfere with the ordinary work of the Institute I should answer unhesitatingly, yes.

8779. Yes; but what I rather want to know is whether the Institute would co-operate cordially with any central body having that purpose?—I think it would.

8780. (*Professor Sidgwick.*) I do not know whether your attention has been drawn to what is called an Association for promoting a professorial University in London?—Yes, I have seen a paper that has been put forward.

8781. Are you aware that the four professors employed at the Central Institution have given their names to that scheme?—Yes.

8782. Professor Armstrong, Professor Ayrton, Professor Unwin, who is on the committee, and Professor Henrici. That, I presume, may be taken to imply that in their view it would be a gain for the ends of the City and Guilds Central Institution that they should be absorbed in a professorial University. "Absorbed" was the word that was used to us?—I am not at all sure about that. You must not take it that I assent to that. I doubt whether, at any rate some of those gentlemen

J. Watney, Esq.

20 July 1892.

do agree that the Central Institution should be absorbed into a University.

8783. I think Professor Henrici, who came before us, was of opinion that if a professorial University was instituted, this absorption should take place, and I think we have been informed that Professor Ayrton would take that view. I gather from Professor Unwin's name being on the executive committee, that he would also be of that opinion?—I can only say that I do not know, but even if that is the opinion of the professors, it would be quite impossible for us to be absorbed into any other institution.

8784. Then the idea of absorption, what has been called before us the "melting pot," into which you were to go among other institutions, is, I gather, entirely alien from the views of your committee?—Entirely.

8785. There is no chance of your agreeing to go into the melting pot?—I think not. At any rate that is their present opinion.

8786. Therefore, the only question with them is whether they should enter the University retaining their independence?—Yes.

8787. But with a view to that as far as you can judge, they are not prepared to capitalise the contributions?—Of course the Institute itself cannot capitalise them. It is a question for the various companies, who practically form the Institute.

8788. I should rather have said that, as far as you know, it is not within the range of practical politics to suppose that there is any chance of these companies agreeing to capitalise?—I do not think so.

8789. (*Lord Reay.*) Who appoints the professors?—The sub-committee recommend. I think I told one of the Commissioners when he was questioning me, that there is a sub-committee of the executive committee appointed to look after each college. The sub-committee, for instance, looking after the Central Institution would recommend perhaps one, two, or three professors, and out of the number the executive committee would elect one.

8790. Would the professors be consulted before such a recommendation was made by the sub-committee?—The other professors you mean?

8791. Yes?—I do not know. There is a professor for each Faculty, so to speak. I have no doubt we should take scientific advice. We have a good many scientific men on our committees, Sir Frederick Bramwell and others; and the committee would probably take advice, but whether they would take the advice of the professors or not, I do not know.

8792. Are the various courses of lectures settled and adopted by the sub-committee for the various institutions?—There is a programme adopted by the committee, and within the lines of that programme the professors practically conduct the teaching as they think fit.

8793. But has that programme been settled after communication with the professors who are to teach within the limits of that programme?—The programme is revised by the professors and submitted to the sub-committee and passed by the sub-committee. The general scheme of instruction to be given in the several departments of the Central Institution was drawn up by the sub-committees of the Institute previous to the completion of the building or of any of the staff; the details of the programme were subsequently drafted by the professors on the lines laid down in the scheme and revised and approved by the committee; no material alteration has been made in the programme since its first issue.

8794. Then the initiative for the educational side of your various institutions belongs to the teaching bodies of the institutions?—Within certain lines.

8795. The students obtain a diploma which is given by the Central Institution?—By the Institute. It is the diploma of the Institute.

8796. Not the diploma of the Central Institution?—No.

8797. That diploma is a different diploma from the one which you call the technological diploma?—The technological examinations held all over the country are very different. A man will attend a certain number of lectures or classes in London or a provincial town and pass a certain examination, and if he gets a certain number of marks in that examination he is entitled to a certificate that he has passed the examination.

8798. Therefore the diploma of the Institute constitutes a higher qualification than the certificate which is given after passing a technological examination?—Yes, in the same way as an Honours Degree at a University is better than a good pass in a public elementary school.

8799. And this diploma of the Institute is only given to students who have attended the Central Institution?—For three years, and who have passed at the end of that three years a satisfactory examination. All the regular students are examined periodically, and in the final examination at the close of the third year the marks awarded during the first and second years are taken into consideration. If a student absents himself without sufficient cause from any of the examinations or fails to show satisfactory progress, he becomes liable to be put back a year or to be sent out of the college altogether.

8800. Therefore attendance is compulsory at the lectures of the Central Institution?—And for the whole course of teaching. To get a diploma a young man has to attend three years in just the same way as a day scholar attends at St. Paul's school, for instance.

8801. What is the average age of those who obtain that final diploma?—Speaking very roughly, I should think about 20 to 22.

8802. Do most of your students enter for that examination?—They all enter for the examination, that is all who go through the complete course of study. Some of them go up twice. They may, if they like, stay another year at the institution and go out in another branch.

8803. Has the result of that examination been satisfactory?—Eminently.

8804. Most of your students have been successful in it, have they?—I do not say that most students have obtained diplomas because the diploma is the honour degree.

8805. But most of the students who entered for the examination have passed?—Most pass the examination, but all who pass do not get the diploma. The man who passes does not necessarily get a diploma. He must pass well to get a diploma.

8806. Therefore the diploma constitutes an honours degree?—Yes.

8807. Could you inform me what are the arguments used by those who object to affiliate the Central Institution to the new University?—I should not like to take upon myself to do that.

8808. One of the objections might be the difference of opinion which, as you know, prevails with regard to technical education on the Continent of Europe. There are two schools, one school is in favour of giving technical education in its highest developments in existing Universities, as a separate Faculty of applied science; the other school, which prevails in Germany, gives technical science an independent existence in separate technical Universities as they are called. Have your council at all had that question for consideration before them?—No, not as a body.

8809. (*Mr. Anstie.*) Did I understand you rightly to say that the terms under which the South Kensington Institute had the site of its buildings, were that it should spend 5,000*l.* a year at least?—Yes.

8810. And that is something very much like a permanent endowment, is it not?—No, because if we cease to spend 5,000*l.* a year the buildings would go away from us.

The witness withdrew.

The Rev. Henry Wace, D.D., further examined, the Rev. Principal H. R. Reynolds, D.D., and the Rev. Principal Dykes, D.D., examined.

Rev. H. Wace, D.D., Rev. Principal H. R. Reynolds, D.D., and Rev. Principal Dykes, D.D.

20 July 1892.

8811. (*Chairman to Dr. Wace.*) This is entirely separate from your examination the other day?—Yes, entirely. I understand that evidence has already been given before the Commission by representatives of the Nonconformist theological colleges, as to the advantage of establishing something in the nature of a Theological Faculty in the University; and they were good enough to ask King's College to enter into consultation with them on that subject. We had several meetings, first of all informally, in order that we might settle upon our own views before the matter was brought before the Council of King's College. When it was brought before the Council of King's College the Bishop of London, who is one of their two Chairmen, was requested to have an interview with the representatives of the Nonconformist theological colleges. He did so, and as the result of that interview he made a report to the Council of King's College, and the Council agreed substantially to the proposal which had been drawn up in these various meetings. Dr. Reynolds, the Principal of Cheshunt College, and Dr. Dykes, the Principal of the Presbyterian College, Guildford Street, are here with me, and will be able to state the effect of our agreement and answer any question upon it. The document which I hand in contains the amendments in the Gresham Charter recommended by the Councils of the various colleges and by the Council of King's College. (*For this document see Appendix No.* 12.)

8812. Then do I understand that you agree to the admission of these six Nonconformist colleges into the University merely as regards this proposed Theological Faculty?—Yes; but we should explain particularly that we have deliberately, after great consultation, resolved that the Faculty should not be called the Faculty of Theology or the Faculty of Divinity, but a Faculty of Theological Science, in order to emphasise the fact that it is not concerned with Theology as a matter of faith, but rather with the sciences which are ancillary to Theology in that respect. Therefore, we deem it to be a vital matter that that should be the name of the Faculty, that and no other. In clause II., after stating that University College and King's College "shall be and are hereby constituted Colleges "of all Faculties in the University," we propose to put "The following Theological Colleges shall be and are "hereby constituted Colleges of Theological Science "in the University."

8813. As it stands now University College and King's College would be and "are hereby constituted Colleges "of all Faculties in the University." There would be no difficulty about that?—I suppose, if they did not form a Faculty, it would simply be that that clause gives them the power, whenever they choose to exercise it. Of course, if one of them did not form such a Faculty there would be no representatives of it on the Faculty of Theological Science; but we could hardly put a clause in the Charter to say that it should be excluded from that Faculty.

8814. With regard to the general question of the advantages of having a Faculty of Theological Science you have no doubt whatever as to the desirability of it?—I think it very desirable with due safeguards.

8815. And you see a possibility of establishing such a Faculty without regard to any particular creed of any kind?—Yes; provided that it has this designation, and provided that the clauses which are afterwards mentioned in the paper are inserted. Perhaps I may explain the paper to your Lordship. The next is a merely consequential alteration inserting the words "Theological Science" in the clause which specifies the various Faculties. The next is practically a consequential alteration. It was found that it would probably be inconvenient to introduce so many new members on the Council as would be required if each College had a separate representative. At King's College, we do not require, of course, any special representative for that purpose, as we have three members to represent all the Faculties. These other colleges, six in number, are content to be together represented by three. I do not know in what way they would make that election. That, of course, is a matter entirely for themselves. Then in the same clause after the word "Arts" insert the words "Theological Science." That is also merely consequential. Now I will go to the last clause, as it is merely a formal one. "The London district for the purposes of the "University shall be a circle of 15 miles radius from "the Guildhall."

8816. What is the present radius in the Charter?—There is no radius. The original proposal was 15 miles radius from Charing Cross; but that was altered by the Privy Council making it the administrative county of London.

8817. What radius would that be?—We do not know, but it would exclude Cheshunt.

8818. And the reason for this alteration is to include Cheshunt?—Yes.

8819. That with regard to Clause X. is rather important, is it not?—Yes; the amendments relating to X. and XXV. are very important. It is proposed to add at the end of Clause X., which prescribes the powers of the Council and makes certain provisions for the exercise of those powers: "Nor shall the Council "appoint any lecturer in any subject included in the "Faculty of Theological Science except on the recommendation of the Board of Study of that Faculty." The reason of that is, that, considering the practical nature of theological training, we deem it of the highest consequence that the teaching given in the name of the University should be such as would sufficiently harmonise with the teaching given in the colleges.

8820. To be sure that the lecturer is a Christian?—Yes, that would be the practical result of it, of course. Then at the end of Clause XXV. it is proposed to add: "The Council shall not require it as a condition of a "degree that the student shall have attended the "lectures of any particular professor or lecturer." The object is somewhat similar. Of course, all these theological colleges are training young men for the ministry, and, therefore, it is of the highest importance that they should have the entire direction of the training of those men. For that purpose they must have a power of saying what lectures they shall attend, and, if necessary, what they shall not attend.

8821. You leave to each college the power of determining what lectures are to be attended and what are not to be attended?—By its own men.

8822. And by the Charter of course no degree can be given to anybody who has not had a course in one of the colleges connected with the University, and therefore, the colleges will really have the power of deciding upon what the instruction is to be?—That is so.

8823. And that is what is intended?—Yes.

8824. I think we understand your scheme now, and this is agreed to, I suppose, by the gentlemen who were before us the other day and by the colleges they represent?—Yes, Dr. Dykes and Dr. Reynolds agree.

8825. (*Lord Reay.*) From evidence which we have received on a previous occasion it is clear that there is a desire on the part of theological colleges to provide for deficiencies in theological training which exist in the present curricula. Would you admit that there were such deficiencies?—As far as King's College is concerned, certainly not.

8826. If the new University came to the conclusion that there were such deficiencies you do not dispute its right to provide for them?—Provided that, as is said here, no lecturer is appointed except on the recommendation of the Faculty.

8827. Therefore you propose virtually that the Faculty should have the appointment of such lecturers in theological science?—Not exactly that they would have the appointment, but they would have what would amount to a practical veto upon the appointment, only in the form of a recommendation.

8828. They would recommend and the Council would not appoint anyone who had not been recommended?—No.

8829. It gives them the initiative in the appointment?—Yes.

8829*a*. Of course the council would be quite within its powers in saying to the Faculty, "We suggest that "this should be done and that this gentleman should "be appointed"?—If they did not appoint him.

8830. It would be practically a recommendation to the Council?—In that way it would

Rev. H. Wace, D.D., Rev. Principal H. R. Reynolds, D.D., and Rev. Principal Dykes, D.D.

20 July 1892.

8831. You would not object to that?—I do not know. If you put it in that way it rather alters the case. Informally, no doubt, suggestions might be made to the Faculty, but I do not think a formal suggestion ought to come from the Council, because that puts the Faculty in the position of exercising a veto, which is not what we ask.

8832. The procedure would then be the following:—the Council of the University would state to the Faculty that it was desirable to provide for a certain Chair of theological science for which no previous provision had been made and would then ask the Faculty to recommend a teacher for such a Chair?—Of course, in the first place, in putting that question you are assuming the whole question of the University appointing these University professors.

8833. I am assuming what is stated here:—"Nor "shall the Council appoint any lecturer in any sub- "ject included in the Faculty of theological science "except on the recommendation of the Board of Study "of that Faculty"?—That is not quite the same thing as appointing Chairs, because that would refer to the power which is given in the Charter to appoint lecturers in any Faculty. It is not intended in the Charter, as it at present stands, to cover the question of University Chairs.

8834. The University, according to the Charter, has the power of appointing lecturers, and, therefore, if the University Council is of opinion that a lecturer in a certain subject should be appointed, then, as I say, all that the University Council would have to do would be to invite the Faculty to designate the person to discharge the duties of a lecturer?—I suppose that would be so.

8835. (*Professor Sidgwick.*) With regard to Clause 10 the words you use are "except on the recommendation "of the Board of Study of that Faculty." You observe that in the last paragraph of Clause 10 of the Charter as it now stands, with regard to the regulations of the examinations or degrees, there are two alternative phrases used. It says, provided that the council "shall "proceed on the recommendation of, or after sub- "mitting the proposal for consideration and report to, "the Board or Boards of Study of the Faculty." What I wish to ask is whether a somewhat less stringent rule would not meet the present case. It seemed to me more likely that it would be admitted that the Council should not make an appointment before it had referred the question to, and received a report from, the Board of Studies than that it should be absolutely restricted, as your words imply, to the recommendation of the latter. Practically it would come, in a great majority of instances, to the same thing?—I think I shall be speaking with the support of my two colleagues here in saying that we considered that point, and that the omission of those words was deliberate.

8836. May I put the question as strongly as this? Would you rather that the whole scheme were dropped than that the power should be in the last resort reserved to the Council. The reason I put the question so strongly is this. It seems to me a very great objection to any scheme that a Faculty should have a power granted to it which is not granted to any other Faculty. If the power were granted in a less stringent form it seems much more probable that it would be held to be a desirable rule to make with regard to all the Faculties?—My colleagues must answer for themselves on that point, but for myself I have no hesitation in saying that I should not wish the scheme to be dropped by virtue of the substitution of the other words for these. (*Dr. Dykes.*) I should not consider it at all a fatal objection to that scheme, speaking for myself, if the alternative in the clause read by Professor Sidgwick were inserted in relation to the Faculty, but I should say that, provided that the clause proposed to be added after Clause 25, viz., "that the council shall "not require it as a condition of a degree that the "student shall have attended the lectures of any par- "ticular professor or lecturer," should be at the same time accepted, because that gives a protection, you will at once perceive, to students and colleges to which students belong in the event of a professor of the University being appointed to whose teaching they might conscientiously object. That would be a sufficient guarantee to my mind. (*Dr. Wace.*) I gave my answer under the same supposition, that the second clause would remain.

8837. (*Mr. Rendall to Dr. Wace.*) As to the position of the proposed Faculty of Theological Science it would include all persons doing professorial work or giving regular instruction in any of the subjects included in the Faculty. That would make the Theological Faculty consist practically of all the theological teachers of all these colleges?—Not all, because it says, "Such "persons for any college of that Faculty as shall be "designated by the governing body."

8838. But the natural course would be all, or at any rate the principal ones?—Yes.

8839. That would mean a Theological Faculty of what sort of number—say five in each Faculty. Would that about cover the main ground?—We should want more than that at King's College, I think.

8840. Would eight be right?—About that I think, about eight or nine.

8841. (*To Dr. Dykes.*) And for your college about the same?—Four is the full number that we have in the college I represent, but I should think five is as many as exists in most of the Nonconformists bodies.

8842. (*To Dr. Wace.*) If we take the seven colleges, we should not be far out in calculating the Theological Faculty at 40 or 50?—It comes to about that.

8843. Now with regard to this Theological Faculty, the clause to be added at the end of Clause 10 says, "Nor shall the Council appoint any lecturer," and so on. How would that bear upon the power of admitting any constituent college? I will state the case concretely. Suppose a Roman Catholic College applied for admission or a Unitarian College applied for admission, would the University Council retain the full power to admit them as constituent colleges, and in so doing admit their lecturers to the Theological Faculty, or would it not?—Certainly that clause does not affect the power of admission to colleges at all.

8844. Then the University Council would be quite unfettered in that particular?—Entirely.

8845. And even in spite of a recommendation by the Theological Faculty they would admit such colleges?—They would have the same power of admitting Colleges in the Faculty of Theological Science as they have in any other. I think it says that the colleges are to be admitted after the report made to the Board of Studies of the Faculty or Faculties in respect of which the application is made.

8846. (*To Dr. Dykes.*) Would that be your understanding likewise?—My understanding would be that this proposed clause at the end of Clause 10 would not affect the introduction into the University of any further colleges.

8847. It would require careful wording to make that clear, but that is the intention of the colleges, is it?—Yes.

8848. (*To Dr. Wace.*) Now with regard to the next addition, at the end of Clause 25. Is that intended to be quite general or to apply to the Theological Faculty only?—We drafted it as intended to be general. Of course it is the necessities of theology which have suggested it.

8849. I think many would take exception to making a general rule excluding the University from having any power of compelling students to attend any particular lecture?—That is a question, affecting the constitution of the University, with which I would deal strongly, because anything which gave the University power to require the students, of King's College we will say, in engineering or medicine, to attend lectures outside the college, would be absolutely fatal to the purposes we have in view.

8850. It is introducing quite a new point into the new University Charter?—I do not think it is, because it is required that the students shall only be admissible to degrees on pursuing the regular course of study in a college.

8851. Let us take an instance of a single professor in a particular college appointed by the University, and the University prescribing that all students must attend the particular course of study. It is surely a natural provision for the University to make, and it is such as is made in nearly every University, I think?—Not in the Victoria University.

8852. Take the case of the Faculty of Music. The University requires that every student of music should attend a course of study given by a college of the University?—Quite so, but that is not the case of the University professor. All that that comes to is to

require that a man shall attend a course of study in a college of the University.

8853. He is the only University professor?—He has to go there. That I do not object to. If, for example, at University College there was a Faculty of music it would not be inconsistent with the principle of the Charter that anybody who wanted a degree in music (which would be involved in the Charter) must go through the regular course in the college.

8854. The Charter does not lay that down and does not preclude it. It seems to me to be left entirely open to the University to decide as the emergency might arise?—That is a point which had better be discussed on another occasion perhaps, but with respect to the Theological Faculty at any rate we deem it essential.

8855. (*To Dr. Dykes.*) Your colleges would not wish it to extend beyond the Theological Faculty?—No. We do not wish to give any opinion with regard to any other Faculty.

8856. With regard to the Theological Faculty you consider it a *sine quâ non*?—Yes.

8857. (*To Dr. Wace.*) Supposing it were considered unwise to constitute a difference in the case of the Theological Faculty, would you sooner that the whole scheme were given up than that—— ?—I should feel so, and I think my Council would.

8858. You would think that better than the risk that they should take a high-handed measure, and say the students should go to one theological lecturer?—I think that is a danger that one should guard against.

8859. And you would prefer that the whole scheme should fall through rather than that the proviso should be given up?—I should.

8860. (*To Dr. Dykes.*) Would you feel the same?—I should unless the addendum to Clause 10 were passed. I think either of these is, from my point of view, a sufficient safeguard, but without one of the two I do not think there would be a safeguard at all. (*Dr. Wace.*) Clause 10 in that case would have to be passed in its present form.

8861. (*To Dr. Wace.*) Do you know if there is any such limitation of University powers in any existing University?—I should answer to that that at the Universities of Oxford and Cambridge there is no formal limitation of that kind, for the simple reason that the Theological Faculty is absolutely bound up with the Church of England.

8862. Till very recently of course the University of Cambridge did require attendance upon the lectures of one or two professors, the Regius Professor or one other, I think. That you would think objectionable, would you?—It would be objectionable I think in this University, because we know perfectly well what is the nature of the instruction which would be given by the Regius Professors at Cambridge. They must be doctors of divinity of the Church of England. At least they would be in holy orders of the Church of England.

8863. You personally would not prohibit the University from exercising that power?—Yes, I would.

8864. Would you be content to render it subject to veto?—No, certainly not.

8865. You would not trust them in that particular direction?—I do not like to use the word "trust."

8866. I will say confide the power to them. You think it would be a dangerous power to entrust to them?—Yes.

8867. (*Mr. Anstie.*) Can you give me any guidance as to the principle on which the number three has been assumed as the representation of the theological colleges? I understand you to say that the theological colleges are to have three?—I think I may say it was felt that it was a little unreasonable to ask to have a representation of every college, so as there were six of them they took one representative for two colleges.

8868. Of course one must not be too scrupulous for exactitude, but the result will be that the collegiate representation as distinct from the Faculty representation will be: for theology, 3; for law, possibly, but only possibly, 2; for medicine, 10; and science, none. Does not that strike you as a rather strange result?—But there will be in course of time representation of scientific colleges. I cannot doubt that one or more of the great hospitals will sooner or later qualify for it if they do not apply at once to be admitted as colleges of science.

8869. That is a matter for the future. At present there is no collegiate representation of science whatever?—That is unfortunate for science, but it is its own fault, I suppose, because there are no colleges of science.

8870. Would it be possible, do you think, to re-adjust the method of collegiate representation by throwing collegiate representation into a rather different form?—Perhaps I might ask leave to correct what you are saying in this respect. When you say there is no representation of the colleges of science, the collegiate representation of University College and King's College does include the representation of colleges of science.

8871. It includes representatives of colleges which are, amongst other things, colleges of science?—Yes.

8872. But as colleges of science specifically they are not represented?—Not as colleges of science alone, but specifically, yes.

8873. Not specifically?—Yes, because they are admitted in respect of all the Faculties.

8874. That is to say, a fifth of each college may be ascribed to science?—Yes.

8875. That would mean, say, two fifths of each unit as each institutional representation?—Yes.

8876. Does that strike you as adequate?—As I said before, when I was being examined about the matter, we are rather diverging into the general question.

8877. We are almost inevitably brought back to general considerations by this particular evidence and, on the other hand, I do not quite see how to discuss this evidence except on general grounds?—May I venture to ask what was the alternative that was passing through your mind?

8878. What was suggesting itself to me was that, preserving the entire independence and autonomy of the colleges in all their own proper collegiate work they should, in their connexion with the University, be considered with reference to the particular kind of work which they do, so that in effect they should be rather considered as schools of particular branches of learning than as colleges. In other words, that the whole University provision for the collegiate arts training, the collegiate science training, the collegiate theological training, the collegiate medical training, and the collegiate legal training, should for University purposes be constituted in five separate and distinct schools on which the various institutions should be represented in voting power in a manner to be settled by some independent commission, say some statutory commission, such as that which has regulated the internal affairs of Oxford and Cambridge?—Yes, and no. I must distinguish. If you ask me whether I should have any objection in principle to the colleges having a representation proportionate to the number of Faculties in respect of which they are admitted, I say no, I do not object to that; but if you ask me whether I should consent to the extent of the representation of the colleges not being fixed at the outset may, as now, be agreed upon, and being referred to some subsequent commission to decide as they pleased, that I should resist very strongly.

8879. You think it would not be a reasonable thing to ask, and that London, in the formation of a new London University, practically, I may say, on new lines, the collegiate institutions in their relation to the University should not be subjected to that statutory interference which Oxford and Cambridge and the Scotch and the Irish Universities have all been subjected to?—No, because the reason why Oxford and Cambridge were deemed, at all events, to be properly subjected to that interference was on the ground of their possessing property which was deemed to be national.

8880. (*Professor Ramsay.*) Did I understand you to say, in answer to Mr. Rendall, that you contemplated the Charter to mean that the whole course of any one student must be taken in one particular college of the University?—No, I did not say that. I said it must be taken in *a* college.

8881. Does that admit of students taking one part of their course in King's College, and another part in University College, and another in any college of the University as he chose?—Not as he chose. With respect to this Theological Faculty, at all events, we should be very willing that there should be reciprocity in attending lectures. We discussed that point amongst ourselves. That question was raised, and we distinctly agreed that college, for example, would be quite open to students in those colleges, and I have no doubt

Rev. H. Wace, D.D., Rev. Principal H. R. Reynolds, D.D., and Rev. Principal Dykes, D.D.

20 July 1892.

that theirs would be open to ours, but that it would require the leave of the authorities of the college to which a student belonged, whether or not he should go to other colleges.

8882. So that the natural course for a degree in arts science, or laws would be that the whole of the students' course should be taken in that particular college; and you would not allow him to go outside that college unless he obtained the leave of the authorities of the college?—Not unless he got the leave of the authorities of the college, but with the leave certainly. The college would be responsible for his education, and would have the duty of prescribing whether he should go elsewhere.

8883. Supposing a student at King's College had a poor opinion of the professor of chemistry at King's College, and a high opinion of the professor at University College, you would not allow him to go to University College unless he got the leave of the governing body?—Certainly not.

8884. So that there would be no freedom of choice on the part of the student, except in some subject which the college did not provide?—No, they could not exact it, of course.

8885. Then would not a college be tempted to keep up a complete staff in a subject; and would not that defeat one great object of the new London University, the co-ordination and organisation of studies in different colleges in relation to one another?—I do not think a college would have attempted to do that unreasonably. As I said, in certain of the essential subjects which every student for a full education must go through, a college would be obliged to keep up a complete staff; but with regard to any exceptional subject I should feel, on the contrary, that the colleges would be very glad indeed to divide the subjects of their work between them, and I should think they would feel it a great advantage if they could do so.

8886. That is with regard to special subjects where there are few students?—Yes. Take, for example, what has been already done with regard to the Oriental schools. We have divided the Indian and the non-Indian languages between King's College and University College. It would obviously be a very great waste for us to try and duplicate, say, the professorships of Sanscrit.

8887. Is it not the case at present that if one college takes a particular development in a particular direction the other colleges find it necessary to follow suit as a matter of self-defence?—Certainly; if there is a subject of general importance which it is requisite for students to learn for the purpose of their future profession, then it is necessary for any college which professes to train students for all those purposes to be provided with it.

8888. So that competition would tend not to differentiate, but, on the contrary, rather to increase the duplication of work? If you put it in that way I think the words would require a good deal of qualification before I could admit them. You must have, as I said yesterday, duplication of laboratories in proportion to the number of students who attend those laboratories. You must have duplication of class-rooms in proportion to the students who attend.

8889. According to your view the University, if it founds lectureships or professorships, should not have the power of saying to students, "You shall go to such and such course"?—Certainly not.

8890. Therefore the University teaching of London would be practically confined to the colleges?—Yes, substantially.

8891. (*Mr. Anstie.*) I think you distinguish the present case from the case of other statutory commissions on the ground that they dealt with what were said to be national endowments. I do not know whether it suggests itself to you that the granting of the power of graduation is a prerogative of the Crown?—Certainly.

8892. And the colleges are at present asking the Crown to exercise that prerogative in their interests. Do you not think that might be a reason why the Crown in the exercise of its prerogative might claim that certain statutory requirements should be fulfilled?—I certainly do not think it would be an adequate reason for such a requirement as you suggested.

8893. (*Professor Ramsay.*) You do not contemplate under any circumstances, do you, the University aiding the colleges financially?—We have not asked for it I see no reason why the University should not.

8894. Supposing there were an Imperial grant made to the new University, would you consider it a proper use of that money to add to the buildings of a college, or to the appliances of a college, or to anything in short which exclusively belonged to the college and not to the University?—Certainly.

8895. Would you think that possible in view of the fact that you impose a test upon professors at King's College?—Yes.

8896. Do you think Parliament would grant money to the chemical laboratory of a college with the knowledge that the college was denominational? — When you asked me whether it was right I said, yes. I thought you meant what the University would do. If you ask me what Parliament would do I will not venture to say.

8897. Do you think it at all likely that Parliament would grant money on those conditions?—I should not like to speak about the probabilities of what Parliament might or might not do.

8898. But that does not form part of your plan? You do not expect that the University should undertake financial responsibility either for keeping up or extending the colleges?—No.

8899. (*Mr. Rendall.*) There is another point which is a little important. I refer to Section 24 of the Charter. Are all these colleges under the independent control of their own governing bodies?—Ours is, of course.

8900. What about the Presbyterian and Wesleyan colleges? Are they not in some relation by which the governing body is responsible to some larger governing body?—(*Dr. Dykes.*) In regard to the Presbyterian college the governing body is the synod of the church.

8901. (*To Dr. Dykes.*) Then it is not technically under the control of its own governing body more than a medical school is under it?—I do not exactly understand what you mean by the words "governing body" in that connexion.

8902. Section 24 says "saving always to the 10 "Colleges of Medicine above named their right to "apply to be admitted as colleges of other Faculties, "notwithstanding that they may not be under the "independent control of their own governing body." In their case it is necessary to introduce that saving clause. I only wish to know whether it would be necessary to introduce some such saving clause in the case of the Presbyterian or other colleges?—Not if by the governing body is meant the supreme court of the church, which has the supreme authority over the college. Of course the teaching staff is, in one sense, a governing body, and there is a committee which manages some affairs of the college. But these are both responsible to the synod of the church.

8903. That is a wider governing body?—Yes, a wider governing body.

8904. And it would be necessary to introduce some similar saving clause?—That may be, but it depends entirely upon the sense in which you use words "governing body."

8905. It is a matter of drafting?—Yes. (*Dr. Reynolds.*) The governing bodies of New College, Cheshunt, and Hackney College are all of them committees appointed by the subscribers.

8906. (*To Dr. Reynolds.*) But not some higher independent body such as the synod?—No.

8907. (*To Dr. Wace.*) Should you wish to maintain that provision in the Charter to the exclusion of any theological college? It breaks down in many points. It breaks down in medical schools, theological colleges, City and Guilds Institute, and the Royal College of Science, Kensington. Do you think it is a wise provision to maintain? Perhaps you have not considered it?—I have not considered it fully. I think it is a right provision in substance. It would deserve some consideration.

8908. It may be of importance. I want to know whether it had occurred to you with regard to the admission of theological colleges?—It does not apply to some extent to medical schools.

8909. You would not, at any rate, wish it to be maintained in such a form as to exclude theological colleges?—No, certainly not.

8910. You would be glad that some saving clause should be introduced, if practicable?—Yes, something

like this: "sufficiently under the control of the "governing body to satisfy the Council."

8911. And that, you think, would be the feeling of the supporters?—I cannot say that, because it is the first time the difficulty has been put to me. I think it deserves some consideration.

8912. (*Lord Reay.*) With regard to Clause 25 you would not object to the University requiring certain books to be read by the students?—I think that is going beyond the purpose and intention of the clause, and, I think, I should object to it. Certainly, after consideration, I should decidedly object to it, because if the University had the power of requiring certain books to be read by the student it might entirely annihilate the effect of the clause we are introducing here.

8913. (*Chairman.*) How do you interpret the words "the duration and nature of the studies?" It is rather a vague expression?—Of course "duration" is plain enough. "The nature of the studies" would rather refer to the general syllabus of them, I suppose. For example, in mathematics before a man can obtain certain degrees he must have read up to a certain point, and so on.

8914. The "duration" is the length of time he has resided at the college?—Precisely so.

8915. (*Mr. Rendall.*) In other Faculties many Universities do prescribe books?—Yes; but in what sense do you mean books?

8916. They prescribe books up and down the field of classics and modern languages?—You require to distinguish them. When I went up for my degree in Oxford I had to take eight books. Those were the material of study. But the University did not require that I should read certain text-books about them; and so it is with respect to theology; of course the University would require that a man should have an adequate knowledge of the Bible, but it would be another thing to require that a man should read a particular introduction to the Bible.

8917. You think that power should be withheld from the University?—Yes.

8918. (*Professor Sidgwick.*) Clause 10 says: "Pro- "vided, thirdly, that the Council in determining the "curriculum of each Faculty," and so on. If we had a phrase like "determine the curriculum of each Faculty" in the statutes at Cambridge, it certainly would be in accordance with the whole practice of the University to suppose that the determination of the curriculum included or might include the prescription of certain books to be read. In some subjects it is not easy to see how a curriculum is to be determined without prescribing books?—It would require, of course, careful guarding, as I said just now, in answer to Mr. Rendall; with respect to theology you must prescribe that a man shall read the Bible and know the Bible; but it would introduce absolute confusion if you prescribed what Introduction to the Bible he was to read.

Rev. H. Wace D.D., Rev. Principal H R. Reynolds D.D., and Rev. Principal Dykes, D.D.

20 July 1892.

8919. Do you not conceive that, as the clause now stands, the Council will be within its legal power if it prescribes books. Therefore if you wish to restrain the power do you not require some change?—Yes, I think we do. (*Dr. Dykes.*) I do not think that question has been considered. I do not understand that the prescription of books applies to anything but examinations for degrees. Am I right in understanding so?

8920. (*Professor Sidgwick.*) It says, "determining "the curriculum of each Faculty." But I presume it is a with a view to degrees? (*Dr. Wace.*) But still "curriculum" would cover the whole course of study. (*Dr. Dykes.*) I do not think it would be at all a desirable thing in the case of the Theological Faculties which are here represented that the students in their own Faculties should be interfered with or their studies prescribed by the University. But if it means merely that the Council may lay down the books upon which men are to be examined for degrees then I conceive that is a very different matter. The Council is a proper body, I should judge, to determine upon what conditions degrees are to be given, but I do not consider it a proper body to say what I or my colleagues should teach our students or what views we should recommend.

8921. (*To Dr. Dykes.*) I meant what is called a regular course or curriculum, of which, no doubt, the degree is the culmination. You would not object to the Council having the power to prescribe the reading of certain books with a view to a degree, would you?—As subjects of examination for a degree I should not, because I should conceive it came clearly within the function of the University. (*Dr. Wace.*) If any clause of that kind were introduced we should absolutely refuse to join.

8922. (*To Dr. Wace.*) As I understand, you agree with me in thinking that, as the term now stands with no further restrictive clause introduced, the Council will have the power to determine the books to be read with a view to the degree?—It seems from what you say that that is possible. If so I should desire some restraint upon them. (*Dr. Dykes.*) I wish to call the attention of the Commission to the fact that the questions have gone beyond the lines of the Theological Faculty. Questions have been put on which the views of Dr. Wace have been elicited, with respect, for example, to the reciprocity of attendance on other subjects than theology. I only wish to say that I hope it will not be understood that the representatives of the Nonconformist colleges are committed by those answers which travel beyond the ground upon which we have come to an understanding.

The Reverend PRINCIPAL DYKES, D.D., examined.

Rev. Principal Dykes, D.D.

8923. (*Mr. Anstie.*) An exceedingly important question was raised in the evidence that has been given with regard to the Theological Faculty. As I understood one of the witnesses, he stated, as far as my memory goes, that it would not be inconsistent with the proposal that a Mahometan college, if such a case arose, or a Jewish college, or a Roman Catholic college, should be included in this arrangement. Is that the view you are prepared to maintain. And, of course, it must be understood that the University arrangements relating to a Theological Faculty should be such as not to exclude the collegiate position of those bodies?—As I read the Charter the principle is laid down that no one is to have any test imposed upon him; and I understand the spirit of that to be that the University is open to men, both as teachers and as students, of all creeds. In the event of any application being made for such colleges as have been mentioned the University would be the proper body to judge of that application. It would do so when the occasion arose in the light of that principle, undoubtedly. But I do not think I am called upon to say how it would decide the question. Personally, I do not see how any competent body, claiming to be a teaching body in theology, could be excluded, under the principle that underlies the Charter. But I do not think that the question is one which is a practical one, or one on which I am obliged to give an opinion at this stage.

8924. Only in this view, of course, we have to consider what is the view taken by those who desire a Theological Faculty or a Faculty of Theological Science of the position the University is to assume in the matter. It was stated to us by one of the former witnesses very fully and explicitly that the word "science" had a very distinct signification, and it was used to limit the demand made; the word "science" was intended to be the ground work of the demand made for a Theological Faculty. If that is so, one has a little difficulty in following the limitation laid down by the last witness, and which appeared to be endorsed by yourself upon the nature of the University demand on the candidate for knowledge required?—What limitation do you refer to?

8925. Limitation upon the requirement of reading particular books, and making one's self acquainted with particular branches of thought?—I have already spoken to that point, I think. My opinion is that the Charter provides under a special clause that the University shall not have a right to interfere with the instruction which is given in each of the colleges under the University; that each college shall manage for itself its own course of study, its curriculum, and, of course, the books which are given to the students. But in the giving of degrees where students can be rewarded by an honorary title, there the University must necessarily prescribe the subjects and the books, and the lines of study upon which it will examine.

8926. Then you are prepared to accept in the widest terms the power of a University to prescribe any course of instruction or study it thought right?—I think not

Rev. Principal Dykes, D.D.

20 July 1892.

—not any course of instruction. My distinction is between a course of instruction and the subjects of examination. A curriculum or course of instruction is one thing, the knowledge which has to be possessed by a candidate for a degree is a totally different thing. This last is in the power of the University. Let me illustrate my meaning. I may guide my own students in my own college, with my co-professors through any course of theological study I choose, under the Charter as I read it; but if one of my students wished to come up as a candidate for a degree, say of Bachelor of Theological Science, or any other name, then he must privately or otherwise read up for that particular degree along the lines prescribed by the University giving the degree.

8927. Then you contemplate a University laying out lines which should be distinct from the college lines?—For degree purposes certainly. I understand that in the laying out of those lines the Faculty of Theology will have a large, indeed a preponderant voice. I assume as the basis that each Faculty will practically determine the subjects of examination, the standard of examination and the other particulars relating to the degrees, in its own Faculty. And I can trust a Faculty so constituted as we ask here that it should be, to do that in a wise and proper way.

8928. No doubt, as you say, practically the Faculty in each particular subject would determine the course, but that would be subject to the general control of the governing body, however it might be described?—No doubt.

8929. And you would therefore not only confide to the Board of Studies of a particular Faculty, but also you would be willing to confide in the Council which had complete and supreme control?—I should, because I see no practical danger within the range of one's foresight from such an arrangement. I am not afraid of the students in any of our theological colleges studying any branch of theological science, or any books of theological science, which could be prescribed. They do in point of fact extend their reading over all classes of theological literature, and we desire that they should. Therefore I am not afraid of that. As to the other point, the possible extension of this very wide unsectarian basis to include, as you have put it, a Mahometan college of theology or anything so far away from what is at all practical, I am disposed to take the risk; but in the extremely improbable event of such a college being hereafter admitted, as would make it impossible for, say my own college to co-operate with it on common lines, we have our remedy in the power of withdrawal from the University.

8930. Then your position, if I understand you, is this. You are prepared to trust to the supreme governing body of the University to lay down, under such advice as will naturally be given to it by the Faculties and the Boards of Studies, the complete direction of the conditions of the course on which theological degrees may be obtained; and you are prepared to accept the position that if that does not accord sufficiently with the internal requirements of your own college, you would then withdraw from the University?—As to your first question, yes. As to the second, the conditions upon which degrees are given, could have no possible effect upon our continuing in the University. It might shut out our men from obtaining the degree. But our non-continuance could only result from the inclusion in the University hereafter of some colleges very far removed from our position. In that event, as I have said before, we have our remedy in withdrawal.

8931. That risk you are prepared to take?—That risk I am prepared to take personally, and I believe that on the whole, I express the mind of the Noncomformist colleges. (*Dr. Wace.*) Not mine, certainly.

8932. (*Lord Reay.*) Therefore you are also prepared to give the University the right to enforce attendance at certain lectures which the University might consider necessary for the attainment of a degree of theological science?—Yes, because if these classes were such as we should not recommend our men to attend, we should have to go without the degree that is all.

The witness withdrew.

Rev. H. Wace, D.D.

The Rev. Henry Wace, D.D., recalled, further examined.

8933. (*Chairman.*) Now we will finish your examination on the main subject?—I should be glad if I might add one word with reference to what Dr. Dyke has said. I could not myself possibly accept such powers in the Council as he appears to be willing to accept, and I am very confident that our Council would not think of it for a moment. The reason is a simple one. I perfectly agree with him that every work or every branch connected with theology ought to be studied. But this should not be forgotten. The young men are under our control for two years, or at the most three, and it is a matter of vital importance to their training what books they shall read. That really is the main thing that determines their training, and it would be quite impossible for us to say that an external body shall decide practically by what teaching, and under what influences, the theological students of our college are to be brought up. If you prescribe the books in which the student is to be examined, you are prescribing the teaching in a vital sense. Therefore I venture to say that that would be perfectly inadmissible as far as we are concerned.

8934. (*Mr. Anstie.*) You referred to the question of what is called University extension. That is mostly evening teaching, is it not?—Yes.

8935. A great deal of teaching of that kind has been given at King's College, and by other institutions?—Yes, and by other institutions.

8936. I am a little startled to read at page 215 of the Minutes of Evidence of the former Commission a letter which was communicated to you by Professor Seeley which I understand you to have given your assent to. This letter states, "I am unable to see why the pro-
" fessors and lecturers of King's and University Col-
" leges should not do the whole of the University
" extension work." May I take it that that is your measure or your view of the requirements of the University extension work taken in its broadest sense?—Yes. Not necessarily by the staff of University College and King's College as it at present exists, but it would be possible for them to engage lecturers as might be needed.

8937. By the staff of University College and King's College you do not understand to be meant the existing staff of professors and lecturers at King's College and University College, but such as might, under some other wholly different condition be appointed as professors and lecturers of King's College and University College?—Not under wholly different conditions, under the present conditions.

8938. Amongst other conditions are increase of funds?—That is the difficulty. That is the main difficulty of the University extension movement.

8939. Does it not really come to this, that you meant by your answer, and Professor Seeley meant by his statement, that there would be nothing to prevent University lectures being called the University lectures of University College and King's College?—I mean to say it would be possible for University College and King's College to act practically as the Council of the University Extension Society.

8940. That is all that was meant by that letter?—That is all.

8941. It conveyed to me a different impression, but I will not detain you upon that?—I gather from what you say that I think you misunderstood the meaning of it very much. We had no idea that our present staff would be adequate to the amount of work that was required, but all I would say is that the existing colleges of London have in their organisation sufficient capacity to do the University extension work.

8942. I think I ought to point out to you that this involves some adjustment of the City and Guilds Institute, the Birkbeck Institute, the City of London College, the Working Men's College, and other institutions of the same kind?—Yes.

8943. Did you mean by that that the Council of those two colleges would have the management of those institutions?—Not the management of those institutions, but it would co-operate with those institutions.

8944. Then I hardly follow the meaning of this communication, because it does not seem to me to express that sort of thing. What co-operation do you

contemplate? Do you contemplate a co-operation under any terms of partnership or in what form?—You must remember that this was not a definite formal proposal made by Professor Seeley. It is merely an expression or an intimation that with proper regulations the Colleges could do the work; that is all.

8945. Then under such an arrangement as might conceivably be made with the Birkbeck Institution, the City and Guilds, the Working Men's College, and other places of that kind, there might be constituted such an organisation as would do that University extension work?—Yes, or was contemplated under the Gresham Charter.

8946. The question only would be what form should be given to it?—Of course.

8947. There was one answer which you gave to Professor Ramsay which I did not quite understand. Perhaps I may be mistaken, but I understood you to say that, comparing the two forms of test, in your opinion the King's College test or declaration with regard to being a member of the Church of England, and so forth, did not prevent any lecturer from expressing his dissent from one of the Thirty-nine Articles?—When I said one, I meant particular ones.

8948. Which one was in your mind at the time?—What was in my mind at that time was that impugning the Articles did not necessarily disqualify for membership in the Church of England.

8949. Is there any authoritative statement of what Articles there are in the Thirty-nine which would or would not affect it?—No, and I hope there never will be.

8950. (*Mr. Rendall.*) Can you tell me what numbers of your students for the last year have presented themselves for the existing London degrees?—No, I cannot tell you.

8951. You do not know how many have entered for the final stage of the B.A. or the B.Sc.?—No.

8952. Do you not keep any record?—We keep a record of those who have taken degrees, not otherwise.

8953. How many have taken them in the last year?—I cannot tell you that.

8954. I see at page XXXIX of the Appendix to the Calendar, the total number of the students in the General Literature and Science Departments were 50?—Yes, the matriculated students.

8955. Then I see on the next page that the college was recognised by the Educational Department as one of the day training colleges for Queen's scholars, and was allowed to receive 25 students?—Yes.

8956. That would leave a total of 25 students?—Yes.

8957. What proportion of those trained for the existing London University degrees?—Not many of them.

8958. Can you account for the number being relatively so few?—Yes, London University has killed this part of our work. I account for the numbers being so small in precisely the same way as is accounted for in that passage which I read yesterday from the representation made on behalf of Owen's College.

8959. At the same time Owen's College was not killed, and it did not at all show so small a number of students under those conditions?—The passage which I read yesterday contains these words: "Whereas at present "the proportion of students taking the regular three "years' course of the college accommodated to the "demands of the London University examinations, is "comparatively small, and exhibits a tendency still "further to diminish." Owen's College was not killed, because it obtained the independent University powers which we are now seeking.

8960. Yes, but we are now considering the total number of your students. In what sense is the London University said to have killed you?—By making its degrees accessible to persons who have simply passed examinations, it has made it easier for people to get degrees by mere coaching than by going through a regular course. Take the Chair of classics as an illustration. We at any rate endeavoured to obtain a first rate classical scholar. He certainly will not devote his whole time to preparing students for passing degrees of the University of London; but an institution like the University Correspondence College obtains men who will devote their whole time to the object of passing men for the University of London degrees. If a man's main object be to pass degrees of the University of London, he will go to the University Correspondence College rather than to King's College, for that purpose.

8961. Can you name any reason for the University of London being so peculiarly unacceptable to King's College in contrast with University College?—University College always had a close connexion with the University of London; the University of London to a large extent arose out of it, and they have always been allied. King's College used to be more in connexion with the older Universities.

8962. Has King's College at all discouraged the preparation for the London University degrees?—I have been told it used to do in former days. It has not within my knowledge, but I believe formerly it used to.

8963. But practically, students will not come forward?—I do not think that affects it now.

8964. But practically now students will not select the London degree courses and examinations? That is what accounts for the very small number. They are not discouraged by the college authorities, are they?—No. On the contrary, in science and in medicine they are rather encouraged than otherwise, I think.

8965. In one part of your evidence you said you thought the Church of England discipline enforced upon the students was a strong attractive power?—Yes, I think so.

8966. It seems to act upon a small area, does it not, with only 25 candidates?—No, you cannot judge by that, because you must take all the other students, 105 engineering students, and 220 medical students and others.

8967. Do you think it is particularly attractive in the case of engineering and medical students?—I think it is an attraction.

8968. Are these disciplines of attendance at chapel enforced on engineering students?—Yes, on matriculated ones.

8969. What proportion of them are matriculated?—105 matriculated there.

8970. And on the medical side too?—Yes, on the medical side too.

8971. And you say that it is very rare that any kind of dispensation is required?—Yes, it is comparatively rare.

8972. I suppose that would mean that it operates really to keep away sudents who would feel those disciplines objectionable?—It may be partly so.

8973. There is a clause in the Gresham Charter, "The assembly of each Faculty shall include all such "persons doing professorial work or giving regular "instruction," &c. . . . . You are familiar with the clause?—Yes.

8974. Does it not seem to you rather indiscriminative?—You have not read the whole clause.

8975. The whole clause is: "The assembly of each "Faculty shall include all such persons doing profes-"sorial work, or giving regular instruction in any of "the subjects included in that Faculty, for any college "of that Faculty in the University, as shall be designated "by the governing body of that college?—When you quote the words "as shall be designated," it is not indiscriminate. The object of introducing that was that of course in any Faculty like engineering, you will have a few young demonstrators who are quite essential to the teaching of the students, but whom it would not be proper to nominate on the Faculty.

8976. Would all the professors of King's College, for instance, be admitted?—All the professors in each Faculty, certainly.

8977. And a large number of the lecturers?—Yes.

8978. Professors and lecturers, both?—Yes.

8979. If all these theological colleges were admitted, or again Bedford College, for instance, it would rest with the governing body to say who were the persons doing professorial work, or giving regular instruction?—There you see you have touched a difficult point. You asked me yesterday how far I would admit these colleges. I think for that reason it is very disadvantageous to admit colleges as constituent colleges which are in the position of the Birkbeck College or similar institutions.

8980. The alternative would be to constitute Faculties somewhat differently, and to leave the admission of their constituent members to the University?—It would be a difficult thing to do, because it would be quite

Rev. H. Wace, D.D.

20 July 1892.

impracticable for any external body to know who were the members who could be admitted.

8981. They could hear evidence and judge?—Yes, they could hear evidence, but it would be a very troublesome and difficult matter to do.

8982. I do not think it would be very difficult. It is done by Victoria University?—I think in a case of that kind it would be very much more satisfactory to have some kind of veto on the admission.

8983. Did I not understand you to quote words of the Victoria Charter as some authority for that definition?—What definition?

8984. I think you alluded to the fact that there the professors of the University are identical with those of the colleges?—That is so.

8985. Did you not allude to that as what the terms of the Charter were derived from? I fancy you did?—We had that in view. We did not take those words exactly.

8986. You widened the words, I see?—In what sense?

8987. You have put instead of the professors, "All "such persons doing professorial work or giving "regular instruction"?—That is for another purpose. I referred to that with regard to the objection that there were no other professors than those who were professors in the colleges, and to show that the same rule prevails in the Victoria University.

8988. Did you observe that in the Victoria University admission is limited to the professors of the colleges who are members for the time being of the Senate?—Yes. It is only those who are members of the Senate who shall be on the council.

8989. Who shall be professors of the University?—Does it say that?

8990. Yes. "Professors of the college who are "members for the time being of the Senate or "Senates." Now let me ask you a little further. Are you aware that at University College, Liverpool—to take one instance—every professor has to give the whole of his time to his college duties?—Is that so?

8991. Yes, and that the position of professor gives him an important status in regard to the terms of appointment, tenure of post, seat on the Senate, and so forth. You are not aware of that?—No.

8992. You are not aware of similar provisions in the charter of Owen's College?—No.

8993. Then you did not understand that the position of professor is a very carefully defined one in the constitution of the colleges, and marks the highest position in regard to endowment, terms of appointment, and tenure of office?—It marks the same position in our college.

8994. I should have thought not. I have been looking at the list of professors at the beginning of the Calendar, which, I suppose, I may take as approximately correct?—Yes.

8995. At pages 22, 23, 24, and 25, I find the total number of professors comes to 58?—It may be so.

8996. That is omitting Emeritus professors, demonstrators, lecturers, masters, and so on?—Yes.

8997. Of those I find 19 are medicine. If I turn to the sides of arts and science I find languages—I do not know whether I need enumerate them—16 professors?—Yes.

8998. In addition to that I may add economical science, commerce, modern history, and geography. That would make a total of 20 professors of arts?—Yes.

8999. First of all, on that point, I would like to turn to one matter which seems to me important. There is an important qualification of the Church of England test on page VII. at the end. The test does not seem to apply to those who hold professorships of Oriental literature or modern languages?—No.

9000. Then by that all the professors of languages would be emancipated from the test except the professors of classics?—Yes.

9001. Then 16 out of the 17 professors of languages would not be subject to the test?—No.

9002. The classics professor would?—Yes.

9003. And I suppose the professors of economy, science, commerce, modern history, and geography would?—Yes.

9004. You think it is more important in those branches than in the 16 languages which are represented by professors?—It is important in all Chairs as far as it can be provided.

9005. But it breaks down over the main part of the area in the art professorships?—It breaks down to that extent.

9006. The extent being 16 out of the 20?—I will not say it breaks down, because it is provided that it shall not apply to them.

9007. The general principle is not applied there?—No, it is not applied. It does not exist at all.

9008. Now I come back to the 16 professors?—I should say, with respect to that, that the test is applied as far as it is possible for it to be applied, but of course it is practically impossible to obtain teachers in some modern languages if you did that. Therefore, it is necessary to exclude it.

9009. Still keeping to the arts side, how many are endowed?—Very few; hardly any.

9010. Can you tell me about how many?—Not more than two or three.

9011. How many of the endowed professors undertake to give the whole of their time and attention to the work of their college?—None of them.

9012. That makes, I think, a very serious difference indeed. In fact, it altogether changes the position of a professor at King's College as compared with a professor say, at Liverpool, or Owen's College, where a professor undertakes to give the whole of his time to the college?—I do not see that it makes a vital difference for the present purpose.

9013. Can you tell me how many of these professors of language have not given a course of lectures at all this year. Burmese—any course?—No.

9014. Modern Greek?—No.

9015. Chinese?—Yes.

9016. One course?—A regular course.

9017. Colloquial Persian?—Yes.

9018. English?—Yes, that is continuous.

9019. Tamil, Telugu, and Hindustani?—Hindustani does not now belong to King's College. It has been transferred to University College.

9020. Sanskrit?—There have been lectures given in Sanskrit. They have been given at King's College, but they have been given by the professor of University College, to which Sanskrit now belongs.

9021. Russian?—No.

9022. Colloquial Arabic?—No.

9023. Italian?—Yes.

9024. A day course or evening course?—Both.

9025. French?—Yes.

9026. Armenian?—No.

9027. Bengalee?—Bengalee does not belong to us now; it is withdrawn.

9028. Turkish?—Yes.

9029. That leaves a great many professors who are really in the position of rather titular professors than anything else, for they receive no endowment and give no course, and yet you would give them a place on the Faculty of Arts in the New University?—Yes. The reason they have given no course is that there have been this year no students in their subjects.

9030. Does it not make their stake in the University exceedingly slight?—No, I do not think so at all. They lecture whenever they are wanted, but it is rather curious that this Oriental school which was initiated by the Imperial Institute, and which we took up, is not at present wanted so much as we thought it would have been.

9031. Are your professors mostly compelled to reside in London?—No.

9032. That is left completely free?—Perfectly free.

9033. Are any number of them non-resident?—Only, so far as I know, one or two of the Eastern Language Professors,

9034. One professor I happen to know best uniformly resides in Cambridge?—Mr. Cunningham or Mr. Caldicott?

9035. Mr. Cunningham. He lives at Cambridge, and I believe has an incumbency. He only gives a small portion of his time to King's College?—That is because no more is required.

9036. What course does he give to King's College?—He gives the two winter terms, I think.

9037. I thought his course was six lectures. Do you know that?—He must give at least 20 lectures a year, by the terms of his endowment. I thought he lectured through two terms.

9038. But you are not sure whether that is one term or two terms?—No.

9039. Do you think his stake and interest could be called in any sense large?—Yes, certainly, sufficient for the position.

9040. Whom would you name as among the more distinguished of your arts professors?—I would beg to be excused from doing anything so invidious.

9041. If the number was five or six, would you think it was invidious?—Yes; I shall certainly not do so. I do not care to pick out five or six, and say they are the most distinguished, and that the others are not.

9042. On looking through the names, I hardly think they would compare with the list you gave us of the past professors?—I do not agree with you.

9043. You think the standard is maintained?—It is entirely maintained.

9044. You took part in drawing up the Answers to the Objections to the Gresham University on which your name appears?—Yes.

9045. There is a complaint there that many professors were in the habit of being drawn away. It says: "In "arts and science they"—that is the colleges—"have "less power to attract and keep the best teachers who "are drawn away." How would you reconcile that with what you just said? Do you think you are fortunate enough to get as good men?—Yes.

9046. Then it says:—"Who are drawn away by the "richer endowments and more unfettered system of "Universities elsewhere." Does that observation regarding the more unfettered system refer to tests?—No. It refers to the examinations of the University of London.

9047. In what sense unfettered—that they could not control their examination?—No; as far as they work for the University of London, they cannot control their own teaching.

9048. It had not any reference to the Church of England test imposed on the professors, had it?—No, not the slightest.

9049. The rich endowments you do feel is the thing which attracts them away?—We had a distinguished professor with us very many years, but the attraction of a fellowship at All Souls was too much for him, and he left us.

9050. Some form of endowment would strengthen your college, and would strengthen your professoriate?—Yes.

9051. Supposing that was granted to, and administered by a University, would you be disinclined to entrust it with the terms of appointment, tenure of office, and so on?—It would depend upon the terms.

9052. As regards the strengthening of the University element in such direction I do not quite understand how far you entertain very serious and final objections to the establishment of University professors?—My objection is to the establishment of University professors who would be deemed to have a higher capacity of teaching in any subject whatever than those in colleges.

9053. If the professoriate were improved and more distinguished men gained for it, would you still object to the establishment?—I do not think we want more distinguished men than we have got. The professoriate of King's College does not, in my judgment, need improvement except so far as I said men are not able to stay with us as long as they otherwise might. I think our professoriate will hold rank with, I had almost said, that of any University, excepting of course Oxford and Cambridge.

9054. Does the Gresham scheme as it stands in your opinion contemplate or permit the employment of such University professors?—No.

9055. The lecturers you would put below the present professors?—Yes.

9056. And you would think of them, I suppose, as undertaking University extension and such work?—That is what that clause was introduced for.

9057. Not with a view to make what I might call a distinguished set of University professors as distinct from college professors?—If you look at the evidence of Sir George Young at page 18 of the Report of the last Commission, at Question 198 it says: "There is a pro- "vision to which I wish to draw attention in view of "one side of the subject which may be brought to the "notice of the Commission: that the University may "appoint lecturers independently of the colleges or "the medical schools to give instruction in any sub- "ject. It is obvious that a University such as we "contemplate must do a good deal of missionary work. "What is known as the movement for the extension of "University education has been brought to our notice," and so on. That shows what it was intended for.

9058. Was that the whole of the intention, so far as you know?—Yes. Dr. Priestley suggests to me the possibility of those lecturers giving post-graduate courses. I should not object to University professors whose lectures were restricted to that, but I should object to University professors who entered into competition with the ordinary work of the colleges. Not that I would by any means be understood to imply that the professors of the colleges did not engage in post-graduate teaching, because they actually do at King's College, and they have conducted researches at King's College which are certainly as high as those which any University professor could be expected to conduct.

9059. You would make that modification in this "Answer to Objections" to which I again refer, in which it says: "To institute by charter a new staff of pro- "fessors with the title of University professors would "be unfair to existing interests, and either futile in "the absence of endowments, or wasteful if the endow- "ment could have been obtained"? If they did not compete with the college professor, you would not object to their institution?—No.

9060. In what sense should they not compete, might they not lecture in college rooms?—No, they would be most welcome to lecture in college rooms. I should be glad to put any of our resources at their disposal.

9061. So long as they were not given a monopoly, you would not object to that introduction as a feature of University life. Supposing they were allowed freely to lecture side by side with college teachers, and the University laid down that a student must attend the course of the professor or recognised lecturer, would that satisfy you?—But the University ought not to have power to provide that the students of each college should attend their lectures.

9062. I suppose it might prescribe attendance upon approved courses of some kind, either at approved colleges or elsewhere?—I do not know.

9063. You would not give the University that power?—I should not like to give the University any power to interfere with the fixed rule that the student must go through a regular course in a college. I can conceive that power expressed in such a form that it would give the University power to interfere with the courses of the colleges.

9064. Do not you practically limit the power of the University?—The chief object really for which we have this arrangement is that the professors of the two colleges and any others which shall hereafter be established should be formed into a council; and, secondly, should deliberate among each other as to the courses of study to be prescribed to the students. That is, perhaps, the chief advantage that we expect to derive from such a University as this. At present King's College and University College are not brought together for that purpose. Under the other scheme they would be.

9065. By "course of study" you would not understand attendance?—Yes, attendance within the colleges.

9066. But the attendance would be left not to the University but to the colleges entirely?—Well, no; not left entirely to the colleges, because it says ex-

Rev. H. Wace, D.D.

20 July 1892.

pressly at the end of the Charter that the University may prescribe the curriculum.

9067. But "curriculum" does not include attendance upon the curriculum, does it?—Yes, it does.

9068. And would you give the University the power of enforcing attendance?—Within the colleges. The University should have the power of saying what attendance at lectures within the colleges should be required for a degree.

9069. Within any institution belonging to the University?—Yes.

9070. You would go so far?—That is intended, but it is not intended that the University should have power to say to the student: "You shall be required "to attend this course, and that course or the other."

9071. Assuming there were University professors constituted, would you hesitate to leave the power of election to the University Council. Would you give to University Council the power of election?—Certainly not.

9072. You would not give any power of appointing college teachers to the University?—Certainly not.

9073. On what ground?—Because there is no reason for it.

9074. You feel the maintenance of the independence of the college to be essential?—Absolutely essential.

9075. Does that give better guarantees for efficient appointments?—I think so; as I explained before, the thing I care to preserve is thorough instruction within these colleges. I care to develop the life of these colleges.

9076. Do you feel that the governing body of King's College would be a more responsible and a better electing organ than the governing body of the University?—Its members are in sympathy with King's College.

9077. No professors are on the governing body of King's College, are they?—There happen to be at present two, but that is by exception, they very rarely are.

9078. Do you distrust the infusion of a professorial element on the elective body?—We think that our constitution is the best, in which they are consulted, but are not present in the council.

9079. But you think the infusion of a direct element of the teaching body would be a thing to be avoided?—I think so.

9080. Would you be prepared to concede what has been proposed by the Senate of the University of London an equal place to the Royal Colleges of Physicians and Surgeons alongside with the University authority?—No, certainly not. I should very much desire that the Colleges of Physicians and Surgeons should have a place, and a great place, on the Council of the University, but not that they should have a position such as that of the Senate's scheme, which practically gave them a veto.

9081. The only place provided in the Gresham scheme is one representative on the governing body?—No. It says: "In case the Royal College of Physicians "of London and the Royal College of Surgeons of "England shall both hereafter signify to the Chan- "cellor their desire to be represented upon the council, "the council shall have power to provide for such "representation, and for any modification of the con- "stitution and number of the council, which may in "that case be agreed upon by the council and the said "Royal Colleges, but so always that the number of "members representing the said Royal Colleges and "the above-named Colleges of Medicine shall not to- "gether exceed eleven." The purpose of that is that the Royal Colleges of Physicians and Surgeons should come to any agreement that they can with the schools of medicine, and have their share of the representation.

9082. Their representation, proportionately diminishing that of the schools of medicine?—Yes.

9083. Will you tell me whether you support or only accept as inevitable the registrable qualification clause regarding the medical degree?—I accept that as inevitable.

9084. You accept that as inevitable under the Act?—Yes, under the Act and under the circumstances. I confess, my own opinion is that it would have been better not to make that an absolute condition, but simply that the University should have power to confer the degree, and leave those who take the degree as they are at present.

9085. You would prefer, perhaps, the University degree to be the registrable qualification in itself?—Certainly.

9086. What do you suppose the probable action of this clause will be? Would you, in relation to the ordinary tests, superimpose University examinations?—Certainly.

9087. At what stage?—First of all for Matriculation. And the council, I suppose, would require an Intermediate Examination.

9088. The Preliminary Scientific?—Some form of the Preliminary Scientific; the Intermediate Examination, and the final one.

9089. You think all those would be imposed by the University?—Yes.

9090. And distinct and superior to those of the conjoint board?—In some respects they would be superior; in some respects they would not be.

9091. Then there are to face the great difficulties of duplicating and multiplying examinations?—There is that difficulty. That is involved in having an examination which does not confer a qualification. That is an inconvenience.

9092. Do you not consider it a serious objection?—I do not consider it a serious objection. It is an inconvenience. I do not think it is more than that.

9093. Would it not be serious to have the examination doubled throughout?—Not more than it is to the University of London.

9094. The degree of the University of London carries qualification. The difficulty does not act there?—It does act to a very large extent, because the best students, at all events, desire both.

9095. One other point about its action. Do you think students would ordinarily go for the qualification provided by the conjoint board, or for the Apothecaries' license?—I think some would go for one and some for the other.

9096. The witnesses from the Royal College of Surgeons, I think, rather apprehended that the tendency would be for the students to seek the easier qualification, that of the Apothecaries' Society, and really rely upon the University degree for the higher qualification. Do you think that would be likely to result?—I feel confident it could not to any material extent, because the value of the membership of the Royal College of Surgeons or the Licentiateship of the Royal College of Physicians is so great that good men will always go for it.

9097. You would desire to see the degree carrying the qualification as at other Universities?—Yes.

9098. That would give dignity to the University degree?—Yes.

9099. And I suppose on the whole it would tend to keep up the high standard of examinations?—I do not know that it would have any effect that way. I do not think the examination would be any higher for that reason than it would be without it.

9100. You think, anyhow, it would be above that of the Conjoint Board?—In certain directions. I mean, for example, if I am rightly informed, the conjoint board does not require examinations in subjects like botany and biology. The University would have to require that.

9101. It does now. They have just been introduced. Biology is introduced into the latest curriculum of the Conjoint Board?—Not botany?

9102. I think not botany; it is a mixture really; a little botany comes in. Are you aware that the College of Surgeons objected to the privilege of the degree carrying a qualification from some apprehension that the University might lower its standards?—I am sorry to hear it.

9103. Do you know that that feeling exists at all?—No.

9104. You think it would be quite unjust?—Quite unjust. I would not put it as unjust. I think it would be quite irrational.

9105. You know that there is in the profession a very widespread feeling in favour of lowering the test and making it practically equal with the conjoint board

test?—I did not know that there was a general wish for that.

9106. We were told by a representative of the Medical Association, who represented 11,000 members of the medical profession, that it was the uniform wish?

(*Sir William Savory.*) You must take it for what it is worth.

9107. (*Mr. Rendall.*) Are you aware that the Victoria University and the Scotch Universities, so far as they have expressed themselves, would be pleased to see this new degree carrying this registrable qualification?—I am glad to hear it.

9108. You did not know that?—No.

9109. I thought from what you said that you rather misapprehended the position of the Victoria University. They would favour amendment of the Medical Act so that the degree should carry a qualification, with one important modification, the due subordination of the Medical Faculty?—In my judgment the Medical Faculty is quite sufficiently subordinated. It is subordinate.

9110. The Medical Faculty as it stands is this: 10 for the medical schools, four for the Faculty of Medicine, hypothetically one for the College of Physicians or for the Apothecaries' Society, that is 16, and you said you thought there would be one Emeritus Professor of medicine as representing King's College?—Yes.

9111. That would give a total of 16 for medicine?—Yes.

9112. As against the other numbers, six we will say arts, six science, and four laws?—Yes.

9113. So that they would have really a representation of a full half upon the University Council of all academical members?—You are leaving out the Crown members.

9114. Yes, I am, because they are not defined. That is hardly a subordinate position, is it?—They would be a distinct minority.

9115. Among the academical members they would not be a distinct minority?—No.

9116. They would be equivalent to the other three Faculties put together?—The Council is not composed simply of academical members. The very object of introducing the other members is to avoid such difficulties as you mention.

9117. You know that in Victoria University every college must have Faculties of Arts and of Science as well as Medicine?—I was aware of that.

9118. That provides a self-acting balance of Faculties?—The reason for that is the fact of the colleges of Victoria University being in different towns. If any college had not a Faculty of Science the students could not learn science there. Therefore it was necessary to provide for that.

9119. If you go into history the reason of that was that Victoria University was not allowed to give medical degrees except under such a proviso, and even under that proviso it was not in the first instance privileged to give a medical degree. That perhaps you were not aware of?—I knew it was not allowed to give a medical degree, but it was only for one or two years, I think.

9120. Another contrast which seems to me important is this. The Gresham University scheme makes no provisions for collections of the Faculties; the Faculty of Medicine meets by itself?—Yes.

9121. It then reports direct to the council?—Yes.

9122. Do you think that is a good arrangement, does not such an arrangement exclude the action and the influence of the companion Faculties upon the particular Faculty, be it medicine or any other?—I do not quite see how your suggestion would work. Do you mean to say a medical Faculty should never send up representations in medicine until it had met the other Faculties and discussed.

9123. That is the ordinary action of the Universities of Oxford and Cambridge and Victoria University. The particular Faculty draws up its report, that is submitted to some assembly of the joint Faculties (in Victoria we call it the Board of Studies) and the report then goes up to the superior body. Does it not seem an advantage that the Faculties should confer in that way?

(*Professor Sidgwick.*) As regards Cambridge University the statement is not quite accurate, except so far as regards reports involving financial considerations. Practically the Board of Studies is the only body concerned except the ultimate body as regards any question of changes in the curriculum of its own studies.

(*Mr. Rendall.*) But it comes up for judgment before the whole academic body.

(*Professor Sidgwick.*) Yes.

(*Mr. Rendall.*) That is my main point, every report of a Faculty has judgment passed upon it by the academic body?—The governing body of Victoria is not a purely academic body.

9124. But for the purposes of educational matters the general Board of Studies is the collection of the Faculties together. They always pass judgment upon the scheme before them, before it goes up to the final body?—I do not think that is a good arrangement, I do not think it would be a good arrangement here. I think it would be very inconvenient; I do not see what advantage you would gain from it in respect of matters which did not refer to finance. If a purely medical question was brought before the Faculties of Arts, Science, and so on, I think it would be waste of time.

9125. To which Faculty would you commit the Entrance in Arts Examination?—The control would be in the council.

9126. But the report in the first instance?—I should think medical.

9127. And you would give an Arts Faculty no power of judging upon it?—If the council had any doubt about the matter they would consult the Board of Studies and the Arts Faculty, as they have a perfect power to do.

9128. And the Arts Faculty would consider it separately without hearing the opinion of the Faculty of Medicine?—Without hearing it formally, but they would find out what it was.

9129. And the Preliminary Scientific—which Faculty would decide upon that?—The Faculty of Science.

9130. Without consulting with the Faculty of Medicine? They would send it to the council and they would refer back to the Faculty of Medicine, you think?—As reasonable men, if they came across a doubtful point, they probably would consult.

9131. Do not you think it would be an improvement to provide in the Charter for a general meeting of Faculties to introduce something which should represent a collective assembly of all the Faculties?—I very much doubt it.

9132. Otherwise the Faculty of Medicine would draft a report which would go up to the council, and it would be there finally determined. Do you think that would be a good constitution?—Yes, quite satisfactory.

9133. (*Professor Sanderson.*) May I ask what your objection to making the degree qualifying is?—I do not object to the degree qualifying.

9134. It is not your opinion that it should not be so?—I should prefer that it should be so, only we feel it necessary to take things as we find them, and not incur the difficulties that would be met with by claiming it at this stage.

9135. As you find them in the Gresham Charter?—No, as we found them in legislation. There is an Act of Parliament now which says that in case of a future University the degree shall not confer the qualification to practice.

9136. There is no other reason excepting that?—We did not think it wise to propose that that Act of Parliament should be overridden.

9137. You do not entertain the opinion which has been so strongly expressed here that the examinations for medicine in the University of London are excessive in their standard?—I did not think I expressed that. They are unsatisfactory for some reason or other. I do not venture, myself, quite to point out in what respect they are so. It requires more technical knowledge. When you hear Dr. Priestley or Sir Joseph Lister give their evidence they will tell you that. I can only say that there is a wide-spread impression among those with whom I consult that for ordinary students they are.

Rev. H. Wace, D.D.

20 July 1892.

9138. It is your opinion, is it not, that the standard should certainly not be lower than the standard in other Universities?—No.

9139. For example, Cambridge, or if you like Victoria or Edinburgh?—No, certainly not.

9140. Supposing that instead of a federal University there were to exist a University entirely independent—as independent as the University of London, but a teaching University and not an examining University only; that is to say, one whose business it would be to promote the highest teaching in every possible way; would King's College be disposed, or rather would you be disposed to advise King's College to co-operate with it, for example, in the election of professors, or in the disposal of funds for particular branches of teaching?—Do you mean advise the Council of King's College to surrender its control over its own funds, and its own staff, and so on.

9141. No, I did not propose any surrender. I wish to ask whether that subject has been under your consideration. I want to know whether there would not be a way of co-operation between such a body as King's College, and such a University as I am suggesting?—As far as I am at present advised, I do not think there would be.

9142. You think there is no way in which two such bodies could be brought into useful co-operation for the advancement of teaching, particularly for the advancement of teaching in the subjects in which it is admitted to be defective, not at King's College only, but in London in general?—Before I could give a definite answer to that question, I should like to know the sort of thing that is proposed. If what you have in view in your question is a professorial University, then I think our co-operation in anything of that kind would be quite impracticable.

9143. Is there no other mode of co-operation, no other way in which co-operation would be possible? For example, supposing the new University possessed funds which its business was to employ in the advancement of teaching, would it be possible for King's College to co-operate usefully?—I hope so. As I was saying with respect to the University professorships for what we spoke of as post-graduate courses, our laboratories and lecture rooms we should be glad to have used.

9144. Do you think the co-operation would naturally be limited to so-called post-guaduate subjects?—I think it ought to be.

9145. Do you think that no co-operation of teaching for ordinary examinations would be possible under such conditions?—It might be possible, but I think not desirable.

9146. And, therefore, not practically a thing to aim at?—No.

9147. (*Professor Sidgwick.*) Having heard the replies given by the Bishop of London with regard to the main objections brought against the Charter, for example, the objection that the present system led to a duplication of apparatus and teachers, and prevented economy, do you agree in a general way with his view?—Yes, I do.

9148. Do you hold that if the Gresham Charter were carried into effect, the association among the teachers in the Faculties would lead to economy of teaching power so far as it is desirable?—Yes.

9149. And you do not hold that the financial needs of the colleges would prevent any such interchange, so far as it was a good thing for the community?—No, certainly not.

9150. Would you agree that some introduction of a University professoriate, whether of the kind you indicate or of some other kind, is rather required to meet the objection that the Gresham Charter does not institute a teaching University at all, but only gives the University power to confer degrees, and to control the teaching by means of the curricula and the examinations?—You might take my illustration of Victoria University as a teaching University. It has no University professoriate.

9151. Your illustration of Victoria University is as close a parallel as you require, is it not?—I think it is a sufficient precedent. But perhaps I may say with respect to the University professoriate that there is another point of view which may be suggested. There are certain subjects, and very important subjects, no doubt, which would very rarely be pursued by students in studying for a degree. I can quite conceive that, if students would ever attend, there might be an advantage in having University professors for subjects of that kind, but I strongly urge that it is not necessary for the purpose of prosecuting high study in ordinary subjects. For example, in matters like physiology and subjects of that sort, the higher work has been done by professors at University College and King's College. So far as my knowledge extends, I do not suppose there has been a more distinguished man in the department of physiology than Professor Ray-Lankester during the time he was at University College, and I may mention for the same purpose the name of the late Sir William Bowman at King's College. You would not have wanted to make any University professor do higher physiological work than they did. But you may have subjects like, for example, Assyriology, or Egyptology, or some branch of science of that kind, which the college would not need for the ordinary instruction of its students, though they are becoming now very important in some directions.

9152. So far as that goes, you think it would be perhaps a gain to give the University a power which it has not under the Charter, do you?—Yes. It must not be taken that I admit that there is a defect in the Charter in that respect, because I have no doubt that the colleges themselves would in time appoint such professorships. A Chair of Egyptology has recently been founded in University College by a bequest. The power to appoint professors of that class is a very different thing.

9153. I am not quite clear as to the practical control given to the University by Clause 13, in defining the powers of the Boards of Studies. Each Board of Studies has the power to represent to the Council its opinion upon any matter connected not only with the degrees and examinations, but touching all the subjects of its Faculty. The point upon which I am in doubt is what exactly would be the effect of a board of studies representing to the Council its opinion on the teaching: since, as I understand, the Council has no power to interfere with the collegiate teaching under the Charter. Supposing the Board of Studies made a representation to the Council that the teaching in some department was inadequate, the Council has no power to act upon that, has it?—What that refers to, I take it, is what is referred to in Clause 25:—"A college in the "University shall not in any way be under the jurisdiction or control of the Council, except as regards "the regulations for the duration and nature of the "studies to be required of the students of the college "as a qualification for University degrees or distinctions." I take it that the teaching there refers to the nature of the studies.

9154. The nature of the studies is prescribed in the statement of what the student will be examined in, is it not?—Yes.

9155. And only there?—Yes.

9156. Therefore, the words "and teaching" really add nothing beyond the word "examinations"?—No, I think that is a misapprehension, because it is contemplated in the Charter, I take it, that the Council of the University shall not merely prescribe the examinations, but the general course of study.

9157. You mean, prescribe the order in which the subjects are to be read before the examinations?—Yes, I should say so.

9158. You think the colleges are bound to conform to this prescription?—I think so.

9159. What sanction, if I may use the word, would be applied?—Supposing King's College thought they could prepare for a given examination in a different order, what would be done? Would the Council have power to question the students, and say, "Have you "been prepared in such and such an order"? and refuse them admission if they had not?—You mean to say would the Council have power to say to the students "Have you been taught in a certain order"?

9160. Yes?—Certainly, I should say so.

9161. Therefore, by the power of refusing admission to examinations they would be able not merely to prescribe what was to be taught, but the order in which it was to be taught?—Yes, I think so. You see, it gives a great deal of power over the colleges—we always felt that here—but we are not afraid of that power, because the professors of the colleges would be in mutual communication.

9162. Do you still hold to the view that you expressed before, that in this power of determining curricula the power of determining the books would not be included?—I should like to think over it before I answer positively. As I say, there is an ambiguity about what you mean by books. It is a very serious thing if the University is to prescribe the books in which a subject should be learnt. Take, for example, a very familiar instance. It would be fatally interfering with the liberty of professors if the University were to say that a man should study logic in Mill, and not in Jevons, or some other book of that sort, as Sir William Hamilton.

9163. Do you think it would be interfering with the liberty of the professor to say that geometry was to be studied in Euclid?—No, but then Euclid is a sort of classic.

9164. Do you think you could draw the line in interpreting the clause in the Charter between a book which is a classic, and which is not?—I think there may be a way out of the difficulty. You are very good to put these points, but it is difficult to give a positive answer immediately to them. The way in which it occurs to me that the difficulty might be guarded against would be by giving strong control to the Faculty, leaving out for that purpose the words "or "after submitting the proposal for consideration and report to."

9165. (*Lord Reay.*) It is quite clear that the University Council, as the University authority, is, under the Gresham Charter, the supreme authority in the University?—Certainly.

9166. Do you not think that if the University were to claim the right of giving its recognition to certain teachers before giving them the title of University professers, that point might be conceded?—I think it would be a very difficult point to concede, because I think there might be matters of great prejudice arising, in some Faculties, at all events, which would make the vote of the Council on a matter of that kind a very undesirable thing. As the Bishop was saying yesterday, in any matter of that kind, I should not object to a veto which could be regarded as a judicial veto, but I should object very much to an elective vote of that sort.

9167. Is your fear that the University would refuse to give recognition to professors deserving recognition?—I think it is possible that it might. I think that where there was a very strong drift of opinion in favour of some particular view of a subject—some particular new course of thought—great difficulties might arise.

Rev. H. Wace, D.D.

20 July 1892.

9168. Do you mean that the University might refuse to recognise a professor who did not hold the modern view?—Yes, and, on the other hand, the professor who did hold the modern view too strongly, perhaps, in the judgment of his colleagues might be kept out of his due recognition too long. The danger is quite as great in my judgment on that side as on the other. Now, may I say one word upon another matter? I presume that I shall still be heard after I have seen the evidence, but before I go I wish to say that, though I have not seen all the evidence, I am told that one of the witnesses, on his attention being called to the fact that there were no signatures of professors at King's College to the scheme for a professorial University, said he understood that they were prohibited by some regulation or other of the college from taking part in a public discussion. I am anxious to make it quite clear to the Commission that no such restiction whatever is imposed upon our staff, and if there does not appear in that document the signature of a single King's College professor, it is simply because there is not a single King's College professor who has thought fit to support it. Their liberty is as absolute as that of any other professors in any University, and not a single step has been taken by our Council throughout these matters without the consultation of the whole staff. In every important stage, when dealing with the London University, I called the staff together, and laid the matter before them. They were, on all occasions, unanimous. When this Charter was referred back to a Commission and withdrawn from Parliament, I called the staff together, and asked them whether they still adhered to it. They again unanimously left the matter entirely with the Council and myself.

9169. (*Mr. Rendall.*) With reference to the observation of Mr. Rendall on the reputation of our staff, which very much surprised me, I beg to put in a list of some of the original researches which have been conducted by the staff of King's College in recent years. (*For this document see Appendix No.* 13.) I think that is all I need trouble the Commission with at present.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Eighteenth Day.

Thursday, 21st July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE HUMPHRY, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.

Professor BURDON SANDERSON, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
Professor GEORGE G. RAMSAY, LL.D.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

EDWARD LIVEING, Esq., B.A., M.D., examined.

E. Liveing, Esq., B.A., M.D.

21 July 1892.

9170. (*Chairman.*) You are a Fellow and also Registrar of the Royal College of Physicians?—Yes.

9171. You were present while the evidence of Sir Andrew Clark and Dr. Allchin was given on behalf of the College of Physicians?—Yes.

9172. Therefore I will not ask you all the questions that I asked the other witnesses, but I will request you to point out to me what particular parts you think have not been entered into and ask you what it is you wish to call attention to?—I shall be happy to do so. There are one or two points upon which I desire to say a few words by way of addition or explanation. I made notes of them at the time. A good deal has been said before your Lordship and elsewhere for and against teachers examining their own pupils. I do not think there is really so much difference of opinion when the matter comes to be sifted, but I should like to give an illustration by reference to the examinations of the Royal Colleges of what I think to be a very successful solution of that difficulty. The Royal Colleges lay

E. Liveing, Esq., B.A., M.D.

21 July 1892.

down the course of study and they appoint the examiners; the examiners are chosen from the leading teachers of the same subjects at the schools. It is not necessarily so, but as a matter of fact it is so practically. The examiners form a board and meet to set questions, and to consider any matter which may arise in connexion with the examinations. I am speaking specially of medicine because that is what I am most familiar with. In the earlier subjects of examination, not the final, the examination papers are submitted to the committee of management for approval. The final or purely professional examination is largely clinical, practical, and oral, and is conducted by examiners working in pairs. The clinical examination in the middle of the day is on patients, who are drafted in from the different hospitals to the examination hall. Each candidate examines two patients at least and reports to the examiners. In the evening there is an oral examination conducted by different pairs of examiners, including the examination of pathological specimens both coarse and microscopic, and the use of chemical tests. With regard to teachers examining their own pupils every care is taken to prevent it. In fact we never permit an examiner to examine his own pupils. Since there are examiners from a number of different hospitals at these examinations, it is possible so to arrange that pupils shall not go to their own teachers for examination. Now I wish to say that such is the general consensus of teachers and the unity of teaching that no examiner feels that his own pupil will be in any way aggrieved or injured by being examined by an examiner from another hospital. There is no feeling that any injustice would be done. I think this presents an instance of a very successful solution of a difficulty. It is a teachers' examination to all intents and purposes, but no teacher examines his own pupils. The next subject upon which I wish to say a few words is this. I noticed that on Friday last reference was made to a supposed scheme of the Royal Colleges for a University which was being supported by our representatives. Although the Royal Colleges have expressed their opinion on various points which have been put before them, they have not put forward any scheme of their own, and the only scheme which they have accepted is the revised scheme of the University of London. I should wish, however, fully to endorse what Dr. Allchin said, that what the Colleges would consider essential in any scheme would be: First, that adequate representation should be given them on the governing body of the University, and Secondly, that they should be associated with the University in the conduct of the professional parts of the examinations for degrees. Then another important aim of the colleges to which Dr. Allchin referred and which I wish to emphasize is this: we have already existing in London the Royal Colleges laying down the course of study, receiving certificates of education from the schools, and conducting examinations and conferring the registrable qualifications. On the other hand, we have a number of independent schools in union with the hospitals engaged in teaching and carrying out the curriculum. One is in a sense the educational complement of the other. The same men are engaged in the work of both the colleges and schools; there is practical co-operation but no organic connexion. What we wish is not to see these two parted and separated by the creation of a new organization for medical education between the University and medical schools, to the exclusion of the Royal Colleges, but rather to see them drawn closer together and federated in the new University in a common work. I think there was some confusion on one or two occasions between the views of the Royal Colleges and the individual opinions of those who were representing them. I particularly wish to guard against an impression that the Royal Colleges are appearing as advocates of compulsory residence in London for degrees in connection with any scheme for the reconstitution of the University. It struck me at one time as if that were the impression conveyed. By accepting the scheme of the Senate in which there was no provision of this kind at all, it is clear that the colleges at all events did not insist on it as essential. If the Royal Colleges were to accept the Gresham scheme, or a modification of it, which of course is quite open, it might be different, for residence seems to be a fundamental part of the Gresham scheme, their object being to stamp with their degree only those who have had a London education. A Second point is this. Two views were expressed by our representatives with the object of overcoming what may be called the Open graduation and the Provincial difficulty, *i.e.*, the equitable examination for degrees of those who have and those who have not had a regular education in London. I think they were not clearly distinguished. Sir Andrew Clark, if I remember rightly, dwelt upon the reconstitution of the London University with two sides, a London or local side, and a provincial or Imperial side, and he spoke of a separate administration for each. That was his way of solving that difficulty. Dr. Allchin thinks the same difficulty would be met in another way by having two sets of degrees, Ordinary degrees and Honour degrees, the Ordinary degrees being Metropolitan and the Honour degrees being Cosmopolitan. Again, with regard to the Gresham Charter, one point on which I think Sir Andrew Clark was misunderstood is this: I have never heard any complaint that Medicine was inadequately represented on the Gresham Charter, but it was a complaint that the representation was too exclusively by teachers through the Medical Schools. It is true that the Royal Colleges declined to accept the representation that was offered them; but it must be remembered that a very important part of the College programme was not included in that scheme as presented to them; namely, that their professional examination should be taken as part of the examinations for medical degrees, and be conducted for that purpose as a conjoint examination with the University. Another point on which there seemed to me to be some misunderstanding, and which I wish to make quite clear is this: In all the negotiations with the University of London, the Royal Colleges never contemplated that the medical degrees should be given for their qualifications alone. It was always insisted for medicine that candidates for degrees must enter by the University door; they must pass the Matriculation and the Preliminary Scientific Examinations. There we differed very much from the recommendation of the Royal Commissioners. Then there is a matter with reference to which Sir Geo. Humphry made some observations which I should like to reply to for a moment. He seemed to question the stability and permanence of the existing relations between the Royal Colleges, and he referred to the objections taken to the Conjoint Scheme by certain fellows, not members of the Council of the Royal College of Surgeons, as having been arranged without their approval. I wish to point out, subject to correction by fellows of that college, that the Council are elected by the fellows; therefore, if the fellows object to their proceedings, they have their remedy. I wish also to express my belief that these relations will be permanent. This is the tenth year of its existence, and I do not think the Conjoint Scheme was ever on a firmer basis or that the relations were ever on a more cordial and harmonious footing than they are at the present time. I think that is all I have to say by way of supplement and explanation. I should like now, if your Lordship will allow me, to express my own view of the situation. I shall follow so closely the proposals of the first Royal Commissioners, that I think it will be quite sufficient if I refer to the various paragraphs in the Report of the Commissioners without detaining your Lordship by reading them. I think we are all very much agreed as to the urgent need for the establishment of a University in local relation to teaching and study in London. That was on our printed paper, and I may say that it was the view of the last Royal Commission. It is set out on page xi, clause 13, of their report. We are, I repeat, agreed with regard to the urgent need of the establishment of a University in local relation to teaching and study in London, though we may differ individually in our views as to how this may best be accomplished. Any scheme on the lines of the Gresham Scheme means a second University in London. That alone, to my mind, is a great objection, as it would introduce competition; and it would divide public interest, support and endowment. The success of one would mean more or less the failure of the other. That is set out in the report, page xi, clauses 15, 16, and 17. Then I think great injustice would be done to the University of London, which, in my view, has the first claim to consideration. I think it would very likely work in this way: a new University if successful would deprive the old one of its best graduates, those, namely, who have passed through a complete system of educational training, and it would leave it, I will not say (as has been said) those students who have had their education "in the gutter," but those who have got it as best they could, all credit to them for so getting it. On the other hand, I think a New University would lose, through not being associated with the old one, the reputation to be gained from the

distinction which the old one has already achieved. All this has been set out in clause 14 of the report of the previous Commission. As regards other objections which may be taken to the Gresham Charter I will not repeat them, because they have already been set forth by Sir Andrew Clark. Then I should wish to say a few words on the Professorial Scheme. I cannot claim to be particularly conversant with it; it has not been before our college or been discussed there, but from what I have heard and read it does not commend itself to my mind. I think there is a very general agreement that there should be some professorial teaching of a high character in London; there should be also laboratories and other means for the promotion of higher education and research, whatever form of University is established. But this does not necessarily mean the adoption of a professorial scheme at all. A reconstituted London University could very well undertake it. We have precedents for it in the old Universities of Oxford and Cambridge, where, apart from the Colleges, there has always been a professoriate, and where professorial teaching has been greatly developed of late. Then, again, the scheme seems to me to stand self-condemned, on account of its extremely revolutionary and destructive character. It proposes to sweep away existing educational institutions and machinery. Reading paragraph 156 of the evidence before this Commission by Professor Thorp, I see that he says, "As to existing colleges, I would destroy "their individuality; I would absorb them; King's "College and University College would no longer "exist." It is, in fact, a proposal to make a clear field, and start *de novo*. I venture to think this quite wrong. It is generally safer and easier to make use of existing materials, to mend existing institutions of which we know the virtues and defects, than to create anew. I also agree with Dr. Allchin in thinking it dangerous to entrust so much power to an irresponsible body of co-opted professors. Mr. Hulke expressed the same view in saying that no scheme would be satisfactory in which teachers were entirely dominant. But since, as I understand, it is admitted that the Professorial Scheme is very imperfectly applicable to medical education in London, it concerns us less, and so perhaps I need not pursue it further. Then I will come to the question of the reconstitution of the University of London as a teaching University, federating the teaching institutions of London, organising, co-ordinating, and extending their work. All this is set forth in the report of the last Commission, pages xi and xii, in the second part of section 17 and elsewhere, and it is such a scheme which especially commends itself to my mind. I think every credit is due to the London University for the way in which it endeavoured to carry out the recommendations of the Royal Commissioners—endeavoured by prolonged negotiations to reconcile conflicting interests. I am sure I can say so with regard to medicine. One member of the Senate, and of this Commission, more particularly took immense trouble to master the medical side of the question, by no means an easy task for one outside the profession, and did it very successfully. My own view is that the reorganisation of the University should take place much on the lines of the revised scheme of the Senate, but with this very important difference: the provincial colleges should be omitted from the Constitution. This is in accordance with the recommendation of the previous Commissioners, and the reasons are forcibly given in the report, page xiii, clause 22. Here I venture to differ from our President Sir Andrew Clark. I think it necessary that the new University, so reconstituted as a teaching University for London, should admit the non-collegiate and provincial students freely, as now, for examination for the degrees, and without requiring residence or education in London. In this way I think that the difficulty and complication of having two sides, and two sets of degrees, and so on, would be got rid of. I know I shall be met by observations about the unfairness of provincial students being examined by London teachers. I venture to think this disadvantage is more imaginary than real. With such a University as we hope to have in London, anything approaching narrowness, one-sidedness, or unfairness is out of the question. I believe provincial colleges will be in no more unfavourable position than they are in the present University of London, and they will certainly be no worse off than the non-collegiate students must be. At all events that was the opinion of the former Royal Commission, as expressed in their report, page xiii, clauses 21 and 22. In the examinations of the Royal Colleges, which are open to all, we have no complaints of unfairness, although they are practically conducted by London teachers. The recommendation of the first Commissioners was that a teaching University should be established, in the first place, in and for *London*, and not in and for *England*, as Sir George Humphry was saying. I noticed that Sir George emphasized the word *England* in this connexion in the questions he asked the other day. I simply feel with the first Commissioners, that it should be first and foremost a University in and for London; that it is to meet London wants, and the crying disabilities of London students and London teachers, and to forward the cause of higher education in the metropolis, that a new or reformed University is especially required. I would admit outside students to degrees; but the first claim, I think, is for London. That is all, my Lord, which it occurs to me to say.

9173. (*Mr. Rendall.*) You say that provincial colleges should be omitted from the constitution, but you refer only, I understand, to place and representation upon the governing board?—Yes.

9174. You would approve of free access to the students on equal terms to the University examination?—Yes.

9175. And supposing, as would be natural, the University required residence in some recognised medical schools you would accept attendance at a provincial college provided it was well equipped and administered?—Certainly.

9176. (*Mr. Anstie.*) I understand you to say that by the regulations of the conjoint board the teacher does not examine his own pupils?—That is so.

9177. I observe that on page 54 of the Report of the previous Commission the Bishop of London makes this statement. "When, for instance, any man is examin-"ing his own pupils side by side with another man's "pupils, there may then be so much of the personal "influence of the examiner brought to bear upon "the examination as to make it unfair by comparison "for those who are not the man's pupils. I think "that the statute at Oxford, which forbade any "examiner to examine his own personal pupils, is a "right statute on that account." You would agree to that expression of opinion, I gather?—I should quite agree.

9178. There is one point upon which I should like to take your opinion. You are aware that two alternative methods have been proposed for uniting the action of the University with the Royal Colleges: one the system shown in clause 47 of the Senate's scheme which combined the action: the other a proposal by which the subjects were to be divided, and a testamur was to be taken from the two colleges. I understood Sir Andrew Clark to express his preference for the first method—the combining method. Do you agree with him or differ from him on that point?—I agree with him.

9179. You prefer that to the testamur?—Yes.

9180. You stated that in your judgment the effect of a new University being created side by side with the existing London University would, so far as medical students are concerned, be to withdraw from the existing University their best men?—I fear that it might have that effect; and I have in my mind by no means exclusively candidates for medical degrees, for whom a regular training is already required.

9181. You are aware that considerable difficulty has been found to exist, and has been pointed out by several witnesses, in securing upon the governing body of the Senate of the University of London a sufficient complement of teachers in medical subjects. Would the creation of a new University, with a powerful medical side commanding the allegiance of all the medical teachers in London, rather increase than diminish the difficulty which is at present felt by the London University in obtaining their assistance?—You mean *a second* University being established?

9182. Yes?—I should think so, certainly.

9183. (*Sir William Savory.*) I think you declare unequivocally in favour of the modification of the existing University?—That is my own personal view.

9184. But may we take it that you represent your college in that view?—I do not think I must quite say that—I think my college is open as to the two schemes, but there is this important fact—that it has accepted one and rejected the other.

E. Liveing, Esq., B.A., M.D.

21 July 1892.

9185. Which has it accepted?—It has accepted the revised scheme of the University of London. But I think, perhaps, to be strictly accurate, I ought to say it was that scheme before its final revision, for I believe that was the scheme which was formally before the college.

9186. (*Mr. Anstie.*) I think it was the revised scheme?—I do not consider there was much difference between them, excepting the important one of admitting the provincial colleges.

(*Mr. Anstie.*) That was already a matter of discussion before the acceptance.

9187. (*Sir William Savory.*) Then we may take it that so far the colleges have declared in favour of a single University?—Certainly.

9188. And that would be amongst other advantages the simpler one of the two?—Quite so.

9189. A question has been put here as to which would be the simpler: the one or the two. You have no hesitation in saying that if the present University could be reconstituted to meet the present demand it would be the simpler plan of the two?—I should say so. It has been the only difficulty in the way.

9190. The Commission had, I think, pretty fully placed before it the position which the Royal Colleges occupy in the profession, the amount of work they do, the work they have already done, and the means they possess of carrying it on. So I suppose it would not be a small question in regard to the medical side of the new University with which University the Royal Colleges work?—I am afraid I missed the point of your question.

9191. What I mean to say is this that the choice the colleges made between the London University and the new University would be a very important matter in determining the success on the medical side of the new University?—Quite so.

9192. Without claiming too much for the colleges it would be perhaps a very important factor in the question of success?—I should think it would be a very important factor in the question of success.

9193. With regard to that matter I suppose we should all agree whatever view we take of the present constitution, advantages, and defects of the London University, that it has done most material work in the very best direction in our profession?—I think there can be no doubt about it.

9194. May I read you a passage from the evidence of Sir James Paget, given before the former Commission. I want to ask you whether you agree with it. "I "mentioned in my evidence some facts in proof of the "high positions occupied by doctors of medicine of "the London University. One was that from among "them have been selected nearly half of the physicians "and of the assistant and obstetric physicians to the "principal hospitals in London. This may, at least, "show that the studies and examinations necessary for "the degree, did not tend to make them impractical. "The same may be said of a large number of the "leading provincial physicians, and of the many "surgeons of repute who hold the M.B. of the Uni-"versity. And a yet stronger evidence of the emin-"ence in practice of the physicians who hold the "University degree is in the list of the fellows of the "Royal Colleges of Physicians. They are carefully "selected from the members of most repute, wherever "they may practise. The number elected in the "last 20 years, among whom are graduates of 20 "Universities, is 205; and of these 64 have the "degrees of the University of London?"—I have no doubt that is perfectly correct. It is quite my own impression.

9195. Would it not be a very serious step for the two colleges to take to throw this influence of theirs which is so great into the prosperity of the new University with the evidence before us that at least on the medical side it might seriously damage the future welfare of the London University?—Yes, I think so.

9196. (*Sir George Humphry.*) You remarked on my laying an emphasis on the word "England" as distinguished from "London" with reference to the purposes of the University?—Yes.

9197. I do not know whether you observed that that remark of mine was with reference to the admission of candidates for the examination?—No, I did not understand that it was limited in that way.

9198. It was entirely in reply to the observations of Sir Andrew Clark that he thought the University was for London and that students other than those in London should not be admitted. It was simply with reference to that, and there I think you agree?—Yes, I agree.

9199. The remark of yours with reference to the provincial colleges not being admitted to the constitution of the University was not at all in my mind?—I misunderstood you.

9200. I think we agree on the whole. Then you mentioned that the provincial student is not at a disadvantage in being examined by London men?—What I said was I do not remember ever hearing of any complaint.

9201. There are, and have been for a very long time, some provincial examiners at any rate on the examining board of the College of Surgeons?—Yes, I believe there have been.

9202. You probably would not have known whether the London student felt himself at a disadvantage by being examined by a provincial surgeon?—No.

9203. Do you know the number of provincial students who present themselves for the examinations of the conjoint Board?—Relative to London students, do you mean?

9204. Yes?—Yes, I have had that lately taken out. It is about one-fifth provincial and four-fifths London.

9205. And you do not at all wish to cut off that number of provincial students from the examination which may offer to them a degree upon such terms as proposed by the Colleges of Physicians and Surgeons?—No, I do not wish to do so.

9206. I think you generally accept the views of the previous Royal Commission?—Very much.

9207. There was one point which I did not quite catch, I think you rather objected to their view with reference to the preliminary scientific examination?—Yes, because they recommended or suggested that that examination being one of the great difficulties of access to the degree should be conducted by the Royal Colleges. Now we do not think that that is our function at all. It is the professional examination that we think ourselves specially competent to conduct.

9208. The words of the Royal Commission were "we "think also that the University should have power to "dispense with preliminary scientific examination." You would rather that the preliminary scientific examination was still conducted by the University?—Certainly.

9209. And that is the view of the college?—The College adopted a report in which that was recommended.

9210. Therefore you quite assent to the view which I think is generally felt in the profession that the degree as superadded to the license should indicate something of higher general qualification?—Quite so.

9211. And you would regret that that should not be clearly and distinctly stated?—I should much regret.

9212. I think also you feel that one examination ought to meet the requirements both of London and provincial students?—I think so.

9213. That an examination conducted upon such broad principles as should be required for a pass examination might perfectly well be conducted by examiners who had no especial relation with the students whom they examine?—That is my view.

9214. There is an important point which I also mentioned to Sir Andrew Clark, namely, the relation of the Apothecaries' Society to any scheme of this kind. Have you any view upon that from the college?—No, I have no view from the college.

9215. Have you any view of your own at all with reference to that? Of course the relation of the Apothecaries' Society has long been a very great difficulty in connection with a conjoint examination?—It has been and is a very difficult question indeed.

9216. You probably remember that in the original scheme a good many years ago, which scheme somehow or other dropped through, the Apothecaries' Society were represented on that scheme and examinations were to be conducted by the Colleges of Physicians and Surgeons in union with the Apothecaries' Society?—Yes, I quite well remember.

9217. For some reason or other that dropped through?—Yes, that is so.

9218. What is your feeling with regard to such a combination again?—With regard to the new University, do you mean?

9219. With regard to this proposed plan of examination—the Colleges of Physicians and Surgeons taking part with the University for the degree—whether the Apothecaries' Society should be joined with them in taking part?—I think, on the whole, not. I think the Apothecaries' Society is a body of an entirely different character from the Royal Colleges. It was originally a trading society or guild, and has that constitution, whereas the Royal Colleges are composed in one case almost exclusively of University graduates, and in both of men of a different stamp. I think the Apothecaries' Society is hardly a body of academical character.

9220. You feel that their exclusion would constitute a difficulty in the acceptance of any such plan as that proposed?—There is no doubt such a difficulty.

9221. And would your repugnance to it be such as to induce you to approve the exclusion of the Apothecaries' Society?—I have a great respect for the Society and the work they have done, but I disapprove their connexion with the University.

9222. Still you think it might be yielded?—No, I will not say that.

9223. With reference to the union of the colleges you have also referred to my remarks. My remarks were not intended to throw any doubt upon the stability of that union, but rather to obtain from Sir Andrew Clark—and I am glad also to have it from yourself—that there is every reason to think that it is a firm and permanent union?—Then again I misunderstood you. I am very sorry.

9224. I thought it was right that it should be clearly known that that was a permanent union?—I quite agree.

9225. I suppose you feel that the relation of the colleges to a University offering greater facilities for a degree is very important to the colleges?—Very important indeed.

9226. And being important to the colleges it is important also to the welfare of the profession?—Quite so. It is very much a professional question.

9227. And to the public?—Yes, and to the public.

9228. So that the relation of the colleges to the University is very important. We might almost say it is a point of national importance that they should take their fair part in this new University?—I quite say so.

9229. It is not a mere question of the colleges, but it is a question of medical education, medical welfare, and therefore of public welfare?—Very much so, indeed.

9230. Does your experience indicate that any considerable number of students in London, that is to say, gentlemen who have commenced their studies in London, do really go to Edinburgh for the purpose of obtaining the degree?—I should say without doubt.

9231. There are a good many who do it for that simple purpose. In addition to the other reasons which attract them to Edinburgh, those other reasons being the reputation of the school, the cheapness of the education there, the living there, and the quality of the students as well as the teaching which they find there, they are attracted by the desire to obtain the degree?—I think so, and also to other Universities—Durham, for instance.

9232. You really find that that is the case to a certain extent?—It certainly is.

9233. You could not tell to what extent; you have no data, have you?—No, I have not got any, and it would be rather a difficult matter to obtain them.

9234. But your belief is that it is a considerable number?—I have every reason to think so.

9235. Your feeling is that the University should be quite an open University; that there should be no restriction whatever, except as regards the plan of education, as to where that education is carried on?—There should be perfectly free access to the examination for degrees as at present.

9236. From the University of London?—Yes, the University in other respects being reconstructed as a teaching University for London.

9237. (*Professor Ramsay.*) By saying that you approve of the revised scheme of the Senate with the single exception of the omission of the provincial colleges, you mean that the provincial colleges are not to be represented in any kind of way in the government of the University?—Yes.

9238. In the case of medical students presenting themselves from the provinces for a degree you would require them as at present to have gone through a definite course of study in medicine?—Certainly.

9239. Would not that imply a definite recognition of certain medical schools in the provinces?—I think it would, as at present.

9240. Then would you not to some extent, even under that system, get back into the old difficulty of the relations between the University of London and certain colleges which it would recognise, and certain colleges which it might not?—It would be in exactly the same condition as at present. As regards the colleges which were constituent colleges of the University, they would be recognised colleges of the University.

9241. The University of London would have to satisfy itself that some particular schools deserve recognition?—Yes, I do not know how they ascertain that at the present time.

9242. Would not that amount of supervision over the schools, logically, imply some representation on the part of the colleges in the London University?—Well, it does not exist at present, and I would propose to leave that as it is.

9243. Then there would be no official or recognised mode by which the University of London could get any information as to the state of any provincial school?—Well, they would have their scheme of study before them, of course.

9244. But what would be their means of satisfying themselves that that particular scheme of study was carried out? Does not the power of making a selection between schools, or of recognising schools, imply a certain amount of right to ascertain officially how the course of study is carried out?—It would seem so.

9245. Would you make that condition apply only to medical schools? It would not apply, would it, according to your idea to degrees in Arts or Science, or other things?—No, not as regards provincial schools, but, of course, there is a special reason in the case of medicine, medical degrees conferring a qualification to practise.

9246. Take Science. Would not the reasons which make it necessary for a student to have gone through a prescribed course of study in medicine make it equally necessary that he should have gone through a prescribed course in science?—No, for the reason stated, but I believe it is unavoidable.

9247. So that even although you do not admit provincial colleges to the University, it might be a difficult thing for the University to cut itself clear of that sort of entanglement which brought the whole system of affiliation to grief?—I am aware that those difficulties are considered real difficulties now.

9248. You would not propose any machinery by which the London University would have the right to examine into the state of the provincial schools?—I have no views to express on that point, but I cannot say that I have considered that question very particularly.

9249. With regard to the degree, I understand that what you desire is a single degree, and that you object to the scheme put forward by Dr. Allchin which proposes two separate degrees, a pass degree and an honour degree?—Yes. That does not commend itself to my mind. There is a difficulty, which it is intended to meet, but to my thinking it rather complicates it.

9250. Is one of the difficulties in your mind the fact that there is no such thing in any University as a Pass degree as distinguished from an Honour degree?—It was not in my mind, but I suppose that is so. I am not quite sure of the sense in which you mean it. In the University of Cambridge we have poll degrees and honour degrees.

9251. There are higher examinations for those who take the degree with honours?—Yes.

9252. That is a different thing from saying that a degree, as such, is an honour qualification?—Yes, if I understand you.

9253. Dr. Allchin says the pass degrees should be all given at one level, but that in the honour degree in medicine every candidate should be placed in order

E. Liveing, Esq., B.A., M.D.

21 July 1892.

of merit. So that he would not simply obtain "a degree," but a degree of the 5th place or a degree of the 10th place, and so on in order of merit. That introduces a system of complication?—It seems to me a complicated way of meeting a difficulty.

9254. But you would like, I presume, to see a system of honour examinations in medicine associated with a system of pass examinations for one and the same degree, just as is done in other subjects?—Yes.

9255. Now is there such a thing in connexion with any other University?

(*Mr. Rendall.*) It has been established in the Victoria University.

(*Professor Ramsay.*) How long has it been established?

9256. (*Mr. Rendall.*) It was quite recently; this summer for the first time?—There are honour degrees now of the University of London, that is to say, men take honours by going in for an honours examination.

9257. (*Professor Ramsay.*) Quite so, but the degree is the same, some taking it with honours and some without?—At Cambridge, again, the B.A. is given to the senior wrangler and to the wooden spoon—the poll men, and so on.

9258. There is one objection which you put to the professorial scheme, which was also urged the other day by Sir Andrew Clark. He objected to a Senate of professors because they would be irresponsible. In what sense do you mean the members of the Senate would be irresponsible?—They are not responsible to any constituency as it were. They are to be co-opted after the first institution.

9259. I understood the point of the professorial scheme was that they were to be elected by the Faculties. Is not that so?—No, I think not.

9260. In the first instance the professors themselves were to elect a certain proportion of their number to be on the Senate. Is not that the scheme?—I do not think so.

9261. Then you would not attach the quality of irresponsibility to professors elected by the Senate from the whole body of University teachers in the way proposed by the Gresham Charter?—No, I should not object then.

9262. You mean by irresponsible not being elective?—Quite so; being not responsible to any electing body at all.

9263. Then you would make no objection to having professors elected to the governing body from the whole body of University teachers?—That is how it was proposed to elect the Faculty members in the scheme of the University of London.

9264. Take the case of King's College under the Gresham. The representation there is by the Council of King's College. The Council of King's College is a body which would be under the scheme responsible to no one. It is self-elected. Would it not be true to say of such a body as the Council of King's College that they were irresponsible, because the University as such would have no control over its component members and yet they would elect a portion of the Senate?—Possibly, but the Council of King's College is not exclusively formed of teachers. One of the objections to the professorial scheme is that this is to be a Senate of professors co-opted. I am not, however, very competent to pass an examination in the professorial scheme because, as I said before, I have not studied it sufficiently, and it has not been formally before our college.

9265. (*Lord Reay.*) Do you contemplate that the medical students of the new University should be examined for the license by the conjoint board examiners?—For the license of our colleges, do you mean?

9266. I mean whether you contemplate that to obtain a registrable qualification, the students of the new University should be examined by the conjoint board?—In union with the University.

9267. A University examination conducted by you and the University?—Yes, for degrees.

9268. I am now speaking of examinations for the license?—For the license of the colleges alone?

9269. A license recognised by the colleges?—No; I think there must be a separate examination.

9270. The student of the new University would obtain the license from you?—Yes.

9271. Then to obtain the degree there would be an additional examination of the University?—No. We suppose that the examinations for the University would also cover the license for those who had entered by the University door; who had passed the matriculation.

9272. Therefore the students of the University would not be required to pass any examination outside the University?—No.

9273. (*Professor Sidgwick.*) I want to ask you a question in order to make clear the relation of your view to that expressed by Sir Andrew Clark, because it is not quite clear to me how far they diverge. Sir Andrew Clark, as far as I took down his words, held, as you say, that it was desirable that there should be one University formed by the dissolution and reformation of the existing University of London?—Those are the words he used.

9274. You think that the phrase was not too strong for the process required?—Perhaps not. But I do not think I should have used it quite myself.

9275. He also said that it would be desirable that there should be a distinct side of the University for London practically free from the trammels of the Imperial function of examining at large; would you agree with that?—I think his view was that they were to be united under one council.

9276. But that in the work of the administration there should be a London side free from the work of the Imperial side?—Quite so, a separate administration, I think.

9277. He also said that in order to carry out this it would be decidedly required to override Convocation by an Act of Parliament. That is a question on which you do not like to express an opinion?—I would rather not. And I should like to have his words before me.

9278. Then I come to a point on which it seems to me that the answer you gave to Sir William Savory was very different from that given by Sir Andrew Clark. Sir Andrew Clark went on to say that if this process of dissolution and reformation of the existing University of London met with insuperable obstacles he would gladly turn to the scheme of the Gresham University and that there would be enough in the Gresham Charter to make a good University. Is that phrase too strong in your view to express the general opinion of the college you represent. I mean that if insuperable obstacles are found in the way of overriding Convocation and dissolving and reforming the University of London you would gladly turn to the scheme of the Gresham University?—I think if the London University failed the colleges would turn to consider not the Gresham scheme as it was presented to us, which we have definitely refused, but some modification of it certainly.

9279. You mean some modification which gave them power in their view more adequate to their responsibility?—Yes.

9280. In reply to Sir William Savory you said the scheme of making one University was simpler than that of making two. May I ask whether you had in your mind the scheme of the Senate. Was that before your mind as an example of simplicity?—I could hardly say that because I propose alterations in that. I should leave out the provincial colleges.

9281. And that would reduce the complexity?—Yes. Then again I should not have two systems of degrees, two sets of examinations, it would be all one. The collegiate and non-collegiate students would be admitted to the London University examinations.

9282. I presume that in that view you are considering the faculty of medicine, but that you would not propose to interfere with the double arrangement proposed in the Senate's scheme with regard to the examination in Arts and Science, where there seems to be so strong a demand for a London examination as distinct and quite separate from the Imperial one?—I was speaking of medicine.

9283. (*Professor Sanderson.*) I want to ask a question as to the point put by Mr. Anstie relating to the practical examinations of the College. You remarked yourself just now that the conjoint board is especially competent to conduct such examinations?—Yes.

9284. And, of course, we have evidence before us that the examinations in practical subjects are as good as they can be made?—I think so.

9285. I want to ask whether it would not be desirable that the University at all events practically should hand over entirely the work of examining in those subjects to the conjoint board, that is to say, to the colleges?—So as to accept the determination of the colleges, and not conduct them in conjunction?

9286. Not necessarily to accept testamurs, but practically to hand over the business of examining in practical subjects to the colleges?—In professional subjects much as it is proposed in the revised scheme of the University of London.

9287. But in that scheme, the plan is that the University and the colleges should join in forming a board of examiners or something of that sort?—Quite so.

9288. But would not it be very much better that the University should practically hand the whole thing over to the colleges?—I am not sure of that. We should conduct the examinations on the proposed scheme as constituents of the University; not as separate colleges.

9289. But still you would expect to have the complete supervision of the examinations and the supervision of teaching in relation to them?—Quite so. We think that would be best for all with regard to the professional studies and examinations.

9290. Might I go a step further and ask whether the colleges would be willing to hand over the scientific examination to the University?—I do not think the colleges have expressed an opinion upon that point. Do you mean for our license? For instance, the examination in chemistry?

9291. For the degree in medicine. It would, of course, be very convenient indeed if the University could take complete control of all examinations in Science and that then, after the candidate had passed the scientific part of the examination, he should go to the colleges and they should take the whole responsibility of examining him in practical subjects?—I have already said, in reply to Sir George Humphry, that we think the examination in preliminary science should remain with the University. It is the examination in the professional subjects that we feel ourselves so well able to conduct; but it should be a conjoint examination between the University and the Royal Colleges for degrees.

9292. It should be part of a conjoint system?—Yes.

9293. That would not be inconsistent, would it, with a division of labour between the two agencies?—No, I think not.

9294. All I would ask is whether you approve of the principle; I mean the principle of dividing the scientific from the practical part?—Speaking generally I do. Before I could give a more definite opinion upon it I should like to see what you would propose embodied it in a definite scheme.

E. Liveing, Esq., B.A., M.D.

21 July 1892.

9295. (*Mr. Anstie.*) With reference to some questions put to you, as you are here officially representing the Royal College of Physicians, I should like to ask you whether you are familiar with that document (*handing document to the witness*). At page 51 of the Report of Proceedings put in by the Chairman of Convocation there commences a narrative of the negotiations which took place between the Senate and the Royal Colleges. You are familiar with that document, are you?—I took no part in this. It was before I was an officer of the college.

9296. You took no part in what? I want you to be quite clear as to the nature of the document I am directing your attention to. Having now ascertained what the document is, I ask you first of all are you familiar with it?—Yes.

9297. Does the statement there made accurately represent what took place?—That is quite correct.

9298. Now with respect to one other point put to you by Professor Ramsay, the position of recognised institutions from which certificates are receive is a wholly different one from that of an affiliated college?—Quite true.

9299. And neither in the existing constitution nor in the proposed scheme did those recognised medical institutions as such take any part in the government of the University?—Certainly not.

9300. But by clause 29 of that scheme this provision was made: "The institutions from which the Univer-
" sity receives Certificates for Degrees in Medicine
" shall retain their right of giving such certificates
" whether they be or be not constituent colleges. But
" the Senate shall have power, after consultation with
" the Board of Studies of the Faculty of Medicine,
" from time to time to revise or to add to the list of
" such institutions, and to determine in what branches
" of medical education the certificates of each of the
" said institutions shall be received"?—I remember that.

9301. That would meet the point raised by Professor Ramsay, would it not?—I think it would.

9302. Am I right in understanding you to say that under the scheme you favour you do not apprehend that there would be any disadvantage imposed upon or incurred by provincial students?—I do not think myself there would be any disadvantage really.

9303. Are you aware of any grounds or reasons upon which a parallel system applied to Arts and Science should any more put provincial students at a disadvantage?—I am not aware of any.

The witness withdrew.

NORMAN MOORE, Esq., M.D., F.R.C.P., examined.

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

9304. (*Chairman.*) Have you any statement which you would like to make to us, or would you rather be questioned?—I should like to make a short statement. I wished first to mention, as it has been referred to in the history of the subject, that the Royal College of Physicians is not now considering for the first time the question of the formation of a University in London. It has been sometimes said that the college did not do anything to aid in the formation of the London University. I find that that has been mentioned against it as an instance of its want of breadth in considering the subject. I have examined the college records; and it seems to me that the impression that the college rejected the idea of a University of London is erroneous. The false impression I have mentioned, say the college records of 1838, "is highly injurious to
" the character and interests of the College of Phy-
" sicians, whose alleged refusal to aid the Govern-
" ment in the formation of a Metropolitan University
" has already been spoken of as affording a just reason
" why powers subversive of the college should be
" granted by Parliament to the institution. No oppor-
" tunity has ever been afforded to the college of con-
" sidering any arrangement which might conciliate the
" interests and promote the useful operation of both
" the University of London and the College of Phy-
" sicians." I only wish to point out to your Lordship that it is in accordance with this original idea expressed in August 1838, that the college is acting now. It is as ready now as it was then to take part in forming a University, always providing that the University is satisfactory. I think the college is a body with which any University might be proud to be connected, and which would add to the dignity of any University. It is not too much to say that ever since September 23rd, 1518, the college has been the chief medical authority in London. I am using the word "medical" in its restricted sense. And I think it can also be said that throughout that period it has worthily maintained the dignity of medicine. It has endeavoured to advance it by founding lectures. It founded lectures in 1569, 1581, 1635, 1729, and two in this century in different branches of medicine. The lectures were not trivial or unimportant. The most important physiological discovery that was ever announced, the circulation of the blood, was made known in the course of those lectures. I mention that as showing how the college has fostered learning. I am still giving reasons why it would be an additiou to any University. Every physician in London of any note has belonged to this college. It is impossible to mention any distinguished person in the branch of medicine that the college deals with who has not belonged to the college. And in some sense, taking again the medical side, the college is the source of every medical authoritative expression in London. In the Senate of the University of London the medical persons, using the word "medical" still

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

in its restricted sense, belong to the college. In all the medical schools everyone who can speak with authority on the medical side belongs to the college, so that there is in fact no other medical authority in London. If any one speaks with authority his authority is derived from the Royal College of Physicians. So there is nothing like what has sometimes been suggested in some evidence, the exclusion of anything that is worthy or that deserves credit in medicine on the part of the college. I ought perhaps in passing just to mention the Society of Apothecaries. The Society of Apothecaries was originally founded on the advice of two distinguished fellows of the College of Physicians from a part of the Grocers' Company. It is a body which has a creditable history, but it is not a learned body; it speaks with no authority in medicine, and, as most people are aware there is no such thing as an apothecary to-day. There are no men going about saying that they practise as apothecaries. So the Society of Apothecaries is altogether an anomalous body, which has the power conferred upon it by law of granting what is a medical qualification. But its discussions are of no moment. It neither decides questions of medicine nor surgery. All that is of authority in medicine or surgery is contained in the College of Physicians or in the College of Surgeons. The Society of Apothecaries therefore, however it ought to be considered for political reasons, I mean for reasons outside science, has no academic standing whatever.

9305. Would you like to see it swept away?—No, I do not propose to do anything against it. I am merely explaining its position, and saying why I do not think it ought to form part of any University. I should leave it with all its rights. The College of Physicians is competent for a University, partly for these reasons. There are others: it is composed of men accustomed first of all to Universities. Here is a table which I drew up myself of the Universities represented in the College of Physicians in 1892. The fellows of the college, who are the governing body, include 32 graduates of the University of Oxford (of course it is understood that I am speaking of medicine); 50 of the University of Cambridge; 98 of the University of London; 2 of the University of Durham; 84 of different Scotch Universities, made up of 42 of Edinburgh, 7 of Glasgow, 14 of Aberdeen, and 21 of St. Andrew's. Montreal 1, McGill 1, Toronto 1, Brussels 1, Leyden 1, Pisa 1. Then the fellows are necessarily persons of a ripe age. No one can become a Fellow of the College of Physicians until he has attained the age of 29. Then, again, there are men engaged in the several parts of the practice of medicine, and also in several of science. There are a few in parts of science. A large proportion of the Fellows are teachers, actual teachers or past teachers. On the Monday after Palm Sunday, which is a day on which there is always a large meeting (I am speaking of 1892), I estimated the number of teachers present. There were 57 present teachers, 14 former teachers, and of persons who had never held a teaching post there were only 28. Then I take as an ordinary small meeting, to illustrate further the fact that the colleges are closely related to the medical school, a meeting on June 17th, 1892. On that occasion there were 11 medical schools represented. There were 49 persons present, and out of those 41 were actual teachers in medical schools. Then as regards the work done the college is worthy. It has founded laboratories which would be of the greatest value in relation to a University, which are freely open to all students at the expense of the college. Then it has a further advantage that it does exercise a definite moral control over the persons who have received its license, its membership and its fellowship. Those are some of the chief points which seem to show the position and powers of the College of Physicians. Those powers I say apply in a slightly different way, owing to its slightly different constitution, but still practically in the same way to the College of Surgeons. There the power exercised by the governing body is a power which has been received from a larger body. In our case it is a power which is actually exercised by all the fellows; but the general result, allowing for that difference, is, as far as I know, in the College of Surgeons exactly the same. In the evidence of the President and the Registrar, and in that of Dr. Allchin, there was one point which was not, I think, mentioned perhaps as fully as it might have been. That is, that the College of Physicians has passed several resolutions stating that it thinks that the medical schools ought, if possible, in some way to have some direct representation it has never committed itself to the quantity, number, or anything of that kind, but some direct representation upon the governing body of the University, whether a new University or a modified London University. Then I should like to say one word about provincial schools. There are not many provincial schools. The difficulty with regard to them appears to me to be thought more important than it really is. If you take the provincial schools in the places in which there are no Universities there are the schools of Birmingham, Bristol, and Sheffield. As far as I know in every other provincial school if a student does not like the altered constitution of the London University, if it be altered in the direction suggested, he has the choice of a University at home, and, therefore, he is subject to no injustice.

9306. And the remedy for those colleges might, perhaps, be afforded by some other University?—Or even an University of their own, which in the case of Birmingham, I imagine, might soon be the case. I should like to add, if I may, as a member of the committee of management of the conjoint board, to confirm what has been said as to the harmonious working of the two Royal Colleges, there is not the slightest prospect from anything that has occurred, or seems likely to occur, that they should ever separate or be anxious to separate. In fact, throughout all these negotiations in our college, and, I am sure, in the College of Surgeons on every occasion resolutions have been passed that our action should be joint, whatever it was.

9307. Except for the better position which it gives you have you any great reason to prefer the scheme of the Senate of the University of London over the Gresham scheme?—The College of Physicians has assented to the London University scheme. It only assented to the Gresham scheme modified in a way which has not appeared in the Charter. Therefore, I think we are bound as representing the college to say that it has never assented to the Gresham scheme as set forth in the Charter. The case of the colleges before the Privy Council states the way in which they were prepared to enter into the Gresham scheme. That provided that they should be absolutely supreme in medicine; that they should form the faculty; send representatives from the faculty to the governing body; and that all regulations should be in the hands of the faculty.

9308. Would you be content, if necessary, with less than that; with merely being consulted as to the medical degrees, and allowed to take a joint part in conferring them as you do according to the revised scheme of the Senate. That would be sufficient for you, would it not?—I think that as regards the Gresham scheme (I am judging by the votes of the college) I am justified in saying that the college would not be content with any position except that which they stated in their case. As regards the London University, I think I am justified in saying that although the college did not agree with every point in the scheme of the Senate; for instance, they did not think it was desirable to give the provincial colleges the position which is there given to them, although our college did not agree with that they were prepared to accept that scheme.

9309. Even though it gave them less than they demanded from the people who drew up the Gresham scheme?—I might offer an explanation entirely on my own account. I would say that the college was dealing with an established institution about which everything was known, and in the other case they were dealing with a body the action of which had yet to be learnt.

9310. You have already said that you agree in preferring the scheme of the Senate which was rejected by Convocation. Do you agree with Sir Andrew Clark that this objection of Convocation ought to be over-ridden by Act of Parliament if necessary, and the London University compelled to give in, and remodel itself in this manner?—Our college agreed to accept this scheme; but I do not think it must be taken that they thought that in every detail it was as good as it could possibly be. How they might have desired to see it modified I have no authority to say. I have my own opinion about that.

9311. My question was, do you think Convocation ought to be over-ridden if necessary by Act of Parliament, and that that would be the way out of the difficulty?—I feel very great unwillingness to express such an opinion about a University that I do not belong to. I feel that if I were a member of the Convocation of the London University I might object very much to be

over-ridden by Parliament. But our college did approve of the scheme, and personally I think also it was a workable scheme. I would prefer that Convocation should be persuaded of its desirability.

9312. Do you think there is any chance of that?—I have not the slightest idea of that.

9313. How long do you think the public in London would be willing to wait? Do you think it does not matter waiting three or four years?—I think it is highly desirable that it should be settled as soon as possible.

9314. They have had two years to settle it since the last Commission. But you would rather wait for that than adopt another scheme?—I have some diffidence in expressing that. Of course, the older Universities have been repeatedly altered by Act of Parliament, and, therefore, I do not think the London University could complain of it were altered by Act of Parliament.

9315. Supposing there to be any insuperable difficulty with regard to the London University, would you like the last witness, be prepared to fall back upon the Gresham scheme?—I should prefer having the Gresham Scheme with considerable alterations.

9316. Those alterations would be in the way of giving more power to the Royal Colleges, would they?—Yes, certainly.

9317. You attach most importance to that, do you?—Yes.

9318. Do you see any alteration to recommend in any other respects in the Gresham Charter?—Of course, as a very material alteration it would be an alteration in the direction, as far as possible, of the case stated by the Royal Colleges before the Privy Council. I do not know whether the Commission has a copy of that case. If not, I shall be pleased to hand one in (*handing the document to the Chairman*). It is not the whole case, but the printed document sent in stating it briefly. With the Gresham Charter altered in that direction our college has already resolved with the College of Surgeons that it would, at any rate at that time (it might change its mind) have gone into the University. That was also accepted by the medical schools but was rejected almost indignantly by the other petitioners King's College and University College.

9319. Is there any other remark you would like to make?—No, except that substantially the view of the College of Physicians in its negotiations with the London University was that the University should be managed by people in London, that is to say, that as far as management goes it should be in direct relation to London, leaving entirely open the question of examination. Candidates might have been received from anywhere.

9320. (*Professor Ramsay.*) You are to-day appearing on behalf of the College of Physicians?—Yes.

9321. I believe you are also likely to appear before the Commission in respect of the medical schools?—I think that is unlikely. I have been desired by my own medical school to appear. The medical schools, I understand, are to give evidence through a principal witness. As I happen to be the person who gave evidence before the former Commission, and as there was a great deal of detail to master my school asked me to attend, but the nature of the evidence I should have to give would be on matters of detail rather than of principle.

9322. If you were representing your own medical school only you would have nothing to add to the evidence you have given to-day?—Yes, I should have a great deal to add.

9323. I wish to ask whether you, as representative of a medical school, may be regarded as holding the identical opinions you have expressed to-day as furthering the scheme advocated by the Royal Colleges?—Of course, if I were representing a medical school I should be bound to hold opinions which the majority of persons in the school held, or rather to state the opinions, I will not say to hold them.

9324. In the scheme preferred by the colleges there is no suggestion put forward of an institutional representation of the schools?—It says the relation of medical schools to the University. On every occasion when the college has discussed it it has expressed an opinion that medical schools ought to be represented in the governing body of the University.

9325. Yes, represented, but is that to be through their teachers or as institutions separately?—The general tenour has been that they should be represented as institutions separately.

9326. Would they be satisfied if the representation of the medical schools were confined to their teachers?—I do not quite follow your question.

9327. Would it be a sufficient representation of the schools on the governing body if they were represented through the teaching staff?—That entirely depended, I think. That of course is covered in the London University Scheme. The reason there of the large number of the representatives of the Faculty of Medicine was to promote a compromise to be arrived at. The number of representatives was five. The number of medical schools apart from King's College and University College was ten; so that although the principle appears different, the ultimate result would probably have been the same.

9328. Would the schools be satisfied with a principle of this kind: the staff to form part of the Medical Faculty, and the Faculty to send representatives to the governing body, that is, the Senate. Would such a representation of all the medical teachers in London, including the teachers in the medical schools, be a sufficient representation for the medical schools as institutions?—I do not know of any medical teachers in London, except in the medical schools.

9329. There are certain teaching duties undertaken by the colleges in their research laboratory?—I do not know of any such.

9330. Of course that makes the matter simpler. Then you would be satisfied on behalf of the schools, with a representation upon the Senate exercised by the Faculty?—I can give you my own personal opinion upon that. If the representation were sufficient, that is to say, if there were a sufficient number of persons to provide for the opinion of the schools being well represented, I should entirely consent to that.

9331. As representing the College of Physicians, would you agree to a similar scheme on their behalf?—They have agreed to it.

9332. That the College should not have a representation as a college, but simply through those members of it who were teachers?—No. The college would not agree to that.

9333. Do you think you could fuse the colleges and the medical staff into a single Medical Faculty, which would have a single representation?—I should say certainly not.

9334. What would be the objection to such a proposal?—That the colleges are bodies having a very distinct tradition, very distinct powers, and lines of working, and that at this time of day, they having done their duty in every way, and there being no abuses alleged against them, it would not be fair to mix them with other bodies. They are entitled to remain in their individual condition.

9335. Did I understand you to say that the great bulk of the fellows of the college are teachers in the London schools—that the fellows and the teachers are practically the same body only, in a different relation?—Yes, but there is a very great difference. They have a very close relation no doubt to the teachers of the schools, but they could not be taken as identical. There is a difference between resemblance and identity.

9336. I think you pointed out that the great majority were teachers in the medical schools?—Yes.

9337. Would not the representation of the medical schools provide sufficiently for the representation of the college as such?—There you are putting the representation of the lesser before that of the greater. I can imagine such a representation being arranged as justly to represent the medical schools. For instance, in the choice of examiners, both the colleges pay careful attention to the different schools, and see that they are all fairly represented in turn—not necessarily all at once—on the board of examiners, but I do not think you could represent the colleges through the medical schools. I judge from the way in which examiners are appointed, which is done with scrupulous fairness, and which I have never heard any objection to from any one. From that I believe you might represent the schools through the colleges, but I am sure you could not represent the colleges through the schools.

9338. Sir Andrew Clark the other day spoke of the possibility of making what he called one great medical

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

Faculty, embracing both the colleges and the schools, so that the University in dealing with medicine should deal, not with two separate bodies, two separate interests, and two separate representations, but should deal with one single medical Faculty, which would represent every part of the medical profession in London?—I have had a good many conversations with him on the subject, and have often heard him use that expression, but I have always understood him to use the term "Faculty" in the common sense, not in the sense as used in the Charter. He says the faculty in London consists of the schools in one part, and the colleges in another part. He did not suggest a confusion or mixing up, I am sure.

9339. Then your suggestion is that the college has experience of such a kind, and such special interests that these could not be satisfactorily represented through the medical schools?—And prestige.

9340. Prestige cannot appear in a Charter. It does not enter into the constitution of the University. I understand that the college has a knowledge and experience which cannot be represented through the schools, but that the teaching staff of the schools has no experience which could not be represented through the colleges?—I do not think I would carry it so far as you state it in your question.

9341. Would you tell us to what extent you would carry it? I understood you to say that the interests of the medical schools could be represented through colleges, but not those of the colleges through the schools?—There I regarded each college as occupying a more or less judicial position, whereas I do not see how the schools could occupy a position of perfect impartiality in the same way. The colleges would, I believe, act perfectly judicially if they undertook anything of the kind.

9342. But that judicial function would still belong to the colleges in their special capacity. It would not devolve upon them as a constituent part of the University. Sir Andrew Clark expressly laid it down that the colleges must, under any circumstances, preserve those functions which they now discharge, and which have nothing to do with University teaching?—Certainly.

9343. Is there any necessity with regard to those colleges which are external to the University system to arrange for a special mode of treating them in constituting the University?—Yes, I think there is. You might say they were nominally outside the University, but they are really inside the circle of the matters with which the University deals. In other words, you might through a University destroy the colleges. I can imagine a way in which as a licensing body the University could almost destroy the colleges. I think that would be a very undesirable thing.

9344. But all that the University wants of a Medical Faculty is to include in it the persons who are doing teaching and other university work inside London?—I do not agree with that. I think what the University wishes, if it is to be great in medicine, is to get together everything which relates to medicine in the place, and to give each part of that its due influence. In other places what you say may be true, but it does not apply to London. Here you have two peculiar bodies. I cannot compare London with Dublin or Edinburgh. Here you have these two historical and worthy bodies which have never abused their powers in any way; they are now doing what is practically University work, and something the same as that of the University of London. Why should you take steps which would injure, and which in certain ways might be so worked as to very seriously injure them?

9345. Then you would not put it that either the schools or colleges have any right to representation in the University, except so far as they are doing University work?—I maintain that they are all doing nothing but absolutely University work.

9346. In all their functions?—Yes; they are all academic.

9347. The granting of a license is not academic?—Yes, I should have said it was. It is on the examination of people in subjects which form part of learned education.

9348. The control over members of a profession is not University work, is it?—I should have thought so distinctly; control over members of the profession is control over the members of the profession morally.

9349. The University as a whole may have indirectly such a control, but surely not a single faculty?—I should have differed there. I should have thought the faculties had the control, the Faculty of Divinity, for instance.

9350. Can you give me an instance of any Faculty in any University that has such a power?—I should have thought it had that power in the case of the University of Oxford, judging from numerous instances that have occurred.

9351. To what do you refer? If a Faculty, apart from the University could, exercise control over its members after they have gone forth into the world would not that constitute an *imperium in imperio*?—Which I think is often a very desirable thing.

9352. (*Sir George Humphry.*) On the whole *cæteris paribus*, that is to say, supposing the relations equal, would you prefer one University or two?—I think it would always be an advantage, and the College of Physicians is strongly of that opinion, to have one University rather than two, always providing that the one is satisfactory.

9353. Taking the simple question of one or two, the College of Physicians you believe and you yourself, would prefer one to two?—Provided that that one University is satisfactory, I should prefer one.

9354. You mentioned the new laboratories that have been established in connexion with the College of Physicians?—And the College of Surgeons.

9355. The word "Surgeons" ought to be added, ought it?—Yes, I merely confined my remarks to my own college, not as expressing a difference, but as representing my own college. Each college pays its share.

9356. I remarked that the union was cemented by the buildings and the laboratories used by the two?—I hope it is cemented on stronger grounds than that.

9357. With regard to the difference between the license and the degree do you consider that the giving of the degree should indicate something more in the way of education than the giving of the license?—On every occasion on which the subject has been discussed in the College of Physicians that has been stated as the opinion of the college.

9358. And do you think that is the opinion of the profession generally, outside the College of Physicians as well as within, or are you not prepared to answer that question?—I do not know how that could be ascertained.

9359. As far as you learn generally from your intercourse with the men?—I should have thought so.

9360. You would have thought the profession generally desires that there should be something additional to the qualification for the license in obtaining a degree?—Additional to the present qualification for the license.

9361. Do you think that that should be rather in general education or in more special subjects?—I think there I must be taken as partly speaking my own opinion. My impression is that in the College of Physicians we have always been in favour of requiring for a degree an increased standard of general education.

9362. It is very important for the profession that there should be an increase of general education?—Yes.

9363. And the granting of a degree offers an opportunity for increase of that general education?—Precisely.

9364. Would you feel it desirable that the preliminary examination of the University should be passed by all who seek the degree or something corresponding with it?—I do not wish to express myself as believing that the present matriculation is the best possible entrance examination, but I think whatever entrance examination the University determined on should be passed.

9365. Then with regard to the preliminary scientific examination you would feel that there should be something additional to the present preliminary scientific examination required by the colleges?—I should like to point out that a very considerable preliminary scientific examination is required by the colleges. Whether that is enough or not I think we have not quite the means of deciding at present, but I am sure that the College of Physicians would wish that there should be a sufficient preliminary scientific examination.

9366. You will remember perhaps that it was mentioned in Dr. Liveing's examination that the previous Commission suggested that the preliminary scientific examination of the University of London should not be required. Would you agree to that, or although the present requirements of preliminary study of the colleges are considerably increased, and are perhaps increasing, would you think there should be something additional for a degree?—I should say that all medical bodies which have discussed the question have decided that the best way to prepare a man for taking a medical degree or entering the medical profession after his literary education is to give him some preliminary scientific education, and therefore I should be in favour of it.

9367. Do you happen to remember with what body anything approaching a preliminary scientific examination began?—From the question I should say Cambridge.

9368. I meant among the examining bodies in London?—The College of Physicians has always required chemistry, which is a preliminary scientific subject for part of its examinations.

9369. With regard to general examination?—I am not quite clear that I know exactly what you mean.

9370. I remember when I first came to London the great licensing bodies then were the Royal College of Surgeons and the Apothecaries' Society. They were the licensing bodies for the practitioners of England, and the numbers who went to the College of Physicians were comparatively small. I think I am right in saying that it was the Apothecaries' Society who rather set and directed the curriculum of general education. They were the licensing bodies in medicine for the practitioners of England, and they gave the curriculum of study. I think the only kind of general examination at that time was instituted by the Society of Apothecaries. I think you will agree that that is the case. They commenced for the practitioners of England the examination in general education?—I do not know whether I could admit that quite. I was speaking of the examination of the physicians. It really is indifferent whether it was an examination of large or small numbers but the questions were scientific.

9371. Do you agree with me that an examination with regard to anything like a general education of the mass of practitioners in England was first instituted by the Apothecaries' Society?—I do not know about that. I can quite believe it.

9372. I happen to know it?—I think there is a difference between a general examination and an examination for the general public.

9373. I mean by this anything like a classical examination. We were examined on the Apothecaries' Society in Latin?—But that was merely following the principle of the College of Physicians that you must have had a literary education first which had been long instituted by them.

9374. You see the College of Physicians was simply for what we may call a higher class, but the education of the general practitioners of England was at that time mainly in the hands of the Society of Apothecaries. They directed the curriculum and they gave the only examination in school education?—For general practitioners, you say?

9375. For the mass of practitioners?—But not the only one that was going on.

9376. No, there were the University and the College of Physicians. But as regards the general body of the profession that principle which has been carried out more largely since by the Council of Medical Education was commenced by the Society of Apothecaries?—I deny that it was commenced by them, because it existed at the College of Physicians before.

9377. That principle which is now carried out by the General Medical Council of requiring a medical man to exhibit some knowledge of general education—all medical men mind—was commenced by the Society of Apothecaries. Do you question that?—If you state it I do not question it.

9378. (*Sir William Savory.*) Are you speaking of preliminary, not professional, subjects?

(*Sir George Humphry.*) Preliminary.

(*Professor Ramsay.*) General knowledge?

(*Sir George Humphry.*) Yes, general knowledge. The curriculum was laid down in the main by the Society of Apothecaries. Therefore they have a very important historical relation with the education of the medical profession?—I think it would be only fair also to say that for many years they entirely opposed and succeeded in preventing the formation of the first kind of out-patients departments now become one of the most important means of teaching existing in London. So that they have both advanced and endeavours to retard the progress of medical education.

9379. It was quite open to me to attend out-patients practically?—This refers to an earlier period than your studies; to time of Sir Samuel Garth.

9380. You, of course, feel that the apothecaries constitute no small difficulty in connexion with these examinations for degrees in London?—I do not see any difficulty about them at all. Supposing that the scheme which the College of Physicians and Surgeons agreed upon with the London University had been carried out, what difficulty is there about this? I see none.

9381. It would, of course, be opposed by the Society of Apothecaries?—It might be opposed by anybody.

9382. The Society of Apothecaries examine a fair proportion of the medical men of England now, and rather an increasing proportion?—I should not have thought so. It is not the case in my own school.

9383. You see the numbers they are passing?—I know the number of men who go in from my school is very small indeed, and it is a large school. That is all I can go by.

9384. Their examination is conducted under the supervision, to a considerable extent, of the Medical Council, is it not?—I do not understand that at all—only in surgery.

9385. The Apothecaries' Society is one of the bodies which, of course, will have to be considered by this Commission in relation to medical qualification?—I think it ought to be considered in relation to any scheme with regard to medical qualification, but it has no relation whatever to any University.

9386. But if other licensing bodies in London are admitted into a participation in it you would feel that still the Apothecaries' Society might be left out?—Certainly.

9387. Do you agree with Dr. Liveing in thinking that there should not be two examinations for the degree, one for provincial and the other for London students?—I think there should be only one examination for the degree.

9388. That that one examination should confer the degree, and that if anything further be required that should be called a degree with honours?—I would leave the admission to the pass and the honours entirely equal.

9389. (*Sir William Savory.*) Do you propose to appear here again?—Only to attend from the school of St. Bartholomew's to give any information additional to what the chief witness was saying on the part of the school. I propose simply, I might say, to give evidence showing that the school of St. Bartholomew's ought to be admitted into the Faculty of Science, not on general principles.

9390. Would anything you might say then contradict anything you say to-day?—I think nothing.

9391. Could you be sure?—In my individual capacity nothing whatever.

9392. Can we take what you have said to-day as a final statement, or might you when you come again give us different evidence from what you have given us to-day?—Personally, it is quite impossible. I might have to state that such and such a thing is held by the School of St. Bartholomew's, for instance, but as far as I am myself concerned I am stating my own opinion where I cannot speak for the college.

9393. To-day you have spoken as a representative of the College of Physicians?—Certainly. We are specially allowed by the college to express our own opinions if we make it clear that they are our own opinions.

9394. What I want to make clear is that what you say now you will stand by: that it is not liable to contradiction by any future statement of yours in any capacity?—Of course not.

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

9395. I think we might be a little clearer even at the risk of wearying the Commission about the relation of the colleges to the teachers. Really the teachers practically constitute the two colleges, do they not?—Certainly, the two colleges practically consist of teachers.

9396. How can the relation be closer than that? The teachers are the governing body of the colleges, are they not?—I should have said so.

9397. You have spoken of the teachers being represented as well as the colleges. I am not discussing the question as to what extent the teachers should be represented, but in the representation of the colleges you would have virtually the representation of teachers?—What I meant to say was the representation of schools and colleges in the University and of the Royal Colleges. I tried to explain that the colleges do consist of teachers.

9398. I might even go further than that. Of course there are a great many schools, and opinions cannot be absolutely identical upon the matter, but as far as that is possible the opinion of the schools and the opinion of the colleges would be practically one, would it not?—I cannot think of a question in which they would be entirely different.

9399. It is possible that there would be differences of detail, but this great principle of representation of teachers is as thoroughly carried out in the two colleges as it could be?—I should say quite.

9400. You used an expression which perhaps might be misread by some. You said there was a difference between resemblance and identity, but I hardly know how you would consider the distinction with reference to the case in point. If a teacher comes direct from his school, and if he goes direct into his college his identity is not lost, is it?—It is difficult always to be quite clear when one is under examination. What I meant was this. In the College of Physicians, as a rule, the teacher is there himself: in the College of Surgeons he is there through a representative. That is what I was alluding to.

9401. But the Council of the College of Surgeons are teachers?—Yes; but in the College of Physicians practically all the medical teachers in London of importance on the medical side are Fellows of the College. In the College of Surgeons the teacher is there through a representative. I was not objecting to it in the slightest, or criticising it even.

9402. I do not think we need discuss that; but taking the Council, taking the examiners, and taking the officers generally of the College of Surgeons, it is composed of teachers in London?—It is thoroughly representative of teachers.

9403. Now I should like to ask a question which has been raised more than once about pass and honours degrees. Where would be the difficulty in having in our profession at all events a pass degree and an honours degree. I am not saying that it is the best thing that could be done, but where would the difficulty come in?—I do not see any great difficulty in it.

9404. And supposing it were done, it would not be necessary for a man who passed in honours to be distinguished by anything in his name from the other. At Oxford and Cambridge the man who takes a high-class degree is not distinguished from the man who takes a low class degree?—Not at all except in general knowledge. There is no mark.

9405. There is no description after his name. The objection seems very puerile, does it not?—Quite puerile. I do not attach any importance to it.

9406. In the calendar you can always find out what sort of a degree a man has taken. If you want to know more of him you go to the calendar. It does not seem necessary that because there is a pass degree and an honours degree, they should be distinguished by any mark or title?—No. For instance, in selecting a Fellow for the College of Physicians, the council would ascertain who had taken honours with perfect ease.

9407. A question has been raised as to the difficulty of marking the two. If a man went in for honours at the London University, he would expect some mode by which it should be designated as different. That you think would not be necessary or desirable?—No.

9408. Then you spoke of the authority of the two colleges in relation to all professional matters?—I particularly guarded myself by saying I spoke of medicine in the restricted sense.

9409. I noticed that you did, but what I mean is that the colleges have no authority other than the authority which they possess by virtue of their knowledge and the respect paid to it. They do not rule by any other authority in medicine or surgery?—I had a great difficulty in determining what word I should use. I meant by "authority" what you have stated, that is to say, an authority derived from possession of knowledge.

9410. For instance, supposing a man held any particular view of medicine or surgery the colleges would not over-rule that view or in any sense compel him to give it up. If he were guilty of unprofessional conduct the colleges would consider the question of erasing his name from the register. But I am anxious that there should be no misunderstanding that the colleges exercise any authority which is autocratic in that direction. It is open to everybody to hold his own opinions, and the only authority is the authority which is derived from the evidence in support of it?—Exactly.

9411. Now with regard to the Society of Apothecaries. You stated clearly at the commencement of your evidence that there are strong reasons why the Apothecaries' Company should not enter into the scheme for the formation of the University?—Yes.

9412. And although the past history of the Apothecaries' Company is a creditable one, it does hold altogether a different position in the profession from that of the two Royal Colleges, does it not?—The College of Physicians is made up of physicians; the College of Surgeons is made up of surgeons. What is an apothecary? There is no independent body of people existing to-day as apothecaries.

9413. And it would be hardly a ground for admitting it into a University that once upon a time they had an examination in Latin?—No.

9414. That examination was confined to a few questions in Gregory's Conspectus and Celsus; before that the College of Physicians examined in Latin, did they not?—They repeatedly rejected people because they found they had no education, they examined as to education.

9415. The general education of men coming up for the diploma of the College of Surgeons was at least as good as that in any examination existing?—I should have thought so; I have not specially investigated that point, but I have no doubt of it.

9416. It could not be said, if that inference were attempted to be drawn, that men at that time who went up to the Apothecaries' Company went up with a better general education than the men who went up to the College of Physicians and the College of Surgeons?—No, certainly not.

9417. And the fact, I suppose, has been well established, that the examination has always been a very inferior one to that of the two colleges?—As a person who has seen a great number of students who had been in for all the examinations, I should entertain no doubt whatever about that.

9418. And at the very time of which Sir George Humphry speaks one man examined at Apothecaries' Hall on all the subjects?—I have heard that.

9419. It is a fact that it was so; then the Chairman spoke of the better position the colleges might occupy in one University or the other; might not the colleges claim that they have something more in view. Are not the interests of medical education of some moment to them?—In all the discussions upon the subject I have been to a great many in my own college, and there have been a great many with representatives of the College of Surgeons since 1885. I have never heard any remark with regard to getting things for the colleges or protecting their proper and personal interests mentioned, the one desire has been to do the best that could be done for medical education in London and England at large.

9420. It has been suggested more than once on this Commission that the colleges have struggled very hard to get as much as they could in regard to their place in the Charter of the Gresham University, what motive do you think has inspired the two colleges in that?—The feeling that they were the most competent bodies to arrange the subjects with which they deal and the desire to help in the formation of a University which should be a credit to London, and which should not be defective or run any risk of being defective in medicine. It was no desire to get anything for themselves.

9421. But when it is said that the desire of the two colleges is to keep up the standard of medical education it is hardly fair to reply that we have been expressing the suspicion that the examination would be lowered in the Gresham University. It is only to guard against the possibility of such a thing; it is one thing to say that we believe that if the Gresham University were constituted it would have a lower examination, and it is quite another thing to say that we should exert ourselves to the utmost to keep up the standard of that examination?—You have put it exactly as I have always heard it mentioned in the college.

9422. It is impossible not to feel the force of the suggestion that there would be a greater danger if the new University were constituted of a lower or an easier examination being practised than in the case of the existing University of London?—I feel about that that it entirely depends upon in whose hands the University in London is. If it is in the hands of trustworthy people likely to have trustworthy successors I should not fear that.

9423. That would be rather coming round to the same thing. If the colleges had the control of the whole thing you think it would be safe?—Perfectly safe.

9424. You would appeal to the past history of the two colleges and the examinations they have conducted?—I should say that they have steadily endeavoured to raise the standard of general medical education; that they had never taken any steps to depress it or to gain more members or licentiates by making it in any way easier; and that they had as far as possible introduced every check and every improvement with regard to examination that could be introduced. I might just mention the plan, introduced quite recently; when the two colleges joined in submitting papers in certain of the subjects to an entirely independent body the object of which was to see that the standard which the colleges intended to be maintained always should be maintained.

9425. (*Mr. Anstie.*) At page 122 of the proceedings before the Privy Council I find this passage. Mr. Ingle Joyce, addressing Lord Selborne, says, "On the 18th of "February 1891 the Royal College of Physicians wrote "to say that they 'cordially accept the scheme.' On "the 16th February 1891 the Royal College of Surgeons "said that 'after full consideration' they 'approved "the scheme'; and on the 3rd March 1891 this "communication came to the Senate, 'The Medical "'Schools of Charing Cross Hospital, Guy's Hospital, "'London Hospital, Middlesex Hospital, St. Bartho-"'lomew's, St. George's Hospital, St. Mary's Hospital, "'St. Thomas' Hospital, and Westminster Hospital, "'having considered the revised scheme for the recon-"'stitution of the University of London, desire to "'express their acceptance of the scheme as it now "'stands.' So that, in point of fact, they did all approve "of it." Those schools are, in fact, the schools which are enumerated in the 21st clause of the Senate's scheme as being the constitnent colleges of medicine. I suppose we may take that as expressing sufficiently at that date the attitude of the Royal Colleges and of the schools with reference to the proposed scheme?—Yes.

9426. And from what you have said to-day I gather that that carries out and corresponds with the idea which you have given us (I think especially in answer to Professor Ramsay) that you recognise the possibility of representing the schools through the colleges but not the possibility of representing the colleges through the schools?—The colleges could not be represented through the schools.

9427. But the schools, I think you said, in the qualified way shown by this scheme could be represented through the college?—I said that in my opinion they might.

9428. Your attention has been directed on several occasions to some difficulties attending representon of schools as such and particularly yesterday our attention was directed to the qualification which it was found necessary to introduce in the 24th clause of the Gresham Charter, "Saving always to the ten colleges of medicine "above named their right to apply to be admitted as "colleges of other Faculties, notwithstanding that "they may not be under the independent control "of their own governing body." Does the ground of of that reservation indicate one of the difficulties which has always been experienced in giving representation to the schools as institutions as distinct from a Faculty representation?—I do not know what I am to say upon that. I think the objection to representing the schools because their governing bodies were not chartered corporations, at any rate in the case of some schools, has been unduly exaggerated. I do not think there would be any difficulty about it.

9429. It would not rest merely upon their not being chartered corporations but also upon certain grounds connected with proprietary rights and so forth, which are also pointed to in certain clauses of the professorial scheme?—I can only answer that with regard to my own school there would be no difficulty with regard to that.

9430. It might occur with some others?—That I cannot answer at all.

9431. Now, with respect to the question put to you as to the honours and pass degree. I think I understood you to say that you would have no difficulty in having degrees of different standards although expressed by the same letters?—We have that at Cambridge.

9432. And practically it is so at Oxford, is it not?—I think so.

9433. And it is also recognised to some extent at least in the London University, where the pass and the honours may be taken on the same paper?—I believe that on the whole it is a better method of examining men than by having merely additional honour subjects.

9434. Are you aware that the substitution of this method is at this moment under the consideration of the Senate of the University of London?—I did not know that.

9435. Now, one word about the Apothecaries' Society, which seems to be rather a difficult subject. The Apothecaries' Society are a licensing body, are they not?—Yes.

9436. They do not act in conjunction with the Royal Colleges of Physicians and Surgeons?—No.

9437. If the Royal Colleges were associated with one University, the Apothecaries' Hall might be associated with another University, supposing two Universities to exist side by side, might it not?—I doubt whether any body which called itself a University would venture to take such a step as that.

9438. You think it impossible to realise the idea, do you?—I think it is quite impossible. Of course I am only expressing my own opinion.

9439. (*Mr. Rendall.*) You said the College of Surgeons is made up of surgeons and the College of Physicians is made up of physicians, but "what is an apothecary?" I do not quite understand that. Can you enlighten me at all?—An apothecary was formerly a grocer who sold drugs; he was then allowed to administer those drugs and to prepare them for a physician. As the population increased it was impossible to find enough physicians, and therefore the apothecaries gradually came into practice. That is the way he grew.

9440. At present is it an honourable distinction outside the circle of actually selling apothecaries to belong to the College of Apothecaries?—There is no college.

9441. To the Society?—Do all members of the profession belong to it as a matter of course?—Those who do belong to it never make use of it as a matter of distinction in any sense of the word.

9442. It does not carry any distinction?—None except the license. A licentiate of the Society of Apothecaries does not belong to the Society of Apothecaries. I have heard people say that they have been licentiates of that society for 50 years; and have never approached the government of the Society. Its constitution is that of all the London Companies; if you are upon the livery you gradually rise, and so on. But the licentiate is not upon the livery.

9443. In the constitution of the University, and the advancement of the University regulations, is there any reason to apprehend that in any quarter whatever, parliamentary or otherwise, the opposition of the Society of Apothecaries would be formidable?—I am not sufficiently acquainted with it to answer that question.

9444. Would it carry weight?—I should have thought no weight to anybody acquainted with the facts.

9445. Speaking of the relation of medical schools to the colleges, I think, in answer to Sir William Savory, you said the colleges were virtually composed very largely of teachers in the medical schools?—It happens that it is so.

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

9446. Is that true of the science teachers at all? Are any pure science teachers represented?—Professor Burdon Sanderson is a Fellow of the College of Physicians, and he is a teacher of science.

9447. Is that largely so?—No, it is not largely so.

9448. It is rather accidental perhaps, where it does occur?—It does occur in a certain number of cases, but it is not largely so.

9449. Are the science teachers in the London colleges mostly or entirely holding a medical degree?—The lecturer on chemistry in most schools of medicine has no medical degree.

9450. How far is that true of physics? I suppose it would be rare that he would hold a medical degree?—I do not sufficiently know the names. In my own school the lecturer on physics and the lecturer on biology have both taken a medical degree, but neither has any relation to the practice of medicine.

9451. There would be a small per-centage of scientific teachers who would be on the College of Physicians, would they not?—It depends a little what you mean by scientific teachers. If you mean teachers of chemistry, physics, and biology——

9452. Those are what I am thinking of, not physiology and anatomy?—Then I think only a small proportion of those would be Fellows of the College of Physicians.

9453. Speaking broadly, is there any divergence of opinion between those science teachers, in a rather limited sense, and the other medical school teachers?—I should not have said there was any.

9454. It is the only place where it can arise?—I think occasionally the chemists do think that a larger share in examination should be given to chemistry, or that alterations that they are in favour of should be made.

9455. But in the main, between the medical and scientific teachers, there is an agreement as to the proportionate part or share that science should have in the medical curriculum?—I do not like to give a very positive answer, because, of course, my experience hardly admits of it, but I do not know of any very wide divergence.

9456. The College of Physicians as a body recognises quite freely the advantage of a scientific element in the preliminary stages of medicine?—The College of Physicians has always been one of the chief advocates of science. It was mainly through it that the Royal Society was originally founded. It has been one of the chief advocates of science in London for about 300 years.

9457. And in the opinion of scientific teachers at the medical schools in London, with the partial exception perhaps of Chemistry there is a sufficient recognition given to science as things stand at present, in the examination and curriculum for medicine?—As far as I have the means of knowing that is so, but my experience is mainly confined to my own school.

9458. And there would be a reasonable prospect of there being satisfied by being represented by the College of Physicians acting, as you say, somewhat responsibly and judicially in their appointments as representatives in the University?—The science teachers at the schools of medicine are a very small body in each medical school, and I should not like to answer for them separately.

9459. (*Lord Reay.*) Would the medical schools wish their students to be examined by the new University?—As far as I know they approve of the students being examined by the University. Your Lordship means not by the schools themselves?

9460. I mean by the University and not by themselves—rather by the University than by any outside body?—They do not object to their being examined by the two Royal Colleges.

9461. But those students who seek the degree would prefer that all the examinations leading up to that degree should be conducted under the control and supervision of the University?—To some extent under the supervision of the University, but everyone with whom I have talked has expressed a very strong opinion that it would be an immense advantage to the student not to multiply the number of examinations. I cannot speak with any authority about that, but I should have said that in the schools generally they would have been quite willing that the examinations of the Royal College should have been part of the degree examinations.

9462. Therefore you contemplate the examinations of the Royal Colleges as forming part of the examinations of University students with additional examinations by the University before the candidates obtained a degree?—Always provided that there was a relation between the colleges and the University.

9463. But the relation between the colleges and the University as proposed in the scheme of the Senate is that the colleges should be represented in the University?—Yes, for that purpose.

9464. And the colleges would, in that capacity, indirectly exercise some authority over the examinations of the University?—Yes.

9465. There would be no object in having other examinations than University examinations so far as the colleges are concerned, because those University examinations would be partly under the influence of their representatives?—No other examinations for the degree.

9466. It would therefore, as against the multiplication of examinations, be obvious that the examinations for degrees, and the examinations leading up to degrees, would be under the direction and supervision of the University?—Yes, so modified.

9467. Leaving the option to the student of the University to come in for the examinations of the conjoint board which would not be superseded?—Yes.

9468. The students would have the option of the two courses?—I did not quite see what the choice was.

9469. The choice is this. Some students would be satisfied with the license of the Royal Colleges?—The formation of the University would not interfere with those. As regards those, the colleges would remain exactly as they are.

9470. Other students would take the degree of the University?—Yes.

9471. For those students, the examinations of the University, and the examinations of the University only, would be quite sufficient and would lead up to the degree?—Yes.

9472. (*Lord Reay.*) With regard to what you said that the schools might be satisfied with being represented in the University through the Colleges of Physicians and Surgeons, I interpret that as meaning that you would not have given the medical schools their own direct representation on the Council?—I think your Lordship misunderstood what I said, what I understood I was asked was, whether those two things could be combined, and I said (this is purely my own opinion) that I thought it would be a just arrangement and one that the schools might be brought to agree to, that the Royal Colleges should judicially appoint their representatives from among their own body. That, I believe, would be a combination of the two which might be said to be just.

9473. But that does not exclude a judicial selection of representatives from and by the medical schools in the new University?—I understood that the object was to get rid of such a large number, and of the two kinds of representation.

9474. Then you contemplate the possibility of exclusion of direct representatives of the medical schools from the new University?—No, not their absolute exclusion.

9475. Only a limitation of the representation?—I believe that that representation might be carried out in several ways, of which the one I mentioned was one, that is all.

9476. But the one you mentioned was, I understood, that they would be represented through the Colleges?—The Royal Colleges might have their own representatives, and the schools might have their own representatives. It is thought undesirable to have two sets of representatives. I believe that if the Royal Colleges were entrusted with the duty of seeing that the several schools were fairly represented in the representatives which they, the Royal Colleges, set up, that would be a just arrangement.

9477. That is, therefore, a delegation of the representation of the medical schools to the colleges?—Not quite, because the persons whom they would choose in that case would actually be teachers in the schools. That is the way in which they would represent them. They would actually be members of their own bodies who were teachers in the schools.

9478. I must make this quite clear. That really eliminates the individual representation and the direct election by the medical schools?—I do not think it does quite. Let us take the College of Physicians, which is the one I know. There there would be several members; all the important teachers of medicine would be fellows of the college. If the College of Physicians were to choose a representative of any particular school it would choose it from among those, and if it were not chosen rightly all the others would get up and remonstrate. There they are at the comitia of the college. It is done with their full consent. If the college is bound to choose a representative from the school, it does become a direct representation. It is not so in words, but it appears to me that it is a compromise which effects the object.

9479. Let me ask whether it is at all likely that the teaching staff of St. Bartholomew's would be satisfied with such a compromise, and would be likely to adopt it?—That has not been laid before them, so I could not be expected to answer that.

9480. (*Professor Sanderson.*) With reference to the question of the Apothecaries' Society it seems to me that all that has to be said is said when you say that at present the examination in practical subjects, as conducted by the Apothecaries' Society, is inferior to the examination in practical subjects conducted by the Conjoint Board?—The public repute is that. I should not like to assert it myself. I do not think it is all that can be said. In the case of the colleges, behind the examination are two bodies thoroughly competent to decide upon the nature of the examination, whereas behind the examination of the Apothecaries' Society is only the Court of the Company.

9481. If we were to have evidence that the examination in practical subjects of the Apothecaries' Society was equal to that of the Conjoint Board it would be no reason for declining to accept that as part of our University scheme that the apothecaries were once grocers, would it?—No, but the fact that they are not physicians or surgeons, and not competent in the higher walks of medicine or of surgery at the present day, would be a very important point to take into consideration.

9482. Do you think that there is any evidence that the examinations are inferior?—No, but I think there is the clearest evidence that the body which stands behind the examinations is not one of authority. If you take the list of the Court of the Company it does not contain eminent men.

9483. So that even if it could be shown to be up to the standard now you would have no security for its remaining so. Is that your point?—The only security you would have would be the visit of the Inspector of the Examining Council to see that the examination does not go below a certain level.

9484. You have great experience in the general conduct of medical education. Would you mind saying what you think as to the general principle of separating parts of the curriculum from each other? For example, the Cambridge student taking the usual course comes, after having completed his scientific education, to St. Bartholomew's Hospital, and begins his practical education. Do you think that the best arrangement of medical study?—I think it is in the highest degree important that the latter part of his education should never be invaded by the former. That he should finish the scientific part of his education before the time which he is to spend on clinical work should count. I do not object to his seeing something of sick men before that. That is a different thing.

9485. Consequently you approve of the general principle that a man should complete one part of his education before he begins the other?—Certainly.

9486. Would you in the new University consider it right that the scientific part of his education should be supervised by the faculty of science?—I think the difficulty about that is that the scientific teachers sometimes want to press their science further than seems compatible with the limited length of time of a medical education. We are all agreed that the more science a man knows the better, but as he is only able to study for five years he cannot give more than a certain part of that five years to science. I think science teachers occasionally forget that.

9487. But would not that objection be completely obviated if the time for the scientific part of the curriculum were limited?—I think so, practically.

9488. You might certainly leave to the Faculty of Science the quality of the teaching and the conduct of the teaching, provided that the quanity of it was not too great?—I think there is this difficulty. I think it would be well to have some consultation between the Medical Faculty and the Science Faculty about that, because looking to what the man is ultimately going to do science is unbounded, and what he does must be limited. Of course science teachers may not know exactly what parts of science would be most useful to the student in studying medicine. We teach him science not that he may know science merely, but in order that he may be so trained as to appreciate medicine.

9489. But that would be accomplished, would it not, by an arrangement for conference between the Faculties?—Yes, and I think there ought to be such an arrangement.

9490. With such an arrangement would it not be quite possible to leave the management of scientific teaching in the hands of the Faculty of Science?—I am including chemistry, physics, and biology. I do not think you could safely give anatomy and physiology over to the Science Faculty.

9491. Do you say you would not allow them to have anything to do with anatomy and physiology?—No, but I should be inclined in anatomy and physiology, and more particularly in anatomy perhaps, to attach more importance to the Faculty of Medicine than to the ordinary Science Faculty. I would permit conference.

9492. But is it not important that one should learn anatomy scientifically, in the first instance, before he begins to learn the higher branches of medicine?—No, I think not. I think elementary biology would do. And I think he wants to learn the structure of the human body thoroughly. He has hardly sufficient time to do more than that. I am speaking of the ordinary passman.

9493. At the same time you would admit the anatomy taught to the medical student should be scientific anatomy and not merely anatomy taught for the technical purposes of surgery and medicine?—Supposing he has had a grounding in elementary biology——

9494. Would you mind stating what is meant by elementary biology?—These are the regulations of the Examining Board (*handing same to Professor Sanderson*) in which you will find it means elementary acquaintance with living bodies, elementary plants, elementary animals.

9495. You can hardly compare that to scientific anatomy, can you?—It would be the first step in studying scientific anatomy, I should think.

9496. (*Professor Sidgwick.*) There was one point in which, if I understood you rightly, there was a divergence of view between Sir Andrew Clark and Dr. Liveing in regard to requiring residence in London as a condition of obtaining the degree. Would you say whether you are inclined to agree with Sir Andrew Clark or Dr. Liveing on that point, because we are now rather in doubt as to what the view of the college is?—Certainly, what Dr. Liveing said is correct; the college has never committed itself to any resolution on this subject.

9497. We are trying to form a view of what the drift of opinion is in the body. Would you mind at all saying what your view is?—If you could indicate a man who had studied medicine in London by a degree it would add enormously to the value of it, since London is a place where medicine can best be studied.

9498. Do you not conceive that if that be so it is an argument in favour of having a new University distinct from the present Examining Board, which it is desirable to keep impartial; because then there would be no confusion between the two degrees. The degree of the Gresham University would clearly indicate that a man had studied in London, and the degree of the present Examining Board, called the University of London, would retain with the impartiality which it now has?—As far as that goes I think it is favour of it.

9499. That would be a decided argument in favour of two Universities rather than one?—If it is absolutely impossible to bring those two ideas together.

9500. I mean if we assume that it would be unfair to the provincial students that they should not have the same opportunity of obtaining degrees that they

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

have now—which, I think, would be generally admitted—and if at the same time it is desirable that some degree or other should mark the fact that a man has studied in London, then is an argument for two clearly distinguishable degrees, is it not?—Unless it is possible to unite the two ideas.

9501. How could you see any way by which the two ideas could be united? How is it possible to be fair to the provincial schools and at the same time to mark the fact that a man has studied in the metropolis?—I think if the Examining Board of the University were in the hands of the University in London. There are, as I pointed out, very few provincial schools that have not already got a University—only three.

9502. You mentioned Birmingham, Sheffield, and Bristol. Of course we have to consider that the previous Gresham scheme was prevented from passing by Parliamentary considerations. Therefore, it must be remembered that Birmingham is an influential town and is influentially represented in the House of Commons. Any view that was taken strongly in Birmingham would make itself heard, do you not think; and if it was supported by Sheffield and Bristol do you not think that would constitute an opposition very formidable to any scheme?—I am sure it would.

9503. So that it is desirable in the interests of any scheme that we bring forward that the opposition of those provincial colleges should be in some way neutralised?—If it can be done without sacrificing anything.

9504. Then to leave them to have the whole benefit of any reforms that may be made in the University of London as it now exists, while establishing a new University in which the degree will mark the fact that the education has been obtained in London—does not that seem to be a simple and effective way, and perhaps I may say the only simple and effective way of attaining the end?—It does seem a simple and effective way of obtaining it.

9505. You were questioned with regard to the approval given by the London schools to the scheme of the Senate of London University. It may be said that something has happened since that acquiescence was given, that is, that there has been the scheme of the Gresham University framed and approved by the Privy Council, and is just on the point of passing. Do you think that considering those intervening incidents it is right for us to assume that the London schools of medicine would now acquiesce in the overwhelming representation given to the Royal Colleges in that scheme so far as the practical control of the examinations went?—I can only answer that by saying that at the time of those discussions fears of undue influence of University College and King's College were often expressed, but I do not remember hearing talk among the schools of any anxiety about the too great influence of the Royal Colleges.

9506. Then you were questioned with regard to the probability of the examination being easy in case the new University were established. I think your reply was that it would depend upon the hands in which the control of the degree was placed. Suppose the control to be practically placed in the hands of the London schools of medicine, as it was placed in the Gresham Charter; do you think the danger of their lowering or degrading the examination is a serious one?—No, I do not.

9507. With regard to the distinction between the degree and the qualification for a license, I am anxious to clear up a doubt that remains in my mind. If I understood your answers on that point, you said that there was a general agreement that the degree should mean something different from the present qualification for a license, as far as essential subjects were concerned. Let us for a moment put out of sight the actual conditions, and consider whether it is desirable, in a reformed system of medical education that there shall be a recognised difference between the preliminary scientific knowledge implied by the medical degree and the preliminary scientific knowledge implied by the possession of a license to practise: would you still answer the question in the affirmative, and say that it is desirable in the abstract to maintain the difference, to give a man a license to practise for a lower degree of scientific knowledge than you would give him a degree for?—I think the remark applied not only to scientific but to general education. I think it is desirable that a Bachelor of Medicine or a Doctor of Medicine of a University should be a man of more liberal education than an ordinary practitioner. I think it would be equally desirable that the ordinary practitioners should have that education, but it would be impossible. Time and money would not permit.

9508. Do you think that applies to preliminary science, or would you apply it only to literature and language?—To general education. I think the general education certainly ought to be higher. I express my opinion with some hesitation about preliminary science, because we are just entering upon a new series of arrangements with regard to preliminary science; and how that will work I do not quite know.

9509. Now, with regard to the capacity of the Royal College of Physicians to represent teachers. You are aware that before the previous Commission there was some evidence with which I know at the time you expressed disagreement. It was even said that the Royal Colleges practically disregard the opinions of the teachers as such, and that the position taken up by the Royal Colleges was regarded with dissatisfaction?—Is that Dr. Allchin's evidence.

9510. Yes. What I wanted to ask you was quite apart from your own views as to how far any dissatisfaction of that kind would be reasonable. Do you think you can say that the dissatisfaction so far as you know does not actually exist to any great extent?—I did at the time in my evidence express dissent from it, and, speaking again on behalf of my own college (you will understand that medicine and surgery are on very separate lines, so we physicians cannot speak for surgeons), I should say there was general satisfaction with the College of Physicians. I have never heard any dissatisfaction. May I add one word to that answer? I understood when I was listening yesterday that Dr. Allchin withdrew that remark. He thought it was based on imperfect information.

9511. Is there not some doubt as to how far the existing teaching of the schools of medicine would be represented to the satisfaction of those engaged in it by the Royal Colleges. In connexion with that I would draw attention to your own remarks with regard to the University of London. You said that it did not contain a sufficient number of persons actually engaged in teaching, and that a retired teacher, however distinguished he may be—medicine being a subject in which the principles of teaching improve from day to day—very soon ceases to be useful. Do you still hold that view as to the rapidity with which a retired teacher would cease, I will not say to be useful, but to represent the views of the existing teachers?—I think when he has long retired and has ceased to be in active relation to teaching. I pointed out in my answer that at the meeting which I alluded to there were 54 present teachers present, and 14 former teachers. I do not think there would be any objection to some of the former teachers, because experience and age are always valuable.

9512. The schools might feel, I suppose, that the persons of educational experiences in the Royal College of Physicians whose names would be best known to the public would often be retired teachers rather than actual teachers. Now in my experience as a teacher in all subjects with which I am acquainted there are people who have gained reputation, and against whom no one likes to say a word, of whom it is known in by whom any teaching body would strongly dislike to be represented; though they have the ear of the public, do you think it possible that some feeling of that kind might lead to the desire on the part of the schools to have a direct rather than an indirect representation?—I did not say that I thought the schools would not desire a direct representation. I only said that in my opinion that would be a just compromise—the one I have mentioned. If the number of representatives were sufficient I should have perfect confidence in the colleges selecting the persons. If it became the duty of the colleges to select people out of their own body to represent the schools I feel sure that they would select persons who they felt would really discharge that particular duty. I should have no fear of their selecting anyone else.

9513. (*Mr. Anstie.*) I think it is only fair to call your attention to a fact I was not aware of when you gave me an answer a little while ago with regard to the Apothecaries' Society. I understood you to say to me that you thought it was quite impossible that any University possessing self-respect could contemplate a union with them. You were not aware at that time,

perhaps, that in the 9th clause of the Gresham Charter there occurs this provision, "The Council shall, if it "think fit, have power to assign a place or places upon "the Council to a member or members to be nominated "by the Society of Apothecaries of London"?—I thought that was a very distinguishable clause.

9514. (*Chairman.*) After saying that any anxiety shown by the Royal Colleges to have a share in the new University was entirely dictated by a desire for the public good, which I quite believe to be the case, you handed in a paper which contained your demands before the Privy Council, and I think that amounted to the Royal Colleges composing and being the medical Faculty?—Yes.

9515. And virtually having the direction of everything to do with medicine including examination?—Yes.

9516. This was at once rejected by the Privy Council and I think partly on the ground that it was supposed to be an attempt to get in an indirect way what had been already refused by the previous Commission—conferring upon the Royal Colleges the power of giving degrees?—Yes.

9517. That was supposed to be inadmissible?—Yes.

9518. I wish to ask you whether, supposing the promoters of the Gresham University were to offer you the same influence in the examination for a medical degree which forms the basis of the agreement with the Senate of the University of London would this go far to remove your objection to the Gresham Charter?—I could only answer that question on my own account. Of course the college has not expressed an opinion, but I should have said that the answer of the college would have been something like this: that in entering into a treaty with the London University, we are entering into a treaty with a body that is already established, and the general course of whose character is well known. If we enter into a treaty with the Gresham University, we are entering into a treaty with a body which, whatever its probabilities may be there is not quite the same security and knowledge of what it may do. If the Royal Colleges were in the University as they proposed to be, in that case they would require to have much more power than they have suggested in the scheme of the agreement with the Senate. To the best of my knowledge that is the kind of answer that would be given.

N. Moore, Esq., M.D., F.R.C.P.

21 July 1892.

9519. But they would not commit themselves?—I feel sure that they would not for that reason.

9520. They would not commit themselves to giving an affirmative answer or a negative answer; it might be matter for consideration?—No, I did not quite say that. May I explain that we thought before the Privy Council, our position was quite unfairly represented when that was said, and we thought it ought to have been remembered, that before we put in that case we got the assent of the schools of medicine to it. Therefore it is clear that they did not think that we were assuming more than we had a right to.

The witness withdrew.

Sir Joseph Lister, Bart., D.C.L., F.R.S., examined.

Sir J. Lister, Bart., D.C.L., F.R.S.

9521. (*Chairman.*) I do not think you have had any opportunity of knowing what has been already said on behalf of King's College?—No, I have not.

9522. It has been chiefly in reply to the objections which have been raised to the Gresham Charter. I may take it that you are in favour of the Gresham Charter?—Yes, in the main.

9523. You are in favour, in fact, of a federal system of a University rather than a professorial system?—Yes.

9524. One of the objections that has been made to the federal system is that there must be a certain amount of waste of power, and overlapping; that it necessitates the having, according to the number of colleges a great number of laboratories, and perhaps an over large number of teachers, and other things which, under the professorial system, would be economised—under that system you would be able to do with a smaller number. Do you think there is anything in that?—I confess I do not see any weight in that. These various institutions must have their own teaching equipment. The great metropolitan hospitals must have their laboratories; you could not, I think, suppress them; and it seems to me wise to utilise existing institutions, provided they are really doing good University work.

9525. It has also been represented that in a professorial University, such as a German University, where there would be even more direct harmony between the examinations and the teaching than under a system like the Gresham, where the professors themselves form the governing body, and entirely direct the examination, unity would be even more preserved than under the system which you recommend. Do you think the professorial University has any advantage in that respect?—As to the position of the central governing body, I do not see that there would be any advantage in having that exclusively in the hands of the professors, but rather the contrary; but as regards the question of the examinations my own belief is, having seen different systems, that it is a principle of fundamental importance that the teacher should be concerned in the examination of his students. And in my opinion it should be clearly laid down in the charter, that the examinations in every subject should be conducted by the professor of that subject in the college concerned, aided by one or more independent examiners unconnected with that college. Whether those independent examiners should be necessarily external to the University seems to me very doubtful. If the University included all the principal medical schools it might be somewhat difficult to get the best men to be assistant examiners, if we may call them so, if you excluded all who are in the University from that function. I think that might be left to the Council to decide, on the distinct understanding that the assistant examiner was, in every case, unconnected with the college where the examinations occurred.

9526. Do you think there is much disadvantage or danger of unfairness in a teacher examining his own pupils?—I do not think there is if he is controlled by a thoroughly independent coadjutor. On the other hand, I think there is considerable risk of injustice to the student if he is examined entirely by those who do not know what his career has been, and what his training has been. Speaking of the Medical Department, the subjects included in medical education are vast in extent; and you cannot expect a student, in the limited time at his disposal, to be master of them in their entirety. For example, take such a subject as chemistry. I suppose there is no one living who knows the whole that is known in that science. Any teacher of chemistry endeavours to instil its principles by illustrative examples, such as he thinks best adapted for the purpose. Take again one of the practical subjects, as they are sometimes called, in medicine—say surgery. Here the details are constantly growing in extent and complexity, and at the same time different views are often entertained by different teachers, both as to the nature of diseases and as to the best means of treating them. Such being the case, if a man is examined by persons who are not acquainted with the training he has undergone, this may involve great injustice to him. But to my mind far more important than the injustice to the student involved in his examination by strangers, is the effect of such a system upon his course of study. If we look at the matter from the student's point of view and consider a young man coming absolutely ignorant of the subjects that are to be taught him, we cannot expect him to be a critic of his teacher's instruction. All that we can hope for from him is that he will learn what he is taught. It is, of course, of the utmost importance to have such arrangements in a school as will ensure, so far as possible, that the teaching shall be good; but given the teacher, the student must learn under that teacher. If the student knows that the teacher is to have some voice in his examination, he feels more or less on firm ground, and he is encouraged to ligitimate work, availing himself of opportunities for practical instruction whether in the laboratory or in the hospital. But if, on the other hand, he is haunted with the idea that the man under whom he is working will have nothing to do with his examination, and that he will be examined exclusively by others holding, perhaps, different views or pursuing a different system of instruction, it exercises a most distracting influence upon his studies. Students exaggerate the importance of examinations. They do not know that steady honest work under their teachers, in

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

whatever school they may be, is really the best preparation for all examinations. You cannot persuade them of that, and the tendency is that the student, instead of following his teacher in legitimate study in the theatre and ward, will rather give his attention to comparatively inexperienced junior men who lay themselves out for supplying him with the kind of information which, as they imagine, he is likely to be asked for at his examination. I am convinced that the introduction into London of a University system under which the teachers should take part in the examinations, though not by any means exclusively conducting them, would have a most wholesome effect upon the medical study of the metropolis. For an account of my personal experience bearing on this important question, I would refer to my evidence before the previous Commission.

9527. I suppose under the federal system it would be almost impossible to ensure that each student should be examined by his own teacher?—No, I do not think there would be any difficulty at all in that. The only difference would be that the student of a given college would be examined at his own college. Suppose, for example, the London Hospital students were to be examined in chemistry; the assistant examiners would go to the London Hospital and the students would be examined by them along with their professor of chemistry, and so in every other department. It would simply be that each college would be an examining college as well as a teaching college.

9528. Would that apply to the final examination as well as the intermediate ones. Would the final examination take place in each college?—There would be no difficulty in that at all. In fact the final examination would be in some respects greatly facilitated. It is a somewhat difficult thing to get patients together into a common centre to be subjects of examination, but at the school where the student had been taught there would be the wards. Take again the case of the London Hospital. There is ample provision there for patients, so that the clinical examination could be conducted with the greatest ease, as I know from experience in conducting such examinations in the Royal Infirmaries of Edinburgh and Glasgow.

9529. Then the degree would be given in consequence of the examination of each student in his own college?—In his own college.

9530. And that would refer not only to the medical degree, but to every other degree too?—Exactly. I do not see any objection to it. On the contrary, such a mode of procedure would lead to great improvement in the examinations. Take again the case of chemistry. If a man is examined by his own teacher, say at the London Hospital, the professor of chemistry there would take the candidate into his laboratory, the place where he has his own appliances with which he is familiar, and with which the student is familiar. The examination would, I believe, be conducted more efficiently, as well as with greater fairness to the candidate, than if it were done at a central institution.

9531. Would you be sure that the degrees would have the same value in all cases, and that there would be a uniformity and fair competition between the different students, if they each had a separate examination in their own college?—Efficient independent examiners appointed by the governing body of the University would, I think, guarantee that there would be sufficient uniformity. You cannot, under any system, have absolute uniformity. Then I believe that this system would also tend to improvement in the teaching. If a teacher had, so to speak, to exhibit his results, to show what he had been doing, examining his students along with others entirely independent of himself, it would tend to make him more careful of his teaching, and also more careful in having the requisite apparatus for his teaching. He would have to show before those independent men what his means of practical instruction were, and the character of his practical instruction, and I believe in some schools that would have a very wholesome effect in raising the character of the teaching. I also think that the teaching of our medical students would be greatly improved by a University on the Gresham lines in this respect, that the University would insist on a more complete scientific training. If the examining body is a mere examining body for a license, the tendency is that, while the so-called practical subjects are regarded as of prime importance, and the examinations regarding them are maintained at a sufficiently high level, the preliminary sciences, physics, chemistry, botany, and zoology, come to occupy a subordinate position, and experience a corresponding neglect in study. Now it is of the utmost importance that every medical man should have a thorough grounding in chemistry. Perhaps the most important revolution that has ever happened in medical theory and practice, has been brought about by a chemist, M. Pasteur. Zoology may seem at first sight to be but remotely connected with medicine; but one of the most interesting questions bearing on pathology, and that again has its effect upon treatment, has originated with a zoologist, Metchnikoff. But if a medical man has not been initiated into these subjects when he was young, he probably remains in ignorance of them till the last. The new University which I should like to see established would insist upon a thorough scientific groundwork as one of the chief reasons for its existence. It has been said that if there were more Universities than one, there would be a tendency for the Universities to be degraded. I do not believe there would be any risk of that. Take, for example, the case of Edinburgh. There is the University, and there are also colleges which give a license on examinations. The tendency has been that in the University of Edinburgh, the examinations and education in the preliminary Sciences has been elevated rather than lowered. They pride themselves on their scientific element. Therefore I do not think any fear need be felt on that ground at all.

9532. It has been also suggested that the excessive medical representation on the Senate of the Gresham University, would have a tendency by throwing the management too exclusively into the hands of the medical profession, to make the degrees too easy, and to neglect the scientific and other subjects in favour of mere practical knowledge?—I feel quite sure there would be no risk of that sort. If there were any such thing feared, it would be easy to get over that obstacle by having some more Crown representatives, but I do not think there would be the slightest fear of that. The University would pride itself, as the University of Edinburgh does, on its scientific character. Then I will mention one other point with reference to the improvement of the teaching. It is a matter that is perhaps more theoretical than practical, and yet it would be valuable. I think it would be desirable that the chancellor should have a veto on the appointment of any professor in any college. If any college nominated a professor they should signify their nomination to the Council, and the Council would refer the matter to the Faculty concerned, and if the Faculty thought the appointment proposed was one that would be injurious or undesirable to the interests of the University, they would represent that to the chancellor, not merely mentioning their conclusion, but giving their reasons, and if the chancellor agreed with their view, he would exercise his veto and remit the nomination to the college concerned, for a fresh nomination. I think that in the case of many of the schools, such, for instance, as University College or St. Bartholomew's, this would be absolutely a dead letter; but, on the other hand, there might be circumstances in some schools in which the existence of such a possible veto would tend to cause more care to be exercised in the appointment of the professors in order to avoid the possibility of such an occurrence.

9533. You would leave the initiative of the appointment in the hands of the authority which exercises it at present, and give a veto to the chancellor who, in using that veto, would be guided by the representations made to him?—Yes.

9534. And that would be quite sufficient without resorting to what some people advocate, which is the appointment of professors by the University instead of by the college?—That would make such a thorough alteration that it would be revolutionary, and there would be strong objection felt to it by some of the bodies, many of whom there cannot be any reason to doubt, are thoroughly competent to choose good men. Take the Council of University College, or the system which, as I have had it lately explained to me, is in operation at St. Bartholomew's. I think you might be thoroughly satisfied to trust the appointment to the Council of University College, for instance, or the governing body at St. Bartholomew's. I do not see any necessity for making such a revolutionary change to which very great objection would be felt.

9535. You attach great importance to preserving the autonomy of the colleges?—I do, indeed. In the colleges we have institutions which have gradually grown

up and are doing valuable work. Originally, as your Lordship is well aware, the University College was the University of London, and the idea was that it should itself grant degrees itself. Since that time University College has gradually extended; there has been a great new wing built, and in the scientific department there is vastly more done, and better instruction given, than there used to be. The hospital has been enlarged very much, and is going to be still further enlarged. In all respects University College is, I should say, twice as fit for being a University alone as when it was originally founded. Then you have King's College, which, I think, may fairly claim to have been doing good University work, and which is increasing its work. It has lately added a new storey to its building for the purpose of accommodating practical instruction. Various departments and more rooms have been devoted to those objects.

9536. And both those colleges do exercise considerable discipline over their students as far as I can make out, but not of course to the same extent as if they were resident?—No; every college has its own system. Am I right, Sir William Savory, in saying that you have opportunities for residence for some of your students?

(*Sir William Savory.*) Yes, about 40.

(*Witness.*) Then there is residence also at King's College—I do not know about University College—and there is residence also at Guy's. The whole tendency of these institutions has been to become more and more valuable, and more and more efficient. When I was a student the great hospitals were little more than hospitals. They have now become colleges, and there is provision in the Gresham Charter that if any great hospital affiliated as a college really has a complete scientific equipment for a course in science it might have a Faculty of Science added to it. That would tend to diminish the purely medical influence. In the same way there is provision made for any other important educational institution which might arise in London, whether medical or not, to be associated.

9537. In fact you would be very much opposed to anything which would do away with the individuality and the autonomy of King's College and University College as well as the different medical schools. Would you be opposed to anything which would cause their absorption in the University, and would you wish them to keep a self-governing power?—I would. I think you have in them a machinery which you may use to great advantage. If you interfere with them, I think there will be great risk of your producing something that might work very much worse.

9538. Do you see any great disadvantage in having two Universities for London?—I confess I do not. I have always from the first proposal of this teaching University thought that the University of London had its own function, and that it could hardly fulfil the function of a teaching University without entirely altering its fundamental systems, its two fundamental systems being these: in the first place, wherever a man may come from, wherever he may have obtained his knowledge, see if he has the knowledge and be content with it, without considering his training. In the case of the medical schools, indeed, provision is made for ensuring that the student has had opportunities for dissection and practice, but with that exception the University of London looks simply to the knowledge exhibited by the candidate. The other principle is that the examinations are very high pitched; and consequently as experience is shown, and as Sir James Paget once said, the degrees of the London University are regarded rather as honours degrees, so that they do not practically fulfil the requirements of the general student, and, as I have said just now, I think it is of the greatest importance for the general student to have the scientific training which connexion with a University would ensure. In Edinburgh, for example, where they have a very great medical school they have the University and the corporations side by side. There the majority of the students, but by no means all, go through the University course; but a good many who ultimately take the college licenses, as distinguished from the University degrees, attend the University classes in the preliminary scientific subjects; so that the presence of the University is advantageous in that respect even if it does not become ultimately the examining board. The students in the earlier parts of their course take these subjects, because if they did not do so they would exclude themselves from the possibility of ever graduating. It is comparatively few who simply eschew the purely scientific courses from the determination not to take a University degree. So I believe a University established on the Gresham lines would have a most wholesome effect in encouraging scientific study.

9539. There are two distinct plans which have been recommended for a teaching University for London, that of making the present University of London perform these duties and become the teaching University, while at the same time it continues to carry on its present system of giving examinations to all comers performing double function and possibly having two sides, on the one hand, on the other hand having two Universities, one to continue giving the degrees to all comers and the others being a teaching University. Of those two plans you seem to prefer the latter?—I do; I believe the University of London has done most valuable work in the past and would continue to do so in the future; but at the same time I do not think it is adapted for giving what is required for the ordinary medical student corresponding to what is given by the Scotch Universities. As to the inexpediency of two Universities in London, in the first place the University of London, though so called, is really the University of the British Empire; no matter where a student comes from, his knowledge is accepted if he can prove that he has it. On the other hand, the population of London is so enormous that there really would be room for two or three teaching Universities without any real serious evil that I know of. I do not see that any harm would rise from a second University.

9540. I suppose the second University would be started with a view in the opinion of its promoters to be developed gradually to a considerable extent and becoming a wider, more copious and powerful institution as it went on. I mean more colleges would probably be added to it than the two that it starts with in addition to the medical schools, and that it would gradually be enlarged to a considerable extent?—I think it no doubt would. As London increases, educational institutions will rise up, which, as they showed themselves to assume a University character, would naturally be taken in; provision is made for that. On the other hand, I think the schools which already exist are amply sufficient themselves to do all that is required in the way of University teaching. As compared with other Universities there is ample teaching power already: in the Medical Department more than anywhere else in the British Islands.

9541. And would their being joined together and added to the University given them a higher position than they have now, and attract more endowments?—I certainly think it would as regards the medical schools. A great many students go to the Scotch schools for the mere purpose of being able to graduate. For instance, some of our best men at King's, after going through their entire course of education, have gone and spent a year at Newcastle in order to take the Durham degree, not because they wished to get more information, but because they wished to graduate. This may be said to be a secondary matter as compared with the improvement of our medical study which I anticipate would result from the new University. Still it is a serious question, and one which it is quite clear ought to be taken into consideration. Our London medical students have not the opportunity now of getting a degree on what may be said to be reasonable terms, by which I do not at all mean to say on low terms, but terms not so high—in some respects unreasonably high—as the University of London degrees are obtained on. I do not think I quite answered your question. I will say in addition this: if London students had the opportunity of getting their degrees here, fewer of them would go elsewhere, and the London schools would thrive proportionately more.

9542. It has been said that the object of starting this new University is to enable medical men to get a much cheaper and easier degree than they can get now. I think you have already said that you have no fear that these degrees would become too cheap?—I have no fear at all of such an occurrence.

9543. I am afraid you have not been able to come to terms or make any satisfactory arrangements with, or secure the support of, the Royal Colleges yet as to the Gresham Charter?—I must confess, if I am to speak my candid opinion, that I think the new University should be entirely on its own basis independently of the colleges. They have their important function, and the teaching University would have its important function. I think that mixing the two in any way would rather tend in the long run to confusion. With

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

regard to this point perhaps I may be allowed to say that I think it would not be at all right to compel students to take a license from other sources before they take their degree.

9544. You do not approve of that course?—I do not approve of that course. My own belief is that even though the giving of a license along with the degree be not granted to this new University in the first instance as it was not to the University of London, if it should prove to work, as I believe it would, as an institution producing elevation of teaching along with satisfactorily high examinations, it would be soon seen that it would be an injustice to withhold the power of conferring a license from this University, which is given to every other University in the kingdom. Then look at what the injustice would be to the student. I think we are bound to look at this matter in a broad point of view. Look at it from the student's point of view; although it would be admitted that at the Gresham University he went through a course of examinations fully equal to that of the colleges, and as regards the scientific ground-work much superior, yet you would compel that man to go through a second examination. Now these examinations are a most serious matter. As I have already said, they affect the student's course of study, and to have two examinations when one would be sufficient is in itself unfair. Then again, where an examination is conducted by those who are not in any way connected with the student's training there is more liability to uncertainty in the examinations. For instance, this took place the other day with regard to one of our best medical students. He was rejected at the conjoint examination, and immediately after took the M.B. of London. I do not suppose the University of London had been too lax or the conjoint examination too severe; but this case illustrates the uncertainty of these examinations even with our best men. Where there is this sort of uncertainty in the examination, which there must always be where the teacher is not concerned in it, it will be a wrong and a great hardship upon the student to compel him to go though two while one is sufficient: besides which the insisting upon this system would undo, so far as the subjects of the final examination are concerned, the great advantage that I anticipate from having the teacher concerned in the examination. There would still be the evil that there now is that the student is haunted with the knowledge that he is to be examined by strangers, and consequently resorts too often to cramming rather than to legitimate study. So from that point of view I should most earnestly wish that this condition should not be that insisted upon. If the Government does not as yet see its way to giving the license in medicine to the new University, then let the student in the meantime get his license elsewhere, but let the University be independent, let it have its own examinations, and give its own degrees; and let the colleges, the apothecaries' company, and other licensing bodies have their own functions also.

9545. I suppose as long as the degree of the Gresham University did not give a licensing qualification whoever went in for it would also be obliged to go in for the examinations of the Royal Colleges, or he would not be able to practise; so he would have the double examination, would he not?—He would as long as that existed; but I am firmly convinced that in a little while it would be seen that it would be unjust to withhold that license from the University, as it was with regard to the University of London: and if you once have it in the Charter that the students must take licenses elsewhere before they can graduate you may have it hang round the neck of the Gresham University for a long period of years, and it might be very difficult to get it expunged from the Charter.

9546. Then as regards the Royal Colleges I understand that you have no wish to have anything to do with them. You had rather they did their own business and let you do yours as is the case with the other Universities. You would not agree to their having a voice in the examinations and conducting them jointly with you as is the proposal of the Senate of the University of London?—I do not think that would work well.

9547. You have no desire to meet them in that way and conciliate them and get their co-operation?—I do not think it would work well. I think it would tend to defeat the object of the teaching University.

9548. Is there any other point you would wish to dwell upon?—I do not think I have anything more that I wish to press.

9549. (*Professor Sidgwick.*) I do not know whether your attention has been drawn to objections urged by provincial colleges against the Gresham Charter, forming, I understand, an important part of the agitation which led to the Charter being referred to this Commission. I understand that the objections of the provincial colleges were mainly or entirely as regards the regulations with reference to medicine. Have you had your attention called to them?—I cannot say that I have gone into the matter very much. My impression has been that the objection of the Victoria University, for instance, would rather be a sort of testimony to the importance of the proposed system; that they rather feared competition. I no not think there is anything in the objection that they felt that we should be likely to have a lower standard in science. As I have already said, I believe that would prove to be entirely groundless. Beyond that, I have not heard any serious objection on the part of the provincial colleges.

9550. As I understand the objection of the Victoria University, it would be in the main removed if the restriction to which you are opposed, requiring the qualification to practise to be obtained outside, were expunged from the Charter. I think Victoria University was alarmed mainly from the fear of what the effect of that would be. They hold that if the student under the Gresham University is required to prepare for the examinations of the conjoint board and also for those of his own University the complication of examinations would be so great that it would practically almost force the University to identify its standard with that of the conjoint board. Do you think that there is any force in this objection?—As regards the examinations in what are sometimes called the practical subjects the examinations of the Royal Colleges are quite high. I believe they are as high very nearly as the London University examinations in those particular subjects. So that if the examinations were restricted to the final department, I do not think in that point of view there would be any disadvantageous influence. My objection to it is, as I have already said, on other grounds. By multiplying examinations and introducing or maintaining examinations by those who do not know the student's course of training you would treat him unfairly and effect his studies prejudicially.

9551. I think the objections of the other provincial colleges—Birmingham, Sheffield, and Bristol—were rather of a different kind. They thought that if this easier degree were obtainable in London with the requirement of two years' residence, the students of the medical departments of those provincial schools would be unduly attracted to the Metropolis. Do you recognise any grievance of that sort?—I daresay there would be that effect. I do not see myself that it would be necessary (I am speaking my own private opinion) that the residence in the London school should be the two final years. If I remember rightly, in the University of Edinburgh no matter any year of residence is allowed to count. I think it might be advantageous in some cases for the student to take his scientific training in London, and his practical training elsewhere, as, for instance, in Bristol. I should not insist upon the two years of residence in London being the final two years.

9552. You would approve of a change in the Charter in that respect?—Yes, I should quite approve of a change in that respect.

9553. I suppose you hold that the provincial colleges so long as they cannot form part of any provincial University, must be left to the University of London?—Or the Scotch Universities or the University of Durham with regard to the question of getting a degree.

9554. It has been represented to us that the University of London would have a grievance if the London students were withdrawn from it—supposing that they would be withdrawn—by the establishment of the Gresham University; and that considering the work that has been done by the London University and the improvement that it has been the means of effecting in medical education it would have a reasonable complaint if this diminution in its prestige and in its work was allowed to occur. Do you see any force in that argument?—It is impossible, I think, to say to what extent the London University might be affected. I think it is a question that only time could solve whether there would be any serious change in that respect. Many of the London graduates are not London students at all; they would still go as before; and what proportion of the London students would be content with the Gresham

University degree, and what proportion would prefer to take the higher degree of the London University, I think it is impossible to predict.

9555. But you would hold that there would be probably quite as much work for the London University to do, as would be desirable in the interests of the community?—I believe it would have its own functions still. To what extent it would be diminished, I could not venture to predict.

9556. The same grievance has been alleged in the case of the Royal Colleges. It has been urged upon us that considering the work they are doing and have done, they ought not to be put aside in this way as regards the medical education in the metropolis. Do you recognise any force in that?—I can understand the colleges having that feeling. Take again the case of Edinburgh. I believe there will always be a large amount of work to be done by the colleges.

9557. Can you see any reason why the Royal Colleges of Physicians and Surgeons in London should occupy any different relation to a teaching University in London than the colleges in Scotland occupy to corresponding institutions there?—I do not in the abstract see any reason why.

9558. Therefore you think they would have no reasonable ground of complaint if this new University was established?—I must confess I do not think there would be. Like the corporations in Scotland, the Royal Colleges would still have their work to do as examining boards.

9559. One of the objections that has been brought forward against the Charter of the Gresham University is that while the professed aim is to establish a teaching University the Charter itself does not really establish more than a new examining body. How would you meet this?—I think that objection would be entirely met by the alteration in the Charter which I suggested in my opening remarks: that it should be provided that in examining any student in any subject he should be examined by the professor of that subject in his college aided by independent examiners not connected with that college.

9560. Would you be inclined to lay that down as a rule?—I should like to see that in the Charter as a fundamental principle.

9561. In holding that view do you represent the general views of the medical schools of London?—No, I cannot say. I give that as my own individual view, as based upon experience of two Universities in Scotland, and what I know of what occurs in Universities elsewhere. I was speaking the other day to a professor in Copenhagen, one of the most eminent professors there. He says the idea of professors having nothing to do with examining their own students would seem to them most extraordinary. There the professor conducts the examinations himself, but they are attended by two independent men who have equal voice with him in determining the marks to be given to the student. The professor conducts the examinations, the assessors, if I may so call them, see that it is fairly done. In the Scotch Universities the assessors take equal part with the professors in the examinations, and that system works thoroughly well.

9562. Now to return to the Royal Colleges. You would be prepared to give them the opportunity of coming into the University in the way in which it was given in the Charter?—I must confess that I think they are better independent.

9563. (*Professor Sanderson.*) The object which we have in view, and that which you particularly assume our object ought to be, is to improve medical studies as far as possible, both the study of science and the practical study. You think that ought to be the object of our new University?—Undoubtedly. That is what I have chiefly at heart.

9564. It is obvious that this could be best carried out by a perfectly independent and powerful University, that is to say, a body which would be able to act fearlessly, for the purpose of advancing and promoting the best kind of teaching. Does it appear to you that there is anything in the Gresham scheme which is likely to create a more efficient body for such a purpose than any other scheme, as, for example, the scheme of the University of London, or the professorial scheme, with certain alterations?—The great merit of the Gresham scheme seems to me to be that you have a really practical system to start working with at once.

9565. Practical machinery?—Yes, practical machinery to work with at once without disturbing existing institutions, which are doing good work. And I believe that if the central body were properly constituted, representing, though not too exclusively, the teaching element, you would have ample provision against anything like a lowering of the scientific standard. As regards the study of the practical subjects that is high enough as it is. The tendency all round has been to raise it. The question sometimes is whether it is not too high pitched, more especially if the teachers have had nothing to do with the teaching. When I was a student it was an understood thing that only the most ignoble students went to what they called the "grinder," but now there are comparatively few who do not resort to the "coach."

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

9566. Are you referring to the conjoint board?—Yes. Its examinations are, I believe, as high as those of the London University in the final subjects.

9567. So if you had an Honours Examination you would not think of aiming at a higher standard than that which at present exists in practical matters?—No.

9568. The great point, I suppose, is that you should bring into existence a body which would be capable of acting upon existing institutions for the purpose of co-operating with them to make them more efficient?—To make them more efficient stimulating honest legitimate study.

9569. You suggested that the Chancellor of the University should have a veto in relation to the appointment of teachers or professors?—Of professors. The great hospital schools, such, for instance, as St. Bartholomew's, would, in that case, be very much on the same footing as the Edinburgh Infirmary. The Edinburgh Infirmary is quite independent of the University, but it accommodates the professors in certain subjects with wards, so they have their professorial physicians and surgeons, and they have their ordinary ones, and it would be only those recognised as professors whose appointment would be subject to the veto in question. The other hospital officers would remain on the same footing as at present The veto would be on the appointment of the professoriate, and if there were in any school a tendency to go too much by mere seniority, it would act as a sort of check, strengthening the hands of those who might wish to see the appointments made more strictly upon merit. It would rather act, I believe, as a stimulus to careful appointments than come into operation as an actual veto.

9570. It would be a way in which the University would be able to co-operate in the appointment of professors?—Yes.

9571. Another way you suggested was that examinations should take place in the institutions?—Yes.

9572. And that would be equivalent, would it not, to the exercise of a practical supervision over the teaching appliances of the teaching institutions?—It would. I believe in that way it would have a most wholesome influence on the teaching. Where the equipments were unsatisfactory the assistant examiners would point out that such was the case. There is a point I did not refer to. This system would tend to produce a greater homogeneity in the London practice. One practice prevails at one school and another at another, and the fact of there being this visiting going on would tend to advantage.

9573. That would apply to clinical examinations and scientific examinations in so far as they depended upon practical work?—Yes.

9574. Then another way in which the University might co-operate would be by constituting a body which might receive funds for the furtherance of education. Do you think that is an important point?—The central body would undoubtedly require funds. There would be one advantage in the system of the teachers examining; you would have so many examiners best fitted for the purpose ready made to your hands without any fee being charged by them. Each professor would examine as a part of his duty without any additional emolument just as in the Scotch Universities.

9575. So you think the expense of examination would be diminished by that?—Yes.

9576. At the same time that its efficiency would be very much increased?—Very much increased.

9577. Do you approve in general of the constitution of the German Universities so far as you know it with reference to the particular points we have been speaking

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

of. I mean the efficiency of teaching?—I cannot say that I am very familiar with the German system. I think their system of *privat docenten* is exceedingly valuable, and in that point of view, if collateral teaching could be encouraged in our system, it would be a great advantage just as in Edinburgh where the extra-academical school comes to be a sort of training ground for professors, and if a man distinguishes himself as an extra-academical teacher in one school he perhaps obtains a professorship elsewhere.

9578. I suppose with some exceptions probably you would in general approve of the system of Edinburgh University as being very efficient in relation to teaching?—I do think so.

9579. We have had evidence which tends to show that the real difference between the University of London, and others, is rather that the examinations are more inconvenient to the student than that they are really higher. For instance, comparing the University of London with the University of Cambridge and Victoria University, that is the general tendency. In that case do you still think that the examinations of the University are objectionable, assuming that these difficulties could be removed? — I have such a strong opinion myself of the value of the teacher being concerned in the examination that unless that could be done it would be an objection to the London University system.

9580. Supposing we had a University quite as independent as the University of London, but which had two sides to it, one side performing the functions which are at present performed, and another side looking after teaching in the way we have been speaking of, would not that be effectual?—I do not know theoretically that it could be said not to be so, but I doubt if practically it would work well. There would be a great confusion then; two sorts of degrees, one on the present system and one on the other.

9581. But assuming that the London University Degree was so modified as to make it just such a degree as we require, viz., one of the same character, as, for example, the degree of the University of Cambridge, and it seems to require very little modification in order to bring it to that, you do not think it desirable for any other reason, except the difference in standard, that there should be two Universities?—Of course as a matter of theory—not. If the University of London were prepared to do all that I have been advocating for the Gresham——

9582. Then you might be satisfied with it?—Of course.

9583. Is there any reason at all for not according to the new University the power of giving a license, except the mere statutory reason, the mere provision of the Act of Parliament?—I know of no reason whatever.

9584. It would really be more mischievous, would it not, to make it necessary for men to go to two sources to get a license?—I think it would be most unfair.

9585. If the colleges went on examining with the height of standard that they now examine up to, we have already seen that their practical examinations are quite up to the mark, perhaps even above what is necessary. Would it not be a very undesirable thing that there should be a doubling of the examinations in that way; that the colleges should have to examine on the one hand, and the University on the other, on the same subjects with the same standard?—Two collateral systems. I do not think there would be any harm in it. I think the majority of the students of the better class would take the University degree. The thing would be very much as it is in Edinburgh. The majority of the students take the University degree, but by no means all.

9586. That would only be the case, of course, if you made the University degree qualify?—Of course. That would surely follow in the course of no long time, just as happened in the case of the University of London. Its first degree did not confer license to practise, and it was felt to be a great injustice when students had gone through what was thought to be a higher examination that they should not have a license. I think the objection to having the teacher not concerned in the examinations is just as great in the practical as in the purely scientific subjects.

9587. And you think the colleges would not consent to introduce modifications in the directions you are pointing out?—I have not heard that suggested at all. Their system hitherto has been the London University system so far as examinations are concerned.

9588. To exclude the direct action of the teacher?—Yes. The members of the council are most of them teachers, but it is the understanding that they do not examine their own students.

9589. On your plan you would always have an independent outside examiner?—An independent examiner outside the school to which he belongs, not necessarily outside the University.

9590. (*Mr. Rendall.*) In suggesting that there should be introduced into the Charter a provision that every student should be examined by the professor, were you not thinking chiefly of the practical medical examinations?—No, I was not. I was thinking of the whole subject.

9591. Do you extend it to arts and to science as well as to medical subjects?—Certainly to such sciences as chemistry and zoology.

9592. There again you seem to be rather alluding to practical subjects, and the exigencies of practical examinations, and not to have much in mind the condition of examinations conducted entirely by papers. Are you not thinking of *viva voce* examinations in practical subjects mainly?—It is principally the *viva voce* examinations that are concerned in what I was referring to, undoubtedly. Still, in arts subjects I believe the same principle does apply. Well, if you take a schoolboy, and he goes through a certain course at school, his master is naturally the person to examine him; and the student who comes to the colleges is not far removed from being a schoolboy. I think it is only doing justice to the student to have the man who has taught him concerned in checking examination papers, the man who knows what course he has taken him through and what books they have read together.

9593. Would you think of applying the principle in the pass examinations of the schoolboy just commencing as well as to the honours examinations?—I think so. I do not see any objection to allowing the teacher to have a voice in the examination, provided that he is properly counterbalanced by an independent man.

9594. It makes the duties of the professor extremely onerous if he is to take part in every examination of every student. That would be one point. Again have you thought, with regard to the practical examinations, of the very serious complications that might be involved; an external examiner going to 12 different medical schools, sitting with 12 different coadjutors, and endeavouring to obtain the same parity of standard and judgment among all those different examiners?—As far as regards going to different schools, it would be much less a matter of peripatetics were the examiners to go to the various several schools than for all the students to come up from all the schools in London.

9595. It would be so as regards students, but not so as regards the examiners, whose time is more valuable?—I do not think it would make any difference as regards the time spent by the examiners. They would simply go on any given day to some one school or college instead of to a central institution. I here refer to the oral examinations. As regards the written examinations I stated before the former Commission that I saw no objection to one set of questions being used for all the colleges, the questions being drawn up by the teachers and assistant examiners in conjunction. It would be a matter of convenience simply whether the written examinations should be held at a central institutions, in presence of some of the examiners, or whether they should take place at the various colleges (of course simultaneously) the professors being charged with the duty of maintaining the necessary discipline. In either case the answers of the students of any school would be read and judged by the professor of the subject at that school together with an assistant examiner.

9596. When you come to identity of standard and marking do not the objections become almost insuperable? You have quoted Edinburgh, but there there is practically a single University, not 12 distinct medical schools? — The truth is that many of these schools as far as their department goes are quite worthy to be Universities as regards the importance of their teaching.

9597. But that does not get over the difficulty of co-ordinating 12 standards?—You cannot have absolute equality of examinations. Take the examination of the

College of Surgeons; each of the various tables has its own set of examiners, and there is undoubtedly considerable variety in the standard. I think the tendency would be rather to greater uniformity in the system which I advocate. You cannot have perfect uniformity whatever system you adopt. You may have one examiner one year, and another the next, and the two men in two different years will have two different standards.

9598. Of what examinations was the Copenhagen professor that you mentioned speaking?—I understood that he spoke of all the subjects.

9599. Was it a medical examination?—Yes, it was a medical examination.

9600. Medical honours, do you know, or perhaps there is no such thing?—I did not inquire.

9601. I understood that in Germany, and I thought probably in Copenhagen too, the professional examination was conducted by the State and not by the individual professors?—In the State examinations the professors are engaged, as I understand it.

9602. Do you believe that is always the case in medicine?—I believe that it is always the case in medicine.

9603. It is not so in some subjects, but you believe that in medicine the professor always takes it himself, do you?—I cannot say as to all the schools, but I know it is the case in some.

9604. One other point you raised is about the veto of the Chancellor on the nomination of the professor. I did not exactly follow you. What nomination were you thinking of, nomination to be a teacher in one of the constituent colleges or nomination to a seat on the Faculty of the University?—Nomination to be a teacher at one of the colleges. At St. Bartholomew's, for example, when the professor of medicine died or retired the St. Bartholomew's authorities would nominate some one to succeed him, and that nomination would be subject to the Chancellor's veto. In a place like St. Bartholomew's it would be a dead letter practically, because I believe they are exceedingly careful at that institution in making their appointments with reference to the good of the school in regard to the efficiency of the teachers as compared with mere seniority. But in the case of some schools it would exercise a wholesome influence.

9605. It would be a serious interference with the college concerned, and surely it would be a very invidious way of obtaining the end. It would be something like a vote of censure on the individual, would it not?—Yes, and therefore I believe the tendency would be to induce the colleges to act so as to keep clear of the chance of it.

9606. Do you think one could go so far as to say that the University should report to the governing body of the Institution concerned, or would you hesitate to so far control independence?—I do hesitate, because I know there is such a strong feeling against it in the schools.

9607. The method you suggest would be the most invidious of all; it would be a direct impugning of the wisdom of the choice and the competence of the individual. Do you think any University or Faculty would take upon itself such a particular power as making a report upon the demerits of the individual, and the unwisdom of the choice?—I think there would have to be a strong case.

9608. Why would you shrink from the other. Would you think that it would be placing too much power in the hands of the University?—My own personal opinion is that I should like to see the appointment of the professors rest with the Council of the University on the recommendation of the College concerned.

9609. My own sympathies run in the same direction, and what you have spoken of as the autonomy of the colleges seems to me to mean the autonomy and independence of the governing body of the college and their independence of the teaching body. In King's College, for instance, the teaching body have no official representatives upon the governing body at all, have they. I understand that incidentally there are one or two members of the teaching body on the Council, but constitutionally not even the Principal has a seat on the governing body?—Dr. Priestly tells me that that is quite true. There are professors on the governing body, but they do not necessarily represent the professors themselves.

9610. The autonomy of the college really means that the governing body should make all appointments quite independent of any views or influence by the teaching body. Do you think it is important to maintain that? Would you not sympathise with some power being given to the body of teachers?—I should personally have no objection to it whatever.

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

9611. And you would not hesitate to confide to the University Council a considerable share of power?—There is already a certain amount of power both at University College and King's College in the medical appointments.

9612. How is that?—At University College all the medical appointments are first considered by a medical committee consisting of the medical professors. They recommend to the Council. The Council as a rule follow their recommendation, but still it is in their power to act otherwise, and every now and then it has happened that they have appointed somebody else in preference. That is the case with regard to University College. Then with regard to King's College there are medical appointments which are always referred to for deliberation and report to the medical Board, as it is called, consisting of the medical professors and teachers.

9613. Should you fear any bad results from the committee of the Faculty similarly reporting to the University authorities and letting the University Council have the decision?—Instead of the governing bodies of the several colleges you mean?

9614. Yes?—The objection to it is the utter interference with the existing system. The question is whether there is any necessity for making such a change, whether the present system does not work well enough.

9615. The advantage would be that it would give the University a certain amount of control and a certain amount of responsibility and it might be a question whether it would not strengthen the University to have that control and to have that responsibility?—If you ask my own opinion it is that if the schools consent, if it were done by recommendation of the schools, the Council of the University being the body with whom the appointment rested, I think it would give a greater homogeneity to the University, and I should be well pleased personally to see it, but I should be afraid the existing bodies would not like it.

9616. (*Mr. Anstie.*) I understood you to say that the great object of the promoters of the Gresham Scheme is the improvement of medical education in London?—I do not speak for the promoters of the Gresham Scheme. I speak my own opinion. That is what I feel and what I am interested in.

9617. That is your own view?—It is, indeed.

9618. And that, you say, would involve the improvement of the scientific training of doctors?—Certainly.

9619. You mentioned particularly some of those branches which are non-medical branches of science, such as chemistry. You laid great weight on the enlargement of the area of study in that region?—Yes.

9620. The tendency of that would seem to be by no means to make an easy degree?—No. It would put it on the same footing as, for instance, the Edinburgh degree.

9621. Does the Edinburgh degree require a greater scientific training than the London degree. Is not the London degree equal in its scientific requirements?—Yes, but it is only a small proportion of the medical students of London who take the University degree.

9622. I want to see in what way the University is to operate to promote that improvement. What are the means you rely upon for increasing the scientific requirement of the degree and improving the scientific education?—That would be simply done by the regulation of the University, which would insist upon these subjects being subjects of teaching and examination just as at other Universities.

9623. Why do you assume that they would insist upon that in such a way as to raise the standard of scientific attainment. What is the ground of your reliance?—My ground is that I have never heard any other sentiment expressed amongst those whom I have talked with on the subject. They have considered it a *sine quâ non*.

9624. But surely you have heard of the evidence which has been given before this Commission. Some

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

have said that the scientific requirements are too stringent, and some have gone so far as to say that the preliminary scientific ought to be done away with?—I do not know what evidence has been given before the Commission.

9625. You are aware that there is a large demand for a degree. What is the circumstance on which you place reliance to determine opinion of the University in favour of the scientific as against the non-scientific view?—If there were any doubt whatever upon that point I should say that it should be inserted in the Charter what the regulation should be. For my part I would not for a moment support any such new University if I did not feel confident that it would have that effect and be upon the same sort of lines as the University of Edinburgh. Take a subject like botany which the Conjoint Board of the Royal Colleges have excluded altogether and would be certainly included by the new University: or again chemistry: anybody may come up to be examined at the Conjoint Board Examination with merely such knowledge of chemistry as a schoolboy might bring with him from a teacher who has given him just enough to enable him to scrape through. I cannot conceive that the new University would be content with that.

9626. You hardly answer my question. What are the conditions on which you rely to give a scientific current of opinion dominance over what I may call an unscientific current of opinion?—I am surprised to hear that there has been any evidence given here to the effect that the scientific teaching would be put on a low footing. It is one thing to object to the examination of the University of London—it certainly does act as a deterrent in its earlier stages—but it would be another thing to omit such subjects as chemistry and biology from our course.

9627. But there is no question that that sort of demand has been made by those who think this Charter would be the means of realising their desires. In fact a considerable body of evidence has been given in favour of the diminution of the scientific requirements for the degree?—You mean as compared with the University of London?

9628. Yes?—Yes; but not as compared with a University like that of Edinburgh.

9629. Not favouring an increase in the direction you are suggesting, but a diminution and the excision of such subjects as you appear to favour. What I want to know is what forces do you rely upon to enable the scientifically minded to hold their ground against those who are less scientifically minded in this question of education?—I rely upon the sense and good feeling of the Council.

9630. That is your only reliance, is it?—That is all I have to go upon at present. From what I have heard in conversation with medical teachers I have not felt that there is any reason to doubt at all that that would be their view. Their view is that the University of London is in one way or another repellant, but their view is not at all to exclude subjects such as botany and chemistry.

9631. I do not speak of teachers; I do not say that teachers have given that sort of evidence, but medical men have done so?—But surely it is essentially the teachers who would be represented by their faculties.

9632. Is it not the fact that teachers are, to some extent liable to be controlled and dominated, and are likely to be controlled and dominated in their requirements by the demands of their pupils. Is it not the fact that that is constantly found to be the case?—I instanced the case of the University of Edinburgh where there is, so to speak, competition with the licensing bodies, and where the tendency has been with the licensing body to drop scientific subjects, and, on the other hand, in the University of Edinburgh the tendency has been to elevate them. There is a practical instance. When I was first connected with the University of Glasgow in 1860, the scientific subjects were not nearly as fully developed as they are now.

9633. I should like to point out to you the difference between the Universities of Edinburgh and Glasgow, which are celebrated Universities and have a reputation already made, and the position of a new University which has its position in the world to make. Do you think the position of a University which must depend to a large extent on the access of new students to its portals is altogether so strong as that of a University which has centuries of reputation behind it?—I do not think the centuries of reputation were sufficient elements in the change to which I have referred, there were centuries of reputation before 1869, but the change to which I have referred has been since. The tendency has been upwards not downwards, and as the University could not have a much higher examination in the practical subjects than the Royal Colleges now have, it would be their essence of existence to have a good scientific training.

9634. What I referred to was not the motive which caused the changes, but the power to effect the changes which were desired by scientific men. That power, I think you will allow to be possessed in a greater degree by an old University than by one that has at present no such reputation?—I do not know; I should have thought that at the outset the new University would make that an essential condition of its existence.

9635. Having to compete at the same time with another already established University of great reputation on the scientific side, and having on the principal side to compete with the two Royal Colleges, and, perhaps I may say, with a third licensing body, who are able to allow the ordinary practitioners to go through on their own terms, do you not think the position of a new University between those two influences would be a somewhat difficult and precarious one?—I do not myself think so.

9636. An supposing it should happen, notwithstanding the difficulties you anticipate that the London University should so far co-operate with teaching bodies as to become in effect a teaching University, you still would not regard that with any apprehension?—No.

9637. Now to refer to another portion of your evidence. Your view, I take it, would be that each school of a deserving position should be itself a University. That would be still better in your view, would it not?—It would be, so to speak, a University.

9638. But acting, so far as examinations are concerned, only in co-operation with the governing body of the new University?—Yes.

9639. Your expression was that there are medical schools in London which deserve to be Universities themselves?—So far as regards the quality of their teaching and the opportunities of teaching.

9640. Why should they not be Universities, I cannot see upon your grounds why each one of these should not be a University?—Well, in the first place the question of uniformity which has been raised would be entirely done away. You would make each place entirely independent.

9641. If it has resources and such power in its teaching as that it could be trusted to graduate its men, why should it not have the power and be a University by itself?—I used a strong expression, when I say deserved to be a University I mean as regards its material and the men associated with it, but surely it would be a very much better thing to have the schools under a common system.

9642. On the principles in which you have been proceeding, I am really at a loss to know why each one great school should not be a University by itself, and graduate its own pupils, subject, if you like, to any such regulations as you suggested for the Gresham University?—You mean, for instance, in the case of such a great medical school as St. Bartholomew's.

9643. Yes?—You would have to take only the very greatest of course, and here it is proposed to include smaller ones. The smaller ones would be undoubtedly very much raised and improved by this association, but in the case of the larger ones you would leave them simply as medical institutions and you would not have the modifying influence of the association with Arts and Science Faculties. You would have to have each one of these Institutions under some Government arrangement or some arrangement for external examiners.

9644. Why so? The course I am suggesting would seem to afford the maximum of that freedom of teaching and examination which seems to be rather your governing principle. You could not imagine a fuller system of freedom of teaching and examination than the one suggested by your remark, that these schools should be Universities?—I certainly do think, as my evidence shows, that it would in various ways be a very great advantage to these schools to have a community of action, and a common system pervading them.

9645. If community of action is desirable, and if a community with pursuits other than medical pursuits is also desirable, is it not desirable that this community should be extended so far as circumstances permit, that there should not be, in fact, two rival institutions doing the same thing within the same area?—What rival institutions do you refer to?

9646. You seem to consider it as of no moment that there should co-exist this new medical University, and also the London University of very high medical position; and you went so far as to say that you did not think it would be of moment even if the London University should add teaching functions by allaying itself with teaching medical schools. But I understand you to say that you are of opinion that an alliance among institutions of a like kind is a desirable thing for the purpose of securing a certain amount of uniformity and similarity of action. Does not that argument also tend to favour the existence, if it can be attained, of one University only in London instead of two?—As I have already said, if the one University would have the qualities that I desire I should be quite pleased to see it.

9647. Then assuming that to be possible, you would prefer one University to two?—Assuming that possibility I think there is room enough in London for two.

9648. Am I not right in saying that the reasons you have suggested tend in the direction of advocating a single University rather than two?—Supposing it were found impracticable for the University of London to do all that I desire, I do not see any objection to the co-existence in London of two universities.

9649. But are not the arguments which you have given for the inclusion of the various medical schools just as good for the unification of the whole University system?—I do not see exactly what you mean. The things are not parallel.

9650. I do not see where the distinction arises. You seem to be willing to go to a certain point, and then, for no reason that I can discover at present, you stop. Why do you stop at that certain point?—I have not stopped at it except so far as the two things are really incompatible. If the one University did all that were required, there would be no need for the second.

9651. That is what I am asking you to assume. If there were done all you wish to have done, you would prefer one University instead of two?—Yes.

9652. We may go perhaps even so far as this. Assume that the new system were started, not precisely perhaps in all points on the lines which you would desires, but on such a near approximation to them as would make it valuable; and supposing those lines so near to your wishes, though not exactly conforming with them, were adopted by the University of London, may I not assume that that would be the best solution of the question?—That I cannot at all say.

9653. Do you not think that follows?—I cannot say to what degree the approximation would be.

9654. I am right in assuming that you wished the Royal Colleges to be left out of this Charter, am I not?—I prefer seeing them out altogether.

9655. And to keep in the named schools?—Yes.

9656. Would you regard the Charter on that footing as satisfactory?—Yes.

9657. (*Sir George Humphry.*) You have had large experience in teaching and in the clinical opportunities of Glasgow, Edinburgh, and London. We have heard a great deal with respect to the clinical opportunities in Edinburgh, Glasgow, and London. You can compare them well. What is your feeling with regard to the relative clinical opportunities and clinical teaching in Edinburgh and in London?—In that respect very much depends upon the circumstances of the time and the individual London schools. For instance, when I first knew Edinburgh, there was not the enormous number of students there has been of late, and there was ample material in the way of clinical work for everybody who choose to use it. At the present time the students are so very numerous that really it is difficult to find even dresserships for them. That is one question showing how much the thing may vary at a given place. Then as regards London we have such very different institutions. We have a great place like St. Bartholomew's with an enormous number of beds and a large number of students; London Hospital with an enormous number of beds and comparatively few students; then again, a place like University College, where there are many students and a moderate-sized hospital. At King's, again, there is just now ample opportunity for everybody to work who wishes it.

9658. What do you think to be the reason that London students resort, as it is said they do, to Edinburgh?—I believe the principal reason is that they can get a degree there, and of course something also depends upon the reputation of a school and the habit of the students. When I first heard of Edinburgh there was a very small number of students.

9659. And it is cheaper?—No doubt it is partly that. But the attraction of the degree is a very great one, there is no doubt.

9660. Therefore you feel that there should be some greater facility for obtaining degrees in London?—I do.

9661. With regard to each student being examined by his own teacher, seeing that there are a large number of medical schools in London, and also a considerable number out of London, all of which converge upon London for examination, it would be rather difficult to carry out your principle altogether. It would require a very great number of examiners, and you could hardly have the examiners from the provinces, each to examine his own particular students when they come up. So there are difficulties in that way, are there not?—There would be difficulties if you included the provinces, but I do not think there would be serious difficulties with regard to London, because each professor in each school is, to a certain extent, an examiner. You would have a professor as one examiner in his subject in each school. I think there would be rather an economy than otherwise.

9662. But still the provincial students are an element?—They have not been considered in the Gresham Charter as an element.

9663. Then with regard to the examination being conducted at the several hospitals respecting which we can see advantages, is not there a very considerable difficulty in the fact that the student would be acquainted with the patients in the hospital in which he is examined?—I can speak of that matter from experience. There is no difficulty in preventing that in the Edinburgh or Glasgow examinations.

9664. Do you not think there would be in London? For instance, if the students were taken to be examined at their own hospital, there is very great probability that they would know the cases upon which they are to be examined?—I assure you that the thing can be done without the slightest difficulty.

9665. In London do you think it could?—I suppose it would be exactly the same in London as in Edinburgh I do not see the difference.

9666. I do not quite see how it can be done. The students must be shut out from the hospital for a period, and not only that, but they must be shut out from communication with the patients in order to ensure with anything like certainty that they do not know the cases?—As to knowing the cases, I have examined with you, and I think I may say that it is not so much a matter of accurate diagnosis as seeing that a man has accurate general knowledge. I have never felt the difficulty at all. I assure you that I have examined clinically for nine years in Glasgow and eight in Edinburgh, and we have always managed to avoid trouble of that sort.

9667. (*Professor Ramsay.*) With regard to the question asked by Sir George Humphry about clinical opportunities in Edinburgh and in London, your answer implied that the opportunities in London differ in the different schools?—Yes.

9668. Is it not the fact as a rule that a student does not see cases beyond his own hospital?—During his studentship.

9669. Therefore, however great the clinical material in London may be, it does not follow that any particular student has seen more cases than he would have seen in Glasgow or Edinburgh?—No, it does not in the abstract. It is not fair to take all the hospitals together and say, "We have so many beds, and therefore there "is this opportunity." But as you say the student during his studentship practically frequents his own hospital.

9670. The clinical material in Glasgow is particularly good, is it not?—Yes, there there is not the excess of

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

students that there has been in Edinburgh, which has been a serious difficulty.

9671. Therefore you would not support the statement which was made yesterday by Dr. Crosby, quoting words used by Sir Andrew Clark to the effect that every medical student in London sees four times as many clinical cases as a student in Edinburgh or in Glasgow?—I do not understand such a statement.

9672. You could not support a statement put in that way?—No.

9673. I think all your previous evidence was based upon your feeling as a teacher that the student takes a better course, and the teacher feels his hand more free and can give a higher and better direction to his teaching when he knows that the student's whole attention is given to him, rather than to the examination at the end of the course?—Yes, that is so.

9674. And it would be your desire, if possible, to introduce that same principle into London?—Yes.

9675. Was not one main reason of the independence you felt with regard to your subject, in Edinburgh and Glasgow, that you were the sole professor of that subject?—Yes.

9676. That you, in fact, had the whole moulding of the teaching of that subject?—Yes.

9677. Students had to come to you as part of their course?—Yes.

9678. It was not part of your business to attract students to the University or to the classes, but your duty was to treat your subject scientifically in the way in which you thought best for the students?—Yes.

9679. Do I understand that you desire to see in London special professorships in particular subjects, which shall be University professorships, as distinct from teacherships which should only belong to the colleges?—I think every college would have its professorial staff, so to speak, and also collaterally in every hospital there would be the ordinary physicians and surgeons, and the students would be free to come and attend the practice of the other physicians and surgeons and learn what they choose and can. But certain members of the staff would have, so to speak, a professorial rank.

9680. Not all the members?—Not all.

9681. With regard to the question put by Mr. Anstie, you do not mean that the professorial staff in every school should be complete in all its branches, do you?—Yes, I do.

9682. That is to say, that every school should have at least one professor of every subject?—Yes, in each Faculty. The medical school is only medical. But it should have a complete staff, so far as the medical part was concerned. Suppose, for example, that any school had an incomplete scientific equipment it could not teach chemistry, for instance; or it could not teach zoology; or it could not teach botany. Then they could not have professors in those departments and the students would have to go to another college in those subjects. That, indeed, has sometimes happened. I have heard that students intending ultimately to go to a large hospital school for their clinical work in their later years have gone, for instance, to University College for their scientific teaching, and when they have had their year or two there they have gone for their more purely medical work to one of the larger hospitals.

9683. Would it not be a desirable thing, if possible, that the most eminent teachers, whatever their school in London is, should be able to attract students from other schools?—Theoretically it would seem so, and if they were all placed near together, it would no doubt be so, but in London the distances are so great that, as a mere matter of going from place to place, it is practically essential that a man should work in his own school.

9684. For instance, you have only in your class pupils at King's College?—Except strangers who come.

9685. Is it possible you can have 11 men all equally distinguished in any subject?—It is not, of course, possible to have 11 different schools all exactly alike. If you come to the actual fact you have, in University College, for instance, a guarantee that you have competent teachers. At a great hospital like St. Bartholomew's you are practically certain that you have eminent physicians and surgeons. If the best men among them were selected for the professorships, a high quality o teaching would be ensured. A professor would by no means be necessarily chosen from among the members of the college concerned. It is no unusual thing for an eminent man from some other school to be appointed on the staff of a hospital. That was the reason for my proposing the veto—that you might have a stimulus to the appointment to the professorships of men of great merit, rather than have them appointed merely according to seniority.

9686. Does it not strike you as a weak point in the London system that if you have one conspicuously great teacher in any subject, he has no power of drawing students from the other schools; and that the students have no power to choose their teachers by their reputation, but must take the teachers provided by the colleges?—What determines them in joining a school very often is the eminence of the persons connected with it; but however undesirable it may be, it is the fact that the distances in London are so great that whether you make a man a University professor, or whatever you do, the students cannot go from place to place.

9687. And students in all the schools would have that sort of feeling which would induce them, if possible, to take all their lectures in their own school?—It is not easy for a student to attend lectures at another school in the course of any one session. Of course there are post-graduate courses going on in London now.

9688. We are speaking of ordinary courses. Is it not a fact that the determination of students to particular schools is caused more by a general feeling of tradition, or by the opinion of a man's friends and family than by the reputation of the teachers for the time being?—It often is so, no doubt. It is sometimes one way and sometimes another. There are many men who simply send their sons where they think they will get the best education. I think that is on the whole the most prevailing motive. Others send their sons to places because they were educated themselves.

9689. And once a man has joined a school he is apt to have the same *esprit de corps* about it that a man has with regard to his college, quite irrespective of its merits as a teaching institution?—He has his *esprit de corps* of course.

9690. We heard, yesterday, that King's College sends very few candidates for the London University degree. Are any pains ever taken to suggest to students when they join, that it would be a good thing to have in view the possibility of taking the degree of the London University?—There are men at our school who lay themselves out to prepare students for the preliminary scientific examination of the London University.

9691. But is it one of the things which the college as a college puts before medical students as a thing to be aimed at?—Yes.

9692. We were told yesterday that London University had killed King's College?—(*Mr. Rendall.*) I think Dr. Wace was speaking of arts and science at the time.

9693. (*Professor Ramsay.*) The point is just the same. Do the authorities of King's College do what they can on their part to keep alive the University by recommending and assisting students to work towards that end?—Certainly. We have not a large number of medical students at present.

9694. Dr. Wace seemed to attach very little importance to the University degrees, because he said yesterday that he could give no approximate estimate of the number of students in King's College who went forward for the degree?—I cannot tell you. I know there is always a sprinkling every year, some of our best men always go up to the University of London.

9695. Now with regard to the possibility of lowering the standard. Is it not your experience that a standard of examination tends to assimilate itself to the qualifications of the men who present themselves for it? Is it possible for a body of examiners to set up an ideal standard on any subject, wholly irrespective of the qualifications of the candidates who present themselves for it?—Personally I have always striven to do that, and I believe I have succeeded. It was agreed, after considerable consultation in the Glasgow University, that, in the Medical Faculty we should have a single standard as regards marks; for instance, that 50 out of 100 should be pass, and so forth. I am aware, however, that different men may make different estimates.

9696. That is not quite the question. Do you think it would be possible for examiners, as a practical matter, to set up such a standard as would require them to pluck 95 out of 100 candidates?—I know men are sometimes plucked in a very large proportion by a very low standard of examination. It does not at all do to infer that because a large proportion are rejected, therefore the examination is high.

9697. Nor *vice versâ?*—Nor *vice versâ*.

9698. It all depends on the quality of the candidates who present themselves. If you have a picked set of candidates it is very much more easy to maintain a high standard than if you have a miscellaneous set of candidates?—I think one means of keeping up the standard would be the system of visitation of the teacher which I have advocated.

9699. That is rather a different question. The question I ask is whether a standard does not tend to a certain extent—I do not say how much—to assimilate itself to the quality of the candidates who present themselves. The examiners feel that they must make the standard comparable with the attainments of those they examine. For instance, take the examination for the Indian Civil Service. It is easy to maintain a high standard there in every subject because the candidates are picked men. In the case of London, not one London medical student out of ten takes the London University degree. But the degree which it is proposed by the Gresham University to give is, *ex hypothesi*, to be within the reach of every student of average ability who goes through the medical course. Now if all go in for the degree, if not only the ten who are now candidates for it, but also the 90 who are not, all present themselves for this new degree, will it not be a difficult thing to maintain a high standard? I do not quite see the difficulty. We should be very much in the same position that you are in in Glasgow.

9700. There is a difficulty wherever the numbers are large. My question is, Will not a great increase of candidates have a tendency to cause examiners unconsciously to lower their standard?—Take the case of the Colleges of Physicians and Surgeons. They examine all and sundry; they examine in a practical view, and yet they keep up their standard although they reject a very large proportion in the practical subjects on which they examine. The tendency has been rather to raise than to lower the standard.

9701. That rather illustrates my point; because the other day when it was said that at the University of London about 50 per cent. were rejected, it was said on behalf of the Conjoint Board, "We reject about 50 per cent. too;" implying thereby that the standard of the examination was very high. But it was pointed out in reply that the 50 per cent. rejected by the London University are picked students, and to reject 50 per cent. of picked students is something very different from rejecting 50 per cent. of ordinary students?—Still the colleges do in their examinations in the practical subjects maintain an independently high standard in the subjects in which they do examine although they have to examine all sorts of persons.

9702. It might be desirable to guard against such a danger, might it not, in the establishment of a new University, if it is to give a degree to a much larger number of persons than the existing University does?—I do not think there is more reason to fear it in the scientific subjects than in the practical.

9703. Do you not admit that the standard has a tendency to accommodate itself to some extent to the qualification of those who come up for it?—I cannot say that I have observed it as a matter of fact.

9704. I think you have already admitted to-day that there is a defect in the constitution of King's College, which was pointed out by Mr. Rendall. The professors have no place whatever in the government of the College, by the constitution. Is not that so?—I do not quite think Mr. Rendall exactly asked me that question. As regards the medical appointments the professors have a voice.

9705. I said in the constitution. They are consulted, and their opinion may be taken for what it is worth. But is it not a fact that at King's College the professors have no constitutional voice in the government of the college?—I do not think in Glasgow, for instance, the *Senatus Academicus* has any power of appointing professors.

9706. I was not speaking of appointments, but the Scotch Senates have the power of regulating every thing connected with the teaching or discipline of the University, subject only to appeal; and five of their number are necessarily members of the governing body, which is a body of 14. The Professors at King's College have no power and no representation on the Council?—I like the Scotch system better, I must confess.

9707. Academically, is it not a weak point that the professors have no right of self-government?—On the Council there are a great many of the old teachers.

9708. That, of course, is an accident. They are not appointed directly by the professors, are they?—They are not appointed directly by the professors.

9709. May I ask if you approve of the imposition of the Church of England test upon the professors?—I do not think any harm would result from the abolition of the test, except in the Theological Faculty, as has been done in Scotland. There there was the test that a man must belong to the Established Church. That was done away with many years ago, and I do not think any inconvenience has been found to result.

9710. It was explained by Dr. Wace that when the professor affirms that he is a member of the Church of England, that is only interpreted to mean that he is a Christian. Do you consider such an interpretation of a plain statement of fact satisfactory?—I think your argument cuts both ways, because if they can interpret it so—that is to say, if the man who makes the statement can, with a good conscience, say that he is a member of the Church of England though he may differ in opinion from it in various points, if King's College admits such a man it shows a disposition to liberality on the part of King's College.

9711. King's College does not, I presume, put any interpretation upon the formula officially. The formula is that he is a member of the Church of England?—The great majority of people in England are members of the Church of England, I suppose John Wesley would have called himself a member of the Church of England, though a Dissenter.

9712. But it appears that persons are enabled to take that test who are not members of the Church of England?—I did not know that occurred.

9713. Is it not notorious that at Oxford and Cambridge and elsewhere similar tests when imposed had the effect of excluding men with finer minds and finer conscience, while men less sensitive had no objection to assert that they were members of the Church of England although they had no right to be considered technically such?—No doubt that has been the case, but as regards King's College, when a man is said to be a member of the Church of England that implies that he has been baptised into the Church of England, does it not?

9714. I presume so, certainly.

(*Mr. Anstie.*) No, not necessarily?

Then in that case it is the National Church. If a man says that he is a member of it, though he may not conform to its practice, I do not think the governing body show anything but liberality by admitting him into their professorships.

9715. (*Professor Ramsay.*) Would it not be better to show their liberality by prescribing a form of test which would be literally true?—A man is not requested to state that he believes in all the formulas and the doctrines.

9716. We were told that a Nonconformist might make that statement?—If the Nonconformist complies with that which the Church of England accepts—if he has been baptised and they accept him into the National Church——

9717. Would the professors as a body prefer that test to be removed or put in another form?—I really do not know what the opinions of others may be. What form of declaration would you suggest?

9718. The late Scotch form might serve as an example: that a professor would not use his office in any way to the subversion of religion, or to attack the Established Church of the country?—That has been done away with.

9719. Yes. I suppose, as a matter of fact, the test at King's College would not have remained till now if it had not been that the Council of King's College is a very ecclesiastical body?—Probably that may be the case. I do not see what harm is done if King's College is doing its work well. It seems to me to be,

Sir J. Lister, Bart., D.C.L., F.R.S.

21 July 1892.

after all, a very mild form of test. If it were subscribing to the 39 Articles I should say it was a very different thing.

9720. One practical point would be this. Supposing the University wished to increase the teaching appliances of King's College and that it could only do so by money derived from the State; would it be possible in the state of public opinion now-a-days to apply a State grant to providing a chemical laboratory for a professor who was required to be a member of the Church of England?—It is a thing that may be altered any year, as far as that goes. It may be altered at any time, just as it has been altered in your Scotch Universities.

9721. Quite so; but ought the alteration to be dependent on a body which has, to a very large extent, an ecclesiastical element?—Really as a matter of practice it does not come to much.

9722. (*Lord Reay.*) Can any other or better guarantee be given for the maintenance of a high standard of scientific teaching at any University than to make the best selection of the persons who are to teach at such a University, and, after you have made that selection, to give them as much freedom as possible in their teaching, in their research, and to leave them to exercise their influence in the University in their own way?—I think that is the best.

9723. Was not one of the objects of getting this Charter the widespread feeling of the professorial body at King's College and University College that under present circumstances they have not that freedom and that independence, on account of their students being examined by outside bodies?—Yes, no doubt.

9724. Is it not a fact that the present high position of science in Germany is mainly due to the fact that the professors at the German Universities have, during the greater part of this century, enjoyed perfect freedom in their methods of teaching and sufficient leisure to devote to research?—I believe so.

9725. Now with regard to the difficulty of a new University, not having the traditions which the older Universities have, and therefore not being able to offer the same attractions: have we not a very striking instance in the University at Strasbourg of the advantages of a new University. The University of Strasbourg, with its recent French traditions, is a case in point. Notwithstanding all the difficulties which had to be overcome, the University of Strasbourg, through the enlightened support of the German Government, now occupies a leading place among German Universities, and no one would say that the Strasbourg degree was in any way a lower degree than the degree of the University of Berlin or that of the University of Bonn?—No.

9726. Now with regard to the qualifications of the medical students you would establish such a margin between the examinations for a degree and the examinations of the conjoint board that a certain number of students in the new University would always seek for the license of the colleges. There would be no danger that the University would absorb the demand for the qualification granted by the Royal Colleges?—No, certainly not.

9727. But there would be another class of students who would desire to have the higher attainments which the degree of the University would secure?—Yes.

9728. You would make that a superior examination, and there would always be room for a certain number of students to seek the other?—As I said just now, in such a subject as surgery probably the examination would be much on a par with the present examinations of the College of Surgeons, which have been raised, I think, to too high a pitch, considering that the students are not examined by their teachers. But the great difference would be in the scientific side which tends to be lowered, almost dropped, by the mere examining bodies. It would be kept up and insisted upon at the University. That would be the main difference.

9729. Those who did not wish to pursue that higher course would still have open to them the present examinations of the colleges?—Yes.

9730. And a certain number of students would always require them?—There always would be.

9731. (*Professor Ramsay.*) You had much larger classes, had you not, in Edinburgh and in Glasgow than in London?—Yes.

9732. Is it not your experience in teaching that there is something stimulating and inspiring to a good teacher in having a large number of students before him? The magnetism of numbers of which Sir William Hamilton spoke comes into play.

9733. (*Mr. Anstie.*) Is it not the case that the German Universities are in every case maintained and supplied with appliances by the State?—I cannot quite say, but I believe the professors are appointed by the State.

9734. And not only provided with money, but controlled by the State, which exercises a very vigilant oversight over them.

(*Lord Reay.*) Not *vigilant* oversight.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Nineteenth Day.

Friday, 22nd July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir JAMES PAGET, Bart., F.R.S., examined.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9735. (*Chairman.*) You appear on behalf of the University of London?—I had rather it should appear that, as Vice-Chancellor, I represent the Senate of the University of London especially with regard to the letter sent to the Commission about this time last week, which expresses the general opinion of the Senate on the question now before the Commission.

9736. The first point which you would wish to give evidence about, I understand, is the objection which there is in your opinion to having two Universities for London?—Yes.

9737. (*Mr. Anstie.*) May I ask if the Senate's letter is before us?

(*The Secretary read the following letter.*)

"London University,
"Burlington Gardens, W.

"To the Secretary, Gresham University Commission.

"SIR,

"'IN your letter of June 8th, you state that the 'Commissioners are at present working on the plan of 'first hearing evidence in opposition to the proposed 'Charter of the Gresham University, and that as you 'presume that the Senate are in opposition, the 'evidence of the University should come early.'

"This statement appears to indicate some misconception as to the past action of the Senate and its position in relation to the question now under consideration by the Royal Commission. The Senate, therefore, desire to call the attention of the Commission to the following circumstances:—

"The appointment of the previous Royal Commission resulted from the application, by University and King's Colleges, London, for a Charter incorporating them as a new University. The Senate represented to that Commission, that in their opinion it was undesirable that there should be two Universities in London. At the same time they expressed their willingness to accept such a modification of the constitution of the University of London as would meet any just requirements of the colleges and of other educational institutions, and would further the cause of higher education. Immediately after the former Commission had made its report, the Senate entered into communication with the authorities of University and King's Colleges, with the Royal Colleges of Physicians and of Surgeons, and with other bodies, with a view to the embodiment of such a scheme in a new Charter. They ultimately submitted the draft of a Charter for the consideration of Convocation, which, however, rejected the scheme. In these circumstances, the Senate of the University, although not satisfied that the grant of a Charter of incorporation as a University to the two colleges would be of public advantage, did not think it right to oppose the grant of such a Charter. The Charter which was ultimately approved by the Privy Council was, however, strongly condemned by public opinion as embodying a scheme wholly inadequate to meet the demand for a teaching University in London; and this public opinion found its expression in a resolution of the House of Commons. The Senate, cannot but recognise that the question now before the Commission is very different from that which was under consideration upon the application of the two colleges. The objections to the Charter laid before the House of Commons were in a great measure the result of demands for a larger and more comprehensive scheme. It is, as the Senate understand, to ascertain how these demands may best be met that the present Commission has been appointed.

"The Senate retain the objection which they have throughout expressed to the establishment of two Universities in London. They are strongly of opinion that the creation of a second University in London would prevent any satisfactory organization of the higher education in London, and that a competition in degrees would arise which would render it difficult, if not impossible, to maintain a high standard. The Senate when the question was raised by the application of the two colleges were willing, as has been pointed out, to accept such a modification of the constitution of the existing University as would meet the requirements of education and obviate the necessity of creating a new University; and this they are still willing to do now that the question has assumed a different aspect. It may be pointed out that in the scheme which they formulated for a modification of the constitution of the University, in addition to the changes specially designed to meet the views of the colleges, the senate proposed to add to the present functions of the University that of teaching, by means of a professoriate appointed by the University. The Senate trust that the facts which they have brought before the Commission will satisfy them that the Senate are anxious to render any assistance in their power towards the solution of the difficult problem with which the Commission have to deal. In the present situation of the question, differing as it does so essentially from that which formerly had to be dealt with, the Senate cannot but think that when they are aware of the demands formulated before the Commission they will be better able to indicate how the University of London could best meet those demands. The Senate are, however, quite prepared if the Commission so desire, to state at once the grounds of their objection to the establishment of a second University, and for that purpose the Vice-Chancellor, Sir James Paget, and the Registrar will attend the meeting of the Commission on Friday, the 22nd instant, at 11 o'clock, as proposed in your letter of the 6th instant."

9738. (*Chairman.*) There is an expression in that letter upon which I should like to say a few words. The attitude which the University of London wishes to take up is to wait for the demands of the Commission, and then see how far they can comply with them. My opinion of the attitude to be adopted by the Commission, and I think it will be the opinion of the other Commissioners, is that it should receive all the different plans which have ever been proposed, and which can be proposed, should consider them carefully, and should hear evidence; and then proceed to making up our minds upon which of them is best to start with, take that as the starting point and improve it and amend it until we can find a scheme such as we can

Sir J. Paget, Bart., F.R.S.

22 July 1892.

present to the country in our report. This seems to me rather a different mode of proceeding from that which is hinted at by the University of London. We should expect them to present us with a scheme rather than to wait for us to ask them to meet our wishes?—I think the position of the University would be that the scheme which they proposed, and in accordance with which they asked for a charter, would have carried out the intention of the University as far as they were acquainted with the wishes then entertained by different bodies. At present there seem to have been many other proposals which the University has not had an opportunity to consider. It is, therefore, not in a position to say now what scheme it would think most appropriate, wishing as it would to meet as far as possible the reasonable demands of all classes of persons.

9739. The thing that is actually before us in the first place is the Gresham scheme with power to amend it, and alter it, and do anything we like with it, of course to reject it if we choose. Therefore, it is for the people opposed to the Gresham scheme to come and give evidence against it?—My Lord, the University of London never did oppose the Gresham scheme.

9740. If you do not oppose it you would at any rate like to give evidence with regard to it?—I will speak as far as possible for the Senate. We would give evidence upon all questions that have been put before us, and upon all information that has been presented to us, but we hear already by report that there are many things which have been proposed to the Commission which have not been brought before the University. I may mention, for example, that proposal for a Professorial University which has been put in print and distributed. That has never been before the Senate in any form. The opinion of the Senate, therefore, could not be given upon that unless it were put before it in some definite form for answer, and that we look to the Commission for by at least allowing us to have the evidence before them. The Senate might then consider and give evidence to the Commission upon any question so raised.

9741. What it would come to practically is that when more evidence is out, and has been printed, towards the end of the proceedings, you might wish to appear again and remark upon anything that has transpired. We have no objection to that, of course?—I am obliged to you, my Lord.

9742. And I think the subject upon which at the end of your letter you say you are most anxious to give evidence to-day, is the objection which in your opinion exists against there being two Universities for London?—The expression of the Senate, if I am correct, is that the Senate are quite willing to state it. They have shown their objections practically in the scheme which they proposed, and in the draft Charter. I may state that their objections are mainly that the institution of another University in London for granting degrees, would lead to a competition with the present existing University, and that the tendency of all such competition is that on one side or the other the degree is lowered.

9743. Even with such a large population as that of London, nearly five millions of people, you think there would not be room for two Universities to exist without clashing with one another, and without having the tendency to cheaper one another's degrees?—The effect of competition is shown on a population of much more than five millions—it is shown on the population of the whole United Kingdom.

9744. And that has already had the effect of cheapening degrees?—It has had the effect of encouraging the existence of two or three Universities in which it is quite certain that the degrees may be obtained on easier terms than in London, or in Edinburgh, or in Glasgow, and not infrequently it induces persons already in practice to obtain degrees abroad.

9745. Which Universities do you refer to particularly?—I think the degree of Durham can be obtained more easily and the degree of St. Andrew's.

9746. More easily than London?—More easily than either London, Edinburgh, or Glasgow.

9747. Can the degree of St. Andrew's be obtained now more cheaply than it used to be?—I do not know whether more so than it was 10 years ago, but one can see by those who take it, that it holds the same relative position that it did years ago.

9748. And has the cheapness of the degree at St. Andrew's had the effect of pulling down the degrees at Glasgow, Edinburgh, and other places?—No, they maintain their standard, but with the amount of disadvantage which is due to a certain number of students being taken off to the more easy Universities.

9749. They still keep their original high standard?—Yes, the standard in London is not lowered.

9750. Then you are not afraid that this University would lower the standard of the University of London?—Not at all.

9751. You are only afraid that it would give a cheaper degree?—It would not lower our standard, but a certain number of those who would be better for obtaining a higher standard would be drawn away by the facility for obtaining a lower one.

9752. But the University of London, whatever happened, would still keep up its high character?—I believe so.

9753. (*Sir Lyon Playfair.*) You used the words "cheaper degree." I supposed you used that expression in the sense of lower degrees, because some degrees would be cheaper as regards money?—I did not mean in money value, I meant as to quality.

9754. (*Chairman.*) Then the chief harm that this would do to you, would be in your opinion, that it might take people away from you, and fewer would go up?—It is not that it is simply a question between the London University and another, but altogether any step which would tend to lower the level on which degrees are granted would be an unwise one.

9755. At present a great number, particularly of medical students, go to other places to take their degrees?—Yes, they go from London to other places to obtain degrees easier than those of the London University.

9756. Do you not think it would be those who would go to the new University and take their degrees, rather than those who now go to you? Do you not think the new University really would take students from the northern Universities rather than from the University of London?—The objection which has commonly been made is that students are induced to leave the teaching of the London Hospitals that they may obtain degrees more easily in Scotland or anywhere than they can in the University of London.

9757. And it would be those who now go to Scotland and other places who would come to the new University, rather than those who go the London University?—Yes.

9758. Therefore, it would not affect you; it would only affect the Northern Universities in the way of taking away students?—It would affect both.

9759. Is there anything more you wish to say in regard to the objection to having two Universities, or shall I pass to another subject?—I think it might be added that another University could not be fairly worked, except at considerable expense, whereas the whole apparatus for such work is already existing and in full operation in connexion with the existing University of London.

9760. What does the apparatus consist of?—A large number of rooms for examinations and laboratories, and an amount of work to be carried on, which is hardly possible except with great clerical help.

9761. Are there expensive laboratories now in connexion with the University of London?—Not nearly enough. We have to obtain assistance from the school of science at Kensington, and indeed wherever we can, because the number of candidates has now increased so largely that with the present premises we have not nearly room enough for them.

9762. Then even with the new University, you would have more than occupation enough for your present laboratories and appliances?—Yes. We can just manage to carry on our examinations with such help as we can get. We have not ourselves sufficient space for them.

9763. Now I will pass to another subject. After the last Commission I believe the University of London—indeed it had before—expressed its willingness through its Senate to modify their constitution so as to endeavour to meet the wishes expressed by Lord Selborne's Commission?—Yes.

9764. The result of that was a scheme drawn up by the Senate and submitted to Convocation?—The scheme

and a draft charter were submitted to Convocation, which they declined to concur in.

9765. And that embodies what you are willing to give in the way of a teaching University?—It embodies it only so far as we had before us the wishes expressed by those with whom we held conferences.

9766. You had a Conference with University College and with King's College, and the Royal Colleges of Physicians and Surgeons?—Yes.

9767. Did they all express concurrence with this scheme?—No; the scheme was drawn up after our conferences with them, and so far as we apprehended their wishes, and they seemed to be consistent with the interests expressed by others, they were complied with.

9768. (*Bishop Barry.*) The revised scheme, as it has been called, submitted to Convocation was, I think, objected to on the part of the petitioning colleges?—There was more than one revised scheme.

9769. I mean the one that was actually presented to Convocation?—That was objected to by them.

9770. (*Sir Lyon Playfair.*) Would it not be well to ask Sir James Paget officially to put in that scheme, so that we may have it printed and put in the notes. It is continually referred to.

9771. (*Bishop Barry.*) What is headed "revised scheme" is the draft Charter?—With regard to the scheme as to which you were asking it was embodied in a draft Charter. The scheme was never submitted to Convocation, the draft Charter was. I will put in the revised scheme and the draft Charter. (*For these documents see Appendices Nos.* 14 *and* 15.) With regard to what has been called the revised scheme, as I said just now, there were two revised schemes. The scheme revised in June was admitted by the two colleges; subsequently changes were made in that, and in the revised scheme those changes allude to the dissent of the two colleges, but they were accepted by the Royal Colleges and the Medical Schools.

9772. (*Chairman.*) Is that the scheme that was submitted to Convocation?—That is the scheme upon which a draft Charter was founded, and this draft Charter was submitted to Convocation.

9773. In that scheme ten members of the Senate were elected by Convocation?—I think so.

9774. That is where it differs a good deal from the scheme of the Gresham?—Yes, I think that is so.

9775. Twelve members out of the 52 were elected by the Faculties?—12 out of the 62; including the chairman of Convocation, there would have been 13 members of Convocation; and of those elected by the Faculties, 12 were to be elected by the London Faculties, and 4 by the Provincial Faculties.

9776. One of the peculiarities of the scheme was the large number of members elected by Convocation, and the appointment of different standing committees, one to manage the London constituent colleges, others to manage the provincial colleges, and another the Faculty of Medicine. In fact it was so arranged that the University of London was to be able to perform two distinct functions, one as a teaching University for London, and the other as a great degree-giving University to the whole of the United Kingdom?—A teaching University in the sense that there would be a very large representation of teachers on the Senate, and that conferences would beregularly ordered between Committees of the Senate and teachers in every Faculty.

9777. But you still contemplated your being a great Imperial University for the future as you are now, and giving degrees to the whole of the United Kingdom?—Yes.

9778. Combining that with the function of a teaching University for London?—Yes.

9779. You would have no difficulty in combining the two things in one body?—I think there would be no real difficulty in it.

9780. As regards degrees in medicine these were to be given in conjunction with the two Royal Colleges, who were to join with you in determining and carrying on the examinations for a degree in medicine, were they not?—Yes, it was, I think, understood that the examinations held by the Royal Colleges would be accepted as equivalent to portions of the examinations held by the Universities.

9781. This scheme, which we may consider as the scheme that the Senate would be willing to adopt, was referred to Convocation, and was rejected by a large majority?—Yes.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9782. Therefore, that fell to the ground. Have you any hope that this scheme or any other scheme of the Senate which would be of this nature would be ever passed by Convocation? Do you think that Convocation would be inclined to pass it?—I think it very probable that any scheme which was strongly recommended by a commission such as this would be passed. If the Commission made a very definite and strong statement of what they thought would be best for the University I think it would be passed.

9783. Do you think, in fact, we should do a second time very much what was done by Lord Selborne's Commission?—I would not venture to suggest what the Royal Commission should now do.

9784. This scheme, I believe, was the outcome of Lord Selborne's Commission, strongly recommended by them and drawn up by you; then it was rejected by Convocation. Do you think that if the second Commission also recommends the scheme in the way that the first did, and then, fortified by the opinion of the second Commission, it is referred to Convocation, Convocation might be willing to pass it?—As I have understood, you have been hearing evidence from many parties which were not at all heard before Lord Selborne's Commission, and whose case has never been stated to the University of London so that it is now a new question, at least it is in great part new.

9785. Supposing Convocation to be unwilling to pass this do you think it could be over-ridden by Act of Parliament, or in any other way put aside?—I suppose an Act of Parliament might over-ride anything.

9786. Do you think it would be advisable?—I would not venture to express an opinion upon that. I think it is so plainly a case for a Royal Commission to determine rather than one University.

9787. Then supposing your own scheme to fail; supposing that Convocation were to be obstinate, and that it was not thought desirable to over-ride Convocation by Act of Parliament would you then be inclined to fall back upon the Gresham Scheme, or would your objection to two Universities still be insurmountable?—I suppose on the report of this Commission the authorities will determine that this or that shall be done. It does not seem to me that the University of London will necessarily be left to have any choice in the matter.

9788. But if it had it would you still oppose this scheme, which would be the only one then before us?—I would beg leave to repeat that the London University has not opposed this scheme.

9789. And would not be inclined to do so. Will you say that?—I will not undertake to say what it will or will not do at another time with new evidence before it, and new claims made.

9790. There is another scheme, the professorial scheme. Have you examined into that?—I have looked into it personally. It has never been before the Senate, so that any opinion I could give upon the matter would be simply my own.

9791. We should be glad to hear your opinion?—I think the general opinion will be that the professors themselves are not the best judges of what the examination of their students should be. The work of the professors should be in a great measure under the control of examiners separate from them and competent to judge of the knowledge of the students.

9792. Would you give them any voice in the examination; I think you do in your charter?—They would have a voice by being members of the Senate with whom the appointment of examiners rests.

9793. But they ought in your opinion to be supplemented by other people who are not professors?—Certainly.

9794. That would be one objection to the professorial scheme, would it?—I may mention that that objection is entertained strongly by a body of great influence in examinations in my own profession, the College of Surgeons. They examine a very large number of students every year, and many of their examiners are teachers or surgeons in hospitals from which those students come, but under no conditions whatever is an officer or teacher in a hospital allowed to examine a student of that hospital.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9795. Do you think he might be partial?—Or he might examine him only on subjects which he himself has taught, omitting, it may be, subjects of quite equal importance.

9796. And that would be unfair to outsiders?—Yes.

9797. Would it not be rather unfair to expect people to answer questions they had never been taught? You think the teachers ought to be supplemented by somebody from outside?—I think so certainly, at least on such a subject as that which is to determine whether the candidate is to practice medicine or not. I think a difference may be made according to the age and position of the student. Mere schoolboys it may be are best examined by their own masters, but as they pass on to further ranges of knowledge, though it may be on fewer subjects, I think they should of necessity know far more, and it might be said that they ought to know more than their own professor would himself have taught.

9798. Where would they get that knowledge?—From books and observation.

9799. And attending other professors?—Not necessarily.

9800. Of course there is the other side of the question, that the teaching and the examination ought to go together, and that the teaching ought to lead up to the examination, and the examination chiefly be a test of what has been actually taught beforehand. That is one view. Your view seems to be the contrary, but I suppose there is something to be said for both? Do you think it ought to be a combination?—I think it ought to be a combination, and I think a very useful office for Universities generally is that by their examinations they test not only the students, but the teachers.

9801. Then the professorial system you think would put the examination too exclusively into the hands of the teachers. That, I believe, is one objection that you have to it?—Yes.

9802. Then what do you say with regard to the part of it which professes to gradually absorb all existing institutions and take possession of them, and use their buildings and their apparatus, &c., for a University and allow the distinct colleges to gradually decay or to be extinguished at once?—I can hardly imagine such a scheme. I can hardly imagine how it could be possibly brought about, seeing the number of interests that are now concerned in the several teaching bodies in London.

9803. If it were possible would it be advisable to destroy the colleges?—I think not. I think a great advantage comes from the competition among the several schools and colleges.

9804. Then as far as I can make out, as the matter at present stands, we may consider your draft scheme which you submitted to Convocation as the embodiment of you views as a Senate, but you would be prepared to modify those views as far as possible to meet our wishes if we expressed any?—Quite so.

9805. But you have an objection on principle to a second University being established?—Yes.

9806. And that disinclines you to the Gresham Scheme of itself?—Yes.

9807. Are there any details of the Gresham Scheme which, supposing it to be adopted, you would wish to see altered, or on which you have any strong views?—I have nothing to express about them. I have not studied it so carefully as to be able to express any definite opinion upon each clause proposed in it. I can only state the general objection to a second University in London.

9808. You will have an opportunity at some future time to appear again before us with regard to anything else you have to say?—I am obliged to your Lordship.

9809. (*Bishop Barry.*) May I ask whether the Senate, since the institution of this Commission, have had before them their own proposed draft charter for further consideration?—I think I may say that the Senate has not considered any of the questions raised before this Commission.

9810. I did not mean that; but in the view of a fresh Commission, has the Senate thought it at all necessary to go over the draft Charter proposed with a view to any modifications of it?—The Senate awaits the knowledge of what may be brought before the present Commission before it can undertake anything like a revision.

9811. Then I understand that it has not done so?—It has not.

9812. Is it at all likely that, speaking generally, the Senate would still approve of this draft Charter, with such modifications as might be suggested?—I think so.

9813. I am speaking not of details, but of general principles?—I think that is what the Senate expresses in its letters.

9814. I was not quite certain how that might be; therefore I am glad to have the assurance?—I am sure I may say that this Senate would gladly reconsider their draft Charter by the help of any statement that may be derived from this Commission relating to the matters brought before it.

9815. But you have no reason to think that in essential principles they would depart from that draft Charter?—If anything proposed meant anything widely departing from it, I suppose they might object. The only essential principle I think is, that there should be one University, and that in that University the representation of teachers should be much larger than it is now.

9816. And that there should be what are called constituent colleges?—Yes, constituent colleges. With regard to that which is a very material change, may I say that the appointment of Faculties which should nominate members of the Senate is merely carrying out what the Senate has had in view all along, and has always done as far as it could consistently with its Charter. It never has made any considerable alteration either in a syllabus, or method of examination, or as far as it went in any method of teaching, without distinct and careful conference with teachers and examiners concerned in that matter.

9817. There is one point in the draft Charter and the revised scheme upon which it is based, on which I should like to ask a question. I think the main difference between that scheme and the one on which University College and King's College more or less agreed was the inclusion of provincial colleges as constituent colleges?—Yes, I believe it was.

9818. Are you aware whether the Senate would still lay great stress upon that?—I think that would very much depend upon statements obtained from this Commission, and from evidence that may be given before it.

9819. Did it not involve a great deal of complication in the scheme? You would be obliged to have a standing committee of the provincial colleges, a standing committee of the London colleges, and so on, and it would introduce some complication into the scheme?—I never thought there would be any difficulty in working those two plans of committees.

9820. Still, I am anxious to know whether the Senate would make that one of the essential points in any scheme which they would be willing to accept?—I could not venture to express beforehand what would be the feeling of the Senate. I think it would be a very serious matter for the Senate to give up its relations with a number of schools and colleges in the United Kingdom from which students come to it for degrees.

9821. I made a distinction between relation to students in all parts of the kingdom and relation to institutions in all parts of the kingdom. I can understand that the Senate could not give up the one, but I did not know how it might be disposed in regard of the other?—If it were merely recommended that the admission of students from other parts of London should be without conference with their teachers or without conjoint committees of their teachers that might be admitted by the Senate.

9822. You have, I suppose, no reason at present for supposing that Convocation has changed its mind upon this matter?—I have no knowledge of what passes in Convocation.

9823. I believe there is a standing committee of Convocation to consider all these matters. I thought possibly you might be cognisant of anything that had been done in that committee?—I do not remember anything done since the proposal for the draft Charter. We had a conference with the standing committee.

9824. Passing then to the objection to the two Universities, I think it came to this—the objection to competition and the objection to extra cost involved?—Those are the two main objections. I might add

another which I think we generally hold. It is very difficult when there are two Universities or two schools existing side by side for either of them to make any serious change in its arrangements without considering what the other would do.

9825. Would that be a serious difficulty?—In some cases it is a very serious difficulty. There is a case now before the Medical Council, I believe: the question whether the education of medical students should not be made compulsory for five years instead of four. I do not think there would have been the smallest chance of that being carried by any one institution, and the necessity will be that the Medical Council should require the scheme to be adopted, and require it of all.

9826. Has that been done?—I am not sure at present. I think it is in the way of being done, if it is not already done.

9827. I suppose that of those three objections, the one with regard to competition is the most fundamental?—Yes, I think so.

9828. The question of cost might not be very material. I suppose, at present, the University of London has not sufficient appliances to carry on all its present work?—Yes, it does carry on its work, but, as I have said, with difficulty.

9829. I thought you said you had to refer to the Royal School of Science?—We have to obtain rooms in other places but no examination is ever prevented for want of appliances.

9830. I suppose another University might do the same. Therefore, the only difficulty would be that of establishing a central institution?—If it were a University examining the same number of students, they would require to have buildings or accommodation as large as we have now.

9831. Probably it would come to that. Have you any idea what the cost of the present University buildings has been?—No, I cannot tell what the original cost was.

9832. Perhaps the difficulty of cost might be met, but the main point is the competition, and your idea is that that would necessarily lead to the lowering of the standard?—That has generally been its result.

9833. Even in so large a population as that of London, and with the immense work which the University of London as existing is doing outside the metropolis. You think there would be hardly room for two Universities?—The competition as existing at present is not amongst 5,000,000, but it is amongst the whole of the population in the United Kingdom.

9834. Would not your objection lead up to the system which I believe once prevailed in another country, of making one University for England, and all the others subordinate to it?—I could not venture to express an exact opinion upon that. We have, I should say, a sufficient number of Universities already, and it is not necessary to add another.

9835. Although there has been a desire for a University properly belonging to London, you think the function which would meet that desire might be added to the existing University of London?—Not by addition but by increase of what does exist already.

9836. To do this would, of course, involve an entire re-construction of the constitution of the University of London. It would require a new charter, would it not?—It would require a new charter, but I should not venture to call it in the widest sense a new constitution.

9837. Many witnesses have expressed it as a re-casting. You think the modification will not be so considerable as that?—No, certainly not.

9838. May I ask what proportion of the candidates for the Matriculation in the present University come from outside London?—I am not sure of the number; I should think it is about two thirds.

9839. And would the same proportion apply to the B.A. and to the B.Sc. degrees?—I have not reckoned them, but I should think yes, very probably; but there would be a proportionate diminution as they go on to the higher degrees.

9840. The number decreases, but do you think the proportion decreases?—The number of students will diminish from the lowest to the highest. I have not looked carefully into it, but my impression would be that the proportion of London students becomes greater as you get towards the advanced degrees.

9841. But still there is always a very large number coming from outside?—Yes, a very large number.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9842. May I ask you another question, to which perhaps you can only give an approximate answer? Do you know how many of the students enter themselves as from private study?—Private study is a very indefinite thing. A student puts down his place of education nearly as he pleases. If he has spent five years in a school or hospital, and six months in what is called private study, he may put down private study.

9843. He might do so, but do you think he does so?—I cannot tell.

9844. My remembrance is that it was generally from such and such a college, and from private study?—There are various ways of putting it down. I do not think that from the manner in which it is put down one could form any just estimate of the proportion more or less of private study, or of what private study means.

9845. Then with regard to the lowering of the standard of degrees, we have heard a good deal of evidence as to the difficulty of obtaining medical degrees in the present University of London. In case that University were to undertake the whole work, would you propose that there should be any change of system in that respect so as to have, as has been expressed by some of the witnesses, what are practically pass degrees and honours degrees?—I think some adjustment of that kind would have to be made. The difficulty is a very great one. It has been considered repeatedly, and those who hold the degree of Doctor of Medicine of London are very anxious that nothing should be done which would lower the value of that degree as held by themselves. They have, as some of them have expressed it, a kind of vested interest in the value of the M.D. degree of London, and, therefore, they would not like any plan which would admit of persons passing less severe examinations than they have themselves passed to obtain that title.

9846. Do you think the plea of that vested interest should stand in the way of what most medical witnesses have spoken of as a great public improvement?—I do not know that it would be a public improvement. It would be a personal advantage to each person who could obtain the M.D. degree, whether with or without honours, upon easier terms than it is obtained at present.

9847. Perhaps I ought to say a benefit to the profession at large. Many witnesses have said that it is very undesirable for medical students, especially in the advanced portion of their career, when they get their greatest advantages in London, to be drawn away to other Universities; hence it would be very greatly to the advantage of the London students, as well as to the public, if they could obtain degrees here?—That is one of the things I should anticipate in the case of the institution of a second University in London. Those who wished to obtain the M.D. degree on easier terms would go to that University.

9848. Would it not be desirable that, if they cannot go to that University, they should go to the present University?—I quite think so, and I think there ought to be a distinction made between the higher and the lower of the two degrees.

9849. Then, again, there is another matter which has been put before us that the degree has a greater real value when it implies systematic study as well as passing the examination. That would probably be your view?—Yes, I would not say that of all degrees. I am speaking merely of the medical part. I quite think so.

9850. Would it not extend also to the degree in Arts?—I am not a competent judge of that, having never taught Arts or examined in it; but as I see the plan working now I think the examinations are more sufficient by themselves for Arts than they are for Medicine.

9851. This would be rather a question of degree, hardly such as to entirely destroy all analogy between the two faculties?—I could not speak positively about it; but it seems to me that Arts, speaking very generally, can be studied more indefinitely, and at longer periods, and in a more casual manner than Medicine can. I only express that as an opinion.

9852. Looking at it from the point of view of Arts, I might venture to question that?—Just so. I quite feel that, and that is one of the difficulties one always

Sir J. Paget, Bart., F.R.S.

22 July 1892.

finds as one sees it amongst professors. They seldom agree.

9853. Then supposing the establishment of a second University, which should involve, as the Gresham Charter does, systematic study and subsequent examination, co-existing with the present University, which requires nothing but examination, do you not think that the value of degrees would come to be looked at from a different point of view in the two cases?—I could not tell that without much more consideration than I have given to it.

9854. Does not public opinion generally come to know what a degree is really worth, whatever the letters be which a man appends to his name. A senior wrangler is B.A., and a wooden spoon is B.A., but people soon come to know the difference between the high degree and the low?—I could not speak for other degrees than Medicine, but in Medicine I am sure they do not. A man is a doctor, and unless they take the trouble to look into the Medical Register or the Medical Directory, they do not at all know what he is.

9855. It appeared to some of us that supposing the new University had a lower standard of examination, yet that that defect might be compensated by its requiring what the University of London does not require, except in medicine, systematic study; and hence that the two degrees might come nearer to a co-ordination of value?—"Systematic study" seems to me so wide a name that I should say the examination alone can determine which is the better.

9856. That is a view diametrically opposed to the views which have led to the request for what is called a teaching University?—Pardon me; I think not. If the examination can be determined by skilled persons, professors and others, in constant contact with teachers, they can guide sufficiently to make the examination a very fair and proper test of the teaching.

9857. This does not quite touch what I meant—that for the education of the student who takes a B.A. there are many who hold that going through regular courses of study, as in college or elsewhere, has itself, independently of examination, a considerable value, and that, therefore, the value of the degree is, so to speak, a conjoint product of the value of systematic study, and the value of the examination. Would that be your view?—In so far as it might be so it would be quite possible for any University to insist upon a course of study by all its graduates.

9858. As the University of London does now in the medical profession, but in no other?—It might do it in any other if it pleased.

9859. That would be contrary to the system of the University as it at present is constituted?—But as I said before, there is no reason why the University should not in that as in other things change its mode of procedure.

9860. Then what would become of what is known as the private student. Would you exclude him from the examination?—No; I think it would be a great error if the examination was limited to those who had submitted to a certain plan of education. I think it ought not to be done. I do not know whether the Commission has had before it the scheme for the University extension.

9861. Not formally, I think?—I have heard that the University Extension Committee hope to be heard by the Commission. I think it would be a matter gravely to be regretted if its students should not be admitted to examinations for the degrees.

9862. And to degrees of the same character as those given to other students?—Yes, degrees of which the value should be determined by careful examination.

9863. Then your opinion is that some re-constituted University should be able to discharge all these various functions, of co-ordination of colleges, of examining external students, of relation both to collegiate and provincial students and to discharge all that without doing injustice to any?—I think it might do it without doing injustice to any: I am not sure that any institution could do it with satisfaction to all.

9864. That is a view which I should agree with strongly, and that is the very reason why some people have held that two Universities, each discharging a tolerably definite function would be able to work more satisfactorily than one University having a very complex function. But that is not your opinion?—No.

9865. (*Professor Ramsay.*) You were asked a question as to whether the cheapness of degrees at St. Andrew's had had any effect in causing a downward competition among the other Scotch Universities. You are aware that the privilege of granting medical degrees at St. Andrew's is at present limited to ten graduates per annum?—Yes.

9866. And consequently so small a number could have no effect in depressing the standard of degrees in the other Scotch Universities. Now with regard to the great question of the revised scheme of the Senate—you feel strongly that for all purposes that we have before us now, it would be better to have one University in London than two?—Yes.

9867. You gave, I think, two special reasons for that. The first was that with a single University there would be greater security for maintaining the standard; and the second was that a single University would act with greater power over the whole education of the Metropolis?—Yes.

9868. With greater strength, unity and economy?—Yes.

9869. With regard to the standard; the question has been several times put, whether or not the foundation of a second University might tend to depress the standard, the idea being that if there were two, one University would give easier degrees and the other more difficult degrees. I suppose whether the standard were depressed or not would depend principally, or at any rate to a large extent, upon the composition of the governing body of that University?—Yes.

9870. Is there anything in the constitution of the Senate as laid down by the Gresham Charter which seems to your mind to suggest a want of adequate security for maintaining an efficient standard of degrees?—I could not say, but speaking of the general practice in such things, whoever the persons are who manage them, the general course is that except with great care one institution will have a lower standard of examination than another.

9871. But there is nothing specially in the composition of the governing body as proposed in the Charter to lead you to suspect that result?—No.

9872. Is it not your experience as an examiner that any examination tends to some extent to accommodate itself to the qualifications of those who present themselves for it? In examining a body of students is not the mind of the examiner in forming a standard to some extent guided by the amount of knowledge he finds displayed by the candidates?—I think that might come about gradually. I may mention that in the case of the University of London, to prevent as far as possible anything of that kind, or other errors in examining, there is a certain tradition maintained that no two examiners ever leave office at the same time. But I dare say it frequently happens that examiners may have said that several years ago they were rather too high or too low, and they might in that way alter their standard.

9873. That does not quite meet my point; your answer deals with the continuity of standard. If an examiner has to examine a certain number of pupils, and has to fix a standard out of his own mind, he feels that he cannot maintain an ideally high standard with an inferior set of candidates?—I do not think an examiner would make any great change in any one year, but he may say: "I think the standard is too high, let it be gradually lowered"

9874. But it would be impossible for examiners to go on demanding a standard so high that the great bulk of those who come forward would be unfit to pass it?—I think it would be looked into every year by noting the proportion of those who were rejected. If year after year three-fourths were rejected it would occur to everyone that the standard was too high.

9875. It would be difficult to maintain if the proportion of rejections were so high as that?—Yes, and if the proportion were only one-fourth, the standard ought to be raised at once.

9876. Would you not say that one reason for the high standard of the examinations of the London University is that the candidates who present themselves are to a large extent picked candidates?—I think that very probable, but nevertheless the number picked increases year by year.

9877. I think in your previous evidence you pointed out that one great reason for the high standard of the examinations of the London University was that, as a matter of fact, the candidates for the London Uni-

versity had picked themselves, and were more or less a select class; in short, the candidates presenting themselves to the London University as a body were of a higher class than you could expect to get from any one single institution?—I think there is truth in that, but the general result is that by picking men they have picked a larger number every year, so that without harm to any the standard has been gradually raised.

9878. And those drop off who feel that they cannot reach that?—Yes.

9879. Does it not occur to you that in the event of there being a second University started in London with a view to meet the wants of the bulk of the medical students in London the result would probably be a lowering of the degree standard?—Certainly not.

9880. Would not the fact that the great bulk of the medical students went in for the degree of the second University rather cause the standard to be lowered from the operation of that cause which I am suggesting?—To cause a lowering of the standard in the present University, do you mean?

9881. No, I mean in the new University. It was given in evidence that, at present, only 10 per cent. of the medical students in London go forward for the London University degree; that seems to imply a very high standard. If the whole 100 were to go in for the degree of the new University, would not the fact of so large a body of students presenting themselves rather tend unconsciously to make the examiners adopt a comparatively low standard?—I think it would.

9882. Now, with regard to the other point, whether a single University can do the work of organising education for London as a whole better than two. Is it your view that what the proposed university has to do is not merely to maintain the University education now given in London, but to improve it and to extend it?—Yes.

9883. Do you not want for that purpose some central body, with authority both by its constitution and its composition, to deal with the whole problem of the higher education for London?—I think the more such an influence as that which is exercised by the present University of London extends the greater will be the advantage to education.

9884. Without referring to the University of London in particular, is it your view that one single body, given adequate power and adequate resources to deal with the whole University problem in London in all its branches would be likely to take a higher and larger view than if the power were divided between two Universities?—Certainly.

9885. And is it your view that the initiation, supervision and organisation of such work would be better done by one single body than by giving independent power to a large number of constituent colleges?—Yes.

9886. I think in the scheme of the University of London there was no definite provision for the University exercising any control over the internal administration of the colleges?—No, I think not.

9887. Do you think it desirable that the University should have any authority in the appointments of the curriculum and the administration of the colleges admitted into the University?—I think in regard to the appointment of teachers in the regular courses of study it should not have any influence, but I think that very probably in course of time more influence will be exercised by the University or by other institutions over teaching than there is at present, just as now the medical teaching is, in many respects, practically determined by the higher body, the Medical Council.

9888. But you would leave that to the gradual operation of natural causes?—Yes.

9889. You are aware of the state of things that has existed during the last quarter of a century or so at Oxford and Cambridge?—Generally.

9890. You are aware there has been a conflict of interests between the colleges on the one hand and the University. Do you not think there is a danger that if the colleges are left independent, and the University has no power or control over them, the college power will become predominant, and that the colleges will control the University instead of the University governing the colleges?—Surely that would depend in a great measure upon the proportion in which they are severally represented on the Senate.

9891. The representation of any one college on the Senate would be small; but would not the tendency of the college interest, as a whole, be to combine, so as to regard any question from a college point of view rather than from a University point of view?—It might do so in some measure, but I do not think it would ever be so great as to overwhelm the rest of the Senate.

9892. Then you do not desire to see the Senate exercise any control over colleges admitted into the University?—No, I think not any direct control.

9893. But you do desire that it should have power to establish teacherships, professorships, lectureships, or otherwise?—Much has been said about that of late, I know. I hope it will be understood that a great part of what I have been saying of late is only my own opinion. My own opinion is that the better work of the University in regard to the appointment of professors would be in the appointment of professors of higher standing, and teaching more difficult subjects than the subjects of ordinary education in the colleges, professors more after the fashion of Regius Professors in the University.

9894. Post-graduate courses?—Yes.

9895. You do not wish to see the University undertake the task of teaching the great body of teachable youths in the metropolis?—No, not by means of the appointment of professors.

9896. Only through the instrumentality of the colleges?—And its own examinations.

9897. My question was limited to the question of teaching. Is there no danger in your mind in separating the lower grades of teaching from the higher? The Bishop of London said the other day that it was a very undesirable thing to separate the higher from the lower. His view was that to be really well taught a subject should be taught by the same agency from the foundation to the apex. Is that your view?—The professors of the University might be held to be professors above the apex. I would use the term you have yourself used, post-graduate courses.

9898. Then would your view be thatthe colleges are to do the ordinary pass work for the ordinary degree, while the University should have a separate set of buildings, and by a separate staff to undertake the higher teaching, and work in the nature of research?—I think the teaching of the colleges should at least be continued up to the higher degrees granted by the University, but the University might after that teach any subject for which it should appoint a professor.

9899. Then the University teaching should commence at the point of its own degree and go upwards?—Yes.

9900. Then when you speak of a plan for a teaching University you really do not mean a teaching University; you mean an examining University the governing body of which shall to some extent be composed of teachers?—Yes.

9901. There seem to be two totally distinct meanings of the term "teaching University." There is the University which itself teaches by means of its professors, whilst others have used the term to denote a University which does no teaching but is to be governed by a Senate largely composed of teachers?—Yes.

9902. It is in the latter sense that you advocate the foundation of a teaching University?—Yes. I think the representation of teachers should be sufficient to control in a great measure the education in the different colleges.

9903. Then you would not share the view put forward by the Bishop of London the other day, that a great work, perhaps the greatest work, of this new London University, should be to attract in any way whatever the youth of London who now get no higher education at all, so as to bring higher education within the reach of the mass of young men and women of the metropolis?—I should say that that view would be very fairly and well carried out by admitting to its examinations those who have been so taught.

9904. Yes, but it is a question of superadding teaching to examination. You would not superadd University teaching with a view to meeting that want?—I do not think it could be supplied by any University in London.

9905. Therefore, you would leave that work to be done by the colleges?—Yes.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9906. And you think the *esprit de corps* of the colleges left to their own initiative would be sufficient to induce them to cope, and to cope adequately with this great work?—Yes.

9907. Why have they not done it in the past?—I cannot tell indeed.

9908. Supposing it to be the fact that in the present day the public expects higher education to be brought home to the masses as it is to some extent in Scotland, does the scheme of the Senate provide any mode by which that can be done?—No.

9909. You consider that for a teaching University a proportion of 12 teachers in a Senate of 48 members is a sufficient representation of the teaching element?—It should be mentioned that together with those 12 there would always be on the Senate a considerable number who have themselves been distinguished teachers.

9910. That is true, but they would not be actively engaged at the time in teaching work?—No, but I think it is a good arrangement if, together with those who are actively engaged in teaching, there are some who have left the office of teaching, and can control some of the tendencies that the teachers might have.

9911. Would you object to increase the proportion of the teaching element upon the Senate from one fourth to one half of the whole?—Looking at it as a mere matter of working, one half would be too large a proportion, I think.

9912. One-third?—Yes, one third. I may say that at the present time, certainly with the addition of those twelve, the constitution of the London University would give them a third, including those who are not actually teaching, but who have been teachers, and are in touch with teaching. But let me say this has never been before the Senate. I am only speaking my own personal opinion.

9913. The next point is with regard to the powers of the Faculties and the boards of studies. Under the scheme of the Senate the only power which the Faculties possess is that of electing members to the boards of studies?—Yes.

9914. And the only powers which the boards of studies possess are powers of recommendation?—Yes.

9915. Do you think those are sufficient powers to give to the Faculties or the boards of sutdies? The Faculties also nominate members to the Senate.

9916. We have already spoken of that. Would you have any objection to give the Faculties or the boards of studies certain powers of initiation or arrangement in matters relating to education and examination, subject of course to an appeal to by the Senate?—No regulation of the University could be made except with the consent of the Senate.

9917. But in the constitution of the new University I mean. Would you have any objection to enlarge the powers of the Faculties or the boards of studies, whatever they are called, so as to give the teachers not merely a power of recommendation, but a certain amount of executive power, subject of course to review by the Senate?—I doubt whether it would work well that you should have two bodies each capable of determining that this or that should be done without the consent of the other.

9918. A similar system works well in the Scotch Universities where the *Senatus Academicus*, composed of the professors manages everything relating to teaching, examining, and discipline, subject always to review by the University Court which is the supreme body. But the power in strictly academic matters belong to the body of teachers?—Has it the power of reversing a decision?

9919. It has?—So that practically everything is subordinate to the highest power?

9920. Yes, if the supreme body is appealed to or chooses itself to interfere o—I could not speak positively about it, but my impression is that there should be one body finally determining all questions of that kind.

9921. Then you objected to the professorial University on the ground, I think you said, that the professors were not the proper persons to control examinations?—Not alone.

9922. Is it not part of the case for a teaching University that the examinations should be more under the control of those who conduct the teaching for them?—I think I said that I should draw a distinction according to the level which the students have reached. For mere school boys as they might be called I think their own master should be their examiner. But as they go on to subjects on which there are wider differences of opinion and wider ranges of inquiry I should not leave it to their own teachers to examine them.

9923. That is not quite the question. It is not a question of one teacher examining his own students. The question is whether you would desire the examinations of the London University, as a whole, to be more under the direction and control of those who conduct the teaching. Would or would you not say that the examination ought to control the teaching rather than the teaching control the examination?—I think it would come to the result that the teachers on the Senate would determine the examinations and through the examinations the course of teaching. No question would come before the Senate without being submitted to a committee, and that committee would consist probably of none but teachers or representatives of the subjects under consideration.

9924. You do not mean to lay down a hard-and-fast principle that the examinations ought to control teaching rather than teaching control examination?—I think they must exercise control one upon the other.

9925. There is one other point in the Senate's scheme as to which I wish to ask If I understand the scheme aright what are called "constituent colleges" are not colleges which are to form constituent parts of the University but only colleges whose teachers are to form part of the Faculties?—I think so. I do not remember it.

9926. The really constituent colleges are only the two colleges, King's and University Colleges?—But there is a power of admitting others.

9927. I wish to point out that the word "constituent" seems improperly used, because it is used to denote simply a college whose teachers are to be admitted into the Faculty to which they belong, not the colleges admitted as a whole into the University. That use of the term "constituent" seems to me misleading. It simply means a college whose teachers form part of the Faculties.

(*Mr. Anstie.*) That is not quite correct, but it is not a material point. If you look through the various clauses of the scheme, you will find that is not quite correct.

(*Professor Ramsay.*) There are, no doubt, constituent colleges in Clause 3; but those that are called constituent colleges are not, properly speaking, constituent colleges. The only really constituent colleges are those named in Clause 3, namely, University College, King's College, and the Colleges of Physicians and Surgeons. These are to form component parts of the governing body of the University; whereas what are called constituent colleges in the scheme have no relation to the governing body.

(*Mr. Anstie.*) There are no Faculties except those that exist in constituent colleges.

9928. (*Professor Ramsay.*) But surely the term "constituent" is misapplied. What you really mean is recognised colleges, associated colleges, colleges whose teachers are admitted into the Faculties?—Yes.

9929. That comes, therefore, really to admitting into the University the individual teachers in those colleges, rather than the institutions as a whole?—Yes.

9930. Then would it not answer the purpose equally well, and perhaps better, especially in the case of certain colleges whose standing is somewhat doubtful, if the University had the power of recognising, not necessarily the colleges as a whole, but individual teachers in any college as being of University standing?—In what way should their recognition be shown?

9931. By allowing the particular teachers recognised by the University to be members of the Faculty without admitting the college as a whole with its whole staff?—I think that is quite a thing that might justly be considered.

9932. We have that system in the Scotch Universities. The University Courts recognise for the purpose of graduation individual teachers, but not whole colleges. Each teachers's claim must thus be considered before he can be recognised. This system would remove any difficulty as to colleges not fit to be admitted as colleges

though some of their teachers might be of University standing?—I think that might very justly be considered.

9933. (*Sir George Humphry.*) With regard to the functions of the University, one may say first that they are to grant degrees, and to conduct examinations, and to direct education with reference to those degrees. Your feeling on the whole is, that that work would be better done by one University than by two?—Yes.

9934. With regard to directing education, a point mentioned by Bishop Barry, the scheme does contain this proposal. At paragraph VIII., on page 46, you will see, "(2.) Production of evidence satisfactory to the "Senate of diligent attendance at such college "lectures and for such time as may from time to time "be prescribed by the Senate"?—Yes.

9935. So it does propose that the University of London should undertake that function of requiring certificates, and in that way of course directing the method of education. It does that already in connexion with medicine?—Yes.

9936. And you feel that with regard to degrees there should be some greater facility in London for medical students to obtain degrees than is now offered?—I think so.

9937. And that facility might well be given by the University of London?—As well by the University of London as by any two Universities, and better.

9938. Is your idea that there should be two degrees, one of a lower standard than another, or that there should be one degree, and that there might be superadded to it in certain cases honours, first of all the degree, and then in certain cases M.B. with honours, or that there should be two degrees?—It is a mere question of title, and it is very difficult not only to say what it should be if written out in full length, but what it should be in initials. I think a way out of the difficulty might be found. Some have suggested that Bachelors of Medicine should be justified in calling themselves doctors. That is one method in which it might be done. Others have suggested that certain of them should bear the title "Honours" after "M.D."

9939. In the older Universities, for instance, there is the Bachelor of Arts degree?—Yes.

9940. Then Bachelor of Arts degree with honours, all those who obtain honours can affix the title "Honours"?—Yes, the difficulty is how it will stand on a brass plate at the door: it really comes to that in many cases, what may be put upon a brass plate at the door, and many do now indicate their names "M.D., London."

9941. And all M.B.'s call themselves doctors?—They do, but they cannot justify it legally.

9942. Then with regard to another function of the University which has been so much spoken of, namely, the organising of what has been called the second class teaching in London, the organising of the teaching of a large number of the youths of London who do not propose to come for degrees. The organising of the teaching of London, has been spoken of a great deal; do you think that that if practicable would be more easily done by one University than by two?—I should think by one.

9943. You think that the authority of the one University might be great and important?—I should think one University would do it better than two, but I have not thought of the question of the University having anything to do with any other education than the education which may lead up to its degrees.

9944. There has been a great deal said here with reference to the great importance of organisation and exercising some influence over the more general education of the youth of London, but suppose that to be carried out, would that be more effectually done by one University or by two?—I should think by one better than by two.

9945. There is a third function which has been alluded to, namely, that of higher teaching and higher research, which would also require, of course, professors of the highest qualities, and laboratories on a large scale in which research and teaching could be carried on so as to promote the science of the nation in a high degree. Is that more likely to be effected, if it can be effected at all, by one University or by two?—I should think by one.

9946. It would require, of course, considerable plant and considerable funds?—That was one of the things I had in my mind when I spoke of the disadvantage of two Universities as involving a much larger expenditure.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

9947. But this would be rather a different point. I am not speaking of the examinations, but I think it is generally admitted that we do require in London larger laboratories and a higher quality of teaching and professorial work of a higher quality so that high teaching and research would be carried on irrespective of the teaching required for degrees, anything of that sort would require considerable plant and could only be done at considerable cost. Perhaps one may hope that there might be governmental aid for a thing of that sort, would such governmental aid be more easily obtained in the case of one University or of two?—I should think certainly in the case of one, because if the Universities are to be in any sense equal, each University would require what you have called the plant to the same extent and at the same cost.

9948. But something higher than ordinary plant higher than those ordinarily required for teaching, they would require more aid than Government support?—Yes.

9949. And that, you think, would be more easily obtained if there were one University than if there were two?—Yes, certainly.

9950. Then with regard to the scheme before the Senate there are provisions for provincial as well as for London colleges?—Yes.

9951. Do you think it is desirable or necessary to make any distinction and have a separate provision for provincial colleges as distinct from London colleges, or that one standing committee should regulate the whole which might be done in a more uniform manner and which might possibly simplify the proceedings of the University, is it necessary to have provisions for provincial colleges separately from provisions for London colleges?—If I remember aright those arrangements were made in the endeavour as far as possible to reconcile the claims made by the two colleges on the one side and the provincial colleges on the other.

9952. Those are not necessarily to be taken as the views of the Senate?—Convocation was very strong about it too.

9953. It really was not a necessary and desirable thing, for I perceive that the provincial colleges are represented on the Council, and there is no separate examination provided for?—No, it was never intended to have the examinations different.

9954. And being provided for by one council with one examination for all, it would seem, perhaps, superfluous that there should be a separate organisation for provincial colleges?—I think it was very much felt by the provincial colleges that they had not been represented before the last Royal Commission, and that it was very hard for them if the whole of their teaching, so far as examination could determine it, were to be determined by teachers in London.

9955. And certainly the University of London had no desire at any rate to limit its sphere of action to London. It desires to include provincial teaching or provincial examination and the admission of provincial students as well as London students. It is not desired to limit its sphere of action to London students?—Certainly not.

9956. Therefore it does not desire in any case to be considered exclusively as a University for London?—No; I should think in the same sense perhaps as London would not like to be deprived of the title of Metropolis.

9957. In what way do you think examinations would be altered in the case of medical students? I think there is no desire on the part of the profession that students should be admitted to degrees on the mere examination that gives the license. I think we all desire that the degree should indicate something higher and more particularly, perhaps, higher general knowledge. You feel that they should be required to pass the matriculation examination?—That may be deemed essential. I think I have never heard anyone propose to give that up.

9958. There has been a great deal of objection made to the character of the preliminary scientific examination of the University of London. It has been thought

Sir J. Paget, Bart., F.R.S.

22 July 1892.

perhaps to require too much of detailed knowledge?—That might be adjusted by adjusting the examinations, and especially it would be adjusted if we were in connexion with the two Royal Colleges.

9959. And it would be desirable that the opportunities for obtaining the degree in London, could in that way be facilitated?—Certainly.

9960. That the real knowledge of medicine, surgery, and midwifery should not be materially altered?—I think we have generally felt that the facility would be greatly increased if a great part or the whole of the examination held by the two Royal Colleges for license and membership were accepted as part of the examination for the M.B. because at present the student who wishes to be an M.B. of the University, and who wishes to be at the same time a member of the College of Surgeons, must pass both examinations in their complete forms.

9961. Do you approve of the exclusion of the Society of Apothecaries from that combination?—I do not think it has ever been considered by the Senate, but it has always been assumed that we should have our relations with the two Royal Colleges only.

9962. You think, then, that it would be rather objectionable to include the Society of Apothecaries in the combination?—I see no advantage whatever in it, and some disadvantage.

9963. With regard to University extension, I think the point which the Bishop of London had a great deal in view, was that there should be University extension lectures connected with the coming University, whatever it be, corresponding with those which are now given in connexion with Oxford and Cambridge; of course there would be no particular difficulty in that in either case?—No, they could arrange that just as well with one as with two Universities.

9964. You had rather not perhaps speak respecting the powers of convocation. The power of convocation at the present time is to negative any new charter, I think?—Yes, a charter may not be asked for without the assent of convocation.

9965. According to the revised scheme in clause 16, the second paragraph, "The business of the Committee "shall be to discharge such functions in relation to "the medical constituent colleges, and the examina- "tion of students in Medicine as the Senate may from "time to time delegate to them." It has been felt by some of those who are proposed as constituent medical colleges that there should be a combination of teaching. They feel that they cannot carry out efficient teaching, especially in certain of the preliminary subjects, as they now stand. Some schools feel that they are not strong enough to carry out efficient teaching in the various subjects, and they would be very glad that there should be some power which should compel a combination among them?—That might be made under that clause, but I think no one would know better than yourself the exceeding difficulty of compelling a medical school to undergo any such change as that.

9966. It requires some superior power to effect the change, and that is a point that might be borne in mind?—It might be borne in mind, but the compulsion in every case would be exceedingly difficult. I think that with a threat of compulsion possibly it might be brought about.

9967. And this clause would probably admit of inspection of the schools?—Certainly.

9968. It has been suggested, though not in this room, that it would be very desirable that inspection should be required?—Of all the schools?

9969. That not only should there be the power to inspect, but the requirement to inspect—that they should from time to time as a matter of duty inspect the schools?—The medical schools and others?

9970. Yes, inspect the medical schools and others as a matter of duty?—That would require a very considerable change, and would be a great expense besides.

9971. That a University which requires certificates can if it chooses inspect, but that it should not only have the opportunity, but the requirement, because practically, if they had only the opportunity, they would be likely not to do it?—It might be the function of the University to inspect.

9972. They would in that way exercise a very important influence over education, no doubt. If they really sent periodically persons to inspect the several schools, it would act in a very influential manner upon these several schools?—I think it would be very useful, but I am afraid it would be more difficult to carry out.

9973. If it had the power it would lead probably of necessity to this sort of combination more particularly in the preliminary subjects, which is very much desired by many of the medical schools, but which they cannot of themselves manage to effect. Do you feel that there may be difficulties about that?—I am afraid the difficulties would be almost insuperable, especially if, as in the case of the University of London, it had to inspect the provincial teaching places. I forget what number of institutions send their students, but it would be very difficult to inspect them all.

9974. The mere fact of the expectation of such inspection would do something, would it not?—Yes.

9975. In Clause VI., paragraph 31, it says, "Each "Faculty shall consist of the teachers of London con- "stituent colleges as determined under the foregoing "Clauses 22 and 24." Does that mean all teachers? That seems to require a little modification?—(*No answer.*)

9976–9. (*Mr. Anstie.*) It has been stated before us that the time for graduation required in the University of London, speaking of the M.D. degree, is from 10 to 12 years. Is that correct?—No.

9980. What is correct, if that is not?—Four years of medical study for the M.B. and one year after this.

9981. That makes five. It has been also stated that the examiners in the University of London change every two or three years, and that on every change there is a new syllabus. Is that correct?—No.

9982. What is correct?—Each examiner is appointed annually, and the general rule is that each examiner is appointed for five years, by his first appointment and four subsequent re-appointments, and the arrangement is made that in no instance should two examiners cease at the same time.

9983. With reference to new syllabuses always coming in, may I refer to your previous answer that whenever new syllabuses are issued they are settled after communication with teachers and examiners?—In every instance that I have been acquainted with a syllabus has not been altered except after conference with teachers and examiners in the subjects of the syllabus.

9984. We have been told something about the universal opinion of medical students of the day. Are you aware that a petition was presented to the Senate in the course of these proceedings, very largely and very influentially signed by the students of the London hospitals, asking that they might not diminish the intellectual requirements of their degree?—Certainly.

9985. Is it also the fact that last year the London University passed more doctors of medicine than in any previous year?—Yes, I am sure it was so.

9986. (*Sir George Humphry.*) By doctors of medicine do you mean bachelors?—No, doctors.

9987. (*Mr. Anstie.*) Was that the case with bachelors too?—That I cannot tell.

9988. (*Sir Lyon Playfair.*) Can you tell us how many doctors of medicine were passed last year?—The registrar tells me that there were 61 candidates, and 49 passed. There were 107 candidates for the bachelor's degree, and 75 passed.

9989. (*Mr. Anstie.*) In the 47th clause of the Senate's scheme I find certain provisions giving power to the Senate to enter into arrangements with the Royal Colleges, and concluding I quote these words: "This arrangement for joint examination shall not "lessen or interfere with the duty of the Senate to be "satisfied as to the adequacy of the examinations in "all respects." That has been described before us by one or two witnesses as giving the Royal Colleges a veto on the action of the Senate. Is that your view?—No, certainly not. No one would be admitted to the degree except on the statement of the examiners appointed by the University.

9990. Now that we have got rid of some of these misconceptions, I want to come to a few of the more important points. In answer to Professor Ramsay you seemed to consider that the University could not with great advantage make itself in any way responsible for the teaching of collegiate institutions or schools?—Not otherwise than by the indirect influence of examination.

9991. May I direct your attention to the provisions contained in clause 46, by which examinations even up to the final degree are to a considerable extent shared with, and to some extent left in the hands of, the colleges. Supposing a large share of influence to be in that way given to collegiate institutions, might it not be a reasonable thing that the University should have some control, it would be a question how much, in the nomination of the teachers to whose teaching such great weight was to be given?—I quite think it might be useful if the University had, but I do not think that was contemplated in that clause.

9992. But assuming such power as that, might it not be a desirable addition that, kept within due limits, the University should have some influence in determining who those persons were to be to whose teaching so much weight was to be assigned?—Yes.

9993. Then with respect to the question of the extension of teaching for which I think you said no provision was made in the scheme may I direct your attention to the 13th clause of the scheme which appears really to contemplate a great deal of that kind of thing. "There shall be a standing committee of "the Senate for the Faculties of Arts and Science in "connexion with the London Constituent Colleges in "those Faculties"—that is to say, University College and King's College—"This committee shall consist of "the President and Principal of University and King's "Colleges, of the Fellows elected by these colleges, of "the six Fellows elected by the London Faculties of "Arts and Science, and of ten other fellows to be "elected by the Senate annually. The business of the "committee shall be to promote the organization, "improvement, and extension of University teaching "in Arts and Science in and for London, including the "establishment of professorships and teacherships in "London, and to discharge such functions in relation "to the said constituent colleges, and the examination "of students therefrom in Arts and Science, as the "Senate may from time to time delegate to them." So it will appear that those functions were contemplated?—Yes, I had forgotten that clause.

9994. You now remember it?—Yes.

9995. With regard to another important question put to you by Professor Ramsay. You seemed not to be in favour of any body such as a board of study or *Senatus Academicus*, or whatever it might be termed, having the power to make regulations, subject only to, the overruling and controlling of the chief governing body. But would that necessarily involve any great degree of difficulty? Let me, for instance, call your attention to a parallel existing in our constitution. The Local Government Board and some other departments make provisional orders which become law after lying on the table of the house for a certain period of time. Would there be any objection to a body of the description referred to by Professor Ramsay, incorporating all the teaching power of the University making regulations which should be no doubt laid before the central body, the ultimate supreme governing body, but should, unless interfered with, take effect?—I think that might be a very good method of carrying out what is practically done now. All changes are recommended by committees, and it is the rarest thing possible for the Senate to reject their recommendation.

9996. But in matters which were matters of considerable variety and the conduct of which required rapidity it might facilitate what needed to be done?—Yes, I think so.

9997. So you would recognise the advantages attending a system of that kind, would you?—Yes, but I think practically it is all put into the hands of the Faculties. They may meet at any time; they may recommend what they wish; and the Senate can pass it at once.

9998. But supposing some recommendation of that kind were in force, might it not make the conduct of work go more easily?—Yes.

(*Professor Ramsay.*) It is the boards of studies, not the Faculties.

9999. (*Mr. Anstie.*) It is the teaching element that I desire to indicate by whatever name they go. Now I think a question was put and answered in the way I am going to indicate. It was stated by the Bishop of London that assuming a University to exist in London which commanded the aid and allegiance of the great body of London teachers no better body could be discovered for determining and controlling the course of study and the results of that study for private students. Would you agree with his Lordship in that opinion?—I do not see why it should be better than the judgment that might be passed by examiners who examine the students under all systems of teaching.

10,000. But could there be any better than that?—No, I think not.

10,001. Could there be any better body to control and test the results of private study than the great body of London teachers?—No.

10,002. You would agree with the Bishop of London in that opinion?—Yes, provided they determined it by methods of examination.

10,003. The direction would not be by examination, I suppose?—I thought you asked as to the results.

10,004. The determining of the course and testing the results?—Yes.

10,005. You understand it to apply to both?—Yes, but the results should be tested by examination.

10,006. Certainly. But I wish to make it quite clear that what is in my mind is both branches the direction of the course, and the test of results?—That question might imply that the professors themselves were to be examiners.

10,007. It does not imply that?—It might. There is no mention of examiners in it or of examinations.

10,008. Perhaps I did not use the word "examination." Of course examination is the only thing which tests results?—Yes.

10,009. Therefore, that is necessarily implied, or at least take it as implied?—Then I should agree.

10,010. If, however, the aid and allegiance of the great body of London teachers were transferred to another University in London, would not the existing University seated as it is in London, and managed as it necessarily must be by persons who are resident in London, find considerable difficulty in obtaining the requisite aid and assistance of teachers for carrying on their work?—Yes, I should think if the association of the teachers in the new University were in any sort compulsory, so as to leave none who might attach themselves to the old one.

10,011. I mean if their aid and allegiance were transferred to, and all their interests associated with the new University, would not the difficulty experienced by the existing University be very largely increased?—Yes.

10,012. And would not the difficulty also be increased of finding persons with competent knowledge, and a sufficiently fresh experience of teaching, to take an active and interested part on the Senate of the University?—Yes, I believe so.

10,013. Supposing you had a body constituted in the way I suggested, commanding the services of the great body of London teachers, and constituted in such a way that it might be regarded as not only a powerful, but also an impartial body, do you see any ground or reason why students in other parts of the country should anticipate being treated unfairly, or not having full justice done to their attainments in the awarding of the honours of the University?—I think they would be justly treated, but I do not think they would feel that it was quite fair that the whole of the method of their teaching should practically be determined by London men.

10,014. Now you are speaking of important collegiate bodies?—Yes.

10,015. But now, as a practical matter, must not we face this fact, whether we like it or not, that local Universities will certainly be founded in the near future in which those colleges will find their proper place?—I think it very likely they will, but the number of colleges besides which will not be associated will go on increasing.

10,016. They might hereafter?—Yes.

10,017. But if such colleges were to be founded hereafter, there would be two alternatives, they would either be united with some local system if they were strong enough for it, or if they were not strong enough to be united with the local system, they could hardly yet claim to have a voice in the conduct of the affairs of the University of London?—Not to have a voice in the conduct, but to find an examination open to them. If one is to forecast events like that, I would forecast that whatever number of provincial Universities they

Sir J. Paget, Bart., F.R.S.

22 July 1892.

have, a large number of students will come from them to London for the sake of the higher degree of the London University.

10,018. But if students desert in that way their own University system, and come to London, is it a reasonable or a prudent thing in an educational sense, that the course of action in a London University should be controlled by those local bodies?—No.

10,019. If they are not strong enough to retain their students, they certainly ought not to claim to control the conduct of teaching and examination by the London University?—Not to control it. But, as the scheme proposes, I think it would be very fair that some of them should be represented.

10,020. What I am proposing is that colleges which have sufficient strength to establish a title to participation in a University would join some University or other?—Yes.

10,021. If they are provincial colleges they would make good their claim to enter into a provincial University?—Yes.

10,022. If they are not strong enough to make good their claim to enter into a provincial University, I want to know whether there is any reason why they should claim to enter into the University of London?—I should say their claim should not be allowed.

10,023. Still, of course, the opportunity which you have required would still remain open to all students who came from London or elsewhere, to be examined at the University of London?—Yes.

10,024. And the continuance of that power would, in your judgment, be sufficient to answer all reasonable demands?—Yes.

10,025. (*Sir Lyon Playfair.*) You know that the feeling is very strong, that the present London University is not a teaching University, and that it influences education by its examinations. Are you clear that you can meet that feeling by the alteration of the London University sufficient to make it a teaching University, which is the strong public demand?—I think it will require a great change in the present constitution of the University.

10,026. You have previously made efforts to meet that by your scheme?—Yes.

10,027. At the present moment the London University has examiners who examine their own students, has it not?—I do not think that can be justly said.

10,028. I will take the example of one of your medical examiners, Professor Bain. Supposing a pupil came from Aberdeen to take a degree he would be examined by Professor Bain, would he not?—In the written examinations his name would not be known. The candidates are all indicated by numbers. In the *vivâ voce* examination there would be another examiner present who would examine instead of Professor Bain.

10,029. Instead of or along with him?—Professor Bain would sit by, but the examination would be conducted really by the other examiner.

10,030. Or by both?—I would not venture to say that Professor Bain might not ask a question, but the understanding would be that the examination is conducted practically by the other examiner of whom the candidate has not been a pupil.

10,031. Are you aware that in the German Universities and in the Scotch Universities the actual system is that the professor shall examine along with extra-academical examiners?—I do not know to what degree the examination by the professor will be carried, but I think that to have an examination chiefly or practically conducted by the professor is a mistake.

10,032. I was a long time a professorial examiner with extra-academical examiners, and I do not ever recollect the interference of an extra examiner with me except to mitigate the severity of my examination?—That would be due to some extent perhaps to your personal character.

10,033. I am speaking of experience along with the extra-academical examiners who are much less severe than professorial examiners?—In the examinations for high degrees it should not be that a student's knowledge should be limited to that which he has derived from his teacher.

10,034. But have you not in this scheme, Clause VIII., paragraph 3, actually adopted the principle that the professor shall examine for a degree along with the University examiner?—Yes.

10,035. "Examinations of students, being candidates "for matriculation and the pass examinations for the "degrees of B.A. and B.Sc., by a college professor or "teacher in the subject, or other person appointed by "the college, and an examiner to be appointed by the "Senate." There do you not admit the whole principle, that a professor may examine his own students along with a extra collegiate professor?—Yes, and that extra collegiate professor would be appointed by the University, and he would be held responsible for the result of the examination.

10,036. But the examination would take place by the college professor, according to this paragraph?—They would sit together. In the written examination the college professor would not know who were his students and who were not. In the *vivâ voce* examination they would sit together and the examiner appointed by the University would control and guide the examination so far as it might be held by the professor.

10,037. That is an attempt upon your part to try and bring the teaching system into your examination system, is it not?—Yes, so far as it goes.

10,038. If the London University adopted frankly the belief that teaching should regulate examinations as much as examinations should regulate teaching, do you not think a considerable amount of the difficulty between you would be avoided?—I think it practically does so. I think the two do control one another. The examinations from year to year determine what the teaching has done, and if they find the teaching above their standard then they may raise the examinations, if below they might drop them.

10,039. But it has been the administration of the London University hitherto, and is it not the fact that the teachers of London are not satisfied and desire a teaching University?—I have heard so, but I think the desire is unreasonable. I think that all they desire can be accomplished by change in the University of London.

10,040. Do you think you can so modify your methods that you will remove the objection that the examinations limit and cramp the teaching and that the teaching may have great influence for the better upon your examinations?—I think I may say that certainly if I may say "reasonable objections."

10,041. You mean if the objections are reasonable?—Yes.

10,042. Your scheme had for one of its motives here to try and reconcile the interests of teachers—not to be cramped in their mode of teaching, but to teach as they liked and to have their teaching represented in the examinations?—Yes.

10,043. And you believe that, so far as the Senate at least was concerned, the Senate would be prepared to adapt itself to such an object?—Yes; I think I may repeat that the Senate has done all that lay within its power under the conditions of its Charter to have the influence of teachers exercised in the whole of the examinations. It has done all it could to bring the influence of teachers to bear upon examinations.

10,044. You are not so sure that it would be the opinion of Convocation, are you?—I can not tell what the opinion of Convocation would be.

10,045. Are you aware that when the Royal Irish University was established the Convocation of the old Dublin University refused any concessions, and Parliament intervened, and carried what they thought was right?—I did not know it, but I have no doubt it was so.

10,046. I have no doubt you think that the duty of a University does not consist of mere examination, but that it should try to promote even the advance of science and the advance of knowledge?—Yes.

10,047. You think that might be done through University professors?—Yes, I think so. I think the University might increase its utility very much if it had the power of appointing professors who should teach on the higher levels of arts and science.

10,048. And who should have laboratories of research in order to enable them to do so?—Yes.

10,049. You spoke a little of University extension. As Oxford and Cambridge and the Scotch Universities now influence very much the education of the country, do you not think that the London University or

Gresham College, or whatever University was established for London, might influence very much the teaching of the secondary schools in London itself?—Yes.

10,050. And in that way you might influence the education of the masses, as one of the questions put to you referred to?—Yes.

10,051. Do you think that would be the duty of any University in London?—As far as possible I should wish to do it.

10,052. You would wish to promote University teaching throughout the metropolis, would you?—Yes.

10,053. (*Mr. Rendall.*) At the outset of your examination I thought there was a slight misapprehension. Was the scheme of the London Senate ever in any sense approved or endorsed by the recent Royal Commission?—No.

10,054. It was merely that the Commission left the Senate to construct the scheme and itself passed no judgment upon it?—The Commission had ceased to exist before we considered their report. The Commission in their report I may say stated their willingness to consider any questions that might be submitted to them, but nothing was submitted by the University of London.

10,055. The scheme so far as I understood was presented *en bloc* to the Convocation in a simple motion that the Charter be approved?—That is the necessary form. Schemes are not to be submitted to Convocation, but a draft Charter. Their right is that no Charter may be asked for unless with their consent.

10,056. Is it held that it is unconstitutional or impossible to consult Convocation on proposals *seriatim*, rather than present the whole scheme as an entirety for acceptance or rejection?—I do not think it has ever been the custom to do so, but the committees of the Senate had conferences with Convocation before this scheme was drawn up.

10,057. That gives Convocation no opportunity for mending particulars?—None.

10,058. Does not that tend to combine all the elements of opposition, and put any attempt at forming a Charter in a disadvantageous position?—Yes.

10,059. Should a new scheme be submitted to Convocation, would it be impossible to secure that?—Of course whatever this Commission might recommend could be embodied in a Charter, or any arrangement of that kind could be recommended by this Commission.

10,060. Would that be submitted to Convocation as a whole scheme?—I think the Senate has no power at all to submit portions of a Charter.

10,061. Nor to test amendments previous to putting a whole scheme?—No, I think not. It might be done if the Senate wished it.

10,062. You think discretion would rest with the Senate to some extent, do you?—Yes.

10,063. On the main question you think that a single University would and could undertake what we may speak of as the two-fold work of directing through some organisation the higher metropolitan education and, on the other hand, the organising and conducting of Imperial examinations?—Yes.

10,064. For the practical operation of that double duty I suppose it would be in some way necessary to separate the two functions. I mean there would be some kind of separate board or committee or subcommittee entrusted with the work of the Imperial examination?—Yes.

10,065. That would be practically necessary, would it not?—Yes, that was a part of the plan of the draft Charter.

10,066. And the metropolitan part of the work, that is the teaching University part of the work, would be largely, or at any rate in part, administered and controlled by the teachers of metropolitan colleges?—Yes.

10,067. Now, with regard to the other part of the work. I suppose there the endeavour would be to avoid giving any special control or place to the metropolitan teachers?—Yes.

10,068. Do you think it would be possible for the Senate or the governing body to constitute a board on which representatives of provincial colleges should be placed for that particular purpose?—I think it would be quite possible.

10,069. Would that be the best kind of machinery?—I think so. I think that is implied by the proposed scheme.

10,070. And that part of the work, I presume, would be conducted in the main, perhaps wholly, by external examiners appointed very much as the present examiners of the University of London are?—Yes, I should think so.

10,071. That is to say, candidates would be invited to come forward, and the most efficient and eminent examiners would be elected irrespective of their belonging to London colleges, provincial colleges, or any other colleges?—Yes.

10,072. Assuming any sort of special recognition or acceptance for particular examinations contributing towards a degree course, should not such recognition be determined rather by the status and character of the institution than by any local consideration?—Do you mean that none should be admitted except those who are in recognised colleges?

10,073. I was thinking of one scheme that was put forward which proposed that special acceptance should be given by the University of London to London colleges, in respect of matriculation and in respect of intermediate examinations, which I think it was not proposed to give to provincial colleges. Should not that sort of recognition rather be determined by the status of the institution than by the place where it was?—I think that might be so. I had better repeat again and again that the first scheme was drawn up at a time when we had none to consider with regard to intimate association, except the two colleges, University and King's, and the Royal Colleges of Physicians and Surgeons.

10,074. Was not the chief point which excited the jealousy or the criticism of the provincial colleges that there were special privileges accorded to the two colleges, even with the same degree in view and identity of final examination?—Yes.

10,075. It would very much tend to allay any jealousy of that kind if institutions were so accepted on their own merits and academical status, and not by their geographical position?—I think it might, but there again it would have rested with the two colleges to decide what amount of advantage they would be prepared to grant to the provincial colleges.

10,076. I suppose it would be contemplated that London colleges should be free to send in their students for examination quite as much as the provincial colleges—no difference whatever to be made?—I should think so certainly.

10,077. I think there were some claims put forward for representation on the Senate or the governing body by the provincial colleges?—Yes.

10,078. Were those strongly pressed?—Yes.

10,079. Do you think if there were no sufficient representation accorded to London colleges, as such, still the provincial colleges would press for it strongly?—I could not venture to say what they would do. I am not in such intimate relations with them as to be able to tell.

10,080. What I wanted to know was how much it was a desire to be simply represented on examinations, or how far it was jealousy of London institutions having representatives, and themselves having no influence?—That was really the chief difficulty which occurred in all the negotiations. As I said before the scheme drawn up in June was accepted by University College and King's College. Then came strong resistance from the country colleges that this excluded them, and under the strong representations then made the Senate thought it right to admit them, and then the scheme was refused by King's College and University College.

10,081. What do you think was the real gravamen—the desire of representation or the jealousy of representation of other bodies and not themselves?—I can not venture to state that. I do not remember what passed at the conferences enough to speak upon that. I remember the statement being made that it was very unfair that the provincial colleges should have their students submitted to examinations which were mainly determined by the London colleges.

10,082. Or mainly conducted even by London examiners, was it not?—They are not wholly conducted by London examiners. There are examiners from many provincial colleges and even from Ireland.

10,083. In that scheme it was proposed, was it not, that there should be a large element of London examiners?—I do not think the scheme touched the appointment of examiners excepting in so far as the teachers of the two colleges were to be examiners.

10,084. Now turning to the cost of examinations which was one point that was dwelt upon as constituting the advantage of a single University, I thought the full force of the objection was not entirely apprehended. Bishop Barry rather seemed to think that it turned upon buildings, provision of rooms and so forth; that is a very small part is it not of the cost of a system of examinations?—Yes.

10,085. Does any large part go for rents or for payment to various institutions which are good enough to lend or to let rooms?—We do not pay for them at all.

10,086. The main cost of examination, then, consists in the remuneration of examiners and supervisers?—Yes.

10,087. And all that lies outside buildings?—Yes.

10,088. I suppose the efficiency and the eminence of examiners depends very largely upon the amount you are able to offer?—In some measure it does, but I would not say very largely. I think the distinction of being appointed an examiner tells for something.

10,089. Do you think that is a large part of the attraction?—Yes, but still the cost is considerable.

10,090. Are the salaries determined mainly, by the number of papers which they examine or by other considerations, I am speaking particularly of honours schools now, for instance?—I really could not say which, perhaps the registrar could tell you. (*Mr. Milman.*) There are two considerations involved, there is no doubt partly the amount of the work and also the character of the examiner chosen. For instance, if you take a professional man you have to give him a better payment than perhaps you would give a gentleman whose time is not of the same absolute value. There it is a combination of consideration that leads up to the salary, which is in no case a large one.

10,091. (*To Mr. Milman.*) Can you give me the total amount of the cost of conducting examinations of the London University, I only want it roughly?—The working expenses irrespective of buildings and so forth come to something over 15,000*l.* a year.

10,092. (*Bishop Barry to Mr. Milman.*) How far is that covered by the examination fee of the student?—Within the last two or three years our numbers have been so great that the amount of working expenses has been covered, and something more than covered, by the fees received.

10,093. (*Mr. Rendall to Mr. Milman.*) The whole 15,000*l.*?—Yes, last year and the year before we took over 15,000*l.*

10,094. How long has that been so?—The numbers have gone on increasing and increasing till the amount taken in fees has more and more nearly covered it, and during the last two or three years it has more than covered it.

10,095. The larger the number of candidates the more nearly the system becomes self-supporting, does it?—Yes, the cost of examining in science is very much greater than in arts, but taking the whole thing together we had about 300*l.* more than the working expenses. That included more than the salaries of examiners, it included the staff.

(*Sir James Paget.*) It has risen to that in the course of 15 years.

10,096. (*Mr. Rendall to Mr. Milman.*) Do you know what it began with when numbers were small?—No, I could only tell the numbers. I do not know the cost.

10,097. I was thinking rather of the cost?—I could not give it exactly. Of course, we started with nothing, and that involved a grant of something like 5,000*l.* or 6,000*l.*

10,098. Then it has passed, as I understand, from 5,000*l.* to nothing by gradual diminution?—Yes, I am only taking the figures very roughly, but as the work has increased the grant from Parliament has been less.

10,099. (*To Sir James Paget.*) Do you think the Government would be likely to provide material grants for a double set of examinations?—I could not tell what the mind of the Government would be, but I should think they would not.

10,100. Then it would be one difficulty of the second University that it would be liable to large expense on the ground of examinations?—I should quite expect so. As the registrar has said, there would be examiners and clerical work on a very large scale. The number of entries to be sent up is very large; then there is the receiving of the fees, and the arrangement of everything for both written and practical examinations.

10,101. Now I will go to the scheme for a professorial University. There the first, and I think the main objection that you felt was the proposal for the examination of students in part at any rate by their own professors. That could not be considered an essential or indispensable feature of the scheme, could it?—I do not think I said students examined by their own teachers alone, but by examiners appointed by their teachers.

10,102. But even in that form is it anything that is essential to the scheme as a whole? Might not that provision be dropped out without affecting other parts of the scheme?—I think I only mentioned that as one objection.

10,103. I do not think you went on to state a second objection. I was wishing to know whether you had further objections?—I think another objection is that the character of the education should be, I will not say determined entirely, but at least influenced by persons who are not professors. We can observe the ordinary results of education, and the manner in which men conduct themselves after examination. Professors, I think, as a rule, would have an admirable object in view, that of raising the capacity of their students for particular higher kinds of work, whereas the work of the University has also been to raise the level of education for all classes of persons. The average student, for example, may not be raised up in the ordinary manner to the higher level the professor would desire, but he may be educated up to a very useful point.

10,104. One main point of contrast between the professorial scheme and the Gresham University scheme lies, I think, in the tendency to extend the University jurisdiction and prerogative, particularly in the appointment of professors, teachers, and so on. There seemed to me something of divergence between the answers that you gave to Bishop Barry, and those you gave to Mr. Anstie. In section 13 of the scheme of the Senate, the proposed Charter included the establishment of professorships and teacherships in London?—Yes.

10,105. So that that was a part of the scheme of the Senate of the University of London?—Yes.

10,106. And in the report of the late Commission, they suggested that a reasonable time should be allowed to the Senate and Convocation for doing various things; among them establishing as electoral bodies the teachers of its constituent and associated colleges. In contrast with that scheme of the Senate, and in contrast as far as I understand it to the suggestion of the Commissioners, the Gresham University scheme seems rather to exclude the University from that power of appointing professors. Could you tell me which of the two you think the better—that the power should be included or excluded from University jurisdiction?—I think it would depend very much upon what is the office and duty of the professors. It would be to my mind going too far if the University were to undertake the duty of appointing professors in all principal places of education, but not too far if it were to have the power of appointing professors who should teach higher subjects than can be taught to the general mass of students.

10,107. Would not the result of that view be that the Charter should at least contain such powers, leaving it very much to the future to determine to what particular amount or in what exact direction the power should be exercised?—Yes, I think that is what I may say is provided for in that section—that there should be a power, but without at all defining the extent to or the direction in which that power could be exercised.

10,108. Then to that extent and in that direction you would be in favour of amending the Gresham Charter should that be taken as the basis?—I think so, but I have not studied the Gresham Charter so exactly as to be able to say what is in it.

10,109. You spoke of the lower standard of some Universities. Were you thinking of the degrees throughout, or of degrees of any one faculty?—I could only judge so far as my own knowledge of the degrees in medicine extends.

10,110. That is what was chiefly in your mind, is it?—Yes.

10,111. Have you in your mind at all the Faculties of Arts and Science?—No. I could not speak with any knowledge at all of those, and I think it is only fair to add that the degrees in medicine are more easy to judge of because there is a definite pecuniary advantage in obtaining the degree. It gives not only the title to be called "Doctor," but it gives besides a legal right to practise medicine.

10,112. (*Professor Sanderson.*) It is generally admitted, is it not, that the standard of examiners in the University of London is extremely high?—Yes.

10,113. I suppose it is a fact, is it not, that the University of London always has a very large number of competitors for the office of examiner?—Yes.

10,114. And consequently the University of London has really the best men that are to be had?—Yes.

10,115. Consequently if there were a second University, the second University could not have the best?—I do not know how many candidates they might have, but the same men who might be candidates for one University might largely offer for the other.

10,116. But on the whole, it would be a division of energy that there should be two Universities both doing the same work in examination?—Yes.

10,117. It has been represented here by one or two witnesses that the establishment of a second University would be injurious to the material interests of the University of London. I suppose one is right in thinking that the University of London has no material interest—in fact no interest—except the improvement of education?—None at all. Of course the University is very glad that the grant to be given by Government should diminish every year, but that is the only material interest it has.

10,118. Even supposing it could be shown that the second University would diminish the number of candidates, no one would materially suffer from that?—No.

10,119. I suppose as regards science and particularly as regards the sciences introductory to medicine, there is no doubt that the teaching institutions as they at present exist do teach very efficiently?—I have no personal knowledge of it, but I have generally been told that there are a few schools that have very inefficient means of scientific teaching, and it would be well if they could coalesce into one larger scheme. I think some of the scientific teaching of the medical schools is conducted now at South Kensington, but certainly the largest schools have, I think, very efficient scientific teaching.

10,120. But even as regards the largest schools suppose we contemplate the establishment of a really first rate University, it would be very desirable that there should be more efficient teaching than exists at present, particularly from what may be called the higher branches of science?—Speaking only for the medical schools I should answer that under conditions. I think it is very advisable that medical students whilst studying their scientific subjects should be in close relations with those who are studying the later and practical subjects. They should be in fact in hospitals within reach of teaching of every kind, and therefore it would not be an unalloyed advantage if the scientific teaching were carried on in places separate from the large hospitals.

10,121. Do you refer to teaching in anatomy and physiology in particular?—I refer to those particularly, but I think besides in teaching all subjects, such as chemistry; it is well that students whose minds are distinctly set on studying medicine should be in touch with medical teaching even while studying chemistry.

10,122. Then you do not think it very desirable that there should be central institutions for teaching even chemistry and physics?—A great many others besides medical students would be studying chemistry and physics, but I would not discourage the teaching of those sciences in the larger medical schools.

10,123. But is it not better that the teaching for degrees should be in connexion with the higher teaching?—In a measure it is, but I should not be sure that every medical student ought to be taught chemistry and physics up to the very highest point to which anybody who is going to pursue those as their chief studies in life would have to pursue them.

10,124. I suppose the reason why the University of London does not at present take part in the organisation of teaching is that there is no apparatus; it is not part of the system?—None at all.

10,125. If a scheme were proposed which would involve the supervision of teaching and co-operation with the schools, both with regard to the election of professors and in other ways, may I ask whether you yourself would be inclined to further such a direction of new activity in the University of London?—Of course one's mind is to some extent influenced by what might be practicable. I think it would be practicable and desirable that a certain degree of supervision should be exercised. As one knows the working of the medical schools, which are the only institutions I can speak of, I do not think any external influence could well be exercised upon the appointment of professors.

10,126. But as regards teaching?—As regards the supervision of teaching, I think it might well be done.

10,127. With reference to the standard of the degree of Medicine in the University of London, I think we have already understood from you that you think there might be a change made in that standard?—Not to the lowering of the higher standard, but I think some arrangement might be made by which those who pass, say, a degree equivalent to that of Bachelor of Medicine might obtain what I think is the thing they chiefly want—the right to be called doctors.

10,128. I should like to know roughly what standard that degree should be of. As, for example, should it accord with the standard of other Universities of credit in the country, particularly Cambridge and Edinburgh?—I had rather speak of examinations which I am more familiar with. I think the degree of Bachelor of Medicine should be little, if at all, above the level of that which is obtained in the conjoint examination of the two Royal Colleges.

10,129. We have had a good deal of evidence to show that the standard of those examinations as regards practical subjects is quite up to the mark of the examinations of London, and as good a standard as can be obtained; but do you think that holds good as regards scientific teaching?—I think the scientific teaching of the University of London is above the level of those two colleges, but my belief is that if they were combined together those two colleges would quite consent to have their scientific examinations raised to the level of the University.

10,130. Do you mean for ordinary practitioners?—The difference is only the difference of the preliminary scientific, and I think the general class of students might very well pass that.

10,131. Would you make other students go through a real scientific training?—Practically they do so now. They must be examined in chemistry, anatomy, and physiology—every one of them.

10,132. Do you think the scientific training which the medical student undergoes is adequate?—No; I think that in respect of chemistry especially it should be raised more nearly, if not quite, to the level of the London University.

10,133. First of all, may I ask whether you think it is desirable that every medical student should complete his scientific study before he begins his practical?—I think he should complete it before he begins his attendance upon practical lectures, but I do not think it is desirable in all cases that he should be shut away from what commonly goes on and can be seen in the hospitals and from the acquirement of that kind of knowledge which a man gets at the very beginning of his time of seeing patients and seeing what goes on in the hospitals.

10,134. Before that, do you think the greater part of his time should be given to scientific work?—Yes.

10,135. How many years do you think the course of study ought to last for the graduate?—I think they are right in coming apparently to the decision that instead of four years as hitherto it should be five.

10,136. Of those five three according to the present arrangements of the Conjoint Board are applied entirely to practical subjects?—Yes, two years to scientific subjects and the next three to practical subjects.

Sir J. Paget, Bart., F.R.S.

22 July 1892.

10,137. Do you think two years would be enough for the training of a man in science who knew nothing whatever about it?—Well, it is difficult to say. What is true now may not be true 10 years hence. The teaching of science is different in different schools. The teaching of science goes on in all the schools of the kingdom, and the pupils get to know at least the language of it so they are ready to obtain enough for medicine in the first two years.

10,138. But one must provide for the actual state of things. The majority of students now know nothing of science when they begin their work?—I should not be prepared to say that. I saw a paper the other day from Dulwich College showing a very large extension of scientific teaching there.

10,139. I know that at Dulwich College and many other schools a great change has taken place in that direction, but considering that a man has to learn chemistry, physics, and natural history and besides that anatomy and physiology, two years is a very short time?—Practically he goes on studying his anatomy and physiology after his two years. The great majority of them go on studying it into the third year.

10,140. May I ask whether you have directed any attention to the mode of examination at the English Universities, and the Scotch, too, in which there is a combined action of an internal examiner in all scientific subjects?—Yes. I have not studied it carefully. I have heard of it and heard what is said of it generally.

10,141. It seems to be the general experience that examinations conducted in that way are conducted perfectly fairly?—Yes, I believe they are. I have always heard so of the Scotch Universities.

10,142. Does not the whole thing as to whether it is fair or not depend upon whether the examiners are first rate or not?—Yes.

10,143. So one could depend upon the fairness of a teacher if he is a first-rate man?—Yes, and if his examination is limited as to *viva voce*.

10,144. In the way you have explained?—Yes, and that in the written examination it should not be within the knowledge of the examiners whose papers they have.

10,145. (*Professor Sidgwick.*) If I understand you rightly you take three objections to the plan of the Gresham University?—May I say I have always used the term "other University." I have not spoken of the Gresham University.

10,146. I think you took the objection that the competition between the two Universities would lead to a lowering of the degrees?—Yes.

10,147. And I think you also gave as an objection to the Gresham Scheme, that the teachers ought not to have so much control over the examinations, as it was the object of that Scheme to give them?—Yes.

10,148. Your third objection was, I think, as to the cost of the examinations?—Yes.

10,149. Do you not conceive that the cost of examinations would be materially less in a teaching University for London only, because a good deal of the clerical work of which you spoke would hardly be required in that case? Would it not be easy for the colleges concerned to give the requisite notices to their own students without this large amount of circulars? Would not that very much reduce the amount of cost?—I think the amount might not be so great as that of the present University, but in all examining bodies the cost of examination is very large.

10,150. Do you not also think that if the principle of teachers examining their own students was largely carried out the payment for examination only need not be so high as it is in the London University. I do not know whether you are acquainted with the payments to examiners in my own University, for instance?—No, I do not know them.

10,151. The general opinion is that in proportion to the work exacted the payment then is much less than is required in the case of the London University to obtain the services of equally competent examiners; the reason being that a man is more easily induced to undertake for a small payment the work of examining his own pupils. It falls in naturally with the work of teaching them and therefore he will accept a smaller payment?—Cambridge has external examiners, has it not? I am only speaking of medicine. External examiners are employed in all the medical subjects, are they not? Certainly they are in the practical subjects.

10,152. I may say, perhaps, that so far as the payments for certain examinations in Cambridge have been raised in the way they have been it was due to the necessity of paying external examiners. They might have remained at a lower rate if it had not been for that. However, I will pass on to the question of the danger of lowering the degree. I think you spoke primarily of the examinations in Medicine rather than in Arts and Science?—Yes.

10,153. I find that in the evidence you gave before the late Royal Commission you seem repeatedly to recognise the need of a medical degree to be obtained in London by London students on easier terms than are now afforded by the London University. You say it has been strongly represented that by some means there should be a degree in Medicine given in London upon terms not inferior to those of the leading Universities in Scotland, and you seem to share this view, or at any rate to acquiesce in it?—As I said just now, I quite think it would be reasonable to give the title of "Doctor" to those who pass at the level of the present examinations of the two Royal Colleges; but the difficulty is to give the degree of "Doctor" on such terms as would not interfere with what is regarded as the rank of the present existing doctors of medicine of the University.

10,154. Do you not think that if the need of a degree obtainable on easier terms is admitted, it cannot fairly be made a serious objection to the establishment of another University in London, that it will probably supply that need?—There was no such term as "Gresham University at that time in use, and the understanding was that it should be a University which would be distinguished by a title at least as comprehensive as the title of the University of London. If, therefore, the right of giving degrees to doctors of medicine were to be granted to the then proposed University it would have been necessary to distinguish them clearly by some definite title from the present degrees.

10,155. Does it not seem to be a distinct advantage in the establishment of the Gresham University, assuming it likely to give the degree of doctor of medicine on the lower terms of which you approve, that it would in a very simple and effective way distinguish this lower degree from the degree of the University of London; whereas if, as you rather advocate, there were but one University the difficulty of distinguishing the lower degree from the higher degree would be very much greater?—But I suppose in the case of the Gresham University they would be Doctors of Medicine of London.

10,156. No, they would be Doctors of Medicine of the Gresham?—G.M.D.?

10,157. The difficulty of abbreviating the name would not be serious?—It is a great difficulty. If one wants to estimate the probable value of a man's degree one looks at the Medical Register or the Medical Directory. If a man is M.D. of Brussels I should hold that he has no claim whatever to be regarded as an English physician, or a physician upon the level of either the Scotch Universities or the English. It is a title which is commonly taken by very good practitioners who find an advantage in being called doctor, and they get their degrees upon very easy terms in Brussels. That degree is commonly taken not by students but by practitioners.

10,158. But do you not think that the name "Gresham" would more easily acquire a character of its own, and that the character would imply something which it would be very valuable to know in the case of the man who had the name, namely, that he had obtained his teaching in the London schools? It seemed to me to be a distinct advantage that there would be in the name a distinct meaning. A degree would be given which, as I understand, would aim at being about on a level with the degrees, to use your phrase, of the superior Scotch Universities, and would at the same time imply that the education had been obtained in the London schools?—I think it might so be, but I will not venture to say that it will be. I do not see that any advantage will be gained over that which is possible by the present University.

10,159. I think you said there was a great difficulty when doctor's degrees are given by the same University, in distinguishing those who obtain a high degree from those who obtain a lower degree?—A great difficulty, but not an insuperable one.

10,160. But do you not think this can be got over in a simple and easy way if a degree is given by a new University with an entirely different name?—I do not think the institution of a new University is worth doing for the sake of that.

10,161. But then it was urged as an objection that the degree would be lower. I was now rather trying to suggest that so far from its being an objection it would, according to the view you yourself expressed, supply an admitted need in an easy and effective way?—I think not so easy and not so effective as if the power were in the present University of London.

10,162. Now I will go on to the question of the relation of teaching to examination. There I think that those who urged the great advantages of giving the teachers a greater control over the examinations have mainly, if not entirely, urged it in the department of arts and science. It is from the representatives of science rather than from the representatives of medicine that we have heard that claim strongly urged?—May I ask is that in relation to the proposed professorial University.

10,163. No, I am not thinking only of that, but of the general question, whether it is a depressing thing to teachers in an academical body to be obliged to prepare students for an examination over which they have not a preponderant control. That is a view that has been strongly urged upon this Commission by a number of witnessess. With regard to that I would ask, are you acquainted with the system of the German Universities?—Not well; only by report, and what I may chance to have read.

10,164. It is represented to us that speaking broadly in German Universities, as well as in the Scottish Universities, the graduation is in the hands of the teachers?—Yes.

10,165. It is strongly urged that if a teaching University is established in London, it should correspond to that type; and I see that in the scheme of the Senate to which you have referred, that is adopted to a partial and limited extent, as far as certain pass examinations are concerned. What I should like to ask you is whether the fact that there are such wide differences of opinion with regard to the right relation of teaching to examination, and such strong precedents in favour of organising a University so that teachers may have a preponderant control over the examinations, is not an argument for leaving the London University as it now exists—admittedly doing valuable and useful work on the plan of an examination open to the whole kingdom—leaving it to do that work, and instituting a new University in conformity to what I may call the more normal type?—You mean the type of the German University.

10,166. The type of the German Universities or the Scottish?—They are not exactly alike, are they?

10,167. No, but I mentioned the two because I did not wish to suggest that there should be a servile imitation of either the one or the other, but only acceptance of the general principle of giving teachers a preponderant control over the examination, which is applied equally in the German and Scottish types?—It is a difference in degree, I think. The scheme to which I have referred, will give the teachers a very great weight in the decision of everything concerning examinations and teaching. I think, for myself, that that weight will be sufficient, and that it is not desirable that the teachers should have what may be fairly called a preponderant weight.

10,168. I think you said that the provincial colleges thought it very hard that their teaching should be determined by examinations controlled by London?—Yes, they did.

10,169. Then do you not think that it is almost impossible to combine the two requirements, that is to have an examination which the provincial colleges shall regard as strictly impartial, and at the same time to give the London teachers the sort of control over the work of the University which the teachers have in Germany and Scotland?—In the present working of the University, the provincial teachers have a large share in the examinations. A large number of provincial teachers are elected as examiners in the University.

10,170. Yes, but the existing system does not conform to what I have called the normal type of University. It does not give to London teachers a preponderant control over the graduation of their students, a control speaking broadly such as the teachers would have in the Scottish Universities, or the German Universities?—The German University is the type, I suppose, of that method of teaching and examining, but I have never been able to ascertain what influence they have better than that exercised in England over the general mass of students. One sees a considerable portion of highly distinguished men of science and learning in Germany, and it may be that a larger portion of those can be educated on the system of following each his own professor. As far as I can judge, the attraction of German Universities for English students is not any method of teaching, but the personal influence and renown of this or that teacher, and the condition of the German University professor for attracting students is determined rather by personal influence than by practical teaching. I have no indication, and have never been able to find any, that the teaching of the mass of students is better in Germany than in England.

10,171. What I was meaning to suggest was this: as there is a very fundamental difference of view on this question as to whether the teachers should or should not exercise a preponderant control over these examinations, and as there is a good deal to be said on both sides, and a strong body of opinion on both sides, does not that constitute an argument for having two Universities, one constructed on what I call the more ordinary type, the other the existing University of London continuing the work it has done hitherto on the basis of strict impartiality?—I quite feel that it may be justly regarded as an argument, but I think the arguments on the other side would prevail against it.

10,172. (*Lord Reay.*) One question with regard to St. Andrew's University. You alluded, of course, to the past history of St. Andrew's?—Yes.

10,173. St. Andrew's, as you are now aware, has become very intimately connected with Dundee?—Yes.

10,174. And the medical school is chiefly in connexion with Dundee?—I need not say, with regard to all these things, we have no exact test as to the level required by each University.

10,175. I merely wanted to make it quite clear that the St. Andrew's University in future will be placed very much on a level with the other Scotch Universities by the reforms which are at present going on, and the new ordinances which have been made?—I am glad to hear it.

10,176. Now one question with regard to examinations. I understood you to say that the aim of examination was to test the amount of knowledge. Of course we could not disagree about that, but is there not a further question which comes in, that an examination also tests the method by which that knowledge has been obtained?—Yes.

10,177. You fully admit that?—Yes.

10,178. Does it not follow that there is a certain advantage in a teacher who is responsible for the method of ascertaining whether the student has acquired the scientific method, and the external examiner the amount of knowledge which has been obtained through this method?—I quite feel that there is an advantage, but in all these cases there are advantages on both sides, and one has to think which is the greater.

10,179. Did I also understand your opinion to be that one of the objects of an examination is to test the value of the teaching?—Yes, but its first intention should be to test the amount of knowledge.

10,180. To see whether the professor has imparted a sufficient amount of knowledge?—Yes, I think that is the first object, to test the amount of knowledge, and then indirectly, the method of having obtained it. But if the knowledge is there, I should not be so careful about the method in which it has been obtained.

10,181. Then one of the results would be that, supposing the University appointed Sir Joseph Lister and you to examine, you would examine Sir Joseph Lister's pupils, and Sir Joseph Lister would examine your pupils?—That is the plan always carried out in the examinations of the two Royal Colleges.

10,182. And you would distinctly rather see your students examined by Sir Joseph Lister than examine them yourself?—Certainly.

10,183. (*Mr. Palmer.*) I think you mentioned that the title of the Gresham degree would be hardly signifi-

Sir J. Paget, Bart., F.R.S.

22 July 1892.

cant nor comprehensive?—No, I have not objected to the title.

10,184. I thought, in answer to Professor Sidgwick, you said it was scarcely sufficiently comprehensive?—No.

10,185. Then I will leave that. Now I want to ask you with regard to the limitation, in the last clause of the Gresham Charter, which distinctly limits the operation of the proposed Charter to the county of London. We had before us the chairman of Convocation, and he was asked, "Would you object to this "limitation to the London district?" His answer was, "I think that if our present University," that is the London University, "undertook the work of a "teaching University in London, I should object to "it." May I ask what your answer as representing the Senate would be?—Pardon me; I am glad to have the opportunity of repeating that I do not represent the Senate except upon the subjects mentioned in their letter. I should be very sorry to imply that all that I have said is what the Senate would think.

10,186. Can you give me your private opinion as to whether the provisions for standing committees for provincial colleges and for external students in the scheme of the Senate might be discarded in favour of the London University reconstituting itself as the teaching University for London only?—In my own opinion, I should very much regret if the London University were separated from the opportunity which it now has of examining students from every place that they come from.

10,187. Supposing it were so reconstituted as to be a teaching university for London retaining such an examining board for private students as was indicated by the late Royal Commission, would you see any objection to that?—You used the word "private" students.

10,188. I mean external students. There are many expressions in the report of the late Royal Commission, one in clause 11 in which it is said that "The existing "University, as long as it is a mere examining and "degree-giving body for students, collegiate and non-"collegiate, from all parts of the kingdom, and even "from the colonies, is not a London University "in any practical sense." There is another clause which says that such a University, that is to say, that which is not a teaching University and limited to the London district, would not be what is wanted. It would not be a teaching University for London. Then in a further paragraph it is said: "On this point our "opinion is that the metropolitan element should be "adhered to." Would you see any difficulty in teaching in and for London being the main purpose of the University, leaving an examining side to students from anywhere who might come in?—I think that is in great part what is implied by the scheme of the University.

10,189. No, I think the scheme of the University is that it should have a great many sides, a great many standing committees one of which is to deal with provincial colleges and one of which alone is to deal with the Metropolitan area. I would take as a test case the provincial colleges alone, would you exclude the provincial colleges from any constituted University of London?—No.

10,190. You would not be willing to do that, would you?—No, speaking for myself.

10,191. In the Gresham Charter the Gresham body appears as the theoretical University itself, the centre round which certain constituent colleges are grouped. If the Gresham body were to retire in favour of the London University occupying the position which they have in the Gresham Charter, plus the power of examining bodies outside, would you consent to that? In the Gresham Charter the name of the Gresham Institution, is the University itself, round which certain constituent colleges are grouped, the essence of the scheme being that it is a local University for London: now I ask would you individually advise the Senate to consent to occupy that place, retaining only the power of examining all and sundry from everywhere?—But that would be entirely different from the proposal of the Gresham Charter.

10,192. It would, but it would be the proposal recommended by the Royal Commission?—I think that is implied at least in the proposed scheme of the University.

10,193. The late Royal Commission said there would be no objection to retaining the power of examining the external students if they could come in, but it said that anything short of a reconstituted London University, reconstituted to the extent of being a local teaching University for London, would not do what is wanted?—I should repeat that I do not see that there is anything reasonably required for a local University in London which might not be done by the present University without at all diminishing its utility in regard to the outlying districts.

10,194. That might not be a University comprehending provincial colleges at any rate, and that the late Commission said, was what was wanted?—It would have the power of examining students from all those colleges. It would not be possible for it to have all the institutions taking part in it; take a college in the Colonies, for instance.

10,195. It would not be willing to part company with the institutions in the Colonies?—I cannot tell what it would be willing to do on receiving the report of this Commission. It will then have to reconsider the whole matter on what will be then before it.

10,196. The practical point is this, the Gresham Committee who have been put in the position of the centre, have said they would be willing to abdicate their position in favour of the London University if the London University would be willing to take it. The question is, would you be willing to advise the London University to take it?—What would be the contrast between that position and the present?

10,197. There would be a purely local University, excluding provincial colleges and exclusive of connexion with the Colonies. Do you take it that there would be no difficulty in principle in following out what was recommended by the late Royal Commission if the examining powers for the Empire were to be continued?—Yes, I think that might very well work.

10,198. And you think that would pass in the Senate although Mr. Busk has said that he would not agree with it?—I could not tell you what the Senate would say to it.

10,199. In the event of the Senate being willing to agree to such a thing, and Convocation being unwilling, should you think it an unreasonable thing that in any application to Parliament the power of Convocation to interfere with the amendment of any proposed Charter should be limited?—I should not like to make a general statement upon that point.

10,200. You are only representing yourself. You will see that the difficulty in amending Charters is the power of Convocation of any new University, I am only putting an assumed case. Supposing it were recommended to Parliament that any amendment of any proposed Charter should be made by the Queen in Council at the relation of the Senate, but without mentioning Convocation, should you, as an individual and as Vice-Chancellor of the University, see any objection to that?—I think I should say that if this Commission were definitely to recommend a scheme for the constitution of the University of London to fill the whole of those offices without a second University, and if the Senate were to concur in that scheme, it would be very reasonable that that scheme should be carried whether Convocation wished it or not; provided Convocation had the right of appeal to the Privy Council or whatever higher authority there might be.

10,201. A right to appeal in the first instance, do you mean?—A right to appeal at the proper time. I do not think it would be right that Convocation should be left absolutely voiceless in the matter.

10,202. But your experience in dealing with Convocation shows you how difficult it would be to deal with, does it not?—I think it might have a power short of absolute veto.

10,203. A power of appeal and not of veto?—Yes.

10,204. There is one question in which I am personally interested. You were speaking of the level of the examinations conducted by examiners of the London University, you know the secondary schools in London better than I do?—I do not know the schools except the medical schools.

10,205. Has it been brought to your knowledge by those general secondary schools who naturally work up to the level of the matriculation examinations for the University of London that they find a very great difficulty in the level of the examinations?—From year to year, do you mean?

10,206. Yes, from year to year, a difficulty which they think would be very much remedied by the influence of teachers?—I may have heard it stated.

10,207. But you cannot give any evidence authoritatively upon it?—No, and I would say again there that the influence of teachers in determining the syllabus and the level of examinations is, I believe, at present working very nearly as completely as it could be. No change is made except on the advice of and consultation with teachers and examiners.

10,208. But in practically examining in London schools you have not had complaints made to you, as, for instance, with regard to the examinations of trigonometry being at one level one year and in another year at another level?—I have heard no general complaint made. In altering the syllabuses or in questions of that kind I have heard such things said, but every examination paper whether for matriculation or any other examination passed under the eyes of members of the committee appointed for their supervision.

10,209. (*Mr. Anstie.*) I wish to ask upon one point with reference to Mr. Palmer's question. I do not know whether you remember as a fact that not long ago a complaint was made to the Senate of the London University that there had been an unusual number of rejections in mathematical and natural science subjects which was alleged to be due to changes of examiners and to increased difficulties in the paper. That matter was gone into and it was reported to the Senate that the paper was settled by both examiners; that the paper in question was one which ought to have been capable of being answered by any person who was really grounded in the principles of his subjects; and that the number of marks by which the complaining candidate failed was largely in excess of any that was commonly known?—I do not remember the fact, but no doubt you are quite right.

10,210. I believe in that case the candidate had been told by certain persons who might be described as his crammers that he was certain to get through and he complained that he did not?—That may be. I do not remember it.

The witness withdrew.

ARTHUR MILMAN, Esq., M.A., examined.

A. Milman, Esq., M.A.

10,211. (*Chairman.*) You are registrar of London University?—Yes.

10,212. You have listened to the evidence of Sir James Paget. Do you agree with the greater part of it?—I have listened to the evidence of Sir James Paget. I agree with the greater part of it.

10,213. Then, as we have not much time, perhaps you will tell us what you differ from in what he said, and also what points you would like to go to, if any, which he has not touched?—I should not like to say that I differ from anything Sir James said. I think some questions that were put to him might have been a little more fully worked out, especially with regard to the practical difficulties of the question, which, having been for so many years connected with the University, I have seen a great deal of.

10,214. Which practical difficulties?—The practical difficulties in putting forward any new scheme, whether that scheme is based upon two Universities or one.

10,215. Do you think the difficulties would be insuperable?—I do not think the difficulties would be by any means insuperable. I think a great many of the difficulties would vanish when they came to be dealt with; I think a great many of the difficulties are sentimental, and would disappear when once the new machinery was started.

10,216. Which difficulties do you refer to?—I was thinking of the difficulties of conducting examinations in conjunction with London Colleges, and of conducting equally impartial and equally effective examinations for the rest of the country including provincial colleges.

10,217. You think in practice they would be less than they appear. Would you like to enlarge upon that at all and show how that would be overcome in practice?—I should rather prefer to answer any question that the Commissioners may be pleased to ask me. I think myself that no fault is found with the present University as an examining body. It has been admitted through all the discussions that its examinations are perfectly fair *qua* examinations. The June 1890 scheme was accepted by University College and King's College. Then great pressure was put upon the Senate by the provincial colleges. The objection of the provincial colleges was not any objection to our examinations as such, so long as those examinations were guided and managed by what they consider an absolutely impartial examining body. But they objected to be governed by the particular London colleges to which, under the June 1890 scheme, a large share in the representation had been given. By this they said the guarantee that they had of absolute impartiality would be diminished, without suggesting for a moment that there would be any intentional unfair treatment.

10,218. That the students who had been examined in the two colleges would have an unfair advantage over the other, was that it?—They said, "Here we are; "we the provincial colleges who are feeding London "University with a large number of students. It "seems rather hard that if the Senate is to be re- "constituted the London college, should have repre- "sentation upon it and we should be left out."

10,219. And that was why they were put in, was it?—Yes, that was why they were put in.

10,220. Do you cling very much to that part of the scheme which puts in the provincial colleges and gives them the representation on the Senate?—Speaking for myself, I do not.

10,221. It was put in to gratify them, but you do not think they would be exposed to any hardship or any unfairness if it was left out?—I do not think they would.

10,222. You think there would be a great objection to having two Universities. Would you like to say anything on that point supplemental to what was said by Sir James Paget?—I was looking at it from a practical point of view. I think if the problem is the reorganisation of higher education in London the creation of two Universities would, if I may use the word (not in an invidious sense), be rather a clumsy solution. If you create two Universities with separate functions, however separate they are, there must be a collision of interests to a certain extent. One University must hold out inducements to come to it, whereas any University worthy of the name in London ought to be absolutely disinterested.

10,223. When you speak about clumsiness of arrangement in two Universities, is it not rather a question of choice of evils? If it is looked at in one way, is it not rather a clumsy thing to have one University performing two functions?—I submit that a unified University would fulfil the functions of the two. Then the functions would merge one into the other. They would be conducted on a uniform single line, and not on two separate lines.

10,224. You think the two Universities would be a more clumsy plan?—I used "clumsy" as the first word that came. It would be a less advantageous plan than having one University. That is what I meant.

10,225. Would it injure you in any way that has not been mentioned, do you think, if the University were started?—I think the existing University of London and the new University would be both working under disadvantageous conditions. I think the fact of there being two Universities would import into the University system an element of doubt and, to a serious extent, of dissatisfaction.

10,226. Dissatisfaction in what respect?—As I understand, the Gresham University would examine its own students, or students who have gone through certain courses there; but it would be still open to the existing University of London to take any of the students who attended these colleges as we are doing now. On the one side they would come to us free from conditions; on the other side, I presume that what would attract them to the Gresham rather than to us would be that they would obtain certain advantages that they would not obtain from us.

10,227. You still would draw candidates for examination from the colleges which had belonged to the other University?—I think for a considerable time—

A. Milman, Esq., M.A.

22 July 1892.

our degrees having such a value—a large number would come.

10,228. And in any given college some would go to the Gresham, if it were started, and some would go to you?—For some time, I think, a considerable number would come to us.

10,229. The scheme of the Senate in the main, I think, embodies your views. You approve the scheme submitted to Convocation and rejected by them, except with regard to the representation of the provincial colleges to which you have said you do not attribute much importance?—I do not think the creation of a satisfactory University for London ought to depend upon the assent or dissent of the provincial colleges, the chief of which are confessedly aiming at establishing for themselves hereafter other Universities.

10,230. Then with regard to the scheme of the standing committees, one for London colleges and the other for provincial colleges, which seems rather a complicated arrangement, perhaps that might be modified so as to let the provincial colleges take their chance more?—I think the creation of these several committees was to meet what was understood to be a sentimental grievance. I believe the reconstituted University of London could examine the students from the provincial colleges and all the private students with as great advantage as, and probably a greater advantage than, they do now, because *ex hypothesi* they are put in nearer relation with teachers and teaching.

10,231. Then this scheme might be simplified in many ways?—Of course the Senate in framing the scheme had to try and reconcile a number of conflicting interests. Accordingly, after a great deal of consideration, and after a great deal of care and thought, they framed their Scheme. They did not consider it the best scheme that could be made, but the best that they had any chance of passing through Convocation and being accepted by other bodies.

10,232. That clause which brings in the Royal Colleges as determining examinations of medical students in equal share with the London University, I suppose, is one of the clauses which was put in for the sake of conciliating?—I think it was always felt that a large portion of the examiners would still be drawn from the London schools. In the Medical Faculty there are representatives of the provincial colleges. There is nothing to exclude them. The principle of the University has been to take the best examiners wherever they are to be got from.

10,233. Was that plan of working with the Royal Colleges formed because you thought it was the best plan, or was it with a view to conciliate them? I think one main reason for that particular provision was to diminish the excessive number of examinations through which students who wish to enter the medical profession have to go. It was thought that it was a waste of power to have them examined first by the Royal Colleges and then by the University, and that some conjoint scheme of examination should be devised. The Senate reserved the fullest power to see that the examinations were of academic efficiency.

10,234. Do you take the same view with regard to the professorial scheme as Sir James Paget in thinking that it would not be practical?—I think the provisions for creating any new University should be sufficiently elastic to admit of the establishment of a professorial staff; but at present I am afraid that to start one full grown would be almost more than we could reasonably expect to do.

10,235. Do you agree with the objection that in the first place it would be carrying too far the examinations of pupils by their own teachers, and do you disapprove of the absorbing of the different colleges which should form part?—I think the professorial element might be introduced without giving it that predominant position on the Senate which is contemplated by the professorial scheme. So far as funds could be obtained it would be advisable to establish professors as at Oxford and Cambridge in strict connexion with the University, and when this body was established, and as they were established, they should be fairly represented, and not more than fairly represented, on the governing body.

10,236. The advocates of the professorial scheme go rather further than that. They wish to put the whole of the power into the hands of the professors, as I gather. Would you be in favour of the professors being represented, but also there being other people besides?—Yes.

10,237. Both in your scheme and in the Gresham Scheme?—Yes.

10,238. In both of those cases the teachers have a certain amount of power, but they are counterbalanced by other elements. In the professorial scheme the professors would have the whole power. That you would object to, would you?—Yes.

10,239. In addition to that there was the objection to the absorption of the different colleges. Do you think it would be a mistake to absorb the different colleges?—I do not think it is an event that is at all likely to happen because colleges could not be absorbed except with their own consent. I think a college might put itself in more or less close relationship with the University.

10,240. The professorial scheme you think is visionary, and could not practically work?—Not to the full extent. I think that in any scheme for establishing a new University, the provision of a professoriate should be arrived at, and the scheme should be made sufficiently elastic to admit of the admission of the professoriate as a component part of the University.

10,241. You are in favour of establishing University professors, are you?—Yes, that is what I mean.

10,242. But chiefly with a view to the higher education?—Yes, but not to keep every thing in suspense till provision can be obtained for the establishment of a professoriate.

10,243. You mean gradually to give power?—Yes.

10,244. Giving power to appoint them, and let the University appoint them as it got the money by receiving endowments to enable it to do so?—Yes.

10,245. Practically does it seem to you that if we wish to establish a teaching University for London, it lies between some scheme like that of the Senate which was offered to Convocation and rejected by them, and the Gresham Scheme. Is there any other course that you see besides these two for obtaining a teaching University for London?—Without committing myself to detail at all, I think a scheme upon the basis of the two or three various schemes that have been considered by the Senate would have afforded a far better basis for the foundation of (if I may use the expression) one satisfactory University than the limited proposals of the Gresham Charter.

10,246. Supposing you were not able for any reason to carry your scheme or to present us with a scheme would you be inclined to fall back upon the Gresham?—I should not like to commit myself to that without much more consideration of the Gresham Charter.

10,247. But you think that something in the nature of what you desire may be established, do you?—I have hopes, and I think it may be established.

10,248. How would you propose to get over the objections of Convocation. Do you think they show a desire to be converted?—It is difficult to say what view Convocation might take. They are a very large body scattered all over the Kingdom, but I think they would hesitate very much before they rejected a scheme which came from a Commission of this kind.

10,249. Do you think in the last resort it would be advisable to override them by Act of Parliament?—I think otherwise it would come to a deadlock. The Senate admit confessedly by framing these schemes that a re-organisation of the University is required. Convocation are of the same opinion, but are dissatisfied with the proposals of the Senate. If the Senate and Convocation cannot agree to a satisfactory scheme, I do not see any possible solution except by some pressure from outside.

10,250. Do you think that giving Convocation powers of veto is rather a blot on the Charter?—I do not think if the future had been foreseen such an absolute power would have been given. I think if the powers of Convocation were preserved in their integrity future reform may at any time become impracticable. This is my own individual opinion. I think there ought to be a reform of the constitution of Convocation. At present large numbers become members of Convocation because they have taken a degree at the University, and have paid the very small composition fee of one pound. They may never have been in London in their lives, and yet have, for life, a voice in regulating the University of London.

10,251. It is true, is it not, that the whole opposition turns upon one point: that they got the idea that the

degree of the University which they had all themselves taken, and were very proud of, was going to be lowered in value?—I think it was inevitable that this view would be taken by a large number of graduates. There were various currents of opinion, and various reasons for the opposition. That was one, and also there was a very strong feeling amongst large numbers of Convocation, and especially among country members of Convocation who came up in large numbers, principally from Manchester, to throw out the scheme that the provincial colleges were not sufficiently considered.

10,252. Is there any other point you wish to lay before us?—A good many questions were asked as to the cost of examinations and so forth. It would be more difficult to establish two Universities with satisfactory appliances for higher education than it would be to establish one. Our present buildings and our present appliances are insufficient, but we have been promised additional accommodation, and have reason to believe that this will be provided in the new buildings which are to be erected at South Kensington. I think it would be a great deal to ask any Government to build you two Universities.

10,253. (*Lord Reay.*) If such a revolution were to be imposed on the London University whereby it should cease to be solely an examining body and become a teaching University, then do you contemplate to keep the functions of the teaching University entirely separate from the functions which the London University has exercised hitherto?—No, I think they would go on concurrently. I think there need be no interference with the examination of the students at provincial colleges if they are willing still to come under the direction of the newly constituted University.

10,254. The teaching side of the University would be chiefly controlled by the constituent colleges, the teachers and governing bodies of the constituent colleges, the medical schools, &c.?—They would be controlled either by the Senate or the new Council or whatever was made the supreme authority in the University. Under that supreme Council, no doubt, boards of studies and faculties would be created.

10,255. Quite so, but to satisfy the demands of the colleges and medical schools in London you would give to those teaching bodies a very material share in the power to be exercised by the boards of studies or Faculties?—I think it should be rather a representation of Faculties and of teachers than of individual institutions.

10,256. In any case you are prepared to give a considerable representation to those teaching bodies?—Through their Faculties.

10,257. Would not this difficulty arise if a board so constituted were to discharge the duties in connexion with imperial examinations for outsiders, that it would create a grievance that the London teachers had too great an influence over that side of the University?—That was the objection raised by the provincial colleges, but I do not think there would be practically any injustice done, I believe; that is to say, that the reconstituted Senate or Council, whatever it is called, would be as capable of directing the studies of the whole United Kingdom as the present Government, and very likely more capable, although the present Government have admittedly done the work as fairly as it can be done.

10,258. Do you think the demands of both parties might be met?—I think so.

10,259. (*Mr. Rendall.*) You gave some evidence with regard to the scheme of the professorial University. Have you read the document published by the Association for the Promotion of a Professorial University?—Yes.

10,260. You stated that in that scheme the professors had a predominant position on the governing body or had the whole power?—I understood it in that way.

10,261. Do you remember that the scheme says the Senate shall ultimately consist of the professors and a certain number of Crown nominees?—Yes.

10,262. In what respect does that differ very much from the Gresham University Scheme. In the Gresham University Scheme there are Crown nominees?—Yes.

10,263. And there are a very large number of professors. On the Gresham Scheme there are 10 representatives of medical colleges?—Yes.

10,264. And there are four from each of the four colleges; that would be 16; making 26. They would all have a place on the governing body, would they not?—Yes.

10,265. Then where do you see the great difference. The professorial scheme says the governing body shall consist of professors and Crown nominees and the Gresham University Scheme seems to me to provide that the governing body consists of professors, Crown nominees, and some element of representatives of the colleges?—Not University professors.

10,266. Yes. The definition of University professor is anybody doing professorial work in the colleges designated for that purpose?—I think the term has been used in a little different sense by the promoters of the professorial scheme and by the teaching colleges.

10,267. Where I understand the difference in the two schemes to lie is this: By the professorial scheme the power of nominating professors rests rather with the central University, while by the Gresham Scheme that power is entirely committed to the constituent colleges who name any number of their own teachers that they think proper?—Yes, but I imagine that the professorial scheme contemplated what Sir James Paget rather referred to as the higher teaching, whereas in the colleges a certain amount of a higher kind of school teaching would be going on.

10,268. And they would not with any freedom, you think, nominate teachers of the colleges as professors of the University?—They might or might not.

10,269. It is really left very open, is it not?—Yes, it is left open.

10,270. Assuming some such scheme as a professorial scheme to be adopted, you would add the representatives of institutions or groups of institutions? I am speaking of institutions such as University College, King's College, and the theological colleges. You would add them to the governing body?—I think the colleges should be represented through the Faculties.

10,271. Not through their governing bodies?—No; it would be rather through Faculties than merely the governing bodies.

10,272. So far you would approximate then really to the professorial scheme rather than to the Gresham Scheme?—That would be so, I imagine.

10,273. In the Gresham scheme really the representation is from the colleges, that is to say, from the governing body of the colleges as well as from Faculties?—Yes.

10,274. Would you be inclined to strike that out?—I should be inclined to limit it not giving colleges *qua* colleges too strong a representation.

10,275. Then, again, it was said that in the professorial scheme the professorial University would absorb the colleges. You said very justly, if I may say so, that you thought that would be impracticable and impossible without their own consent, but do you observe that in their document they limit it to institutions of academic rank in London which may be willing to be absorbed?—Yes.

10,276. If an institution wish to be absorbed, you would not object in principle to its being absorbed?—Certainly not.

10,277. We heard from Bedford College that there were many of their number who were willing to be absorbed. You would not consider it objectionable where it was the desire of the institution, would you?—Certainly not.

10,278. But you would of course preserve vested rights?—I think the thing to be done is to utilise all the existing bodies that are willing, but to compel none. If you can offer advantages, and if it is proved to be better to absorb them, I should absorb them, but I do not see why the colleges should not stand round the centre of the University, like the colleges at Oxford stand round the University there.

10,279. Then, assuming them to be willing to be absorbed, you would not object to the professorial scheme on that account, would you?—No.

10,280. I will confine myself entirely to the function of the Imperial examinations of the proposed new University. I suppose you think the direction of this examination would be entrusted to a special board of some kind constituted *ad hoc* by the governing body of the University?—Probably.

A. Milman, Esq., M.A.

22 July 1892.

10,281. The governing body would of course contain a large element of London teachers and representatives of London colleges?—Yes.

10,282. Supposing that was not the body that directed the examination, but only the body that appointed the board to whom the direction of the examination was entrusted, do you think there would be any likelihood of provincial colleges objecting to the constitution of such a board by the governing body?—I do not feel sure whether they would object or not. I could not quite say how it would strike them.

10,283. You would not consider the objection reasonable, would you?—I do not think it would be a reasonable objection.

10,284. Have you any ground, either official or unofficial, for thinking that it would be pressed?—I have no ground, official or unofficial, which would enable me to say now what would be the attitude of the provincial colleges at this stage of the proceedings.

10,285. Can you tell me which of them pressed it most?—Mason's College, Birmingham, University College, Liverpool, and the Medical School at Sheffield.

10,286. It was pretty general, was it?—Yes, it was pretty general.

10,287. Did the provincial colleges express much satisfaction with the rather complicated organisation that was adopted of provincial colleges, provincial Faculties, and provincial boards of studies?—In the last scheme of the Senate, do you mean?

10,288. Yes?—I think they thought really that we had not done enough of them.

10,289. That did not go very far to pacify them?—No, the scheme did not go very far.

10,290. Assuming a board constituted *ad hoc* one would have to know what are the particular reefs to avoid. One important thing, I suppose, would be to avoid any special form of recognition given to particular institutions whether in or out of London. I mean, to make examinations entirely independent, all awards emanating from this body, all examiners appointed by that body, who should not delegate any of their powers by accepting examinational tests of other institutions?—The idea was that certain examinations, *e.g.*, the intermediate examinations, might be conducted in conjunction with examiners appointed by the constituent colleges; but that for the external students both examiners should be appointed by the University.

10,291. I am thinking of external students only. There there would be external examiners?—Yes.

10,292. And among the external examiners of course you would give no special place or privilege to London teachers?—The Senate would do as they do now; they would select the best according to their view.

10,293. If there were any acceptance of the examinations of other institutions, it would be important to avoid striking a difference between London colleges and provincial colleges?—I think it would.

10,294. If a privilege was given to any, which you would rather deprecate, would you give it on the ground of academical status, not of position?—Yes.

10,295. And that would go some distance, I should think, to prevent the recurrence of any jealousy?—I think so. I think that really is one of the difficulties that would disappear when the thing came to be dealt with practically. There was an idea that it might be necessary to establish different examinations for different students, but I think when the newly constituted governing body met to consider what was best to be done, they really would find that the examinations that were fitted for one class of students would be fitted for all. In point of fact, that we should fall back upon the system of one examination for all, possibly allowing the intermediate examinations to be held at the colleges, but keeping the final degree examination as one examination for all candidates at one University.

10,296. My own impression is the same. Is there any other reef that you can point out that it would be desirable to avoid?—I think really any new scheme will have to face opposition, which, I may say, depends upon jealousy, sentiment, and so on. That will have to be faced, and it will have to be considered whether on the whole, more will not be gained by the new University going on its own way than by attempting to conciliate all the different conflicting views.

10,297. (*Mr. Anstie.*) With respect to the answer you gave as to the varying of trusts, and so forth, without entering into the question as to whether things ought to be done in any particular way, you are, of course, aware that, with very limited powers, schemes are constantly being made by, for instance, the Charity Commissioners, which do vary trusts, repeal old ones, and constitute new ones?—Yes.

10,298. And substantially the same thing has been done with very extensive powers by the statutory commissions which have revived the life, if I may say so, of Oxford and Cambridge?—Yes.

10,299. You have been asked about some proceedings in the Senate. I will ask you whether, as a matter of fact, the Senate have not recently had under their consideration (I will say no more) proposals in the direction of giving, so far as they can, within their present Charter, powers to teachers in determining the syllabuses and courses of instruction; in the direction of giving a freer scope to the examinations, and in the direction of distinguishing in examinations between honours and pass, so as to diminish the number and differentiate the character of the examinations?—Yes.

10,300. I believe that that action is to a large extent suspended while this Commission is sitting to inquire into the whole question?—Yes.

10,301. (*Mr. Palmer.*) You are familiar with the report of the late Royal Commission?—Yes.

10,302. I want to call your attention to Clause 36. "If the constitution and future operations of the "University of London should undergo the modifi- "cations and extension which we have suggested as "necessary to make it a teaching University capable "of supplying the wants of higher education in the "metropolis, this would, in our opinion, be consistent "with its continuing to admit to its examinations and "degrees all students, wherever and in whatever, man- "ner they may have acquired their knowledge, who can "pass the necessary examinations." I am really mentioning that in supplement to the questions I asked Sir James Paget. Therefore, in the event of the London University occupying the position of the teaching University for London itself, and the other colleges being affiliated with that proviso for external examinations laid down in the report of the late Royal Commission, would you hope to see the Senate acquiesce in it?—It is a little difficult for me to express an opinion as to what the Senate will do. There has been a very considerable difference of opinion, but I think it very probable that they would, in fact.

10,303. The situation which I want you to understand, and which I should be glad if you would express your opinion upon is this. Assuming the Gresham, which is in its name, and its buildings the centre of the Gresham scheme were to retire absolutely in favour of the University, limited as indicated in the Gresham Charter, to the London district, but with the proviso for maintaining its external examinations as indicated by the late Royal Commissioners, would you think that would be likely to obtain a favourable reception from the Senate?—Expressing it as my own opinion, I think it would.

10,304. (*Sir George Humphry.*) That is to say, without provincial colleges being represented on the Council?—As such. But I would strictly guard myself by saying that I am now expressing only what my impression is.

10,305. What was the real objection of the provincial colleges to the scheme proposed by the Senate?—Their real objection was this: They expressed themselves as perfectly satisfied to submit themselves to an examination by a perfectly disinterested body of examiners. "But," they said, "if you admit two or three picked "London colleges, we, as provincial colleges, think we "have as full a title as they have to be brought into the "scheme, especially considering that a large proportion "of the candidates some from the country."

10,306. Then the provincial colleges would be likely to object to such a plan as Mr. Palmer has mentioned, you think?—I think they very likely would object. But I think it right to say that most of the provincial colleges, the great objectors, do not conceal their hopes that before long they will have new Universities, the Welsh and the Midland. They will separate from us when the time is ripe; when they think they have a reasonable chance of getting a University of their own.

10,307. Their position under the scheme would be altered from their position with regard to the Gresham University only in this, that there would be certain

London colleges represented on the Council?—The London colleges would be represented on the Council, and they would not be represented.

10,308. There were four of them to be on the Council, were there not?—I think there were more than that. The scheme was not fully worked out. They were to have four representatives.

10,309. They were not satisfied with that?—No, they thought it insufficient.

10,310. (*Professor Ramsay.*) One of the objections of the provincial colleges, besides the one you mentioned just now, is that the examining body was not sufficiently composed of teachers?—That would be a general feeling.

10,311. That would be met, in your opinion, by the provision you make in your scheme, whereby London teachers would be to a large extent a component element of the Senate?—I think so.

10,312. Your scheme does not make any provision for the University undertaking any general control over University education throughout London. Do you think the Senate would have any objection to extending its functions in that direction?—I do not think the Senate would object to an extension of its functions, if there was a desire that it should asfume new functions.

10,313. If the London University were made the ultimate governor and controller of all teaching leading up to the degrees, you do not think the Senate would find any difficulty with regard to the assumption of such extra powers, do you?—I do not think it would. No doubt it would be constituted differently in the new University. But I do not think the present Senate would object to it.

10,314. You do not think there is any danger that any proposal of that sort would be met by a declinature of such extended powers?—I do not think so. I think the Senate would be disposed to accept anything that they thought would be for the public good.

10,315. The Senate would rise to the occasion, and take the position assigned to it?—Yes, I think so.

10,316. (*Lord Reay.*) The examinations on what is called the imperial side, will be kept entirely distinct from the examinations on the teaching side. You do not contemplate the same examinations for both, do you?—I think that probably there would be the same examination for both, or there might be the same examination for both. I see no difficulty in having the same examination. The private students only wait for us to tell them what the lines of the examinations are to be. I believe if there were a newly-constituted Senate, or if there were a newly constituted-University, they could prescribe for all the country students as good a course of study and as good a syllabus as the present Senate or University does.

10,317. How do you meet the difficulty that arises? Naturally the London teachers might say that they are not sufficiently represented on the examining side or, if you meet their wishes, then you will have the argument by those who constitute the Imperial side that the examinations are too much influeneed by London?—I do not contemplate two sides with conflicting interests, working, as it were, on different lines. I contemplate that in a new University with a newly-constituted Senate, the Senate will proceed to make its arrangements for the different wants it has to meet. It may be that they would find it necessary to have separate examinations for private students, and for those not prepared at constituent or London colleges.

10,318. Would you leave that quite open?—I would leave that quite open. I do not think there would be any serious divergence of opinion. I believe that what was good for London colleges, where you would have the very best advice, where the one object would be to get the highest education for London students, would be good for the entire mass of country students. If not, then the Senate ought to have sufficient power so far to modify its examinations as to make them fair to the external students.

10,319. You do not exclude what I call the dual system?—I do not exclude it, but I do not think it is necessary, and I think it would be desirable to avoid it if possible.

10,320. Then with regard to the additional plant which the University of London requires, I mean the additional laboratories, they are required for the purpose of your examinations, are they not?—At present we have gone far beyond our resources.

10,321. And of course under the new system these laboratories would be used as well by the teaching institutions, and by the University for educational purposes?—I am very reluctant to draw any line, and to say that it would be given to the teaching institutions. I think the whole ought to be so united and consolidated that there would be but one institution.

10,322. Let me put it in this way: You would contemplate laboratories and additional aids to teaching generally to be used for both purposes, teaching and examining?—For University purposes primarily, and, so far as is consistent with University purposes, for collegiate purposes. But King's College, University College, and others have their own equipment. The claim of the University of London to be placed in a fair position to compete with other Universities as regards laboratory and other scientifice appliances, has been recognised by Government. We are very much hampered by limited means, and have grown out of our existing building.

10,323. There would be no objection to a professor of one of the colleges using such improved appliances as might be obtained?—I have no doubt the new University, assuming it to be put in possession of such appliances, would be desirous of making them as generally useful as possible.

10,324. (*Mr. Anstie.*) I understand you to say that this requirement of the University of London has been recognised already by the Government?—Yes.

10,325. There is a sort of engagement, if I may call it so, for the erection of important scientific laboratories at South Kensington, which will be used by the University?—It has, I believe, come to that now. The want has been recognised, and the only question now is how it can best be satisfied. At first it was proposed to raise our present building. The plans for this were drawn by the Office of Works, and were sactioned at the Treasury. This would have been convenient, as the works of the University would then have been completed under one roof, but that plan, however, broke down owing to the opposition of the Royal Academy. The authorities of the Royal Academy thought their light would be interfered with, and it was felt that we could not fight with the Royal Academy. The next proposition was that rooms should be found for us at South Kensington.

10,326. Passing by those details, that provision is required by the University for the purpose of examinations; the requirement is recognised and provided for by the Government; and I think I may also assume that those works which will have a national character will, so far as not required for the purposes of the examination of the London University, be utilised for other scientific training?—No doubt.

10,327. (*Lord Reay.*) Is the teaching at the medical schools, and are the appliances at the medical schools at this moment quite up to the standard of the examinations for the degree of M.D. of the University of London, or have the students to go elsewhere to prepare for the final examination?—The equipment of the various medical schools is very different in different schools. The larger schools, St. Bartholomew's, Guy's, and others are, I believe, admirably equipped, but there are smaller schools where the efficiency is not, by any means, so great. By the establishment of a new University, a great deal of economy might be effected by a consolidation of the teaching: the smaller schools, by joining together and having one set of appliances common to a certain number of them, instead of each separate medical school working absolutely independently. They are at present very unequally equipped.

10,328. Can a student obtain at the best of those schools the knowledge he requires for your higher examinations?—I think so, at the best of the schools.

10,329. Is there anything you want to add?—It is a very large question, but I cannot, at this late hour, think of anything very special now that I want to add. The main thing that has struck me all through, as I have no doubt I have said before, is the great waste of power there would be in having two Universities, one competing against the other. If you have two or three London Colleges, under whatever new name, competing with the University of London it is inevitable that they must be tempted to offer some attractions to the students to draw them away from us. A man comes to London, he takes his degree, the question is asked, "What degree have you taken?" He says, "I have taken the Gresham University degree." Another says, "I have taken the London University degree." It

A. Milman, Esq., M.A.
22 July 1892.

always seems to me that there will be a very great waste of power if you have two moderately good institutions going on side by side instead of one thoroughly efficient. This is a grand opportunity, which is never likely to occur again, of endowing London with a University worthy of the name. It can be done now, but if you set one University against another you may have at one time one up and another down, and at another time the latter up and the other down. I am very much impressed with the danger that there will be in the future if two Universities are created.

The witness withdrew.

Adjourned to Tuesday next at 11 o'clock.

Twentieth Day.

Tuesday, 26th July 1892.

PRESENT:

THE LORD REAY, G.C.S.I., IN THE CHAIR.

The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Professor GEORGE G. RAMSAY, LL.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Professor GEORGE H. EMMOTT, M.A., LL.B., examined.

Prof. G. H. Emmott M.A., LL.B.
26 July 1892.

10,330. (*Lord Reay.*) You are, I believe, Professor of Roman Law and Comparative Jurisprudence in the Johns Hopkins University, Baltimore?—Yes.

10,331. When was the University founded?—The University was founded in 1876.

10,332. Had its founder any special object in view?—I think not. I think the founder wished to give the trustees of the University who were all men in whom he had personal confidence, and to each of whom he was personally known, the fullest sort of discretion in the administration of the trust. He did not fetter or restrict them in any way at all, so that they had an absolutely free hand.

10,333. There was no special gap in the American University system which it was proposed to fill by the foundation of that University?—Before answering that question I should like to tell you very briefly the course which the trustees pursued. They looked around to try and find some man to whom they could commit the actual working out of the trust. They travelled through the whole of the Eastern States and some part of the West, and by a unanimous verdict the choice seemed to fall on Dr. Daniel Gilman, who was at that time the president of the University of California. Previous to going to California he had been for many years a professor in Yale College, and he had been some three years in the University of California when the trustees of the Johns Hopkins University called him, as we say, to the presidency of the Johns Hopkins University. He came and spent several days in looking very carefully over the field, and, after reflection, he believed that there was in Baltimore an opportunity of developing something which had not previously existed in American College or University life. In 1875, therefore, he accepted the presidency of the University, and, on a careful survey of the field, he thought that that there was a distinct gap in American University life; that although there were a number of Colleges there was no institution which was carrying on distinct University work, that there was no institution which gave on the part of its professors and students, facilities not only for original research, but also for the publication of such researches; and therefore the Johns Hopkins University was started primarily as a school for advanced students, for those men who had gone through the ordinary collegiate training and who wished to spend one or more years in the study of advanced work under competent teachers.

10,334. Could you describe to the Commission the exact position of the President of the University, his powers with regard to the adoption of courses of teaching and the administrative work of the University?—The president of an American University has very large powers indeed. Some of those powers, if I may adopt a legal phrase, are known to the law, and some of them are possibly unknown to the law. But, speaking generally, he has a very great deal of power, and I should say without any sort of doubt that the working out of the scheme of the Johns Hopkins University, and whatever of success it has had, has been owing to President Gilman. That is to say, I regard the Johns Hopkins University as his creation, if I may use such a phrase. Whilst, however, he has and exercises very large powers, he always acts in close conference and communication with the professors. The University work strictly so called, that is the advanced instruction, is under the control of a board consisting of all the full professors and all the associate professors. That board is called the Board of University Studies, and that meets constantly, just as often as occasion requires, not only for the examination of candidates but also for consultation upon anything connected with the work of the University. As regards the undergraduate department, the college within the University, that is managed by another board called the Board of Collegiate Advisers. That board consists of all those gentlemen who take a prominent part in collegiate instruction, and that again meets together, just as often as is necessary, for the discussion of any matter of principle; what I may term its routine work, its detail work, is entrusted to a working committee of three. That committee consists of the Dean of the Collegiate Faculty, of Professor Spieker, and myself; and we always meet at least once a week for the discussion of all matters of detail. So that if I understand your question rightly, I should say, summarising, that the University proper is under the care of the Board of University Studies; the collegiate work is under the care of the Board of Collegiate Advisers; and that, speaking roughly, those boards consist of all men who have a prominent share in those distinct departments of teaching, many men necessarily belonging to both boards,—many men who teach in the college and in the University necessarily belonging to both boards; and that the detailed work of the college is entrusted to a small committee which can act promptly and sharply, and be summoned together when necessary, and which has, necessarily, large powers entrusted to it.

10,335. Who constitute the Board of University Studies?—The Board of University Studies consists of all the full Professors and all the Associate Professors. We have at the moment 24 full Professors, and we have six Associate Professors, who are often heads of their departments, and who, in many cases, will in course of time become full professors; so that the Board of University Studies consists of 30 men at the present moment.

10,336. And is there a small committee?—There has not been so far. The detail work of that board falls very largely on its secretary. I look, however, to the appointment of a committee of that board, just as we have found it necessary to appoint a committee of the other.

10,337. You have used the expression "full Professors" and "Associate Professors." Would you explain to the Commission the distinction between the two designations?—That distinction is difficult to formulate. Perhaps I may tell you this, that as a rule in an American College or University, a man goes through several grades. That is not invariably the case but it is usually the case. He begins as what we call an Instructor. As Instructor his appointment is usually for a brief period, for a year.

10,338. He is on trial?—Yes, he is on trial. If he does good work as an Instructor he is often appointed what is called an Associate. As Associate he usually has a three years' appointment. If he does good work as an Associate he may be promoted to Associate Professor, and, speaking generally, although there are exceptions to the rule, the Associate Professor also holds for a definite term of years, three, or five, or seven years; but on the distinct understanding that if his work is successful he will be re-appointed. A full Professor is a man whom, you thus see, has in most cases passed through all these grades. He is usually a man of experience, from 35 to 40 years of age, and his appointment usually is a permanent one.

10,339. Are the Associate Professors generally appointed full Professors?—I do not think that one could lay down any definite rule on that point. Most of our Associate Professors who have served for a lengthened period of service have been promoted, but there is no rule to that effect. A man might remain an Associate Professor until he were 60 or 70 years of age; there is no rule at all. The motto of the Johns Hopkins University is that a man is promoted in accordance with his deserts. In other words, seniority, as such, goes for nothing; a man is judged by what he turns out either in original work or in his pupils.

10,340. Therefore no full Professor is appointed unless he has shown in his previous work that he will make a good full professor?—Precisely.

10,341. With regard to the expression used of University and College, do I understand that the University lectures are for graduates, and that the collegiate work is limited to work among undergraduates?—That is so, with this comment: our graduate students come to us from every State in the American Union, from Canada, from Japan, and many other distant places; consequently although they may all be Bachelors of Arts they are in very different degrees of preparedness; and we often find it necessary to put a man who is strictly a graduate student into an undergraduate class.

10,342. But your own graduates, those who have passed through the Johns Hopkins College, would be admitted, without a further test, to the post-graduate classes?—Precisely. They would be admitted immediately to the post-graduate classes.

10,343. May I ask how your professors are appointed?—The process of selection, as you see, I think, from what I have already stated, is a very careful one. Most of our men have gone up through those various stages, Instructor, Associate, Associate Professor, so that they have already had plenty of opportunities of showing just what kind of stuff they are made of. But in the event of an important chair falling vacant we should proceed with great caution. We usually survey the whole field both of the United States and of Great Britain as far as we know it. We make most careful inquiries, taking care as far as we can that those inquiries shall not come to the ear of the person interested, and wherever it is possible we ask the individual under consideration if he will come and give a course, both of public lectures, and of advanced instruction to our own students. If he fulfils those tests satisfactorily, the custom is for the president of the University to recommend his appointment to a small body, which is called the Academic council. That is a small body of about eight men consisting of those full Professors who have been longest in the service of the University. The President recommends X. Y. to them: if their vote is unanimous, not otherwise, the appointment goes on to the Executive Committee of the Board of Trustees. That is a small working executive committee, meeting frequently, just as often as is necessary, of the full Board of Trustees. If they receive the recommendation unanimously, it goes on to the full Board of Trustees, but not otherwise.

10,344. Is the President of the University generally present at the meeting of the Board of Trustees?—He is ex-officio a member of the Board of Trustees and is usually present at the meetings, and naturally a large measure of responsibility falls upon him; but still, as I said at the opening of my remarks, he acts in constant communication with the professors. He consults them about every move in an important appointment. He would never think of recommending anyone who had not been fully endorsed by his future colleagues.

10,345. Then I understand that when a vacancy occurs, either among the Instructors or the Associate Professors or the full Professors, no candidates would present themselves for a chair with testimonials of former work?—Certainly not, at any rate for an important position. I think we should look with suspicion upon a man who pushed himself forward in that way. In other words, all the initiative comes from the University. We consider carefully what salary we can give: we look over the whole field: we may make mistakes, but we try to get the best man that we can.

10,346. You have just mentioned salaries. Have the Professors any share of the fees of their classes?—None whatsoever. The Professors are paid by fixed salaries exclusively.

10,347. That system, you think, works well?—I think it has worked very well at the Johns Hopkins University—very well indeed. I should not like to see it changed.

10,348. Can you tell us whether that is the prevailing system in other American Universities?—I believe that is the prevailing system in all the good American Universities.

10,349. One of the good results of that system is that there can be no competition for students by lowering degrees or by making examinations easier in one University than in another?—I think so. I think that is one good result of the system.

10,350. The rivalry which there seems to exist between various American Universities is more a rivalry to get the best men to teach than a rivalry to pass a great number of students easily through their final examination?—I think so, precisely. I think that the rivalry between American Universities, as far as the public is concerned, has been productive of very good results. I think it has raised, and constantly has a tendency to raise, the standard of teaching. It also operates as an incentive to the Professors themselves. A man who does good work at an institution may receive a call to Harvard or to the Johns Hopkins. I do not think that in the East, which is the only part with which I am familiar, the rivalry and competition between American Universities, which is certainly very intense, has resulted in any lowering of the standard of the degrees. I think that both our Bachelor of Arts degree and our advanced degree of Doctor of Philosophy have rather a tendency to harden than otherwise.

10,351. In fact, the rivalry tends by good salaries to obtain the most eminent men to occupy the chairs in the various Universities you are acquainted with?—Yes, and not only by good salaries, because, I think, American College and University men are not so much influenced by mere pecuniary consideration, as by the introduction of good apparatus, excellent libraries and books, facilities for the publication of research—the rivalry is rather more by those means to render the position attractive to leading men. Still the tendency of salaries is distinctly upwards, all along the line.

10,352. Do the State authorities contribute to the treasury of the University?—In many of the Universities they do. Many of the States have what are called State Universities. That is not so in the State of Maryland. We have never had any assistance at all from the government of the State of Maryland. But many Universities both in the East and the West are

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

supported almost entirely by the State. That is so in the case of the University of Wisconsin. That is so very largely in the case of the University of Michigan; also in the case of the University of Nebraska, and many others that one might mention.

10,353. (*Mr. Anstie.*) Neither Harvard nor Yale?—I do not think so. I do not think either Harvard or Yale have any assistance now from the State.

10,354. (*Lord Reay.*) Do the municipalities contribute in any way?—The towns? No, not to my knowledge, where grants are made they are made by the State.

10,355. Is there an entrance examination to the College?—Yes, there is an entrance examination to our collegiate department which is quite as stiff an examination as I personally think it ought to be. I think it is quite a severe test.

10,356. Is it the same for all the candidates for admission?—I have not the papers here, but certain substitutions are allowed. For instance, French and German may be substituted for Greek.

10,357. Latin in every case?—Latin is required in every case, and quite a fair knowledge of Mathematics.

10,358. Are modern languages taught in the collegiate department of the Johns Hopkins University?—We require from every man who takes our Bachelor of Arts degree a reading knowledge of both French and German.

10,359. That is compulsory, is it?—Yes, that is compulsory.

10,360. Would you be good enough to describe to the Commission the various courses of teaching in the collegiate department?—(*The witness handed in a copy of the Johns Hopkins University Circulars. See Appendix No.* 16.) There are in our collegiate department seven groups, as we call them—seven elective courses, each of which leads up to the degree of Bachelor of Arts. Those groups are called by distinctive names—Group 1 is called the Classical Group; Group 2, Mathematical—Physical; Group 3, Chemical, Biological; Group 4, Physical—Chemical; Group 5, Latin—Mathematical; Group 6, Historical—Political; and Group 7, Modern Languages. The two words indicate that in that particular group those two studies are specially emphasized; for instance, in Group 2, Mathematics and Physics; Group 3, Chemistry and Biology; Group 4, Physics and Chemistry; Group 5, Latin and Mathematics; Group 6, History and Politics. In each of those seven groups certain studies are required. For instance, in the first year in each of the seven groups a knowledge is required of Physical Geography, of History and of English. In the third year, in each of the seven groups, a knowledge is required of Logic, of Ethics, and of Psychology. So that in two combinations of studies, Physical Geography, History, and English in the first year; Logic, Ethics, and Psychology in the last year, all the groups are alike; but otherwise, as you see, considerable variety obtains among them.

10,361. The degree which is given in any of the groups is the same. It is the Bachelor of Arts degree?—The degree which is given in any of the groups is precisely the same. It is the degree of Bachelor of Arts.

10,362. Is there a pass degree and honours degree?—We have no different examination as is the case, for instance, at Cambridge, for pass and for honours. All our men go through precisely the same course. We publish a list of those who are deserving of honours, but the examinations and tests are precisely the same.

10,363. I suppose in the University classes the principle of election is even carried further?—In the University classes the principle of election is very great. A large part of those men who enter upon University work do it in the hope of obtaining our degree of Doctor of Philosophy. In order to obtain that degree they must study for at least three years certain advanced studies. They have it in their option to take one subject, which is called their Principal subject. They are also obliged to select two other subjects, which are called subordinate subjects, and the rule is that the principal subject must be studied for three years. The first subordinate subject must be studied for two years, and the second subordinate subject must be studied for at least one year. So that the studies stand to the person taking them in a certain descending degree. I mean that on the principal subject the student necessarily spends most of his time, on his first subordinate subject he spends rather less, and on the second subordinate subject less still. In the principal subject he must not only obtain a precise knowledge of the leading literature but he must also write a Thesis containing the results of some original investigation of his own, and we attach, in the compilation of that thesis, great importance not only to a careful and thorough knowledge of the work but also to the exercise of the critical faculty and the production of something which is a distinct contribution to the particular field of investigation on which the student is engaged. In other words, our object there, as everywhere else, is not simply to encourage the student to collect an enormous amount of information, but to cultivate his critical faculty and his powers of original thought. So that the man who wishes to take the degree of Doctor of Philosophy must follow his principal subject for three years. He must write a Thesis on some special topic in that field; he must pass a written examination in that subject, and in each of the two subordinate subjects; and he must also pass an oral examination before the full Board of University Studies. We test him in every way that we possibly can; we will not give our degree of Doctor of Philosophy to anyone unless we think him thoroughly deserving of it.

10,364. Perhaps you could send to the Commission some of the papers?—Which papers?

10,365. Some of the theses?—They are printed, and I shall have great pleasure in directing some of them to be sent.

10,366. To illustrate how that system works you might perhaps give to the Commission some evidence how it is applied in your own department of Jurisprudence?—It is usual for the men who work with me to make their main study in the field of history. They usually in that way select history as their principal subject; historical and comparative jurisprudence as their first subordinate subject; and very frequently political economy as their second subordinate subject. They then write a thesis on some special topic in history, for instance, a thesis that I have in mind at the moment relates to the early English manor. That is a thesis written by a man who took history as his principal subject and made a special study of the old English manor from such documents as he had access to on our side of the Atlantic. So that in that way he was engaged as a matter of fact, for two years very largely, and all the time that he could devote to the subject, in working up this subject of the old English manor, and in committing to writing the results of his investigations. When he came to the end of his three years he in that way would be examined in the whole field of history, but naturally with special relation to such particular departments as he had specially studied, in the particular case that I have in mind, English and American history. He would be examined also in the history and principles of Roman law, the general history of the English common law, and a knowledge of the leading statutes; and he would also be examined in the more general principles of political economy.

10,367. (*Professor Ramsay.*) Did you call it historical jurisprudence?—I call it historical and comparative jurisprudence, because my object all through is to combine the comparative study of jurisprudence with the historical.

10,368. (*Lord Reay.*) You have alluded to history. Great importance is attached to the study of history in both your University course and in your collegiate course, is it not?—That is the case. Great importance is attached to the study of history. I suppose there is no part of our work that has attracted more attention than the contributions which our students have made to the working out of American history. That was a field which in 1876 was comparatively little worked, and our men have published in the course of the intervening years a list of volumes which pretty nearly covers the pages of that little book. I will put that in as showing what our men have done.

10,369. Then I understand that in the principal subject the object is to test the faculty of judgment and the faculty of original research as bearing upon the special points of that subject?—Precisely.

10,370. More than to make a show at the examination of a great amount of knowledge of mere facts?

—Precisely; but we also endeavour to test the value of the education received.

10,371. I am not going to ask about all the branches of study which the University course covers, but I suppose you could give us a programme of the studies for the entire course?—I have a short programme which will show you the leading points of our work for next year. [*For this document see Appendix No.* 16.]

10,372. What is the length of a full course first to obtain the B.A. degree and then to obtain the degree of Doctor of Philosophy, which I understand to be the full degree which is given at the end of the University course?—That is the degree which is given at the end of the University course.

10,373. It takes six years?—Yes; at least, and often more.

10,374. Three years in the collegiate department and three years in the University department?—Precisely, though either course may take more than the three years.

10,375. There are no Faculties?—We have at present really only what is called the Philosophical Faculty fully developed. I hope that before long we shall have a Law and a Medical Faculty. We certainly look to that; but at present the only one that we have developed is what is called a Philosophical one.

10,376. I believe that among the teaching methods you use you also make your students teach themselves—give a lecture occasionally?—We do. I may, perhaps, illustrate that by one of my own undergraduate classes. It is a class of English constitutional law and history, my object being to try and combine the study of the fundamental principles of English Constitutional law and some knowledge of leading cases with a sketch of their historical development and continuity, showing the way in which those principles have gradually grown up. I conduct that class partly by means of informal lectures. I seldom lecture formally. I prepare my subject every time just as carefully as I can. I go in there with a few notes and lecture informally by means of those notes. Then, secondly, I always have a text book. I assign a certain number of pages in that text book, and I question various members of the class indiscriminately with a view of bringing out the important points on the pages assigned for the day, also commenting on them myself: and, thirdly, I assign to every member of the class two topics, one a topic that I know can be discussed in a short period, say 10 minutes or a quarter of an hour; another a topic which will require possibly 40 minutes for a thorough consideration. I give out those topics just as early in the year as I can, and I usually tell the students very carefully firstly what the leading authorities are; secondly, what those authorities are, which, although not absolutely necessary, are nevertheless advisable to consult if he has time; and, thirdly, those more detailed works or sources which, if he has time to consult he will very profitably do, either then or at some future period; and I tell him that, using those authorities, he must give me a lecture which will take not more than so many minutes. The students almost invariably take great pride in the preparation of these lectures; they come to my desk at the end of the room and, using such notes as they have, are put in possession of the room for the time being, and deliver their lecture. So that I should say that in our undergraduate work—I think my case is perhaps a typical one—we all try to get the students to do something for themselves. We entirely object to the method of reading lectures, day after day, by the professor.

10,377. You introduce, therefore, what may be called a conversational element?—Very largely so. Those remarks apply very largely both to the college and to the University. The class I took for illustration is a collegiate class, men whose ages, I suppose, would average from 19 to 21.

10,378. And after the student has delivered his lecture, of course you criticise it?—After he has delivered his lecture, I criticise it, and usually, almost invariably, try to gather up the threads and to summarise the whole in a short compact way.

10,379. Many of your students become teachers, I think?—A very large number of our students become teachers. I think I should mention that in connection with our University work we have a number of societies or organisations, where the results of original work are usually first read and commented upon. In history, for instance, our graduate students meet together at least once a fortnight, often once a week, in what is called the historical seminary. The idea, I think, came possibly originally from Bluntschli's Seminary of International Law at Heidelberg. We have copied that, adapting it of course to our own needs, in, I think, all our departments of advanced work. The men who are working on original lines of research read their papers before the society in question. In that way the paper gets a candid and friendly criticism. Suggestions are made which are well worthy of being considered, and it gets criticised before it is put into permanent form. And in all our work the great bulk of advanced teaching may almost be said to centre in the seminary. It gathers round the seminary.

10,380. I believe your students display a very critical disposition?—They are exceedingly appreciative and also extremely critical. They are very prompt to respond to efforts made on their behalf. They are not at all reluctant to come up at the end of a lecture and thank the professor, and compliment him for it, and, on the other hand, they are extremely prone to criticise, without any sort of hesitation in doing so. So that poor and inefficient work is found out directly. Our men dare not teach badly.

10,381. So that a professor who was not up to the mark would not have an enviable position?—No, he would very quickly resign.

10,382. Most of your students, as I understand it, are actuated by a desire to obtain the degree, and as you have only one degree, it requires much serious study. You have not what I would call the ornamental student, who enters a University merely to become acquainted with University life?—We have hardly any of those. The proportion is infinitesimal. Both our undergraduate and our graduate students come for serious work. Baltimore is a delightful place to live in, and the society is delightful; but our men are not actuated by that. They are actuated by the facilities for research and study.

10,383. The spirit of the University would be distinctly that of an active, progressive, healthy, intellectual life?—Precisely. Then there is a very important factor, I think, in connection with our University. That is the close connection between the professors and the students. We really are all a society of students, some older, some younger; but I think the students recognise that the professors are working just as hard, or harder, than they are, and there is a sort of feeling of comradeship between all classes which certainly has worked extremely well. Our relations with the men are most cordial.

10,384. And the professors are always within easy reach of the students. A student can consult a professor about any difficulty in his studies. That would not be considered out of place would it?—Not at all. All the instructors who do any amount of teaching have studies provided for them within the University. In those studies they are expected to be at least one hour per day. That hour is known, advertised, and posted upon their doors; and each student is at full liberty and encouraged to come and consult the professor about his work at any time during that hour.

10,385. Are there any coaches?—There are no coaches who are in any way recognised by the University. We entirely discourage cram in every form and shape; and I think so far we have kept it out. I do not know how long we shall, but I think so far we have entirely killed it.

10,386. And your examinations are in very close connection with your teaching?—Our examinations are in very close connection with our teaching, and I think all examinations ought to be.

10,387. The examination is distinctly a test of the teaching as you have described it, which the student has previously received?—Precisely; and also of the way in which he has read and assimilated, and is able to reproduce and improve upon such outside reading as may have been suggested to him. I think in all our courses we have what we call outside reading. For instance, if I am lecturing on English history or Roman law, I always get the man to do some outside work which is not fully covered by my lectures.

10,388. But you would know in what direction that outside work is being done?—Precisely. That would be done in constant communication with me.

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

10,389. And in your examination you would also test that work?—In the examination I would test his work as carefully as I could.

10,390. Your main object, therefore, is to develop in your students the love of study, not only study as represented by the lectures, but also of their own independent study?—Yes.

10,391. And then to test both elements in the examination?—Precisely.

10,392. Are the teachers examiners?—The teachers are examiners in every case.

10,393. Of their own students?—Of their own students. We often call in outside help. We get professors from other colleges to come and to help us with our examining; but the professor himself has always a prominent voice in the matter. He either sets the paper subject to the veto of the outside examiner, or the outside examiner sets the paper subject to his veto. We should never think, under ordinary circumstances, of calling in a man to examine without the full concurrence of the professor whose students were being examined. I say, under ordinary circumstances.

10,394. Is that a general system in other American Universities with which you are acquainted?—I believe that is the general system in all American Universities, that the teaching and examining are done very largely by the same man, often with outside assistance as well, but that the men who are responsible for the teaching and who know the students take a very prominent part in the examination.

10,395. And you would be prepared to state that the examinations are conducted with fairness on those lines, and that if they were not conducted with fairness the students, whom you have described as being very critical, would be the first to complain?—The students certainly would complain immediately, and in the most fearless way, if anything at all were to go wrong.

10,396. There is in the University a public opinion bearing upon the examinations, which is very strong, and which would restrain any discrepancies?—Immediately. There is a very strong public opinion in a really good progressive American University, and that public opinion, which is usually very healthful, would stamp out immediately anything of an unfair nature.

10,397. And where a method is pursued such as you have described, especially in the advanced stages, where you specialise and where your object is to elicit originality and critical powers, it would be extremely difficult for an outside examiner to test those special subjects?—In many cases it would be impossible. I hardly know in my own work whom I should call in to test exactly in the way that I think would be fair. But you see our theses go all over Europe. They would be criticised, of course they are criticised; but I mean if they were not good they would be criticised unmercifully directly.

10,398. The fact that the theses are printed and issued to the public is an invitation to all learned bodies to criticise your standards?—Precisely.

10,399. I believe you have another University in Baltimore?—We have an institution which is called the University of Maryland. That has a Law Faculty and a Medical Faculty. The Law Faculty confines itself to teaching, I think very fairly, the principles of existing laws. As far as I know no comprehensive historical treatment is given to the principles of law in any way.

10,400. Is there any competition between the two Universities in those departments of law and medicine?—Not the slightest, because the classes of students at the two institutions are so entirely dissimilar.

10,401. Do your students attend any of the lectures at that University, and their students attend any of your lectures?—A student might and sometimes does attend my work in historical jurisprudence and also attend the law lectures at the Law School of the University of Maryland, because he gets there the principles of American law as they now exist, taught very fairly well; and he gets from me some knowledge of the historical development of law and also a knowledge of the Roman law, which he would not get there.

10,402. Does that system work well, or do you think that sooner or later both Universities will be amalgamated?—I should like to get their students.

10,403. What is the number of their students?—The number of their students in law is about 70 to 80.

10,404. And in medicine?—I do not know what the number of students is.

10,405. What degrees do they give?—They give in law the degree of Bachelor of Laws. In medicine they give the degree of Doctor of Medicine.

10,406. And your University does not give such degrees?—We do not give either of those degrees.

10,407. Are those degrees so valuable that there would be a tendency on the part of your students to try and get that specific degree of Bachelor of Laws and of Doctor of Medicine; or is it sufficiently known what your degree of Doctor of Philosophy represents?—I think the fields are rather different. I think a man who, having had a good collegiate training, wishes to take a short cut to the practice of either law or medicine, is well served by the existing University of Maryland. I think that if he wants a thoroughly scientific knowledge of either subject he may well go through the course there and come on to the Johns Hopkins University afterwards, or he might take certain courses at both institutions simultaneously.

10,408. Are there any instances of this?—Yes.

10,409. A Bachelor of Laws and a Doctor of Medicine of the Maryland University would afterwards get the higher scientific training of the Johns Hopkins University?—Precisely; that happens constantly.

10,410. And would they be admitted to your University course on the strength of that degree, or would a further test be required?—We should admit them to our University course with the possession of either of those degrees.

10,411. Now with regard to the Faculty of Law, if I may just ask you to tell us what subjects are taught. I call it the Faculty of Law although you have not adopted that designation; but in those groups which we might call legal groups, could you tell us which of the law subjects are taught in the University course at the Johns Hopkins University?—The history and principles of Roman law are very fully treated of: I give a very thorough course on the history of Roman law and Roman institutions from the time of the Twelve Tables down to the time of Justinian. I encourage every one who wishes to read Roman law to take that course, and as a matter of fact all the men who wish to read Roman Law do take that course on the history of Roman law and Roman Institutions. Then the men read side by side the Institutes of Gaius and the Institutes of Justinian. I encourage them to use a parallel text with a view of comparing the law of the time of Gaius and the law of the time of Justinian. I also encourage them to use a good English or German commentary. Mr. Moyle's commentary on Justinian is the one they most of them find serviceable on Justinian; Mr. Poste or Mr. Muirhead on Gaius. I go topically through the subject matter of the Institutes of Gaius and Justinian, making reference to the works of other Jurists, Ulpian especially, and also, if I have time, treating rather specially of some topic in the Digest. I take, for instance, such a subject as Partnership, or Purchase and Sales, or Letting and Hiring, and treat specially of that at the end of the course on the Institutes of Gaius and Justinian. Then I have a course on the history of English private law, in which I specially emphasise the history of English private law down to the time of Edward I. I treat of the history of English private law, as far as I can, down to the present time, but I specially emphasise the period down to Edward I. I try to treat of that specially, under the headings of Real Property Law, Contracts, Torts, and Successions. Those are the two courses I specially encourage every student to take, a course on the history and principles of Roman law, and a course on the history and principles of English law. Then a course which for some reason or other has proved rather attractive has been a course on what I call Comparative Jurisprudence. That is, I take the two great systems of Roman and Teutonic Law. I try to follow them up side by side, comparing their developments; considering such topics as the so-called "Barbarian" Codes, the history and development of the Roman law in Gaul, and also dealing just as fully as time permits with the great modern codes, the Code Napoleon and the Prussian Code, and also those experiments that we have had in the United States in the case of the Code of Louisiana and David Dudley Field's projected code for New York State. Then I have the course of which I have already spoken on English Constitutional Law and History. There I follow the leading principles of English Constitutional Law, as contained in such works as Dicey and Anson, and also

take the men through Stubbs, Hallam, May, and those more practical works which deal more directly with the English Constitution and its working as at present existing, the little books in the English Citizen Series, such as Traill's Central Government, and so on. That is as far as I have so far been able to develop my work; of course it is confessedly incomplete. I want more colleagues; and I want to develop it much further.

10,412. What other lectures are given?—Professor Adams lectures on Public International Law and the history of diplomacy. Then Professor Woodrow Wilson of Princeton lectures on the subject of Administrative Law, Dr. Schouler, the author of the History of the United States under the Constitution, lectures on American Constitutional Law.

10,413. Are there any lectures on Private International Law?—There are no lectures on Private International Law at present. That is a subject which I should like to see developed, and we also ought to have a course of Comparative Constitutional Law. That is a need.

10,414. Are there any lectures on Criminal Law and Procedure?—Not except in so far as I have time to treat them historically. I treat them just as far as I can historically, but we have no systematic course of Criminal Law and Procedure as at present existing.

10,415. What other additions do you think ought to be made to the lectures which are being given to make your Faculty of Law, as we may call it, complete?—I should like to continue the work of Historical and Comparative Jurisprudence pretty much as it is, developing and enlarging it, and I should also like to add to it as soon as opportunity occurs, some courses on the three great branches of existing law. That is to say, that I think that the present day law ought to be crystallised as far as possible round three centres. I think one topic ought to be the Law of Real and Personal Property as at present existing, and the theory and practice of Conveyancing. I think it would be fair to entrust that subject to one professor, a man of experience, a man of some historical knowledge, and a man also of experience at the Conveyancing Bar. Then I think there ought to be another professor who would deal with the origin and growth of the principles of Equity, both in England and in the United States, and the practice of the Equity Courts. In this country it would be the procedure of the Chancery Division; we in the United States have a number of courts still existing which are somewhat anomalous, but which one might group under the collective name of Equity courts. They are courts which administer Equity in some shape or other. Then I would have a professor who was charged with the work of teaching Common Law as it at present exists, including not only such subjects as Torts and Contracts, but also such subjects as the Law of Domestic Relations, Guardian and Ward, Parent and Child, and so on. And I should think that the same man whose special work it was to deal with the Common Law, might also be fairly charged with the work of teaching Common Law procedure. Those it seems to me are the three great branches of existing law, first, the Law of Real and Personal Property, and the theory and practice of Conveyancing; secondly, the growth and extension of the principles of Equity, and the procedure of the Equity Courts; thirdly, the principles of the Common Law and the subject of Common Law Procedure. So that I should like to have at the Johns Hopkins University at least three more men who would give their full time to the teaching of law.

10,416. Do your students attend the Law Courts at Baltimore?—To some extent they do. We have some good courts in Baltimore and a very upright and intelligent Bench, and the students often derive considerable assistance, in my view, by attending the courts.

10,417. Do you require any practical work such as drawing up deeds or wills?—I have not done that at all, so far, because I am single handed, and I did not wish to duplicate the work of the Law School of the University of Maryland. That work is done well there, and I did not wish to overlap it in any way. That certainly is a most important part of legal instruction in my view. I think a professor might fairly be charged with the work not only of lecturing and teaching, but also of giving practical instruction in the drawing up of such documents as you mention.

10,418. Do your students attend with a view to prepare for legal practice, and to enter the State Departments? You have spoken of lectures on administrative law, and, therefore, I suppose some of your students are appointed to some of the State Departments?—A large number of our students go into, or have so far gone into, various State Departments at Washington.

10,419. Without further examination?—Yes, without further examination. Our degree of Doctor of Philosophy, with all that is involved in it has been accepted as fully equivalent, or more than equivalent, to any examination that might be set there.

10,420. There would be no further need for any Civil Service examination?—There would be no further need for any Civil Service examination although, I believe, that in all offices to which the provisions of the Civil Service Law apply the formal examination must be taken. I should think such an examination would be in most cases entirely unnecessary. I mean our men have gone straight to conduct important work—important investigations in France and Germany—and have performed them in the most admirable way, with no other training except ours, and just a few months in the Government Offices at Washington.

10,421. It would be a very good thing for your diplomatic service if they took some of the graduates of the Johns Hopkins University?—It would. It has been, and it will be in the future. I think that service will develop all the time, owing to some of the men we are sending into it from the Johns Hopkins University.

10,422. And a per-centage of your students go into practice?—A per-centage of our students go into practice, but that per-centage so far has not been large, because I have always said that we have no law school. I do not call my work a law school.

10,423. Those who go into legal practice would select a University where the teaching was more professional, yours is not?—Mine is not.

10,424. Among the courses of instruction in the lower department are there any medical courses?—There are a number of medical courses which are given at the Johns Hopkins Hospital, which is an independent foundation with a staff of physicians. I do not think, as far as I understand, that anyone has been admitted to the lectures of the Johns Hopkins Hospital who was not already a graduate of some reputable medical school. In other words, I think that instruction at the Johns Hopkins Hospital corresponds to our University work. It is only given to men who have passed through a preliminary training.

10,425. Therefore it is distinctly more advanced scientific medical teaching?—Yes.

10,426. Those students have obtained their scientific training as well as the strictly medical elsewhere?—They have obtained it elsewhere. I should not like in every case to say that they have obtained a scientific training as well as a medical one.

10,427. Is that supplemented when they attend lectures of the Johns Hopkins Hospital?—They would very likely come down to the University proper to take courses of chemistry, physics, and biology.

10,428. Would it be left to their own discretion or would they be encouraged to do it?—They would be encouraged.

10,429. Are any physiological or other laboratories attached to the hospital?—I believe the only laboratory that is so far attached to the hospital is the pathological laboratory. The laboratories of physiology, physics, and chemistry are in the University.

10,430. Are the physicians and other practitioners at the hospital recognised by the University as teachers, or are they entirely independent of the University?—They are recognised by the University as teachers. If you would be good enough to look at that programme I think you would find them described therein, Dr. Osler for example.

10,431. And no student would be sent by the University to be taught by anyone who had not been previously recognised by the University?—Certainly not.

10,432. The guarantees which you have described in the University proper would be just as carefully taken into account for the appointment of medical professors?—I have no doubt at all that they would be, just as careful.

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

10,433. Those medical teachers at the Johns Hopkins Hospital would be in the foremost rank of scientific men in the United States, I suppose?—Undoubtedly, or in the world.

10,434. The Johns Hopkins Hospital, I believe, is one of the best equipped in the United States?—I think it is beyond a doubt the best equipped in the United States. It was a very great number of years in building; and Dr. Billings under whose direction, it was completed, made constant journeys to Europe with the view of examining into everything that was best on the subject.

10,435. The tendency therefore of the medical teaching at the hospital is distinctly, as in all other branches, upwards?—Distinctly so.

10,436. How many beds are there?—I am afraid I cannot tell you.

10,437. (*Sir Lyon Playfair.*) But is it a very large hospital?—It is not a very large hospital. I do not think it was ever intended to be a large hospital. It was intended so far as possible to be a hospital to which cases could be brought that had baffled treatment elsewhere, of which a special study might be made under favourable conditions, and careful monographs written; something that would form a distinct contribution to medical science.

10,438. (*Lord Reay.*) Do the medical students of the Maryland University frequent the classes at the Johns Hopkins Hospital?—The students at the Maryland University I think would not be allowed unless in very exceptional cases to frequent them.

10,439. But they would come there after having taken the degree at the University?—They would come there after having taken their degree of Doctor of Medicine at the University of Maryland.

10,440. Would the degree of Doctor of Philosophy be granted to those advanced medical students who attend the classes at the Johns Hopkins University?—In the case of those students who were willing to comply with the regulations, and to follow a full three years course there, under similar restrictions to those under which the men are in the University proper.

10,441, It would be given?—Undoubtedly it would. It has been given.

10,442. Therefore the medical branch of the Johns Hopkins University is distinctly a recognised branch in the University although the professors, I suppose, are not appointed in the same way as the professors of the University?—As nearly as possible they would be appointed in the same way.

10,443. Does the superintendent of the hospital stand in much the same relation to the medical school that President Gilman stands in to the University?—I am not prepared to answer that question.

10,444. But would he be the adviser of the Board of Trustees?—Yes, he would be the adviser of the Board of Trustees.

10,445. Is the hospital in charge of the same trustees as the University?—The hospital has its own Board of Trustees, who are very largely the same as those of the University. The object is to keep the two foundations, whilst separate and distinct, in close unison.

10,446. Is the degree of Doctor of Medicine sufficient to entitle a man to practise in the United States, or must he undergo a professional examination by some other body outside the University?—That really falls outside my province, but my impression is that in most of the States the fact of taking a degree of Doctor of Medicine is sufficient *per se* to allow a man to practise without any other professional examination.

10,447. You have no professional association of Doctors of Medicine and Surgery who admit to their register persons who have already taken a degree in a University?—I do not know how far that is the case—how far such associations exist.

10,448. Most of your practitioners, both physicians and surgeons, have taken the degree of Doctor of Medicine, and have been attending the medical lectures at some University or other?—Yes, that is so.

10,449. The teachers in the medical schools would also examine their own students?—I think very much the same course of procedure would be adopted as that which I have tried to describe in the case of the University. I am inclined to think that the teachers would do most of the examination, and possibly that outside examiners would be called in less frequently than we call them.

10,450. Your Board of Studies or the Academic Council would not interfere with medical matters?—We never have done so far; I do not see why we should.

10,451. The medical school has an independent existence?—I do not think, if I may say so, they would like to use the term "medical school." I think they hardly regard themselves as having developed so as to deserve that term; but it is really, I was going to say, a medical faculty of the University. In other words, I do not think they regard themselves as so thoroughly equipped, as having filled a sufficient number of chairs, to entitle them to that name.

10,452. They are very much in the same position as you are in with regard to a particular law faculty. They would require a further sub-division of subjects just as you would in law?—Yes, I think they would.

10,453. But the point is that whatever they teach they teach in the most scientific manner, and the object is to encourage research and originality in the students who attend that hospital just as you do in the University?—Precisely so; and with that object you will see that a series of hospital bulletins and hospital reports which are referred to in the programme that I put in have been in existence for some little time, really with a view to making such contributions.

10,454. And their students would also publish treatises on special subjects?—Yes.

10,455. Does the Pathological Laboratory also contain one for bacteriological purposes?—It does. Dr. Welch, who is at the head of the Laboratory, is specially interested in the study of bacteriology, and the Pathological Laboratory is largely devoted to bacteriological work.

10,456. (*Mr. Anstie.*) I understand you to say that in legal matters the Maryland University practically takes charge of education in the ordinary subjects of legal knowledge, and that you do not?—It takes charge of the teaching and practice of law as at present existing.

10,457. A person going to practise would go to Maryland University, and not to you?—That is so.

10,458. But you have students who, after having completed their course at Maryland University, come to you for the more scientific branches?—That is so.

10,459. Could you give me your opinion as to the relative value of the two methods; that of dealing, in the first instance, as such students with practical law in its concrete bearing as exhibited in human life, and that of commencing with the scientific branches which you chiefly have charge of. Which, in an educational point of view, would in your judgment be the better course?—I think the proper course would be to put them side by side in a strong law school.

10,460. You would concurrently carry on the scientific and the practical branches, would you?—I would carry on the scientific and practical branches concurrently, encouraging the students not to depreciate, as they are so apt to do, the historical and scientific teaching of the subject.

10,461. You would not approve of the method by which all the scientific branches were gathered together and dealt with in the first instance, and the student then abandoned that pursuit and devoted himself solely to practical study?—I should very strongly disapprove of that.

10,462. Then if you succeeded in what you seem to desire—the adding of the practical side, which is now taken charge of at Maryland, to your University, the course you have indicated is the one you would pursue, is it? You would make the two sets of studies run concurrently?—I would make the two sets of studies run concurrently. I came here quite unexpectedly, and I am not prepared to say at the moment just how I should do it. Roughly speaking, I think I should make them run concurrently through each of the three years. I think I should make a man learn certain branches of work — historical and scientific work — side by side through each of the three years.

10,463. Can you tell me the age of the students who usually go to the college and the University side re-

spectively?—The students who come to the college side I should think average about 17 years of age, so that the students who come to the University side in many cases would be 20 or 21 years of age; with this comment, we have in our University a great number of men who have been teaching elsewhere, often for many years, who in that way have saved money and come to us with a view of broadening their scholarship, perfecting it more than they have been able to do, and in that way taking more advanced positions in educational work, becoming perhaps professors of colleges when they may have been teachers in high schools or occupying subordinate positions in other American colleges.

10,464. And would the students who come from Maryland to the University side be about the same age? They would have gone through the course at Maryland, and would they be about the same age as your students who had passed through the college?—Yes, about the same age.

10,465. I wish to ask you a question with regard to the effective value of a degree in your own State—I suppose we must not speak beyond that?—No.

10,466. With respect to Maryland, does the degree contain a licence to practise?—In Maryland it practically does. That is, the additional formalities are so slight as to amount to comparatively nothing.

10,467. Does the court keep its own roll?—Yes.

10,468. So far as educational matters are concerned it takes the degree as a certificate?—Yes. I should tell you perhaps that one of the judges—Judge Harlan—is engaged as a teacher in the work of the law school.

10,469. Is there any other mode of access to practice in law besides the University of Maryland?—I believe there is, but I am not familiar with the details. As a matter of fact, most men go through the law school of the University. A Committee would be appointed to examine the candidate where he had not attended the University course.

10,470. Now, having regard to the fact that the law school of the Maryland University is a school for practical men, would it, in your judgment, impair the educational scientific value of the University teaching if, as you seem to desire, the two schools were united?—That would depend I imagine very largely, would it not, on the sort of men we had to take over?

10,471. And the requirements of the men you had to take over. That is just the point. The requirement of the ordinary practitioner is just to be qualified to entitle him to make his living in practice?—Precisely.

10,472. Would taking over that class of men, in your judgment, be likely to impair the excellence and the high standard of University teaching?—I think that would depend upon the characters of the men themselves.

10,473. The men who came, do you mean, or the men who taught?—The men who taught.

10,474. But you think it would be possible still to maintain that high scientific tone which you desire to see maintained, under those conditions, if you only had a sufficiently carefully selected body of teachers, do you?—Precisely. I am afraid I misunderstood you. I understood you to ask my opinion as to what the effect would be of taking over the existing law school of the University of Maryland.

10,475. No, not so much that as the taking over of that practical work which the University of Maryland now does?—I should like to express myself upon that. I see no reason in the nature of things why the taking over of that practical teaching and doing it in the very best possible way should in any way impair the value of our scientific and historical teaching of law. In other words, I do not see why the two things should not be done side by side as well as they can possibly be done.

10,476. And would the same thing be true of the medical school, considering the Maryland University as an access to practice and your University as rather taking charge of the scientific aspect. Would it, in your judgment, impair the scientific work of the University to have conjoined with it the practical school of medicine?—I should not think so. I see no reason why it need.

10,477. On the other hand, assuming that the standard and the high tone of the teaching could be maintained, would it be an advantage to the practical class of men that they should be brought under that discipline?—I think it would, in our profession distinctly. One does not like to speak about medicine very much, but I am certain that in the profession of law it would be a distinct advantage.

10,478. When you mentioned the three heads of practical study, I suppose you did not mean to confine yourself to having one professor in each?—No, not at all. It seems to me that for many purposes it is rather useful to keep those three heads somewhat separate and distinct.

10,479. But you did not mean to say that it might not be desirable to increase the staff in each department?—Not at all. I simply meant to say that I think in a good law school it ought to be quite sufficient for one man to be charged with one of those subjects. If he has some one else to help him with a part, so much the better, but I do not think he ought to be asked to take more than one of those subjects.

10,480. I understand that you only give two degrees; the one you call a collegiate degree, Bachelor of Arts; the other a University degree; Doctor of Philosophy?—That is so.

10,481. You say your legal and medical schools are not developed, but, on the other hand, the subjects included in the examinations for the degree of Doctor of Philosophy, or which may be included, appear to recognise a very large development of science?—They do recognise a very large development of science. That is so.

10,482. May I ask why you chose the term "Doctor of Philosophy"?—I think it was chosen after a careful survey of advanced work in Europe, and with regard to the fact that in 1875 the degree of Master of Arts had somewhat fallen into discredit in the United States, as simply indicating that a man had taken his A.B. degree a certain number of years ago, and the degree of Doctor of Philosophy was designed to indicate that the Candidate had successfully pursued distinct University work for at least three years in the studies which are included in the faculty of philosophy and of the liberal arts.

10,483. Then having regard to the fact that your Doctor of Philosophy includes such various subjects—history, science, law—if you were to add a more strictly medical or legal side to the University, would you think it necessary to add any other denominational degree to that of Doctor of Philosophy?—So far the feeling amongst my colleagues has been that it was not advisable to do so.

10,484. (*Lord Reay.*) Would it not follow from the evidence you have given with regard to the Faculties that you think in the future it would be desirable to have such a distinction; and that then each Faculty should, as in Germany, also give its own degrees—medical degrees, law degrees, and so on?—If we had a Law Faculty, I should like to have the Law Faculty giving the degree of Bachelor of Laws, which on that plane would correspond to the degree of Bachelor of Arts. But having got the Bachelor of Laws, and taking the student on to advanced research, and the publication of a work of his own, and the requisite three years study of advanced work, I should call him a Doctor of Philosophy at the end.

10,485. Rather than a Doctor of Laws?—Yes, rather than a Doctor of Laws.

10,486. And rather than a Doctor of Medicine?—Yes, rather than a Doctor of Medicine, and for this reason. In the United States (I do not think the remark applies here) the term Doctor of Laws has appropriated to itself the connotation of an honorary degree exclusively. The degree of Doctor of Philosophy in the United States means a degree that a man has got as the result of hard work and original study in the faculty of philosophy and of the liberal arts.

10,487. The degree of Doctor of Laws is merely an honorary degree?—It is merely an honorary degree.

10,488. (*Mr. Anstie.*) Your view may be, perhaps, stated thus: as far as regards the inferior or collegiate degree you indicate by the letters the differentiation of study and only give one degree in that, and when you go to the more scientific or full study of any parti-

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

cular subject, you describe the man who has achieved success in any department by one single designation?—Yes, that is so.

10,489. So that, if I may put it rudely, the lower degree may be termed the trade degree, and the higher degree is the scientific degree?—It is very largely so.

10,490. Perhaps not, strictly construed, but roughly, that is the case?—Yes, roughly that is the case.

10,491. (*Professor Ramsay.*) How many students have you in the upper department? You said you had about 80 or 90 in the collegiate course. About how many have you in the higher course?—Are you speaking of the whole collegiate department at the moment?

10,492. Yes, I am speaking of the whole collegiate department?—In our whole collegiate department, that has grown in a very extraordinary way, without any sort of encouragement or effort, to be something over 200. I cannot give you the exact figures.

10,493. And in the University?—The distinct University work, do you mean?

10,494. Yes?—That is over 300.

10,495. It is larger than the collegiate?—Yes, it is larger than the collegiate.

10,496. Do they come from all parts of America?—Yes.

10,497. And from out of America?—Yes.

10,498. Your collegiate student does not go on as a matter of course to the University course, does he?—Not as a matter of course. Some of them go to business; some to law schools; some to the medical school of the University of Maryland.

10,499. Their main purpose in taking the University course is a professional purpose ultimately, is it not?—In very many cases it is a desire either to devote their lives to research alone, or to research accompanied with college or University position. I think something like 87 per cent. of our Doctors of Philosophy occupy at the moment high collegiate or University positions in the United States.

10,500. Is the endowment of the University large?—The endowment of the Johns Hopkins University is a little over 3,000,000 dollars.

10,501. That is the capital endowment, is it?—Yes; and the endowment of the hospital is about 3,500,000 dollars.

10,502. And the annual income is—how much?—I cannot tell you what the annual income is exactly.

10,503. Roughly speaking, I suppose, 20,000*l.* to 30,000*l.* a year?—It is between 30,000*l.* and 35,000*l.* a year. Our students mount up——

10,504. I was asking about the endowment first. Have you a capital sum of three million dollars apart from the building?—We have a capital sum of three million dollars apart from the buildings.

10,505. And is the interest of it available for the purpose of paying the expenses of the University?—Not the whole of it. I am afraid I cannot tell you just how much is income-bearing. Some of it consists of land which has come into the city limits, and has increased a good deal in value, but which, of course, brings in no income at the moment.

10,506. What are the fees?—I think the fees are 125 dollars.

10,507. Per annum?—Per annum. That charge includes access to all the privileges of the University.

10,508. For all subjects?—Yes.

10,509. Is that in the collegiate course or in the University course?—That is the same in both courses.

10,510. When you speak of professorships, what is the value of one of the full professorships?—There is no fixed value. There is no fixed stipend, and one hopes to have an increase from time to time.

10,511. (*Sir Lyon Playfair.*) What is the sort of average?—The value of the full professorships varies from 3,000 to 6,000 dollars.

10,512. (*Professor Ramsay.*) And in all minor details, you say, as far as the constitution goes, the real government of the place is in the hands of the president, subject to the veto of the general governing body?—I would not like to put it in that way, because the president acts with the close concurrence and advice of various boards of professors. It would be more correct to say that the actual government is in the hands of various boards of professors, subject to the veto of the president.

10,513. But he is accountable, as far as the constitution of the Trust goes, only to the Trustees?—He is accountable only to the Trustees.

10,514. Can you tell me with regard to your preliminary examination, which includes various languages, how much Latin is required? What is meant by Latin?—I am afraid I cannot tell you from memory. I can very easily send you such details, but I have nothing with me from which I can give them to you.

10,515. Do they require translation into the language in all cases, as well as from it?—I am afraid I can hardly tell you that.

10,516. (*Sir Lyon Playfair.*) There is nothing about the Matriculations in the programme that you have handed in, is there?—I am afraid not. I did not know, of course, that I should be asked to come here, or I should have been glad to bring the materials from Baltimore.

10,517. (*Professor Ramsay.*) You spoke about giving two subjects of inquiry, one occupying a shorter time in answering, and the other a longer time. How often is that given in the University session?—In the particular class that I had in my mind I was trying to explain to you the method in use in the undergraduate department. I took a class which is an undergraduate class, and illustrated it by saying that I took two topics, one a short and one a longer one. I should give two topics once every year. Does that answer your question?

10,518. Yes. You mean two topics in the course of one course of lectures?—Yes; that is, a course extending right through the academic year.

10,519. With regard to the arrangements you describe as to the appointment of professors, and the general control of matters by professors, can you tell me whether similar arrangements are pretty common throughout the Universities in the States? Does the constitution of Universities in different States differ?—I think you would find that the constitution differs a good deal. In some cases complications have arisen, especially where the University is in any way connected with the State. Complications arise, and the thing is not done in the fair and square way that I tried to explain to you. I think you would find the written constitutions differ.

10,520. Would you find such a fact as this—that the professors are always and everywhere examiners of their own students?—Yes, doubtless that is the case.

10,521. But you would not find it everywhere, would you, that the professors are practically appointed upon the recommendation of the professors?—I do not think you would find that. I think you would have to inquire in every particular case. For instance, at Harvard there is a board of overseers, and they have a great deal to do with the selection of professors. I should like you to ask some Harvard man about that.

10,522. The initiation and the original recommendation comes from the body of professors, who are conversant with the subject in which the chair is to be filled up?—Yes.

10,523. That would differ in various Universities, would it?—It would differ somewhat, but I would say unequivocally, that that is the principle that runs through every University in the United States that is doing good work.

10,524. And in the same way the professors really are the persons who govern the University. The arrangement of its examinations, the conditions for the degrees, and the courses of study, and all the administrative powers are practically in the hands of the body of professors?—Certainly; that is the case everywhere.

10,525. Skilled persons arrange all University matters?—Certainly, and so they ought to.

10,526. I presume the privilege carried by any University degree depends entirely upon the law of the

State? What constitutes a University?—The grant of a Charter from the State.

10,527. From the State Legislature?—Yes.

10,528. The State Legislature is the origin of all University rights and privileges?—Yes.

10,529. They would, for instance, demand a degree in medicine as a qualification to practise medicine. That would come from the State?—That would come from the State.

10,530. There are States in America, are there not, where there has been a great competition downwards in the matter of granting degrees? Are there not certain States where there are a large number of Universities upon a very inferior footing?—There are a very large number of Universities, but they are so far West that I cannot tell you anything definite about them.

10,531. Are fees charged to any considerable amount for the degrees when obtained?—No, I think not. Certainly not with us. We charge something which just about pays the clerk's time for copying the diploma—a guinea, or something of that kind.

10,532. It is not an important source of income, is it?—No indeed; not at all.

10,533. (*Sir Lyon Playfair.*) Was the college contemporaneous in foundation with the University, or subsequent to it?—Do you mean the Johns Hopkins?

10,534. Yes?—I was not there at that time, but I believe that the college was a little subsequent to the University—not long, but slightly subsequent in point of time.

10,535. I suppose it was probably found that the students were not sufficiently up to the mark of the University, and therefore they required preparation for it?—Precisely; and also because, although Mr. Hopkins left no restrictions of any kind, the trustees felt that his desire was to benefit Baltimore and his own State, and there were a great many young men in Baltimore who were going to other institutions of learning for their collegiate degrees who wanted to come to the Johns Hopkins University, and we had no classes suited to them.

10,536. That is what I wanted to ascertain, how, although your college and University are separate in name, are they not very closely connected in fact? Take the laboratories, I suppose they are the same laboratories for both?—Yes, the same laboratories for both, except, I think, for instance, the pathological laboratory is only for graduate students. Then I think the laboratory in mineralogy and geology is only for graduate students, but the laboratories in physics and chemistry, and the laboratory for biology, using the term in its widest sense, are for both classes of students.

10,537. And they are divided for upper and lower work?—Yes, quite so.

10,538. Have the professors in the college similar rights to the professors in the University as to meeting together with the other professors, and consulting about the interests of both institutions?— There are two boards. The Board of University Studies has charge of all matters connected with the granting of the degree of Doctor of Philosophy, and the arranging for graduate classes. The Board of Collegiate Advisers has charge of all matters connected with the government of the college, and acts in matters of detail by a small committee of three, which meets constantly. The committee has only power to act in case of matters of discipline and on the ordinary routine of college work. It has no power to legislate. It must call the full board together for any matter of legislation.

10,539. The Board of Trustees, do you mean?—No, the full Board of Collegiate Advisers.

10,540. Can that board legislate without the consent of the trustees or the upper board?—That board legislates on all important matters, in the sure and firm belief that the trustees will support it.

10,541. Then it has practically the managing power, has it not?—It has practically the managing power just as the Board of University Studies has in connexion with the advanced work.

10,542. And have the professors of the college, and the professors of the University, equal academic rank? Do you look out for persons of equal distinction for the two sides?—We look for a different kind of man. If we want a man for simply advanced work, we look out for a man who can make the students enthusiastic, each along their separate lines, who can publish pretty frequently something that will really be lasting and good. If we want a man who is to do collegiate work, we naturally look for a somewhat different man. We look for a man whose main work will be in the lecture room.

10,543. Do you encourage research work on the collegiate side of the laboratories, or do not the students reach up to that?—I should hardly imagine that they would reach up to that.

10,544. Then they would naturally pass into your University work?—Yes, they would naturally pass into University work. There may be exceptional cases where undergraduate students perform pieces of research, but they are naturally few.

10,545. And there is not so much motive for it, because they can pass upwards to the University part of it?—Quite so.

10,546. Is there any differentiation between the salaries in the college and in the University? Are the salaries lower in the college?—We have very few professors who simply teach in one or the other. Most of our men do teaching in both. Professors Gildersleeve, Newcomb, and Rowland are the only men who occurs to me at the moment as having University work only. Many of our leading professors, for example, Professor Martin, and Professor Remsen, have both undergraduate and University work.

10,547. Do you not find that the best investigators, or the highest men, are very generally the best teachers?—It is usually so, I think.

10,548. I was afraid it might be the reverse, but I am glad to find that both University professors and teachers give common instruction?—I think it is so.

10,549. (*Professor Ramsay.*) Do you lay it down as a rule that the most original investigator is the best teacher, or do you mean that it has the most inspiring effect upon a student to come across an original man and see his mind working?—What I meant was that as a matter of fact, in the experience of the Johns Hopkins University, it has been found that those men who were doing the best original work were also the best teachers even to undergraduate students.

10,550. (*Sir Lyon Playfair.*) On the whole, with a few exceptions?—I am not prepared to make any exception, for it must be remember d that a great University needs many different kinds of teachers.

10,551. You said that the students' fees helped considerably. Where do they go? Do they go into a common fund?—They go into the common fund.

10,552. And from that they are distributed for the expenses of the University of the college, and for the remuneration of the professors, are they?—Yes.

10,553. Who determines the proportion that should go to the remuneration of the professors, or to the expenses of the University. Is it the Board of Trustees?—You understand that the professors have no share at all in the students' fees.

10,554. At least out of the common fund?—A professor has a fixed salary, which is paid to him either for a fixed term of years, or indefinitely, if he is a full professor. If he is a full professor he is usually appointed indefinitely: that means, as long as he does his work well: and he is appointed at a yearly salary; that salary is paid to him month by month.

10,555. Out of the endowment and the common chest?—Yes, out of the income accruing from the endowment and the common chest.

10,556. (*Lord Reay.*) I understand that your leading men in the Civil Service, the men who in each department would be at the head of their profession, are distinctly in favour of giving encouragement to the members of the Civil Service to obtain University degrees, and the training in such subjects and history of diplomacy, administrative law, and so on?—I think so emphatically.

10,557. And the same applies to your lawyers. The leading men in the legal profession also give encourage-

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

ment to scientific legal training being received at the University?—Our ablest, our best judges, certainly would do so.

10,558. (*Sir Lyon Playfair.*) Is your example being followed? Are other Universities arising for high study such as that pursued at the Johns Hopkins University?—Harvard, Yale, Columbia, and Princeton are all trying to encourage the post-graduate work on the model of the Johns Hopkins.

10,559. That I am aware of, but I mean specially founded on your plan that you should be a University of higher study as your main purpose?—The only example I know of late years is the one of the Clark University, at Worcester in Massachusetts.

10,560. That has scarcely got into swing yet, has it?—It has hardly got into swing.

10,561. Does it intend to do the same thing?—Its object is to do the same thing that we have done. The University of Chicago is in process of organisation, but has not yet commenced work.

10,562. (*Lord Reay.*) With regard to French and German you take those languages as a substitute for Greek at the entrance examination?—Yes; we take them as a substitute for Greek.

10,563. But a candidate cannot attend the collegiate course without knowledge of French and German?—He must get the French and German some time during the collegiate course. He cannot take the Bachelor of Arts degree without it.

10,564. Can a man attend a collegiate course without knowledge of French and German, or are the cases very rare of the absence of such knowledge?—The cases where a student comes to the University without any knowledge of French and German would be very rare indeed.

10,565. And does he come with sufficient knowledge, or would he as a rule have to attend French and German lectures in the collegiate department?—As a rule he would have to attend French and German classes in the collegiate department.

10,566. The number of students who would be allowed not to attend them would be very small?—Very small relatively.

10,567. And would that knowledge of French and German be colloquial?—I presume colloquial knowledge would be included, but it would be a great deal more than a colloquial knowledge that would be required.

10,568. Do you include the knowledge of French and German literature?—Yes.

10,569. Would it be carried rather high?—Yes. I think the knowledge of French and German that is exacted is quite severe.

10,570. Your main object is that whatever study he takes up he should be enabled to consult French and German books on the subject?—I think that is the main object. A student cannot go far in any subject of investigation without French and German authorities.

10,571. (*Sir Lyon Playfair.*) Your University is steadily growing, which shows that there was a decided want in the United States, does it not?—Yes, undoubtedly so.

10,572. Year by year it is growing, is it?—Yes, year by year it is growing steadily.

10,573. (*Mr. Anstie.*) Your University refuses to publish the examination papers of its candidates, does it not?—We do not publish our examination papers. We say any teacher, or any candidate, or any person who has a legitimate interest, may go and consult those papers which are kept permanently on file. Anyone who has a reasonable interest may go and consult them at any time during office hours, but we do not publish them, for the reason clearly that there are a certain number of questions in every subject that a man is always bound to ask from year to year. We should not like the men cramming up those questions as something that would be likely to be asked.

10,574. Then is it your view that the publication of examination papers is a direct incitement to cram?—I think it is.

10,575. You disapprove of the practice of publishing examination papers?—I disapprove of the practice of publishing examination papers.

10,576. (*Lord Reay.*) How often are the collegiate students examined?—The collegiate student is examined by means of written papers at least three times a year, at Christmas, at Easter, and at the end of the year.

10,577. (*Sir Lyon Playfair.*) By his professor, or by special examiners?—By his professor at Christmas and at Easter. Often at the end of the year an outside or external examiner is called in; or, if no external examiner is called in someone in the University who is familiar, at any rate in a general way, with that line of work, assists in the examination.

10,578. (*Lord Reay.*) How often is the University student examined?—In the University much greater latitude is allowed to the professor. The professor practically decides himself how often he will examine his students, I examine mine twice a year, on or about the 1st February, and on or about the 1st of June.

10,579. The only real University examination is the examination at the end of the year?—That is the strict University examination.

10,580. At the end of the collegiate course the examination is for the Bachelor of Arts degree?—Yes.

10,581. The other are less formal examinations?—No, they are just as formal.

10,582. (*Mr. Anstie*) Do you publish class lists?—We do not publish formal class lists. A student comes, and he is told what his mark is, and a copy is sent to his parents, together with a report from his adviser, as he is called, that member of the Faculty who stands in a close personal relationship to him. His marks and a confidential report are sent to the parent or guardian at least once a year.

10,583. (*Sir Lyon Playfair.*) That is, in the case of the collegiate course?—Yes.

10,584. Would you do that in the case of the post-graduate course?—I should not do that in the case of the post-graduate student, unless there were exceptional reasons,

10,535. (*Lord Reay.*) Has each student in the collegiate course what you call an adviser?—Each student in the collegiate course has an adviser, that is a member of the Faculty who stands to him in pretty much the same relation that the good old Cambridge tutor of my time used to stand in towards the student, a personal relation. The professor asks the student to his house in an informal way, to supper or dinner, he encourages him to look to him as a friend, to go to him if in a difficulty, to go to him about everything.

10,586. Do all the professors undertake the duties of advisers?—No, the professors who are specially suited for the purpose.

10,587. (*Sir Lyon Playfair.*) Does the student select his own adviser, or is the adviser given to him?—If he has a special reason which he can show in favour of the selection of any particular adviser, he does so. For instance, if his parents have been on friendly terms with a particular professor for a long time he might say, "I would like to have professor so and so," otherwise the advisers are selected practically by the president of the University.

10,588. (*Lord Reay.*) I suppose at the examinations other professors are present besides the one who is examining?—Which examinations are you referring to?

10,589. The examinations which you have just now called the University examinations at the end of each year?—Yes, a number of professors are always present at the annual examinations.

10,590. Then the other examinations which you have described as being earlier in the course are examinations which are conducted by the teachers individually?—They are examinations by the teachers, but they are just as important to pass as the other ones.

10,591. Still they are left to the responsibility of one man?—Yes.

10,592. (*Sir Lyon Playfair.*) Do they count towards the degree?—Certainly. A careful record of all those marks is kept.

10,593. And counts towards the facility with which he gets the degree?—And counts towards the degree.

10,594. (*Lord Reay.*) With regard to honours, I suppose they are only given at the annual examination?—The honours are given at the annual examination, but on the results of all the three examinations, that is, the examinations at Christmas, Easter, and June.

10,595. And would that apply to the collegiate course as well as when the degree of Doctor of Philosophy is given? Do you then take into account the previous examinations?—Yes.

10,596. I suppose honours are given in few instances?—We usually find quite a number of men who are deserving of honours—quite as many men, unfortunately, as we have scholarships to give to. I wish we had more scholarships.

10,597. Do you mean to say that honours and scholarships are identical—that a man who is entitled to honours may also obtain a scholarship?—We have two distinct sets of money rewards. One of them is what we call scholarships. Those are given to the undergraduate students at the end of their first year; another set at the end of their second year; and another set to those ten who come out first on the whole three years work, at the end of the third year in the undergraduate department.

10,598. (*Sir Lyon Playfair.*) What is about the value of the scholarships?—They are, I think, 200 dollars—not a great deal.

10,599. Enough to pay the fees?—Enough to pay the fees, and about 15*l.* a year over.

10,600. How many have you? Have you one third of your collegiate men under scholarships?—No, nothing like it. I am speaking entirely from memory, but I should fancy certainly not more than 20 per cent.

10,601. Have you the same proportion on the University side?—Not quite as many on the University side.

10,602. Have you any entrance scholarships which may be competed for from external schools?—Yes. I think there are three or four of those—quite a small number. In considering the work of the Johns Hopkins University, however shortly, one ought not to lose sight of the second class of University honours—the system of Fellowships—because I think it is the system of Fellowships which has proved so great an incentive to the publication of original work. We give every year 20 fellowships to those 20 men who show, not so much what they have done—though of course we have to consider that—as what they can reasonably be expected to be able to do in the future along the lines of original research.

10,603. The students who have already shown capacity?—The students who have already taken the Bachelor of Arts degree, and who either by the publication of a thesis, or a carefully prepared original report, or in some formal way, have shown that they can prosecute original research in some chosen field.

10,604. What is the value of those Fellowships?—The value of those Fellowships is 500 dollars a year.

10,605. How many have you?—We have 20 of those.

10,606. (*Lord Reay.*) Are they given at the end of the collegiate course?—They are given in June of every year, for those men who will avail themselves of them during the next academic year.

10,607. But are they given to the B.A.'s when they enter upon a University course?—We have never given one to a man who had only just taken his B.A. degree. We should be much more likely to give one to a man who had been one or two years in University work, or at any rate one year in University work, and who had shown by writing or in some other way that he was a youth of considerable promise.

10,608. Then in the first year of the University course you would expect him to show some originality, and some powers of research?—Yes.

10,609. For how long is the Fellowship tenable?—It is only tenable for one year, but it may be renewed.

10,610. Is it ever given to men who have attained the degree of Doctor of Philosophy?—No, that is a disqualification.

10,611. It is always tenable at the University?—It is always tenable at the University, and only during residence at the University.

10,612. It is not given on a specific examination?—No, indeed.

10,613. But it is given by the academic council?—It is given by the academic council on the reports of the individual professors.

10,614. Are there any scholarships at the University as well?—There are scholarships at the University as well.

10,615. Are they given on the results of the examinations?—No. We give nothing in the University as the results of set examinations. It is *propter spem*, and not so much *propter rem*.

10,616. (*Sir Lyon Playfair.*) You think a teacher has a better way of drawing out the facilities of youth than by a mere examination?—Exactly. I should tell you that for many years we used to award a certain number of scholarships in University work on the basis of written examinations. We found that we did not get the best results; that men spent too much time in preparing for those examinations; that during that time their work in the laboratory or their work in the historical seminary was suffering; and that really with the constant contact we had with the men we were in a better position to form a judgment whether A.B. or C.D. was the better man than if we set him a formal paper for the purpose.

10,617. We have a body here who give scholarships of about 750 dollars a year to young men of promise at the different colleges throughout the country in order to get them over the first year or two after the first graduate course, to encourage them to go on with researches, and to enable them to pass over the difficult time when they have not got places and positions, and still induce them to continue researches. Do not you think that with the magnificence of gifts in America that would be a good thing to encourage with regard to your University?—That is, if I understand you rightly, to encourage men who had taken their degree of Doctor of Philosophy.

10,618. And who have shown a strong capacity for research. They give them such a fellowship for one year or two years after they have left the University to encourage them to go on with the researches?—I think something in the nature of what is sometimes called a travelling fellowship to encourage them to go to Europe to spend one or two years in research here in London, or in Berlin, would be exceedingly useful. We have a fellowship of that kind in Biological Science, called the Bruce Fellowship to which only those who have already held an ordinary fellowship are admitted.

10,619. That is the way we work it. We always recommend them to go to another college to get larger experience?—I should think that would be exceedingly good and very much to be encouraged. So far in the history of the Johns Hopkins University—I cannot tell how much longer the state of things will continue—we have never had a man who was fit for a position who has been unable to get one; but, of course, there must be an end to that.

10,620. (*Lord Reay.*) Are the scholarships in the collegiate department given on the same lines—on the results?—The scholarships in the collegiate department are almost invariably given on the results of the three examinations conducted in the course of the year.

10,621. To those men who deserve honours?—Yes, to those men who deserve honours.

10,622. That only applies to the collegiate department?—That only applies to the collegiate department.

10,623. Are there any fellows in the collegiate department?—No. Our idea has been that in the collegiate department the men must be held to strict work—strict supervision. Different methods and different tests must prevail there.

10,624. And the discipline would be stricter, of course?—Very much stricter.

10,625. The power of election is also less than in the University?—Yes.

10,626. A student in the undergraduate department would be guided more as to what work he should do,

Prof. G. H. Emmott, M.A., LL.B.

26 July 1892.

than a student who has reached the University stage?—Yes, exactly. A student who has reached the University stage in most cases selects his own three subjects—for instance, history, jurisprudence, and economics. He usually makes the selection himself. He often comes to the professor and says, "Will you kindly advise me?", but in just as many cases he makes his own selection.

10,627. Have you any demonstrators in the laboratories?—Yes.

10,628. They are not professors?—They are not professors.

10,629. They stand outside the professorial body?—They stand outside the professorial body. They usually hold practically under the professor in charge of the particular work. As long as they satisfy him that they are doing good work they continue to hold their position.

10,630. Does he appoint them?—No, he does not appoint them, but they are appointed on his recommendation.

10,631. They are University appointments?—Yes, they are University appointments. Every appointment is a University appointment.

10,632. And the professor could not dismiss them?—No.

10,633. The University which appoints them dismisses them?—Yes.

10,634. Are there any instances in which they have risen to the rank of professors?—I do not think there are, so far. They usually get a position elsewhere. A demonstrator of the Johns Hopkins University will go to take a full professorship somewhere else before long.

10,635. Are they generally taken from your own students?—They generally are taken from our own students.

10,636. Do instructors give lectures as professors give lectures?—They usually give very much the same kind of instruction. The main difference is one of rank. They are men who have recently taken their advanced degree. That is the first step on the ladder.

10,637. Are they sought for by other University?—They are indeed. That is the trouble.

10,638. Are they paid salaries by the University?—Yes.

10,639. Does that apply to the Instructor, Associate, and Associate Professor. Does it apply to the whole body of teachers?—Yes, it applies to the whole body of teachers.

10,640. An Instructor would not compete in any branch with a Professor. He would teach what was not taught elsewhere?—A Professor would consult in May or April with his immediate colleagues, and with his Instructors; I should, for instance, consult with my colleague, Professor Adams, and the Professor of Political Economy, as to what courses we should give in what is called collectively, the department of history and politics during the next year. After consultation we should each write out a sketch of what we thought was best. We should confer again, bringing our sketches, and we should consult with the Instructors and younger men as to what part they were to take. That would then go on to the President for his revision, and he feels perfectly at liberty to revise it in any way he thinks fit. He has a very accurate knowledge of what is going on everywhere. There is nothing that Dr. Gilman does not know. He would make in most cases some valuable suggestions. Those he would talk over with us very frankly, and finally a draft would go to the printers. So that it is the combined results of the Professors, Associate Professors, and Instructors of that Department, with the supervision of the President.

10,641. Were the gentlemen whose names you have given who were giving lectures in law all full Professors?—Professor Adams is, of course, a full Professor. Professor Woodrow Wilson only comes to us for a part of the year to lecture. He is full Professor of Jurisprudence at Princeton, and Dr. Schouler is a lecturer in the University.

10,642. An Instructor?—Hardly. Dr. Schouler is one of those men who came to us from a distance to give a certain number of lectures. We call men from other institutions who are not permanently connected with the Johns Hopkins University to give a certain number of lectures.

10,643. Therefore they are not full time men?—No. They come to give five, ten, or twenty lectures.

10,644. (*Sir Lyon Playfair.*) For instance, you had Sir William Thomson?—Yes, and Professor Cayley. We have had a number of celebrated Englishmen, including Professors Bryce and Freeman, Lord Rayleigh, Professor Huxley, Alfred Russell, Wallace, and many others.

10,645. (*Lord Reay.*) The other Universities consent to that?—Yes. Other Universities are very glad to have their men invited to come to the Johns Hopkins. It is a great honour.

10,646. There is no rivalry about it?—No, not at all.

10,647. How many instructors are there in the Legal Faculty at the Johns Hopkins?—I can hardly say that there is any instructor at all, because, with the exception of what Professor Adams does in International Law, Professor Woodrow Wilson in Administration, and Dr. Schouler in American Constitutional Law, there really is no other work in law besides my own.

10,648. One of the judges, you say, is a lecturer?—Judge Harlan is Chief Judge of the Supreme Bench of Baltimore. He lectures not in the Johns Hopkins University, but in the law school of the University of Maryland.

10,649. How many instructors are there altogether in the Johns Hopkins University?—10, and 11 lecturers.

10,650. Instructors come before lecturers?—Instructors come before lecturers, as being for the time being at any rate permanently attached to the institution. A lecturer has a definite contract. "I give you so much, and you will be good enough to give me so many lectures."

10,651. The lecturer is not a full-time man, and the instructor is?—Yes.

10,652. And there is a difference between Associate and Associate Professor?—The Associate is a grade below the Associate Professor.

10,653. Does he give his full time?—He gives his full time. It is simply a question of grade.

10,654. (*Mr. Anstie.*) The educational lecturers are not part of the governing body of the University, are they?—Not in any way. They may be consulted individually—"what do you think about so and so,"—but they have no place in any of the governing boards.

10,655. (*Lord Reay.*) Do they lecture in the college?—They may lecture in the college or in the University.

10,656. And an instructor?—An instructor would be usually confined to collegiate work.

10,657. (*Sir Lyon Playfair.*) Is an instructor practically a tutor?—The instructor is very much what is called at Harvard a tutor. I think the Harvard men use the word "tutor," and we have used the word "instructor."

10,658. (*Lord Reay.*) And the Associates?—The Associate sometimes does University work—not at all infrequently.

10,659. (*Sir Lyon Playfair.*) Is the associate like the *privat-docent* in Germany?—Except that he has a fixed salary.

10,660. And the *privat-docent* has not?—He is dependent on fees.

10,661. (*Mr. Anstie.*) When you referred to Cambridge just now, you meant Harvard?—Yes. Of course he is entirely unlike the Cambridge tutor in England. The tutor in England is really the working head of the college.

10,662. He does a good many functions which the University used to exercise?—Yes, I suppose that is so.

10,663. (*Sir Lyon Playfair.*) Do you give your degrees of Doctor of Philosophy for *honoris causâ* at all?—No, we do not. We have steadily set ourselves against the giving of honorary degrees.

10,664. (*Lord Reay.*) Is there anything you would like to add?—No, I do not think there is.

10,665. If there are any statistics or any facts to which you might wish to refer the Commission on your return to Baltimore, we should be very glad to have them put in in the form of a statement if you will send them?—Thank you.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

STATEMENT received from Professor EMMOTT since his evidence was given.

Since returning to Baltimore I have carefully read over my evidence, and beg to add in further explanation of the work of the Johns Hopkins' University the following statement:—Throughout the whole history of the University a sharp distinction has been made between the methods of University instruction and those of collegiate instruction. By the college is here understood "a place for the orderly training of youth "in those elements of learning which should underlie "all liberal and professional culture." The collegiate instruction of the University is thus intended to provide a thorough and systematic training in liberal studies. It is organised and administered in reference to the wants of two classes of persons—first, those who look forward to an academic, professional, or literary career, and who desire such a discipline as shall best fit them for further study; and, second, those who do not intend to continue their studies beyond the period of the college course, and who wish to find in it a sufficient preparation for life. The degree of Bachelor of Arts is conferred upon those students who have successfully completed the collegiate course. Considerable opportunity is given to the student to vary the proportion, and to some extent the character of the studies which he will pursue, in accordance with his individual tastes and needs, through the organisation of several distinct and parallel courses of instruction, which are known as "Groups." These are seven in number, and I described them in my examination in answer to question No. 10,360. Each "group" comprises (*a*) studies common to all the groups and required of all undergraduates; (*b*) studies peculiar to a group and required of those who elect it: (*c*) optional studies.

The studies required of all students, as preliminary to the degree of Bachelor of Arts, are as follows: *before Matriculation*, Latin, Greek (or French and German), Arithmetic, Algebra, Geometry, Plane Trigonometry, Analytic Geometry, and the elements of a good English education; *after Matriculation*, English, German, French; one laboratory subject (Chemistry, Physics, or Biology); Logic, Psychology, and Ethics; Physical Geography; Ancient or Modern History; Drawing; Vocal and Physical Culture. The full "Requirements for Matriculation" will be found in the University Register for 1891–2, on pp. 124 *et seq.*

In the University more advanced and special instruction is given to those who have already received a college training, or its equivalent, and who desire to concentrate their attention upon special departments of learning and research. Advanced and graduate students are received into the University with or without reference to their being candidates for a degree, and they are permitted to attend such lectures and exercises as they may individually select. The degree of Doctor of Philosophy is offered to those students who continue their studies in a University for three years or more after having attained the baccalaureate degree. Their attention must be given to those studies which are included in the Faculty of Philosophy and the liberal arts, and not to the purely professional Faculties of Law, Medicine, and Theology. It is desirable that the student accepted as a candidate should reside here continuously until his final examinations are passed, and he is *required* to spend at least the third year of his graduate work in definite courses of study at this University. Before he can be accepted as a candidate he must satisfy the Board of University Studies that he has received a good collegiate education, that he has a reading knowledge of French and German, and that he has a good command of literary expression. He must also name in his application his principal subject of study, and the two subordinate subjects. There are several tests of the proficiency of the candidate in addition to the constant observation of his instructors. He must present a carefully prepared thesis on a subject approved by his chief adviser, and this thesis must receive the approbation of the Board of University Studies; the candidate is required to print the thesis in full or in part, and, if in part, to the extent of not less than 24 octavo pages, under the supervision of his chief adviser, within one year of the time when the degree is conferred. The candidate is also examined in writing both in his principal subject and in each of the subordinate subjects, and, if these tests are successfully passed, there is a final oral examination in the presence of the Board in the principal and first subordinate subjects.

In conclusion, I should like to state that whilst the object of the Johns Hopkins University has been to bestow its benefits and advantages as freely as possible, and by means of a large staff of teachers, an abundance of instruments, apparatus, diagrams, and books, and facilities for the publication of research to encourage the prosecution of the most advanced studies, yet its honours have always been bestowed with a sparing hand, and only on those who have shown by searching tests that they had well deserved them.

GEORGE H. EMMOTT.

Twenty-first Day.

Wednesday, 27th July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
The Right REV. BISHOP BARRY, D.D., D.C.L.
The Right Hon. Sir LYON PLAYFAIR, K.C.B., LL.D., M.P.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.D., *Secretary.*

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

SIR GEORGE YOUNG, Bart., M.A., LL.D., examined.

10,666. (*Chairman.*) You have had an opportunity of seeing a good deal of such evidence as has been already printed?—I have had an opportunity of seeing the first three days. Everything after that has been received so recently that I have not been able to do it justice, but I have read some portions of the first eight days.

10,667. You have also had an opportunity from other sources of considering some of the principal objections which have been made to the proposed Charter of the Gresham University?—That is so.

10,668. And I think you have drawn up your answers to most of those objections. (*For this document see Appendix No.* 17.) The best way of proceeding, I think, will be to take them in the order in which you have put them down and let you give your answers?—May I mention what this paper is which I have ventured to hand to the Commissioners as a suggestion of the order in which I should propose to give my evidence? It is a formal statement of Answers to the Objections raised against the Charter of the Gresham University, as it was settled by the Committee of Her Majesty's Privy Council, drawn up last March by a committee of the Colleges Designate in the Gresham University.

10,669. This paper was drawn up as long ago as last March, was it?—Yes, and it was signed by the Lord Mayor as High Steward (designate) of the Gresham University; Mr. Erichsen, President of University College; The Principal of King's College; and by the chairman and secretary of the committee of delegates of the London medical schools. It was distributed to all members of both Houses of Legislature, and has been communicated freely to all who have inquired for it, including several of the principal opponents of the Charter. If your Lordship would allow me I should propose, while following the order stated in this paper, to reserve certain parts of the case until the objections have been fully heard, and until I have had the opportunity of considering them. Such parts are the claims of particular teaching institutions to be included in the University; the composition, in detail, of the governing body of the University; the question whether we should have a Theological Faculty in the University, and generally, the objections which are stated in the latter part of this paper, from objection No. 15 to the end.

10,670. Those you would wish to postpone?—Yes.

10,671. And to appear again later in order to speak upon them?—If the Commissioners please.

10,672. What was the date of this paper?—Early in last March.

10,673. Previous to the deputation to Lord Salisbury?—It was being prepared on that day. One copy was in the hands of Lord Cranbrook, but he had not had time to read it.

10,674. You had already been informed of the objections which were formulated on the occasion of the deputation to Lord Salisbury?—In substance, yes.

10,675. Then we take, first of all, the question of the second University and the objections that have been raised to the establishment of such an institution. Perhaps you will say what you have to say on that point?—I note, in the first place, that there have been additions of late to the ranks of those who urge these objections; but I think the objection remains what I may call a *primâ facie* objection. I notice that while other objections deal with particulars which admit of being stated at considerable length the reasons in this case are somewhat vague, and those who urge them avoid dealing with the difficulties involved. I propose to consider the question mainly from the educational point of view; and to point out, not with any hostile intention, but as a matter of conclusion, that these difficulties amount, in our opinion, to something like impossibilities. I may call your attention in the first place to the precedent of Dublin, where there at present exists a teaching University and an examining University for reasons which, though they are not the same, are comparable to those which we have now to urge.

10,676. You mean the Royal University and the Dublin University?—Yes. In the next place I have to put in a paper containing a statement of the places of education of the successful candidates at all examinations for bachelors' degrees in the University of London during the three years, 1889, 1890, and 1891. (*For this document see Appendix No.* 18.) It will be useful to the Commission, I think, to see what the state of the case is in regard to the present University of London. I should like to make one or two preliminary remarks upon this paper. It is not compiled, and it is not put in, for the sake of showing that one institution is better than another institution; and if any such conclusion is to be drawn from it it will be necessary to interpose some considerations of particular kinds. But taken altogether it does show the proportion of work done in London institutions, in the country institutions, and by private students, for the University of London; and the result is as follows: of 953 entries for the first degree examinations in the Faculty of Arts, London institutions claim only 138; country institutions claim 240; and private study and tuition 522, or very much more than half.

10,677. (*Bishop Barry.*) Do those include matriculation examinations?—No; those are only the entries for the examinations for bachelors' degrees. In the Faculty of Science, 462 entries, London institutions claim 183; country institutions 150; private study and tuition 129; the proportions in the Faculty of Arts thus being reversed. Of the total of Arts, Laws, and Science, 1,492, London institutions claim 332; country institutions 447; private study and tuition 713, or one half. Entries are not the same thing as graduations because, as is known to those who are acquainted with the University of London, many of these examinations are divided, and separate lists are brought out for each portion of a set of examinations. The effect of that will be that if any estimate is to be made of the actual graduations, which of course can be ascertained by

comparison, name by name, with the books of the University of London, it will be necessary to make considerable deductions, especially in science and in medicine, from those totals, because those examinations, as I find, are more split up than the examinations in arts and laws. One other point. Places of education are entered jointly and singly by students. That is to say, a student will often enter a place where he has been taught and add "private study"; or again he will enter two places of education and thus constitute a joint entry. This table shows the exact numbers in each case of the joint entries and the single entries. I may have to call further attention to particulars in the paper on a subsequent occasion, but for the present I put in this return and ask that it may be printed as part of my evidence; and I draw from it the conclusion that the University of London is, to a very large extent, an institution devoted to the graduation of students other than those in London institutions. In regard especially to private students it may perhaps be important to distinguish the single entries from the joint entries; and I have therefore made out separately that of the private students, 389 in arts, 36 in science, and 475 for the faculties of arts, laws and science together, give private study and tuition alone.

10,678. (*Chairman.*) This tends to show of what a very Imperial nature the London University really is?—I think so.

10,679. And that its main work really is for the United Kingdom and not for London?—I think so.

10,680. One of the objections to a second University has been that the competition between the two Universities of London would tend to lessen the worth of the degrees; to make them unduly easy to take. Do you think there is any truth in that?—No. I am prepared to argue that it is not likely that any such result would follow; and I would, in this respect, rely specially upon the example of the Victoria University which, as is well known, was founded 12 years ago, and, as this paper shows, still prepares very largely for the London University. But the degrees of the Victoria University by common repute—I only know of them by common repute—stand high; and if the numbers of those to whom they give degrees are compared with the numbers of under-graduates it is evident that the temptation in question has not been yielded to. In the Victoria University there were in 1889–90, 494 undergraduates, and in that year only 39 degrees were given; that is to say, three M.D. degrees, one M.A. degree, or four higher degrees; 21 degrees of Bachelor of Medicine and Bachelor of Surgery, 11 degrees of Bachelor of Arts, and three degrees of Bachelor of Science; total 35, making with the four higher degrees, 39 altogether; this showing, I think, a very creditable result in that respect.

10,681. Some people have said that the object of the new Gresham University is to give degrees upon easier terms than the present University of London does. I should like to hear you on that point; whether you think they would be easier, or whether you think that the advantage you expect from them will be more from the nature of the degree and the circumstances attending it, and the way in which the teaching will lead up to it, and other things of that kind; and not merely from its requiring less knowledge?—The latter, certainly, is the opinion I hold. I do not think it has been stated even by opponents that the object of those who promoted this Charter, was to give cheaper degrees, except only in the Faculty of Medicine. In the Faculty of Medicine, as the Commissioners are aware, there are many special circumstances. There have been two movements proceeding side by side in London from time to time, one of which was that promoted more especially by University College; the other was that more especially promoted by the medical profession. That the medical profession in general, and to a certain extent, the teachers of medicine in London, desire an easier medical degree than that of the University of London, is certainly the case. My own opinion has always been that an easier degree must be clearly distinguished from a cheaper or lower degree, and that by proper arrangements a degree may be made easy, or much easier than it is at present in the University of London without in any degree lowering the standard. But upon medical matters I do not speak with the authority of an expert, and I should prefer to leave my answer, therefore, in somewhat general terms. Perhaps I may state on this occasion what I should like to say more about at another time, in answer to particular objections that have been made, that there is no foundation for the statement that the promoters of this Charter, whether in the University colleges or in the medical schools, have any desire to give a degree which does not represent an adequate standard of attainment in science.

10,682. You are prepared to prove, I think, that the existing University does not supply all that is required. This, I think, does not require very much insisting upon. It is pretty generally admitted, but we shall be glad to hear anything you have to say upon that point?—I will add very briefly one or two remarks to the statement on page 2 of the paper. I should like to note in reference to paragraph 4 on that page, which refers to medicine, that apart from the difficulty, which has just been alluded to, in obtaining degrees, it is our opinion that medical students in London are subjected to too great a number of examinations. At present, as a matter of practice, this is owing to the parallel existence of systems of examination for which a medical student enters who wishes to obtain a license and also to obtain a degree; namely, those of the University of London on the one hand, and those of the Conjoint Board of the Royal College of Physicians and Royal College of Surgeons on the other, and also, to some extent, the examinations of the Apothecaries' Society. I think the reason for students deserting the London schools in order to reside for a year or two at some other University and qualify for its degrees, to which I referred, has not perhaps been fully stated in evidence, though I have not seen all the evidence and cannot say. I should like to mention that I think a student in London entering at a medical school is generally led to take the examinations of the Conjoint Board, and would like, in many cases, to obtain a University degree also. But before he can do so he must in that case either give up the examinations of the Conjoint Board or add to them the examinations of the University of London. The number is very considerable in that case; and in the result a good many who might take a degree in the University of London content themselves with the examinations of the Conjoint Board so far as London is concerned and, as is here stated, desert the London schools in order to obtain a degree on easier terms in the last years of their undergraduate career. The only other observation I will offer on this subject is with regard to the objection that we make that the colleges have less power to attract endowments in their present position, and I do so merely in order to notice that it has been raised as an objection to the Charter that it does not show endowments forthcoming to support a first-class University. My answer to that is that it was not the business of the Charter, or the intention of it, to deal with the question of endowment; but the obtaining of the Charter is, in our opinion (and we give it as the opinion of those who have studied this question of necessity for many years), the best way to obtain endowment either from public, semi-public, or private sources.

10,683. (*Bishop Barry.*) Do you mean endowment of the University or endowment of the colleges composing the University?—I do not draw any distinction between them

10,684. (*Chairman.*) Then we come to what, I think, is a more important matter that we should really like to inquire into: whether the existing University can be so modified as to supply what is required. Of course, you have had an opportunity of considering the scheme drawn up by the Senate, and submitted by them to Convocation?—I have.

10,685. Supposing the difficulties of Convocation to be got rid of, either by persuasion or, if necessary, by an Act of Parliament overriding Convocation, do you think that anything in the nature of this scheme, which has been presented, would in any way meet the requirements?—I do not think it is likely; but without stating a personal opinion or, still less, an opinion on behalf of the college, I should like to go into the question somewhat more particularly. The first question that arises is whether a single system of graduation is contemplated, or two systems. I notice that in the University of London, according to a Table which was printed in the Appendix to the Report of the last Commission, the average age of undergraduates, say, in the Faculty of Arts, is 25 years and seven months. It is on page 245. I have taken the trouble to average the length of the undergraduate career of candidates in the Faculty of Arts for 20 years, from 1868 to 1887, and I find that the average length of that course is six

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

years and one month. I think it is evident that a system of graduation which proceeds upon the expectation that the average length of the undergraduate course will be six years and one month, must, necessarily, be very different from ours.

10,686. Is that for medicine?—That is for arts only. In science it is very much the same. In medicine the considerations are different, and the course, as is very well known, is longer in all Universities. I think a system which proceeds upon the expectation that the average course of the undergraduate will last for six years and one month must necessarily be very different from that which proceeds upon the certainty that it will not exceed, say, three years. In the next place, I notice that the work of the examining University is to arrange and hold examinations, but in a teaching University it is to teach. Examinations are useful accessories to teaching from the point of view of a teaching University, and for degrees it is proper, perhaps, to insist upon them in all cases. In former days the same thing was done by disputations. It is conceivable that the test of learning may yet be altered, but for the present I may take it that examinations are recognised as being the best way to test attainment. Still, these examinations are merely accessories to teaching in a teaching University. In an examining University they are all that it has to do. Then the objection is raised: Why not utilise the examinations of the existing system, since you must have examinations under the teaching system? The answer is, that the best open examinations are not the best practicable for the purposes of a teaching University; and this is because an open examination must, above all things, be constant, and follow a certain average; an average taken as between methods of teaching and the efficiency of the institutions that send up candidates. An abrupt variation, say, from the last year's papers, or a special recognition of particular teaching comes to be considered, and is, a blot upon the examinations, as interfering with the general equity of the system. On the other hand, it is the merit of examinations in a teaching University to follow teaching, to recognise the special teaching of an eminent man or of a successful school, and to foster improvements in method in their very inception. Each system, of course, has its defects; but in order to remedy defects each system requires a free hand, close attention to detail, and that it should be worked with a single eye to its own principle. The intrusion of a different, and in some respects an opposing, principle into the consultations of a governing body, does not help them to remedy defects; it rather tends to pare away the excellences of each system taken separately. I notice, for instance, that in Dublin where a system of open examination, that is to say, a system of admitting students to the examinations of the teaching side, has been grafted upon the system of a teaching University, no attempt is made at impartiality and independence. On the contrary, the examinations are entirely in the hands of those who have been giving the teaching; in fact, they are the practice examinations of those who have been taught, term by term, conducted by the teachers themselves. Such a system as that is, of course, entirely inapplicable to any proposed combination of the existing University of London with the teaching University which we propose to found.

10,687. You think it would be impossible to adopt the Dublin system of allowing the outsiders to come in if they choose, even though they should be subject to the disadvantage of not having been specially prepared for the examinations. It would affect them, but it would not affect London?—That is so. I should object to it also from that point of view; but I must point out that if the teaching University were to do as Dublin has done, if it were to see cause to introduce this qualification of the teaching system—it would not meet the case of the present open examinations of the University of London, because they must, from the very nature of the case, from the very object of the institution, be impartial and independent. They are the examinations to which outsiders who want degrees must continue to resort.

10,688. It would be unfair upon them that one living in London should have the special advantage of having been already taught the answers to the questions which would be put?—It would clearly be unfair in the sense of placing them at a disadvantage compared with other students. But, more than that, it could not be done. The pressure of opposition to any such proposal as that would be irresistible. I do not think it is seriously proposed by those who know how the examinations of the University of London are generally regarded. I will take, for instance, the debate of July 1st, 1889, in the House of Commons, upon a proposal of Mr. Wallace to add to the system of the teaching Universities in Scotland, a similar open examination system. The arguments on both sides would be adverse to this proposal, and would make in the same direction. That is to say, taking Mr. Wallace himself as the representative of those who wish to carry out this change in Scotland, he praised a system of graduation by open examinations as being the poor man's University. Then if you take his principal opponent, Mr. J. B. Balfour, his argument was that a combination would damage both. You have the majority and the minority united, therefore, in opposition to any such proposal as that of placing the external examinations of the University of London under London teachers.

10,689. Then with regard to the other plan of having two separate sides to the University, one a London teaching University, and the other a University to give examinations to all comers, do you think that would work?—I notice in this respect two plans. The first is a plan on the principle of the scheme of the Senate which was rejected by Convocation in 1891. With regard to that scheme, I should like, in the first place, to point to certain provisions in it which were objectionable in our opinion, but which were not essential, in order that I may not be supposed to be objecting merely on the ground of blots which could be removed. Such were, for instance, that after an open side and a teaching side had been established, each with its own system and with its own separate examinations for degrees, in the first place, the Medical Faculty should be entirely separated from the Faculties of Arts and Science, and be placed for London as well as for outside medical schools under an entirely different management. That, of course, was no necessary part of a proposal for combination between the teaching University and the examining University. In the next place there was a limitation, to which we objected, to Arts and Science only; thereby excluding the teaching side in London from founding any new Faculties. In the third place there was a serious injury to the Faculty of Science, one of the two that remained, through the refusal to it of a very important element in the Science teaching of the University, namely, the preliminary scientific examination of medical students, or, as I should rather say, from the point of view of the teaching University, of those who are to be medical students, since in a teaching University a student is to be classified according to the teaching he is receiving. This refusal would, as we showed at the time, have thrown our Science Faculty into confusion, and it was one of the points which to the last we never accepted in the proposals of the Senate. In the fourth place there was a limitation to a mere Pass degree.

Setting these aside, we come to consider the scheme on its merits. The Governing Body as proposed was a very large Senate, amounting at least to upwards of 60 members, and this was to administer the separate systems by committees. I do not think that is, on the whole, the best form of Governing Body, but it is a workable plan. An attempt was made to conciliate the opposition raised to this scheme in the country by introducing a separate plan of graduation for provincial colleges. I do not find that that in any degree met the objections either of the institutions of University rank or otherwise, or of those who looked at the matter from the point of view of the more important section of candidates—the great majority—who are private students. I think they still felt that the changes proposed would injure the reputation of the University for impartiality and independence, and in the course of a rather extensive correspondence, I find that many of the most eminent teachers and administrators were of opinion that such a plan as this did not provide them with sufficient security that the external examinations would remain sufficiently independent of the influence of London teachers. The difficulty in forming the Governing Body is very great. London teachers might well have enough influence to injure the open examinations in repute, without having enough to ensure a free hand on their own side; and when you have two systems, administered, or at all events governed in the last resort, by one body, not being similar, crossing each other in various points, and requiring to be considered from different points of view. I think it is inevitable that one system should come to

be preferred by the majority and the other less considered. I think it is probable that there would be a tendency to revert to the old system by breaking down, for instance, conditions of efficiency in admitting new institutions on the teaching side. The past history of the University of London is a very strong instance to that effect. Then again there would be a tendency always towards accepting the open examinations in order to save trouble; trouble to the University in the first place, and expense; and in the next place, trouble to professors of the weaker sort, who would find students coming to them claiming to be prepared for the open examination, and who would desire to avoid the necessity of preparing for two sets of examinations at once. It is very likely that it would be thought a good thing in such a case to accept the open examinations, and to substitute them for the teaching examinations. It would be very difficult to retrace any step of that kind. I think, therefore, that the two systems would tend towards unification; and that we should in the end imperceptibly lose that for which we had effected the change, a teaching system independent of external authority imposed upon it through examinations.

The next plan is that of what I may call for distinctiveness a dual University; that is to say, two entirely separate committees, each of them constituted in the best possible way for its own separate purpose: the one to administer a system of external examinations, the other to administer a London teaching side; and with a Court, to exercise supreme control over both. I use the word Court, with reference to the nature of the work which would come before it, which would be in the nature of appeal or reference in any point where the two sides were concerned, or where they might differ. I think it is workable—decidedly workable. It is a better system I think than that of the Senate, but I do not see any chance of its being accepted by the University of London, either Senate or Convocation, and I am not at all sure that they are wrong in refusing it. It is a great question whether it is worth while for the sake of meeting this mere *primâ facie* objection that you cannot have two Universities in London, to incur the difficulties, dangers, and confusion to which such a proposal, I fear, must give rise.

There is an objection common to all these plans: the dilemma as to one degree or two. If you have one degree it becomes unmeaning, that is to say, it means two things. If you have two degrees, I declare, speaking as an administrator, that I should despair of making the institution intelligible to the outside public. It will be observed that my principal objections, apart from this last-mentioned, of the confusion that would arise, depend upon the improbability, in some respects the impossibility, of carrying out these plans. To that an answer has been made that it was all very well, that the argument was just, some two or three years ago; but that things have moved since then, and that it is much more easy now. I think it would be very important before relying upon any such statement or argument as that to have very strict proof of such an assertion. I do not myself see any signs of it. I am quite aware of all that has taken place, but I do not think it tends towards an agreement upon any particular basis of combination such as I have tried to examine. I think that those who have united together of late to place in the forefront of their programme that there must be only one University, mean by that one University, diametrically opposite things: and difficulties would break out so soon as they were called upon to produce a scheme in detail. I will take, for instance, the association for promoting the establishment of a professorial University which I will deal with in detail hereafter. I think the probability of their success is affected very unfavourably by the adoption of any such ideas as these. I notice that it is not so much the admission of Council representatives, say of University College, as the influence of our professors that is objected to outside London. The members of the Council of University College have in times past in considerable numbers been members also of the Senate of the London University, without any impeachment of the impartiality or independence of the examinations of the London University. Take, for instance, the case of Mr. Grote. He was for a long time the champion of University College on the Senate against the proposals, continually made in those days, to admit institutions which he did not consider worthy of being admitted; but when he found that it had been carried so far as to have constituted a new policy in the University, he changed his attitude entirely and became the principal supporter and even proposer of the proposition of 1857—to throw the degrees open to the world; thus adopting a position which I think would in general be that adopted by a gentleman who held the position of member of the Council of University College, and member also of the Senate of London University. But a teacher is in a different position. It is hardly possible that he should be thought impartial, however much he may be so.

10,690. Is there anything more you wish to say against any scheme suggested by the Senate of London University?—Any scheme for a combination with the London University, does your Lordship mean?

10,691. Any scheme which the University would take lead in in the attempt to perform the function of a teaching University for London. Have you anything more to say upon that point?—Not at present. I think I have covered the ground so far as regards any proposal for a combination yet known to me. I have tried to classify them, and show the weakness in each case.

10,692. Then in objection No. 4 you say: "That to "found another University tends to the multiplication "of small Universities competing for students, and "making a Dutch auction of degrees, as in America." You have already said that you do not think the Gresham University would have a tendency to lower degrees?—I have answered that by implication.

10,693. Do you think it would tend to the multiplication of small Universities?—That is an objection raised by Lord Justice Fry. I do not know whether it is largely held, and I think the question whether other teaching Universities should be founded in England must be considered as having been already answered in the affirmative.

10,694. Then we come to an objection on the ground of procedure?—Upon that, as it is now a matter of history, I have nothing to add. I should wish, however, to add something to the answer numbered 6, that is to say, in regard to the procedure before this Commission, and in regard to the position which is now held by the Gresham Charter. After the hearing before the Privy Council I do not consider that the reopening of the subject before this Commission in any sense implies a rejection of the Charter. Such a rejection is, in fact, one of the points, though it is not the whole of the case which the Commissioners will have to consider. I plead for a full and fair consideration of this Charter. It represents, as the Commissioners are aware, a very considerable amount of labour which was given to it by those who are responsible for that which was the subject matter of the inquiry, namely, University teaching in London. In this connexion I deprecate plans which require Acts of Parliament to give effect to them.

10,695. On what ground? There might be a very good plan which might require an Act of Parliament, might there not?—I deprecate them at this stage, more especially because of the uncertainty which attends proceedings in that direction, and especially because, I think I may say, of the reasons which are assigned by those who have especially advocated proceedings in that way. They are, in fact, proposals of a destructive nature; to neutralise Convocation; to take away its powers; to absorb or otherwise very seriously interfere with the colleges; to repeal the Medical Acts Amendment Act. All those are very serious questions, and I believe will result in postponing a practical solution for many years, if they are raised. You cannot raise one or two of them and not raise the rest. The whole subject would, as it appears to me, be thrown very much into confusion. If it is possible, and I am not urging it if it is found impossible, to make a good scheme for the University of London without an Act of Parliament, then I think the labours of this Commission will be much more likely to result in success.

10,696. You would not object to alterations which would require an Act of Parliament, would you?—So far from that I fully contemplate that as time goes on very considerable alterations will be required, say in the Act of Parliament under which University College is governed, or in the Act of Parliament, it may be, under which King's College is governed.

10,697. A point like the one with regard to the degree given by the Gresham University carrying a

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

qualification to practice would require an Act of Parliament, would it not?—Yes.

10,698. If such an alteration were proposed you would object to it on its merits and not because it would require an Act of Parliament?—I should neither object to it because it required an Act of Parliament, nor on its merits. On the contrary, it would be a very good thing for the University. But to reopen a long-continued controversy upon medical questions which was settled under the Medical Acts Amendment Act, 1886, by an almost unanimous conclusion of those who possessed knowledge and influence on the matter, that there was already a sufficient number of licensing bodies in London, would be a very serious matter. I do not think we should be successful in it. And since the University will work very well without that plan, I am prepared to try the experiment. If my opinion should be found to be wrong—if it were to be found hereafter that it was a very serious drawback for the University—then I think it will be time for the administrators to go to Parliament and say, "We have tried honestly to work the system, "and now we ask you to remove the grievance."

10,699. I do not know whether you would like to go into the merits of that particular point now?—I should prefer to postpone it, because it is a matter which undoubtedly will come more conveniently hereafter. With regard to objection No. 7: "That the adoption of the "name of 'The Gresham University' and the resolu- "tion of the Gresham Committee to support the esta- "blishment of the University afforded an opportunity "and increased the necessity for a revision of the "Charter," I think, perhaps it might be convenient that I should explain what the nature of the understanding arrived at with the Gresham Committee was. It will be remembered that the petitioners failed before the Privy Council in obtaining the name for the University which they desired, the Albert University of London. The words "of London" were omitted. A considerable objection was raised to the name in the mutilated condition as being not sufficiently definite and not exactly appropriate. It came to our knowledge that the Gresham Committee, or some members of it, had devoted attention to the subject and were anxious to confer with us upon it. Private conferences took place and a proposition which was made before the first Commission—not by the colleges but by an individual witness—namely, that some connexion should be established between the Gresham Trust and the University, was discussed. The line open to the Gresham Committee under the Charter was that they should claim to enter the University as a college in it. But there were two objections to this. In the first place it was very doubtful whether, upon the most liberal construction of the conditions of efficiency of teaching the professors and the lecturers of Gresham College could be considered as entitled to enter the University. In the next place it was not desired by either party that they should enter, if they could enter, as a mere college, holding a very inferior position to that held by the other colleges which were mentioned in the Charter. The suggestion was then made that since a name was wanted for the University and buildings, and a central position in London, this was exactly what the Gresham Trust could best afford; and on their part the representatives of the Common Council and of the Mercers' Company, who form the Committee, were very desirous that the most ancient institution for University purposes in London should not be left out, but should hold a position within the University. It was agreed, therefore, that the Gresham Committee should not claim to enter as a college, but that they should take into consideration, and work out after the Charter was established, a plan for giving the University a centre in the city of London.

10,700. I think they only propose to lend the buildings to you? They do not make them over to you, but they propose to lend them?—The whole question was reserved for future consideration. They gave us an assurance of goodwill, and it was given in a form sufficient to show us that it was not likely to end in mere goodwill. What we gave them was the position of honour in the new University. Besides that we got the advantage of the name.

10,701. Since then they have passed another resolution that they would rather work with the London University, have they not?—Not that I know of.

10,702. I think they are rather lukewarm in their support of you now?—I am not much surprised to hear that, because we do not hold the same position now as we did when the Charter was on the point of being passed into law. But I hope that the recent good understanding is not irrevocably lost.

10,703. You do not contemplate getting any part of the endowments from them, do you?—As I say, the whole question as to what the exact nature of the arrangement on their side should be was reserved. They told us that they were not satisfied with the present condition of things—a conclusion which I was not at all surprised to hear—in regard to their educational work; and the whole matter was reserved for future treatment. This might of course result in a change in the trusts of the Gresham endowment, or it might be gradually adapted to the work of the University upon the basis of their present trusts.

10,704. Your connexion with the Gresham institution is not at all essential to your scheme, is it?—No, it is not essential, but it is of the greatest value to it.

10,705. It got over the difficulty of the name?—It got over the difficulty of the name, and it was of the greatest value in other respects. It re-established that connexion which formerly existed between University College and the City of London. There was formerly a very close connexion between the city and the University teaching of London; a connexion of a kind which, speaking from some experience at the Charity Commission, I can say, is by no means a shadowy matter.

10,706. It is of so little importance that I do not think it is mentioned in the Charter, is it?—The Charter had passed the Privy Council before this negotiation took place. I would refer the Commissioners for further information as to the Gresham Trust to the Return which has just been presented to the House of Commons on the motion of Mr. Roby, as a Blue Book.

10,707. Shall we proceed to the "Objections to the "constitution of the University as settled in the "Privy Council"?—I have nothing to add with which I need trouble the Commission until I come to No. 11 on my paper. As the paper will be put in as part of my evidence I do not trouble them at present about the other matters. I should like, however, to add to the statement of the efficiency of University College in particular that we have received during the last 20 years private endowment to the amount of about 200,000*l.*

10,708. You allude further on to the question whether there are other institutions which could also be drawn into the new University?—That is one of the points that I propose to reserve on this occasion.

10,709. Now would you go on with 11?—The Association for promoting a professorial University which has been formed since this paper was drawn up is one which I should prefer to consider as not antagonistic to the objects of those who have promoted the Gresham Charter. It is true that they have, in my opinion somewhat unfortunately, adopted a rather hostile form of expression. But we have much in common with their ideas; and if we differ from them, as we are constrained to do, it is rather upon questions which are outside educational policy, and in points which arise, perhaps, from our having been obliged in the responsible position which we hold to take into account many considerations which are not so evident to teachers engaged in work of a special kind within the various teaching institutions.

10,710. You have not had an opportunity of seeing the evidence of the advocates of the professorial system, have you?—I have seen the evidence of Dr. Thorpe and of one or two others. The evidence of the Secretary of the Association, Professor Karl Pearson, was put into my hands only this morning. At the same time, I may say that I have seen so many of their papers, and the subjects are so familiar to me from a time long antecedent to the foundation of the Association that I am quite prepared to answer any questions put to me, and shall have something to say on my own initiative.

10,711. As far as I gather the main principle of their proposal was that the colleges should either immediately or gradually cease to exist as colleges and be absorbed into the University?—So I understand.

10,712. Do you think that could possibly be reconciled with your scheme?—No, that could not be reconciled with our scheme.

10,713. It seems the direct opposite?—Yes.

10,714. In your scheme the colleges are the main thing?—Yes.

10,715. The University fills rather a subordinate position to the colleges in your scheme, does it not?—No. I shall endeavour to show that that is not so.

10,716. I was noticing you remark that there is nothing necessarily antagonistic between your scheme and the professorial scheme?—It was rather their ideas than their scheme of which I meant to speak. The objects with which they have proposed the absorption of University College did not appear to me to require anything of the kind.

10,717. You would be in favour of a strong staff of University professors, which seems to be the pith of their scheme, or at any rate you would see no objection to it?—I do not attach the smallest importance to their being called University professors, but I should be in favour of a strong staff of professors doing University work.

10,718. It would be a point of minor importance whether they were called college professors or University professors?—They would not be called college professors. At present they are called professors simply. We do not call them college professors.

10,719. They are appointed at present by the Governing Body of the different colleges, and in their scheme they would carefully avoid that; they would be appointed by the Senate of the University, or by some body of that kind?—Yes, that is so, no doubt. That is a detail, though possibly an important detail.

10,720. What does the resemblance consist in, then? Is it in having a strong body of professors?—The resemblance is that we are both alike desirous of a University giving prominence to teaching as its primary work, and governed practically, though not altogether without check, by teachers. In their programme I have to note, in the first place, the absence of any necessary connexion between this scheme and the question which we have been discussing of the one University or two. They have placed it in the forefront of their proposals, but it is quite clear that a professorial University might be established in London independent of the existing University, and I should say also that many difficulties in the way of increasing professorial influence are gratuitously encountered by mixing up with it control over the existing external examinations. The next point is, that they have given, I think, an insufficient consideration to the provisions of the Gresham Charter. A good deal of misunderstanding arises from the idea that the Charter must contain everything that it is important that the University should do, and that it must mention, in some proportionate way, the more important and the less important details of its work. That is not the case with a charter. The shorter the charter the better the University. The fewer the provisions, which are almost entirely of the nature of restrictions, in a charter, the freer hand the University has. For instance, when we pass over leaf after leaf and paragraph after paragraph of the Charter, and find nothing about research, I say so much the better for research. When we find certain provisions inserted with some degree of particularity of a nature which tends against a free hand in matters of education, it does not follow that those are the matters which are of most importance in the minds of those who are drawing the Charter. They were put there in order to satisfy objectors; they are fetters upon the action of the University, inserted in order to meet the objections of outsiders who would otherwise have opposed us. In short, a charter is not a body of statutes. Thus, when I read in the circular of this Association that there is no security for the preliminary scientific training of medical graduates, my reply is that the security is in the nature of the University itself. I do not find in the Charter of the Victoria University, and certainly not in any document which is binding upon the Universities of Oxford and Cambridge, that a security is deemed to be necessary for the preliminary scientific training of medical graduates. If it is objected that from other reasons a conclusion is arrived at that the promoters of the Charter are anxious to have no such scientific training or inadequate scientific training, that is an argument which we will endeavour to meet; but it is not a valid argument that such a security does not exist in the language of the Charter.

10,721. One idea was that the preponderance of the medical profession on the Governing Body and the immense power which the medical profession have altogether in the Charter would tend to make the examinations for medical degrees purely practical, and prevent the scientific education being sufficiently attended to?—That is a very fair argument, and no doubt it requires to be met in detail. Another point is this: It is alleged that there is an intention to admit, or at all events, that there is no power to prevent the admission of institutions to the University which are not of University grade. I think this shows that the provisions of the Charter have been very insufficiently considered. They are, in fact, the same as those which have been found entirely efficient in the Victoria University. Another statement that has been made very freely is that such institutions as the Normal College of Science are excluded from the Charter. That, of course, is not so.

10,722. There is power to admit that?—Yes; there is power to admit it and to have affected to admit it would have been quite out of the question in the circumstances under which the Charter was framed and considered by the Privy Council.

10,723. You would have no objection to admit it if it were possible to do so?—Certainly not.

10,724. The objection to that would be Government control, would it not? It ought to be autonomous if it were to be admitted as a constituent part of the University. Would there not be difficulties in that way?—No doubt. And there are difficulties of another kind which I will deal with hereafter—I do not know whether I ought to call them at this stage impossibilities—but there are difficulties which under the present constitution of the college would render its admission impossible.

10,725. Would you rather postpone that question?—Yes; I would rather postpone it for the present. Then the next point that I would come to in considering the question of professorial control in the University is the question whether the Council in the Charter will be too powerful as regards the teaching body.

10,726. Whether the teaching body will be sufficiently represented or not?—That is one element in the question. I wish to say that the constitution of the University was settled by among others those who were well acquainted with the working of University College, London, through several years. We find that the plan there followed is that of a Council upon which the professors have a substantial representation.

10,727. What sort of number was it contemplated that the representatives of the Crown should be? It is left blank?—The number that is contemplated would be six, reducible after ten years to three if a representation was given to Convocation, that is to say, to the body of graduates.

10,728. The Convocation was to appoint half when it was in full swing?—Yes.

10,729. And the remaining three were to be appointed by the Crown?—Yes. An objection has been raised that the Council in the Charter will be absolute, and that there will not be a sufficient check upon its action by the professors. To that I wish to answer that good administration seems to require that responsibility should not be divided. To make the best Governing Body you can, and to give it absolute power is, I think, the way to manage an institution; but the voice of the teaching body should be carefully secured its proper share of influence in various ways: in the first place, by a strong representation upon the Council; in the next place, by an exclusive position of advisers to the Council in educational matters; and in the third place, by the constitution which has been given to the advising body. I do not mean to insist that the particular constitution we have adopted is necessarily the best. I believe it to be the best under the circumstances with which we have to deal. A different constitution would be that of a *Senatus Academicus* as in Scotland, where, instead of separate Faculties appointing boards of studies, the professors, as I understand, or a representation of them form a common board. It is a matter of detail which of those is the better of two plans. Again, there is a somewhat different plan adopted in the Victoria University. But I think the opinions of administrators of University education in London coming together from institutions governed on different plans to consider the question by the light of their experience are deserving of some respect in such a matter as this. I was going to say that my own experience of 20 years of the working of University College leads me to have some confidence in predicting that in all educational matters, and in every matter in which some financial consideration or some consideration derived from the nature of trusts or similar provisions does not come

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

into play, the teachers will govern this University. They will have matters in their own hands.

10,730. To begin with they will attend more regularly, will they not? — Yes, and they will know the facts of the case with which the University is dealing. Moreover, there will be no inclination in a body formed as we have formed it in any way to go against the advice of the teaching body, except where it appears absolutely necessary so to do. The question whether the Faculties should be divided or put together I may say was decided by us in favour of the division chiefly from regard to the circumstances that the Faculties at present in London are of very unequal size and the number of students very different; the Medical Faculty, of course, having an immense preponderance.

10,731. And it would have a still greater preponderance than it has now in the councils of the college if the faculties acted together?—If the faculties were compelled in all cases to act together that would be so, and if they were bound as a normal thing to act together and were separated only for special purposes, I do not think the separate faculties would have the same power that they have under this provision. I submit the matter to the judgment of the Commissioners, who can consider it for themselves, upon those grounds.

Now I come to the question of the absorption or abolition of University College and King's College; and I would ask the Commissioners to compare very carefully the handling of this question in the Gresham Charter with the handling given to it by the Association. The diversity of tradition and principle between University College and King's College is a thing which exists in society and in the State, quite apart from University teaching in London, and quite apart from the constitution of these colleges. It will continue to exist, and it will find its place in the minds of those who administer the University. We recognise this diversity: we assign strict limits to it; and we provide a University which shall be so far as possible independent of the special considerations to which this diversity gives rise. Our friends of the Professorial Association begin by sweeping away institutions which are at least respectable; which have done their work well, and which are very strongly rooted in the affections of the principal sections of those from whom the University must draw its students. They ignore the impossibility of proceeding upon any such supposition as that King's College will give up its traditions in favour of University College, or that University College will give up its traditions in favour of King's College; and I think we must fairly conclude that, owing to the fact that the University will be undenominational, the result of accepting their scheme would be that King's College would be left out. But supposing that their scheme were successful; that it should be adopted; I say that the antagonism would arise and become the subject of difficulty in every matter that was discussed within the University itself. We should have contests for the appointment of professorships between those who looked at the election from the point of view of King's College on the one hand, and those who looked at it from the point of view which is associated with University College on the other hand. We should have, that is to say, a University which was not in unity with itself and in which no limits were placed upon these contests; which are not after all of the essence of University work. In our scheme we have allotted to each element its proper sphere; we have recognised facts as they exist, and made the best of them.

An objection is raised, then, that the Gresham University is merely another examining body; that we have added nothing to the teaching power of London; that all we have done is to institute a new body which shall examine. That is another point in which I think insufficient consideration has been given to the terms of the Charter. By bringing together the teachers of London, organising them into Faculties, giving them power, not as members of institutions, but as teachers of a University, that is to say, teachers of London generally, we have provided a forum, as I said in my previous evidence — a common platform — for improvements in teaching, the absence of which has been the true reason hitherto why these improvements could not be made. It is then said, "But your inter-"collegiate arrangements are not compulsory"; and in the heat of argument it has even been asserted that they are prohibited by the Charter. That is not the case. To make them compulsory in the Charter would involve a proceeding into detail certainly incurring more than a risk—a certainty—of making a great many mistakes. We are asking for this Charter in order to carry out inter-collegiate arrangements. We have asked for it, because we cannot get on without them; and certainly if after a fair trial it was found that they would not be promoted by the Charter, it would be our duty to go and ask for further powers. These powers, however, are in our opinion sufficient to enable us to carry out very beneficial arrangements for lessening the competition as between institution and institution, as between teacher and teacher, which at present does us all equally harm. I would point to the experience of my own University (Cambridge), and to the history for the last 30 years of the Universities of Oxford and Cambridge, where a system of almost absolute separation of the several colleges has given place, and where a system of inter-collegiate arrangements has become rather the rule than the exception, entirely without provisions in a Charter or an Act of Parliament to compel them, simply from the good sense of the administrators of the institutions who found they were doing themselves harm by going on without these arrangements. Human nature being the same, and the difference of conditions between London and Cambridge not being so very great as to make a difference in regard to this question, I anticipate the same result from the Gresham Charter.

Another objection is that the University will have insufficient power as against the colleges. It is even said that the University will be placed in an inferior position as against the colleges. I do not think that is so. The paragraph that is quoted is paragraph 25 in the Charter. "A college in the University shall not in "any way be under the jurisdiction or control of the "Council, except as regards the regulations for the "duration and nature of the studies to be required of "the students of the college as a qualification for "University degrees or distinctions." With that must be taken paragraph 3, where the University takes power to confer degrees on all persons who shall have pursued a regular course of study in a college in the University. Referring to what I said before, it is evident that what we had to do in this Charter was to fix the limits of interference, and not to describe the powers of the University, except in general terms. It follows that it is the University and not the colleges who will say what "the regular course of study" is to be. It is the University and not the colleges who will say what the "nature of the studies to be required" shall be.

10,732. The University has not power, as the Charter is drawn, over the appointment of the professors of the different colleges, has it?—I will come to that, but I am now dealing with the question of the studies, which, I think, it will be convenient to keep separate from the question of the appointment of professors. I was saying that it is the University and not the colleges who will say what the nature of the studies to be required shall be. That gives the University an almost absolute power, except in regard of such branches of study as are outside the curriculum for any degree; for instance, the Fine Arts School at University College, the classes for preparation for Civil Service examinations at King's College; and I may compare the medical classes at Owens College, which prepare for the conjoint examination of the Royal Colleges in London. In all other respects the colleges are, educationally speaking, I think, placed entirely not under the mere formal control, but under the power of the University to an extent which will be efficient for the purposes of graduation.

The question remains as to the appointment of teachers. This I should prefer to treat in the first place from a somewhat broader point of view than the mere appointment of them, because I notice that an argument is urged against our Charter from the competition which at present exists between institutions, and from the necessity of putting an end to that competition if any improvement is to take place in University teaching. Competition as between teachers is not in my opinion and in the opinion of those whose ideas are embodied in the Gresham Charter a thing to be put down and suppressed in every form. Different systems of competition, different forms, are adopted in different Universities. It may be entirely unregulated, like the competition that existed at Cambridge when the whole of the teaching of the undergraduates was done by private coaches. It may be between extra-mural and intra-mural schools, an institution which has arisen from historical causes in Scotland, and which in form,

I suppose, it would be impossible to introduce into another University. There, as I understand, you have a regularly organised staff of teachers within the University and a more or less regularly organized staff outside the University. Then, again, there is a system under which not exactly monopoly but a privilege is given to a single professor in each subject or in each department to an extent which enables him practically to regulate the whole of the teaching of the University in that department, the rest of the teaching being done by teachers who have not very much power. That, I understand, prevails to a considerable extent in the German Universities. As against all these there is another system, of recognising a limited number of organised staffs, placing the competition between them under check by the University, and giving them a common faculty organisation such as we have arranged, which will tend to a self-acting remedy for the mischiefs of competition. I think there is a good deal to be said in favour of that. We are decidedly inclined to prefer it, and I would call attention in this respect to the very large powers which are given to the University in respect of teachers, to which, I think, not quite sufficient attention has been given. I refer to paragraph 11 of the Charter. In starting a University it is, of course, necessary to recognise more or less existing interests; and I do not suppose any exception will be taken to this being done in the way proposed; that the colleges after discussion should at the first start — nominate their existing teachers under arrangements which seem to them good, who should constitute the first Faculty in the University. But in the case of all other appointments the University is absolute: "Provided that, except in the case of persons designated before the "Council is first constituted, no designation of persons to be members of the Assemblies of the Faculties "shall take effect without the approval of the Council." What would be the position of a teacher in University College, I ask, to whom the University refused admission to the Faculty? Certainly the University would have it in its power to say, "We cannot recognise his "teaching as in any way contributing to the qualification of a student to enter the examination for the "degree." His position would be untenable; and it follows that the University has a practical veto upon the appointment of incompetent teachers.

10,733. One proposal has been to give an actual veto to the Chancellor, and that he should exercise it after consultation with the Faculty to which the teacher belonged?—I think it would be very much better to give it as we have done, to the Council of the University.

10,734. In an indirect way of not allowing him to be admitted to the Faculty, you mean?—Yes.

10,735. Do you think that is sufficient?—I think it is certainly sufficient. I cannot doubt it. There would be no power, it is true, to prevent University College, for instance, from trying an experiment in teaching which the University is not yet prepared to try. That is a power which I sincerely hope will not be taken away. If the University say, "We think your experiment a rash one, or one which in its inception we "think we ought not to recognise as forming part of "the necessary curricula for degrees," then it will be in its power to refuse to recognise those teachers.

10,736. To refuse recognition or admission into the Faculty, but the teaching may still go on?—The teaching may still go on in the college, but the University will be in no sense responsible for it, and it will not lead to a degree.

10,737. Would there be any objection to giving a more decided veto. Do you think the Council, or the Chancellor, whichever you like to trust with it, would be in the least likely to veto a useful or necessary man?—I think my answer would be this: Is it worth while, for the sake of what would come to the same thing, to force us to raise all the questions which would be raised by a repeal of the University College Act?

10,738. Except that you think it not worth while, and that it would entail an alteration of the University College Act, you do not in principle object to a more decided veto, if it were thought advisable on other grounds?—I think I must reserve an objection, although it is one which does not affect the principal subject of our present inquiry. I think if University College is to continue to exist at all, it ought to have that power of trying experiments, even beyond what the University may be prepared to recognise. I do not urge this as a strong practical objection, because I do not think the University would, as we have framed it, desire to prevent University College from trying those experiments. But it certainly would be desirable that each in its own sphere should have a free hand; that the University should have an absolute veto over anything which affects its own teaching, and that University College should have power to develop on its own side.

10,739. I do not know whether this is the time to enter into the subject, but some time or other I should like to ask you your opinion as to the appointment of University professors. Will that come in now?—Certainly.

10,740. At the end of clause 3 the University is given power to appoint lecturers to give instruction in any subject. Would you object to strengthening that by making it compulsory that they shall appoint lecturers, and putting the word "professors" instead of the word "lecturers"?—No, I do not think there is any strong objection to that. I rather object to making it compulsory upon the University that they shall do anything which they will be disposed to do if there is the smallest reason for it. But that is a formal objection, if it is thought advisable that the University should be so compelled. With regard to the second point, questions of title are not to my mind things that we should care to discuss now.

10,741. Would it not put the University in a stronger position if they found they were to appoint professors? A professor is a rather more important man than a lecturer, is he not?—Yes. I should like to discuss that at some length. I notice that the University under the Charter has full power to call its lecturers professors at present. There is nothing to prevent the University from giving titles to anybody. That power can be exercised in favour of the professors in colleges, so as to call some of them University professors, or Gresham professors, or regius professors, (though I do not think the Council of the University ought to call anybody a regius professor,) or, again, it can be exercised in favour of these external lecturers.

10,742. We have had the question raised before us as to the desirability of appointing regius professors?—By a regius professor, I understand a professor who is historically connected with the Crown in some way.

10,743. Appointed by the Crown?—Not always, I think.

10,744. I am not sure about that, but would you object to professors appointed by the Crown?—A professor appointed by the Crown is a professor appointed by the minister of the day. The minister of the day must act on the advice of somebody. I do not think anything is gained by it. I do not strongly object to it, but I think it is better to leave the responsibility where it exists.

10,745. (*Professor Ramsay.*) What do you allude to when you say that under the Gresham scheme the University can appoint professors? To what clause in the Charter do you point?—There is no clause in the Charter which prohibits it from doing so. There is nothing to prevent it from conferring any title upon anybody, unless it is prohibited in the Charter.

10,746. You would not object, would you, to the word "professors" being inserted, instead of "lecturers," to make it beyond dispute?—In addition to "lecturers," do you mean?

10,747. "Professors and lecturers"?—That is the point I am now going to discuss. I am not opposed to it absolutely, but I want to point out a good many difficulties, and a good many considerations which ought to be taken into account. Next to the proposal of giving it as a mere title, which I do not think is a matter for long discussion or of great importance either way, comes the question of appointing professors by way of University chairs, such chairs carrying with them a certain position in the organisation and constitution of the University. I will take for instance an *ex officio* seat upon the board of studies. In framing the Gresham Charter we were face to face with a very serious difficulty affecting this question, which is this: it is the principle of a University such as we were of desirous of founding that there shall be no test as a condition of University office. As is known to the Commissioners, there is a provision at King's College that every teacher must be a member of the Church of England. We were, therefore, unable to contemplate the conferring of an *ex officio* position

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

as a University teacher upon an *ex officio* teacher at King's College. The two could not be combined. What we could not arrange for at King's College it was impossible to claim at University College. Therefore, it was necessary that this *ex officio* position should not be attached to the chairs held in the two colleges, or, of course, afterwards, when they joined us, in the medical colleges. That being so, an *ex officio* chair in the University must necessarily be outside them. It might be filled, it is true, by the appointment of a professor from the two colleges, without his ceasing to be a professor in the colleges, but the *ex officio* chair in the University must be outside the colleges. I do not say that this is an absolute objection, but I say it would require to be most carefully guarded, in order to take care that you do not proceed in the direction of forming a third college of arts and science, which shall be the special property and pride of the University, and which will, therefore, operate injuriously as against University College and King's College. In the first place, it will be sheer waste to do so; in the next place, it would be objected to, and with justice, on the part of the colleges. But, supposing that it can be arranged that there shall be *ex officio* chairs established in the University to which individual professors at University College and King's College can be appointed without vacating the chairs which they at present hold, and supposing it can be guarded against developing into a third working staff, which is not yet wanted, costing a great deal of money which would be wasted, then I think the objection might be met.

10,748. (*Chairman.*) You would not put it in the Charter that they must be professors of King's College or University professors. Would you leave that to the discretion of the University?—Yes, I would leave that to the discretion of the University.

10,749. You would not put that in the Charter, but you would leave it to the good sense of the Senate not to do what you are afraid of. Is that so?—I would do so provided that the Council of the University was so constituted that the colleges might have a fair expectation that their influence would prevent any injurious operation in that direction. Then there is one remark that I should like to make about No. 13, that is in regard to a proposition which I notice has been made to the Commissioners, that these University professors should give something which is called the highest, or which is otherwise defined as post-graduate teaching, and so fill what is considered to be a gap in the present teaching of the colleges. I do not recognise the existence of any such gap; but the teaching of the colleges is not so perfect as it ought to be, I admit, because failure of resources and the difficulty of forming classes prevents us from doing all that we should hope to do under a better system. I submit, however, that it is very difficult to separate this higher teaching from the rest. It would be most injurious to the spirit with which the work is done, in the lower teaching more especially, if that lower teaching were to be given by separate staffs in colleges; that it should be supposed to be different in some way—ruled off and divided—from something else which is called the higher teaching. In regard to post-graduate classes, that is no doubt emphatically a thing which the University might see fit to start, but we should object to any proposed debarring of University College from carrying on, as it does at present, a very considerable amount of work of this kind.

10,750. Then No. 14?—The question of dismissals is one, I think, which does not require much consideration. Of course, it is a very special matter, which hardly ever arises, and the system which we at present pursue at University College gives sufficient power in that respect. With regard to the details of the system of appointments I can confidently recommend, from long experience, the system pursued at University College, which I should like to describe. The Council having absolute authority makes the appointment, but it proceeds in all cases upon a detailed report by a Committee of Professors appointed for the purpose and consisting chiefly of those professors whose subjects are more nearly related to the subject of the chair which is vacant. That report upon the testimonials and qualifications of the candidate is very full, and goes into particulars upon every point. It is most carefully considered on every occasion by the Council with the result that, in my experience, which, as I have said, extends to 20 years, the Council has never seen occasion for differing from the report of the professors except upon one, or at the most, two occasions, when the considerations involved were not so much the personal merit of the candidates as questions of organisation, which were more especially within the scope of the Council. Therefore, practically, it comes to this: that a committee of experts does the work of making the appointment, and the Council assumes the responsibility, being in close touch with that committee, members of which are generally represented at the sitting upon the Council itself.

10,751. Does that apply to King's College as well as University College?—That I am not able to say, but at University College this system is pursued, and it is, as I conceive, the system pointed to by the arrangements of the Gresham Charter. Some of us certainly contemplate, and I have not much doubt that the college would be ready to contemplate that if the University were established upon something like the lines of the Gresham Charter it would be possible to transfer this work of recommendation and dealing with the testimonials from the informal Committees of our own professors to a committee of professors appointed by the faculty at large.

10,752. By the University Faculty, you mean?—Yes, by the University Faculty. You will see the importance of this suggestion if I add that it will practically give the appointment of the professors at University College, if experience in the future is similar to that which it has been for the last 20 years, to the University as distinguished from the college.

10,753. That would be giving them more than a mere veto?—Yes, it would, and it would be giving what is very much better than a mere veto. A mere veto is not likely to be exercised except in an extreme case. It is more valuable that a right choice should be made in the first instance, a choice made not by the council but by a special committee of professors. If it were made in the University by a special committee of the professors who are teaching in the University at large, I myself should consider it a fortunate thing, and one of those changes for the purpose of which this Charter was to be obtained. I give that of my own authority, and not as a conclusion come to by the council. I say it is merely one of those points which the council is considering or is ready to consider from the point of view of a desire to move in the direction indicated. It will be an entire mistake to suppose that the Council of University College, in the future any more than in the past, will be setting up institutional considerations as against the interests of the University.

10,754. Your plan would not apply to the other colleges necessarily if they were affiliated. It could not apply to King's College because the University could not have the appointment of professors who would have to submit to a test?—It will be observed that I am not proposing that there should be a formal change in any respect. The Gresham Charter will stand as it is at present and there need be no verbal addition to it, but free action will be obtained within the limits of the Charter so as to confer very much greater power on the University element. I would only add that I think this is pre-eminently one of those questions the solution of which ought to be left to be worked out hereafter by the administrators of the University, and not forced upon them by the Charter. It will be understood that I can only speak for myself on such a point as this. Whether the Council will follow or adopt such a plan I cannot say, but if in all these matters a free hand is left, and goodwill exists, the best result is pretty sure to come about in one way or another before many years are out. And where such concessions have been already made (some of which I have pointed out) by the governing body of the college to the new body, and embodied in the Charter, it is at least reasonable to consider that the administrators of the college would be prepared to move forward in the same direction hereafter.

10,755. I see with regard to the question of dismissals, the University has the power of refusing to recognise the lectures of a professor whom it disapproves of?—I suggest that that practically amounts to sufficient power to ensure, if not a dismissal, at all events a resignation of a professor; but it is far better, of course, that what are spoken of as dismissals should be conducted in a different way. If a professor for any reason—and sometimes very eminent men are in that unfortunate position—is unable to keep a class together, it is generally sufficient to suggest the point to him privately. I do not think it is a matter to be considered when the business before us is that of drafting a Charter.

10,756. Shall we go now to No. 15?—I shall be quite ready to go on if it is wished, but that was the point where I proposed to stop in my evidence to-day.

10,757. Would you rather reserve anything else you have to say to a later stage?—Yes.

10,758. (*Professor Sidgwick.*) Might I ask a question upon one point for explanation. I do not quite see that the University has the power stated in the answer to Objection No. 14. "Although the University can-" not dismiss at pleasure, it can render the position of " a defaulting professor untenable, by refusing to re-" cognise attendance on his lectures as a condition in " the qualification required for a degree." It does not appear to me clear that it would render it possible to say that a course of study given by a professor was not a regular course?—I think the regulations which the University takes express power to make in the nature of an exception under Clause 25 as to the nature of the studies to be required would cover that.

10,759. Do you not think it would be better to have some clause to make the power designed to be conferred more clear? Would you see any objection to that?—No, certainly not. I would submit, however, that it is an inherent power in the governing body of a University that they should say such lectures, and no others, shall be taken into account as giving the attendance qualification for degrees.

10,760. (*Bishop Barry.*) I think I gathered from your evidence and the table that you put in with regard to the examination of the University of London, that you considered that at present it serves principally for those who would be, as far as regards the Gresham Charter, outsiders?—Yes.

10,761. It has been suggested to us that the University of London might perform the office of the teaching University as its primary duty, and might make its examination of what I have called outsiders, especially private students, secondary. Do you think, judging from the experience of the University of London, that that would be possible?—No, I do not think it would be possible, even if the Senate and Convocation were prepared to accept it; but so far as we have any knowledge of the opinions expressed by the Senate in the first place, by Convocation in the second place, and by those of the outside public who take an interest in the matter in the third place, we do not think it has been approved by either.

10,762. That is true; but I was supposing it to be accepted in spite of those difficulties. You are of opinion that it still must occupy a primary place in the work of the University?—That the external examinations must?

10,763. Yes?—I can, of course, conceive regulations under which the present existing examinations of the University of London with their crowds of candidates were absolutely placed under the control of those who would regard them as secondary. It is conceivable, but it is impracticable; and I would add that it is not to be recommended, even from the point of view of those who desire to see a teaching University founded.

10,764. The second point, which I think you brought before us, was that the scheme for performing all functions by a single University would not only be somewhat cumbrous in working, but too heterogeneous in idea?—Yes.

10,765. And that, therefore, it would lead to internal conflict, resulting in failure?—Yes, it would lead to internal conflict, and that might result in failure. What I should rather anticipate would be that it would lead to a gradual reverter to the old state of things.

10,766. You mean the present state of things?—Yes, a gradual reverter to the present or former state of things, owing to the natural tendency to abolish the limits and break down the conditions under which alone the new work can be done.

10,767. The third point that I think you brought before us was that in your opinion the two chief objects of those who advocate a professorial University could be attained under the Gresham Charter: those two objects being, the giving a primary place to teaching as distinct from examination, and the giving a large share, not unqualified in the government to teachers?—That correctly states what I meant to say.

10,768. You would not wish the power of the teachers to be unqualified by what we may call lay influence from without?—No, I think they themselves accept that.

10,769. That lay opinion would be partly represented by the Crown nominees, I suppose?—Yes, and very well represented.

10,770. Would you object to a larger infusion of Crown nominees, than the very small number of six which was contemplated?—No, I should not, but it is necessary to keep an eye upon the gradually swelling numbers of the Council. The reason in connection with this matter which has induced us to make rather a point of having three representatives of the Council of University College is that we think it necessary that the two institutions should be in touch with each other, and we do not see how we can do it unless the work is distributed among three at least of our Council. It is not that we want a large number of votes on the Council.

10,771. Have you ever considered the question whether the difficulty of a very large Council could be obviated by some plan like that of the Victoria University, where the body called the Court is very seldom called together—it is only, I believe, called together for great legislative purposes—and the Council constitutes the real executive?—Yes, that was carefully considered by us. In fact, I may say that in forming the Charter we started from the provisions of the Victoria Charter as our basis. We decided to accept what we looked upon as the more efficient system of a single Council. It was not so necessary for us as it was in the case of colleges scattered over a large number of towns to provide for a large number of outside elements; but if it be found for other reasons than those that were present to our minds that many new elements must be introduced, I think the direction in which the question points would probably be the correct one. That is to say, if our Council is forced up beyond its present number, or even if it stands at its present number of 38 or 40, which I think too large, I do not know whether I might not say that it would be well to contemplate the bi-cameral system.

10,772. The number would be increased when fresh colleges came to be included in the University?—Yes, but we have tried to meet that by taking power to revise from time to time the representation of colleges. I may say that was done with no determination to exclude from consideration even the present number of three, which we consider to be the minimum for University College.

10,773. With regard to the general ideas of the professorial University, we have it laid before us in evidence that the body of professors at University College, which I think is called the Senate, had passed a vote upon this subject as against the Gresham Charter, and in favour of the scheme of the professorial University. Are you cognisant of that fact?—Yes, though I should not call it a vote against the Gresham Charter.

10,774. The resolution has been put in evidence?—Yes, it was put in in Professor Karl Pearson's evidence. I will read it:—"That in the opinion of the " Senate the appointment of the new Royal Commis-" mission on the reconstruction of the London Univer-" sity offers an opportunity for a more complete settle-" ment of the question than has hitherto been possible, " and, with this view, the Senate respectfully urges " the Council to join with the Senate in adopting " a resolution to the following effect, such resolution to " be transmitted to the Royal Commission: 'The Coun-" 'cil and Senate of University College would view with " 'favour the establishment of one homogeneous Uni-" 'versity for London, consisting of a supreme Govern-" 'ing Body on which the teaching staff would be " 'largely represented, together with Faculties com-" 'posed in each case of professors, readers, and lec-" 'turers appointed by the University. The teaching " 'might at first be carried on in the laboratories and " 'lecture rooms of the existing London colleges. " 'The Council would be prepared to surrender many " 'of its rights of control over the teaching and funds " 'of University College to a central body constituted " 'on such lines, provided that other institutions " 'were willing to act in the same spirit.' That in the " event of the Commission finding it impossible to " establish a single homogeneous University for Lon-" don, the Gresham Charter be then modified by the in-" troduction of special provisions: (1.) For University " degrees in medicine connoting a certain standard " of literary or scientific education"—(this paragraph is what I alluded to when I said I did not regard the resolution as hostile to the Gresham Charter). "(2.) For " possible future amalgamation of the constituent

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

" colleges under one central Governing Body). (3.) " For the appointment of lecturers and teachers with " power to lecture or teach wheresoever the Univer- " sity shall give its sanction. (4.) For the future " appointment of teachers by a central board."

10,775. Can you tell me the number present when that resolution was passed by the Senate—or the proportion, I had rather say, to the whole body of teachers?—There were present 12 professors.

10,776. Out of a possible attendance of how many?—The number of professorial Chairs in the college is 45, of whom, I suppose, about one-fourth may be considered as practically not in attendance at the Senate.

10,777. (*Mr. Rendall.*) Are they medical?—No. The medical professors are mostly in attendance as a rule. I do not mean that one fourth are absent from attendance at all meetings; but there are a certain number of professors who represent what I may call the experimental teaching of the college, its attempts to form classes for the encouragement of new studies; for these it is necessary to appoint professors who do not spend all their time at the college, and who are only occasionally at the Senate meetings.

10,778. (*Bishop Barry.*) I presume that all were summoned to the meeting?—Yes, that is so.

10,779. And they would all have known what was to be brought forward?—Yes. I do not think any important conclusion ought to be drawn from that. The Senate being a purely consultative body, a considerable number of its members only attend casually, even when important subjects are under discussion. I have been five years President of the Senate, and I speak from knowledge.

10,780. You take one-fourth off, leaving about 34 who might, presumably, have attended, out of whom there were present 12?—That would approximate to a correct statement of the case.

10,781. May I ask whether the Council of University College have had this proposal under their consideration?—No, no one moved it at the Council. It was presented, but of the six professors who hold seats at the Council none of them moved that resolution. Other resolutions were moved, but that particular one was not moved.

10,782. Then it practically went by default, so to speak, in Council?—Yes; it would be a mistake to say that the subject matter of it went by default, but in that form the resolution was not pressed upon the Council.

10,783. Was it pressed upon the Council substantially in another form?—Yes.

10,784. May I ask—if I have a right to do so—whether the Council of University College in that other form came to any conclusion upon it?—It came to a conclusion that it would add nothing to its previous utterances upon the subject for communication to this Commission, but would be represented by Professor William Ramsay and myself, in addition to the president who had already been mentioned to the Commissioners.

10,785. There are a few more questions which I should like to ask, although they do not quite touch the point you have brought before us. Should you object to the inclusion of other colleges in the original draft of the Gresham Charter if they prove themselves worthy of such inclusion?—No, we should not. The principle of such admission upon the terms of the Charter is the one upon which we are proceeding.

10,786. I mean in the original draft of the Charter—to be mentioned in the Charter side by side with the two great colleges and the medical schools?—No; the only additional advantage that they would obtain except in point of dignity, would be that they would have the power, like ourselves, of nominating the first teachers to represent them on the Faculty.

10,787. And that they would secure admission instead of having to ask for it?—Yes, of course I am not assuming they would secure it if they asked for it afterwards.

10,788. I pass to the question of the establishment of a University professoriate. Do you see any objection to that in principle—I mean to the extension of that provision of the Gresham Charter so as to make the establishment of a professoriate an important point in the Charter?—I think the purport of my evidence was to show that there were objections, but that they were not insurmountable.

10,789. I should like to ask you a question upon one objection you named with regard to the position of a professor at King's College. The proposition would be that the University should appoint any persons, whom it chose, as professors, whether they were or were not included in the staff of the colleges?—So I understand.

10,790. In that appointment of course there would be no question of any test whatever?—No.

10,791. But a person who, for another purpose, had thought fit to submit to a test, would not by that be placed at a disadvantage, if he were otherwise fit?—He would be eligible.

10,792. Must necessarily be eligible?—He would be legally eligible.

10,793. Hence I do not quite see that the difficulty that you stated would at all militate against the appointment of a King's College professor to be on this professoriate, whether retaining his chair at King's College or not?—No. That difficulty would militate against the other proposition, which was that the University should constitute, say, the Grote Chair at University College a University Chair.

10,794. That is not what I was contemplating. I was contemplating an independent appointment?—In that case I agree with the answer indicated in the question.

10,795. Do the promoters of the Gresham Charter contemplate the taking up, and the carrying on of what is generally known as University extension work?—Yes, that is so. I need not of course say—it would be no news to you—that a large amount of that work is at present done at King's College. At University College we have not seen our way to do University extension work in the popular sense of the word. But we are in co-operation with the Society for the Promotion of University Extension in the shape of giving facilities for higher teaching to students recommended by the Association.

10,796. Your opinion is that the constitution of the University on the lines of the Gresham Charter would rather further than hinder the work of the University extension as ordinarily understood in London?—I think there is every reason to believe that it would further it.

10,797. It is now done by independent institutions, but it might then be done by institutions co-ordinate in a University?—Yes, it seems to me that those who are at present engaged in carrying it on might be utilised by the University for the purpose.

10,798. And the present University extension committee would not be interfered with by the University?—I could quite conceive it to be possible for a committee to be formed to carry on under the direction of the University the same work, and consisting approximately of the same people who are now carrying it on.

10,799. Lastly, with regard to post-graduate courses, I think you did not at all object to their being taken up by the University professors if existing, but only to their being taken up by them exclusively as though the colleges were unable to carry them on?—That is so. There is, of course, a possibility that the attempt on the part of the University with inferior means for the purpose to start a particular study might be recognised as a reason for prohibiting the college which had better means for doing it from starting it. But I think that had better be left to the good sense of the council.

10,800. (*Professor Ramsay.*) At the beginning of your evidence you laid down this principle: that a degree might be made easy without lowering the standard. Would you explain exactly what you mean by that?—I will give a partial answer to the question. A degree may be made more difficult by arrangements which in no degree require that the student should be more proficient, or be better prepared, but which at the same time increase his difficulties in satisfying the examiners; as, for instance, if too many subjects are examined upon at once, or if the times, seasons, and arrangements are not well put together. There is also, I am aware, a great deal more to be said on the question, but as that would take me too far into matters requiring professional knowledge as a teacher, which I am not,

I think I should prefer to limit my answer to what I have said.

10,801. I suppose that answer refers to the objections which have been raised to the London University degree?—That answer would cover a good many of those objections.

10,802. And it would remove the objections of those who urge that the Gresham Charter, because it wants something different from the London University degree, therefore requires something in the nature of a lower degree?—It would, in my opinion.

10,803. Then you think there is a mode of making the degree attainable without in any way impairing the high character of the examination?—Yes.

10,804. May I ask whether it is the case (I think it has been referred to already before the Commission) that you made a speech upon the subject of the future opportunities to be opened up to medical students by the Gresham Charter? I think you are reported as having said that you contemplated that the ordinary licentiates of the Colleges of Physicians and Surgeons, even in past years, might be admitted to a degree under the Charter. Is that a correct representation of what you said?—No, it is not. It is a mistake which I will not say might not have arisen quite naturally. It is due to a very imperfect and inaccurate report of my speech which appeared at the time, and which unfortunately I did not see; but I have corrected it so often, that I do not know that it is necessary to go into the matter of my speech again.

10,805. Did you contemplate that the Gresham Charter would admit to a degree students who had gone through their course before the Gresham University was founded? The Gresham Charter gives such power?—It is a legal question whether the Gresham Charter gives such power. It is distinctly my opinion that it gives no such power.

10,806. And you have no desire to see such a power conferred by the Charter?—It is not a matter on which I entertain a strong opinion either way. I think such a power as is exercised by the University of Dublin, which gives a few honorary degrees in medicine, has been beneficial to that University. At the same time it would be a very difficult power to administer, and my first impression when the Privy Council struck it out was one of relief.

10,807. Nor do you desire that the qualification given upon the examinations of the Colleges of Physicians and Surgeons should in itself entitle a candidate to a University degree?—No. As the question has been raised I should like to state what I really did say. I was speaking to a mixed audience of teachers and students, by invitation, and in contemplation of the speedy establishment of the Charter. I said that as far as the students were concerned, to whom I was making a dull speech, it might be of interest to them if I pointed out the advantages which the Charter was likely to confer on them, and since those present might say, "It will be of no advantage to us that the Univer-" sity will now be established, we having proceeded so " far in our course that we cannot begin again," I pointed out that the Charter is drawn with sufficient liberality to allow of temporary arrangements of a transitional kind, not for the students who had completed their course, but only those then engaged in their study. Secondly, I said, turning to the teachers, "I hope it will be carefully considered in " the several medical schools during the coming win-" ter, whether it is desirable that we should establish an " M.B. degree." I was speaking from representations which had been made to me by many leading members of the profession as to what was desirable. As is well known, we should have to contemplate the incorporation of the examination system of the Conjoint Board or of the Society of Apothecaries to a certain extent into the system of examination for degrees, because a license would be a necessary condition of a degree. There are parts of this examination system, in particular that of the Conjoint Board, which are at least as high as those of the University of London, and which merely duplicate the examination of the University of London in a way which I think is a mischief to undergraduates. It may be—I was informed that it was so—that among these was a considerable portion of the examination for the M.B. degree. If that were so, or if it were likely to be the case that the examination for the M.B. degree in the new University would merely duplicate an examination satisfactory to the University given by the Conjoint Board, it might be worth while to omit the M.B. degree from the curriculum, with a view to lighten the heavy burden of examinations to the medical student. I expressly guarded myself against the supposition that the University would dispense with a high standard of general culture, and of science in the preliminary examination.

10,808. In pointing out the incompatibility between the course of a University which merely examines and that of one which teaches, you quoted the fact that the average length of an undergraduate's course is six years and one month, and that a course in London University of that kind must necessarily differ from a course supposed to be concluded in three or four years. May not the fact that the London University course is so long be due to the fact that those who work for that degree are actually engaged in the work of life? They can only give a portion of their time to study, and, therefore, in the period of six years they perhaps gives no more time to study than would correspond to three years' unbroken study in the case of a student who had nothing but study to attend to?—That, no doubt, is the reason of it.

10,809. I daresay you are aware that that sort of thing prevails in the Scotch Universities—and I have no doubt it is the same in the Victoria University—that there are a good many students who prepare for degrees after they have entered upon professional work. Such students may be schoolmasters or lawyers or engaged in various kinds of business; they can only give a limited time to study and to attendance on classes, and therefore their course spreads over a period of five or six or seven years instead of being completed in three or four. Does it necessarily follow that the courses taken by two students are different, because one has given his whole time to it for three years, and the other half his time for six years?—I think so. I think examinations best suited for one set of cases would not be in all respects the best for the other set.

10,810. Why not? Could you give particulars?—No, I do not think I could with advantage give particulars. I have had a good deal of rather wide than frequent experience of examining, but I have not been a teacher, and I give this only as a general conclusion which I am not prepared to establish in detail. I may mention this; a student who is, as you say, studying at intervals over a long series of years, is taxed very differently in respect of memory as compared with a student who gives his whole time to study, and goes through a thoroughly efficient course in a short period of time. Again, a student who is of mature age has very different powers from those of a student who is a mere youth, from 17 to 18 and so on up to 21 and 22; and also, the scattered positions of the students render it necessary that the greater part of their work should be private study, and that the teaching given to them should be only casual. This last is of course part of the larger objection to an attempt to assimilate an external examination system to one which directly follows a given line of teaching.

10,811. The two first reasons show that the student approaches the examination under different conditions. Do they show that the examination itself need necessarily be modified to suit him? The matters of memory and age would occur in all examinations. Would you make special examination for older students in which the call upon memory should be less?—I think the conditions of protracted examination would be different in regard to a course that was so accomplished, and one that would be in the shorter time.

10,812. With regard to the question of memory, one objection raised against the examinations of the London University is that they test memory too much and in general mental power too little. You contrasted the two systems. In one case the examining is controlled by the teaching; it is the actual business of the examination to follow the nature and the cast of teaching so far, you said, as even to follow the views of any particular teacher who might have a peculiar line of his own. If you look at the great teaching Universities, is that quite borne not? Is it the fact that in Oxford and Cambridge the examinations are modified from year to year with a view to the teaching of the particular teachers?—Yes.

10,813. Is it not rather the case that Oxford and Cambridge have traditions of their own which operate very powerfully, so that an examiner who desired to start some new line of examination would probably not

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

get a chance of bringing his ideas into play?—To that extent Oxford and Cambridge fall short of the ideal teaching University.

10,814. Can you mention any teaching University in which the teaching is year by year flexibly adapted to the idiosyncrasies (it may be) of special teachers?—I was not speaking of idiosyncrasies of teachers at large, but of a particular eminent teacher who by the effect of his teaching and its success, and the inspiring nature of it, effected a change in the teaching. Then I say it is important that the examination should follow that change, and should follow it without delay.

10,815. Is not that rather an *à priori* idea than a state of things which you can point to as existing in any examination in any teaching University?—I could point to instances in various systems of examination with which I have been connected; and in describing an ideal, I think that is the extent to which I should be disposed to carry the exemplification of it.

10,816. Taka the case of Dublin. In the first place, I suppose you will grant that there is a distinction between a teaching University which superadds mere examining to teaching and an examining University which superadds teaching to examining?—There must be a great deal of difference; no doubt of it.

10,817. You spoke about Dublin, and you spoke rather, as I understood, condemning the system there pursued. You said there was no attempt at impartiality or independence in their examinations?—No; pardon me. I spoke not as condemning the system at all; I was merely attempting to describe it. The impartiality and independence which are claimed for the examinations of the London University are excellent qualifications apart from any question as to Dublin; but the Dublin system is none the worse for that.

10,818. Did not you say that in the Dublin system there was no attempt at impartiality or independence?—So I understand.

10,819. In what sense did you use the words "impartiality and independence"?—Impartiality as between the lecturers who have given the teaching the term before at Dublin and the lectures or other teaching to the student who comes from England or the country parts of Ireland the next term to attend examinations.

10,820. But supposing the examinations proceed upon a regular curriculum and plan, and are fairly drawn up with a view to that plan; and supposing further—I do not know whether it is the case in Dublin, but it is the case in Scotch Universities—that there are external examiners to see that the examination is a perfectly just one in relation to the curriculum of subjects prescribed for it; could you say then that the examination failed in impartiality or independence?—Putting the Dublin system on one side, which I do not think is correctly described in the question, I should say you would not have arrived at impartiality.

10,821. But why put Dublin on one side, which is exactly a case in point, and the only existing case? Do you mean that if a teaching University in London had the best possible teaching, and contrived the best possible examinations in relation to that teaching, such examinations would necessarily lack the element of impartiality and independence with regard to other students coming in from outside to be examined. Is that so?—I cannot doubt it.

10,822. You alluded to the subject of extra-mural teaching and the debate upon it in the House in 1889?—Not that upon extra-mural teaching. The debate in the House to which I referred was upon a proposition to add the external examination system to the teaching system of the Scotch Universities.

10,823. Are you sure that was the subject of the debate?—Yes.

10,824. Not the extra-mural system?—No.

10,825. That is a separate question, is it?—Yes.

10,826. The extra-mural question is simply a question between the professor who belongs to the college or the University and the professor who is external to the University but yet authorised. You are quite aware of that distinction, are you not?—I think my evidence shows that I was aware of that distinction. I merely alluded to the question of intra-muralism and extra-muralism among instances, different plans of ensuring competition between teachers.

10,827. I do not think there was ever a serious proposal to have a mere examining system in Scotland. It was suggested by some members of the House, but it certainly was not seriously taken up. You referred to Mr. Wallace. Perhaps he moved an amendment on the point?—The debate was of some importance, and ended in a division. It was taken part in by several speakers, and the numbers on the division were sufficient to show that a good deal of interest was taken in it. I think the numbers were 164 with the majority and 77 with the minority.

10,828. Although your desire is to see the existing colleges taken as the foundation of the London system, you have no objection, I understand, to the extra-mural system, that is to say, that there should be some teachers recognised by the University in special branches or in special localities independent of the colleges? You quite recognise the possibility of there being a class of teachers not included in the colleges?—My knowledge of the system is not sufficient to enable me to give an answer. I understood that the extra-mural school in Scotland was an organised working staff outside the University.

10,829. Yes; a staff of teachers outside the University, who may individually be recognised for University purposes?—Extra-muralism appeared a proper term by which to describe that system. I ventured to say that whatever the result of working it out in practice might be it was hardly one that could be founded in a new University. In this I was not speaking of such a competition as may exist between *privat docenten* and professors.

10,830. Now taking the plan of the Gresham Charter, do you not recognise the possibility of a conflict between the college and the University, and of that conflict having rather a tendency of preventing a widening of the University and its teaching?—I certainly recognise that there is room for a conflict between the college and the University in various ways, but whether that would be in the direction of preventing the University from widening its teaching I very seriously question. I do not think that is a danger.

10,831. At any rate you do not at all desire to see the initiative of new teaching confined to the colleges?—No, nor confined to the University.

10,832. You mean that the University should have power over all London if it thought fit to recognise colleges or teachers so as adequately to meet the demand for higher education in London?—It would not be enough that it should have full power to recognise colleges or teachers with a view merely to the demand. It is rather to a perfecting of the supply than to a meeting of the demand that we have to look forward.

10,833. You mean there is nothing in the Gresham Charter which would keep the University from such natural and proper extension as might be desired?—I do not think there would be.

10,834. When you spoke about the institution of a body of post-graduate teachers you said special care must be taken to prevent a body of that kind from becoming an organised body like a college so as to interfere with the action of the colleges—in other words, I suppose, to compete with them. Is not that an instance of the very thing I am pointing to?—I distinguished between two proposals, which I think the question takes as one. The first was the establishment of a separate organised staff in the University which would compete with the colleges; and the second was that teachers appointed by the University should give the higher or post graduate teaching, and deny the colleges the right to expand or develop their teaching as they saw occasion.

10,835. But you expressed a fear that teachers responsible only to the University, and appointed by the University, might interfere with the work of the colleges?—Yes, I deprecate very much the idea of setting up a third college if I may say so. I deprecate the idea of setting up another college until the occasion for that college is clearly made out.

10,836. But one point of the Gresham Charter was that the University was to have power to admit new colleges where it was thought desirable?—No, only where such colleges had succeeded in supplying the very severe conditions of efficiency.

10,837. Then you would object to the University taking the initiative and doing its best to found a college in places where the University might think it was needed?—No, I would not object to the University doing so in places where the University might think

they were needed, but it must be remembered that no such college, merely because the University founded it, would be admissible until it fulfilled the conditions, and it would depend upon the amount of public support in the first place in the way of endowment.

10,838. You rather implied that the tendency of the two colleges would be to prevent the admission of new colleges, and that they would act rather as retarders to the extension of University teaching than as promoters of it?—We distinctly recognise that the tendency on the part of existing colleges will be to keep up the standard in the case of the application of a new college. For that reason we have inserted in the Charter that there shall be an appeal to the Privy Council.

10,839. Supposing the University were anxious to extend its teaching in London there would be a conflict of interests—the colleges desiring to keep things as they are, and the University desiring to make extensions?—I do not think it is fair to pit them together in that way. Of course the extension of teaching power of which you are now speaking would not be in the colleges.

10,840. Then you do not object to what we call extra-mural teaching, that is, of recognising teaching outside the colleges?—If it means recognised teaching outside, we have provided for it; but it will generally be better to establish these teachers in connexion with one or other of the colleges, because it will prevent the necessity of finding new places for them to lecture in, and that of carrying the students about from one place to another in their work.

10,841. Passing to the constitution you laid down the proposition that the shorter the charter and the less it contained the better; and the more free the hand given to the governing body, the better it would be. That is, I suppose, on the supposition that you have the best governing body that can be devised?—Yes.

10,842. Do you think it altogether in accordance with precedent that in a complex University system with many interests, and especially one which will present so many new points as a teaching University in London is sure to do, the whole government of the University should be in the hands of one single body? Are you not rather thinking of the state of things in schools and educational establishments of a less high character?—No, certainly not. In schools the system is entirely different. There, one man is the governor.

10,843. I am speaking of the governing body?—The governing body in schools is really only a superintending body. It is recognised that the work is to be conducted by the headmaster. If they are not satisfied with him their remedy is to dismiss him.

10,844. In most Universities there are two or three academic bodies representing different sides of academic life; does not the mutual action of these several bodies on one another, each with its own place and function in the constitution, tend to produce careful and wise decisions?—The Gresham Charter is certainly altogether free from objection in that respect. It has been made a considerable objection to it that we have preserved such bodies in the University.

10,845. But the whole power is lodged in one single body. There is no constitution; the Faculties have only a consultative voice; the whole authority rests in the governing body?—Are you not ignoring the colleges?

10,846. I am speaking of the University?—I am not making any sharp distinction between the colleges and the University.

10,847. There is only one body in the University which has any power, the Senate?—The Council of University College will be one such body within the University, and the Council of King's College will be another. There are a considerable number of those checks in the way of mutual action of associated bodies of which you speak.

10,848. But they have no place in the constitution of the University except that they send representatives to the Senate?—They will have a great place in the work of the University.

10,849. You surely do not consider the constitution of each college at Oxford and Cambridge as a part of the University constitution?—Well, I should do so, if I were speaking not as a lawyer, but were trying to give a description. But can I compare the colleges at Oxford and Cambridge with our colleges, which are small Universities?

10,850. Looking to the fact that you propose to have one single University body in which all power is to reside, is it not too much to ask that that body should have an absolute free hand with regard to what is to constitute the course of study, how many years are to be required, and so forth? Is not the opposition roused against that part of the scheme a natural opposition on the part of those who demand that the University of London shall give the same guarantees for wise and careful legislation which are afforded by the constitutions of the older Universities?—Is not the right way to solve the question how to obtain efficiency in an institution to put one body at the head and make it entirely responsible, and then to provide the checks of which you speak in the shape of well-organised bodies which deal with separate subjects and have a large influence within the governing body itself? I put it as a question, because it is a point upon which I should be sorry to speak too positively; but I have had considerable experience in the making and working of schemes of various kinds, and that certainly is the conclusion of others besides myself.

10,851. This University has not only to deal with London, but it has to consider the other Universities in Great Britain. The Gresham Charter has roused considerable apprehension. Would it not be well to allay those apprehensions by providing a constitution which would satisfy other Universities that whatever is done will be done in a deliberate, careful, and constitutional way; and to provide, if possible, an appeal, in the event of any step being taken which other Universities might consider injurious to their interests, to a body like the Privy Council?—That was a point that was urged by the University of Edinburgh before the Privy Council. It was new to me at the time, because I was not aware that any such appeal had ever been proposed or contemplated in any University. But from the information I obtained I was led to believe there were peculiar circumstances in Scotland arising out of the conditions of the Government endowment, the nature of the Act of Union, and the special reforms which it had become desirable to introduce, but which had not been introduced at that time, in the Scottish Universities, which made it a case from which an analogy could hardly be drawn. I am inclined to think that a power of appeal to the Privy Council on the details of educational matters is not a thing to be accepted as a general rule. I am not prepared to discuss the Scottish system, it may be that what has been done there is bad or good, but speaking generally, from some experience, I should say that it is not a proper body to deal with educational details. If you contemplate the existence of a University at all you must, as in Victoria University, Cambridge, and Oxford, and other cases that may be mentioned, leave the University supreme within itself. If the question is put in the form, "Are you right or "wrong in not having a *Senatus Academicus* as a check "upon the Council?" I have tried to answer that by showing that we have certain interior checks which seem to us to be better.

10,852. I am speaking of an exterior check?—I am inclined to take up the position, with modesty, that it is not a good thing.

10,853. In Scotland the whole University system has been regulated by Parliament; it has been subjected to revision twice in our lifetime. All the matters which are left absolutely to the discretion of the Senate in the Gresham Charter have been regulated in Scotland by Parliament, by statutory commissions appointed by Parliament. We have had it in evidence over and over again that there is a great desire on the part of the medical profession in London to introduce a London degree for the express object of preventing students leaving London and studying in Edinburgh, Victoria, and other places?—Not preventing.

10,854. Well, shall we say enabling them not to go away?—Yes.

10,855. Considering the interests affected by a proposal of that kind, is it not reasonable that Universities which are under Parliamentary control themselves should ask that the conditions under which a great new University is to be founded in London with the express purpose of drawing away students from them should be under some kind of public authority, so that there should be a recognised mode of appealing against provisions which might have the effect of lowering the standard for degrees, or otherwise injuriously affecting University education elsewhere?—I certainly can conceive provisions of that kind being devised which would

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

not injure the University. But I should be rather inclined to think they would be ineffectual, if the University was minded to carry out the particular policy deprecated.

10,856. Do you not think it rather strong that a new University, with no traditions, should ask for absolute power to be given to its governing body, with no checks upon that governing body's actions either from within or from without; and that on the express principle that the freer the hand the better?—I am desirous of separating this question entirely from the question of whether a single body is the better way of governing the University within itself. If you say, do I advocate exterior control in University matters, I answer unhesitatingly I do not; and from the description given of what is being done in Scotland I am sorry to hear what is going on. But if it is urged that what is going on in Scotland makes it reasonable that the same thing should be imposed upon us I must reply, as the Privy Council did to the University of Edinburgh, that the conditions are different, and that no reason appears for extending the restrictions in the one case to the other.

10,857. You do not admit that there is any force in the reasons I put?—I do not deny that they are reasons, but I think they are not reasons which ought to be considered paramount in such a case. Take the matter quite apart from the jealousies of other Universities. I am afraid the effect of providing that in educational matters there should be an appeal to the Privy Council would not be good. The Privy Council must adopt some rules for its decision. It cannot, of course, undertake to decide educational questions from an educational point of view. In the result it is very likely that the appeal would in no case be beneficial; that the Privy Council would lay down some general rules which would prevent the matter from ever being even reconsidered from an educational point of view; but if, on the other hand, it was attempted to guard against that by drawing out a strict form for the University—an order of study of subjects, or an arrangement of examinations—I am not speaking now of trying to enforce a standard, a thing which, as is well known, cannot be done by regulation—I think that the University would be unduly fettered, and no advantage would be secured.

10,858. (*Mr. Anstie.*) Turning at once to the Charter, the points I understand you to say you would be willing to deal with would be there. You are prepared, I understand, to reduce the collegiate representation of the two principal colleges?—No, I do not think I have said that.

10,859. I gathered that?—Do you refer to an answer which I gave which pointed to the power which is reserved to the Council of the University to make such reduction at a future time?

10,860. It may have been said with reference to that, but I understood you to say that the number 3 was inserted because you thought that without that number you could not keep up sufficient contact with the governing body of the University, but you would be prepared to reconsider it?—No, I did not say that last; or, at all events, I did not mean to say that. We thought the number of three was the minimum, and, therefore, in the negotiations with the London University we prevailed upon them to allow us so many; and we have insisted on no more in the Gresham Charter.

10,861. You are not prepared to reduce it to less?—No.

10,862. On the other hand, I understand you to say that you would be willing to add other colleges as constituent colleges represented directly on the governing body if it were so recommended?—If it were found that other colleges fulfilled the conditions of efficiency and could be admitted at first start—yes. There is no reason why that provision should not be put in force at once.

10,863. Then a third point: Would you object to the very large representation accorded by the Charter to the Schools of Medicine?—The original proposal of King's College and University College when the Charter was drafted was for a medical representation somewhat smaller, amounting to 10 in the place of 14. That was altered by the Privy Council, and we have accepted the amendment.

10,864. Comparing that with the original proposals, is it a novelty which, taken in this form, you accept as a just solution of the problem?—The introduction of the medical colleges is not a novelty, but with regard to the alteration in the representation of Medicine from 10 to 14, and the alteration in the character of it, it was made conditionally on the failure of our proposal that there should be four representatives of the Medical Faculty and six of the Royal Colleges. We are in no way responsible for it.

10,865. What we want to ascertain here is the view of the witnesses as to whether it is desirable that there should be so large a representation as 10 for the Medical Colleges?—I entertain no strong view either way. I think I should have preferred that the Privy Council had not altered the number.

10,866. Altered it from what?—From our original proposal of 10 in all, including the four Faculty members. I lay great stress on the Faculty members, I think they are important; but whether the six additional ones were representatives of the Royal Colleges or of the medical schools was less important. Of the two I rather prefer the medical schools.

10,867. The Faculty would still have their four?—That is so.

10,868. In addition to the Faculty representation there are 10 nominated by the schools as schools?—In the place of the original six who were to be allotted to the two Royal Colleges, six, as we indicated to the Privy Council, if the Royal Colleges would not accept, might be allotted to the medical schools. The Privy Council accepted the proposal that the medical schools should be substituted for the Royal Colleges, and increased the number to 10. We were no parties to that, and I should personally have preferred that if they had not increased it.

10,869. Increased it from 6 to 10, in fact?—Yes.

10,870. What I wanted to ask you is this: is this Charter allowing 10 representatives to the medical schools other than those attached to the two colleges, University College and King's College, one which you think a right and proper one?—I have nothing to add to my previous answer.

10,871. Do you think the representation of Convocation by three is right?—Yes, I think that is sufficient. I have no objection to it. It is not a matter on which I lay any stress.

10,872. You say it is sufficient. Is it too much?—No, I do not think it is too much.

10,873. You adhere to the three for Convocation?—It is not a matter on which I lay stress. It was desired by some, and I have never entertained any opinion against it.

10,874. You think it is of no consequence?—No ill consequence, and no particularly good consequence. I should look upon it as a graceful compliment to pay to the institution.

10,875. That is to the graduates?—Yes, to the institution of a body of graduates taking an interest in the University.

10,876. You regard it as complimentary and not educational?—As complimentary.

10,877. And not educational?—As educational, in so far as the representation on the Council of a body of educated men is of educational value; that is, so long as it is kept within limits.

10,878. You do not attach any educational value to it?—No.

10,879. Looking upon the Council as an educational body purely, you would regard it, therefore, in educational results as a cypher?—Yes.

10,880. With respect to the Faculty of Law, are you satisfied with the mode in which it is dealt with?—I think the Faculty of Law is one of those points upon which the re-opening of the question will certainly give an opportunity for improvement, more especially for this reason. The Lords of the Council, I think, overrated our powers to establish immediately on the spur of the moment a satisfactory legal Faculty. It is quite true that by construction under the provisions of the Charter it rests in the discretion of the colleges to suspend the operation of the Charter in that respect, but I do not think that was intended. I do not quite see our way to start the legal Faculty as matters stand.

10,881. It hardly satisfies you as a representation of the just demands of legal education, does it?—As a recognition of the demands of legal education it is, perhaps, as much as can be effected and, perhaps, a little more than can be effected by Charter; but there is a

good deal of work and negotiation to be done, there is a good deal to be worked out, before we can contemplate the establishment of a legal Faculty. I would not be understood to say that I think more ought to be put into the Charter about it.

10,882. You do not regard the report of this Commission as of weight in determining any matters of that kind which are left for negotiation?—Undoubtedly it would have weight. May I call the attention of the Commission to a note which was written for Sir Horace Davey at a time when he proposed that the Society of Lincoln's Inn should take up the foundation of the Legal Faculty with the view to point out how this Charter might be made the basis of a legal Faculty? There is a good deal in it which would show the ideas which have been entertained among us as to the best way of bringing the Legal Faculty into existence.

10,883. That has never been before the consideration of any of the authorities of Lincoln's Inn?—That pamphlet has been sent by Sir Horace Davey to all the benchers of Lincoln's Inn. (*The pamphlet was handed to the Chairman.*)

10,884. But it has never been before the consideration of the Lincoln's Inn Bench, has it?—That I do not know.

10,885. Now one more point as to University extension. Having regard to the important place that is given in the public press to the demand for the extension of University teaching, are you of opinion that this Charter gives adequate scope to that demand?—Adequate scope, yes; adequate expression, perhaps not. The demand for express recognition has been formulated since the Charter was settled, and I think a more full expression will in many respects be desirable.

10,886. What kind of expression would you give to that?—I should give it in the form of distinctly recognising University Extension as one of the objects for which the University might appoint lecturers.

10,887. Now with respect to the question of lecturers, which, perhaps, is rather involved in what you have just said, in the last paragraph of clause 3 of the Gresham Charter it says: "The University may ap- "point lecturers independently of a college to give "instruction in any subject, whether it be or be not "included in a Faculty." And then in clause 11 it says: "The assembly of each Faculty shall include all "such persons doing professorial work, or giving "regular instruction in any of the subjects included "in that Faculty for any College of that Faculty in "the University as shall be designated by the govern- "ing body of that College." In the 3rd subclause it says: "Each assembly of a Faculty may elect as mem- "bers of the said assembly lecturers of the University "or persons who are or have been engaged in teaching "any subject included in that Faculty for or with the "sanction of the University or any College thereof." One cannot help observing the difference in phraseology, and I think—but I am not quite sure about it—that I gather from your previous answers that the true explanation of this is that a lecturer may be appointed independently of a college, but that lecturer, if appointed, has no position in the Faculty unless a position be assigned to him by the vote of the existing Faculty, which, as I understand you to say, was a provision designed for the purpose of enabling the existing professoriate to keep within due dimensions, and within such limits as they might see fit, the University appointments. That is the substance, I think, of what you said?—I do not think I referred to what is stated in the latter part of the question, but I have no doubt that the former part does appropriately express what was in the minds of the framers of that paragraph.

10,888. Then that being so, does it not point to want of unity in the teaching work in the metropolis? Does it not point to the necessity for a more complete co-ordination than is provided for by the Charter, such a co-ordination as would preclude the feeling of jealousy?—No, I think not; the fact is, I look upon the matter from a different point of view from that which is indicated by the question. I do not think that this jealousy between the University and the colleges is at all likely to arise. That jealousy may exist between college and college, I admit, but between University and colleges it is not likely to arise under the constitution as framed by the Charter. It is important, no doubt, that the University should accept the colleges as the medium of its teaching. In the main, considering what the colleges are, and considering the enormous expense of providing new materials to do over again the same work, the University had better work through the colleges. I think they will be more and more unified as time goes on. I do not look upon this particular provision as likely to have any harmful effect.

10,889. The point of difficulty is jealousy between the colleges and the public who desire to obtain instruction. There is a public who desire to obtain instruction in a non-collegiate way, and there are those who are willing in a non-collegiate way to give that instruction. That is the jealousy—not the jealousy between the University as contemplated in the Charter and the colleges as incorporated in that system?—I am afraid I do not follow what the question is that you put to me.

10,890. To put it very shortly, the suggestion on the part of a great many of those who oppose this Charter is that the effect of giving so large a control to the colleges in this University will be rather to interfere with and, to use a common expression, to throttle the action of those who are doing work which, if not collegiate work, falls within the same scope and aims at the same object with it, and is commonly known as University extension work?—Do you refer to work that will be done by the University or to work that will be left outside the University?

10,891. The question is whether it is to be done by the University or left outside the University. The point of difficulty is this, that people in general demand that Universities shall do that work, and there shall be such an adequate recognition of existing institutions other than colleges, and such an adequate provision for the extension of the benefits of education as shall justify the Ministers of the Crown in advising the grant and the Houses of Parliament in accepting the new Charter for the University?—I recognise the existence of a jealousy of colleges that would be inside the University by institutions which will not be within it. I am not sure that that is an evil that can be avoided by any amendment of the Charter, or by any different regulations, because if the conditions of efficiency in colleges are materially lowered the teaching University will go to pieces. If, on the other hand, instead of admitting institutions by way of colleges you contemplate the absorption of existing institutions, we are brought face to face with the objections I have already tried to urge.

10,892. Is there not a middle term. Assume that the existing colleges are the only ones that can be accepted on the basis of colleges with the fullest powers and as thoroughly equipped institutions, is there not also a suggestion made by the late Royal Commission that there should be other institutions united with the University which would receive a sanction from the University, which would be to some extent staffed by University professors, and which would give that wider education which cannot possibly be given under existing conditions by the colleges themselves?—I am aware of the suggestion of the first Commission, and I am aware of the plan of Lord Justice Fry, which I think first started the idea; but I do not agree with it; I do not think it a good plan.

10,893. Then you would not propose to make any provision for University Extension teaching, beyond that which is found in the Charter?—Substantially that, yes. You might add words in order clearly to recognise the existing work of University Extension, but to extend the definition of what is called University Extension teaching to that given in other institutions is new to me. I have not heard it proposed, for instance, that any other teaching institutions should be admitted into the University for this purpose.

10,894. I am afraid I cannot go into this matter fully for my time is limited by our internal regulations, but I will ask you this. I may take it then that clause 3 and 11 must be construed now with reference to the answers which you have given—the last paragraph in clause 3 and the whole of clause 11?—No, I think my answers must be construed by themselves, and the clauses by themselves.

10,895. Allow me to say that I have particularly directed your attention to those two clauses, and rather invited your comment upon their bearing on the action and work of the new University, and therefore I think I am at liberty to suggest that we must look at those two clauses with reference to the answers you have

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

given. I will not go into detail as to whether a collegiate or an extra-collegiate examination can be conducted by the same body because I believe we shall have the advantage of hearing testimony founded upon experience from Dublin on that point. I pass that by, and I think it necessary to mention that I do pass it by. But supposing a new University to be established in London distinct from the existing University of London, and supposing there to be grafted upon the existing University of London teaching functions, would you think that to be a desirable or an undesirable competition?—I should think that very undesirable.

10,896. Then if the only means of avoiding that undesirable competition that we could discover would be to include in the new scheme the existing London University, you would prefer that course rather than that a new University should be founded under the name of a teaching University and that the existing University should add to its functions those of a teaching University?—I do not accept the hypothesis.

10,897. I do not ask you to accept the hypothesis, but supposing that to be the alternative would you prefer that there should be two rival teaching Universities in London, or that the scheme, whatever it is, for a new University should include in it the existing University?—It entirely depends upon the conditions of the schemes whether I should prefer the one or the other.

10,898. You would not give an opinion upon that?—Yes, I would give an opinion. I say it would depend upon the schemes. I should probably have a strong preference for one or for the other according as they were arranged.

10,899. It has been suggested by several witnesses that if a body existed, which, in fact, associated to itself all the teaching power in the metropolis, putting it broadly, no better body could be discovered to conduct the external examinations. Assuming that a body of that kind were to exist, would you see any objection to its taking over the external examining functions of the existing University?—I should see one objection, which would rest, as I have already said, very largely upon the fact that it would be justly objected, to by others. I think the mixture of the two systems under one institution is open to all the objections I have been urging in the earlier part of to-day, but I do not urge those objections to it in this form as my own objections. My objection is the impossibility of it; but I have great sympathy with the objections of those who object to it on substantive grounds.

10,900. But, putting aside their objections, you do not see your way to contradict the suggestion that that body would really be the most competent body to conduct external examinations of that kind?—I think I have already shown that I think it would be a most competent body.

10,901. We are rather on generalities here, but what is the composition of the body which ought to do the external examining work. Have you considered that?—I should think it probably is very well composed at present, but I have not considered it attentively.

10,902. (*Mr. Rendall.*) Should the teaching and examining work be combined in a single University, you think the dual system separating the two departments would offer the most likely solution, do you not?—Yes, I do.

10,903. I think your first objection to it was that there was no reasonable chance of its being accepted by the Senate and Convocation?—Yes.

10,904. We have had strong evidence from the Vice-Chancellor and from the Registrar of the London University partly as to its being practicable and partly as to the probability of its being accepted. You do not speak from any special knowledge, I suppose?—Yes, from the very largest special knowledge, arising from my having been the representative of University College in the conferences with the University of London, and from my having been in conversation at intervals extending over eight years with all those who have taken much interest in it in London. I think it will be very important in considering statements which are made now as to the readiness of the University to accept some combination, to be quite clear as to the particular plan of combination that is proposed. If Sir James Paget has said that he will approve of what I have called the dual University, that is to say, an entirely separate administering body for each system combined under a court, then that is new to me, and my answer must be taken with the qualification that I did not know it. I have not seen his evidence.

10,905. I think there was no doubt as to his view of the general acceptability of the plan of combining the two functions, teaching and examining?—I can quite understand that. Sir James Paget was one of those who promoted the scheme of the Senate for that purpose to which we found so much objection taken in 1891. That is the reason I urge the point; but the idea that Sir James Paget is suggesting any form of dual University is important in itself.

10,906. From which side is the opposition greatest, the Senate or Convocation?—I can hardly answer that question; but undoubtedly the opposition of Convocation is the most dangerous to the success of any scheme, because it is most difficult to calculate the action of Convocation. The Senate is a responsible body, and if their spokesman says that he in such a matter is empowered to answer for them, there is an end of it.

10,907. I suppose there is good reason to hope that an express recommendation on the part of the Commission would go far both with the Senate and Convocation?—The recommendation of the previous Commission did not settle the question.

10,908. They did not make a recommendation; they left it to themselves; they said, "We will leave it to the Senate to devise a scheme"?—And laid down the exact lines.

10,909. Scarcely that?—I should rather have said that it was so; that they laid down the lines of a scheme, to which there were objections in some respects taken by the Senate and in some respects by the colleges; but subject to that reservation I do not deny that the recommendation of this Commission would go a long way.

10,910. You refer presumably to paragraph 37 of the Commissioners' report?—That and others.

10,911. Your next point was that it would be difficult to maintain two parallel degrees; that if there were one degree distinction became unmeaning, and if two degrees it becomes unintelligible. Surely if there were one degree the meaning would be clear, that one degree implied London residence, and the other degree did not imply London residence. By one degree I think you meant degrees identical in standard, did you not?—No, I was speaking of what it would be to a man to be a B.A. of London University. If there were what I call one degree no one would know what his calling himself B.A. of London University would mean. It might mean that he had been brought up in a London teaching University subject to teachers known to be eminent, and that he had passed through a certain curriculum involving residence, or it might mean that he was a private student from a remote part of the country who had passed with credit a series of examinations of high standard, which would quite be a different thing. Therefore the title of B.A. of the University of London would become unmeaning.

10,912. If the two were separate in a dual system of papers that objection would be got over, because, I suppose, the University Calendar would designate under which set of examinations he passed?—Nothing would get over that objection except finding a different designation for the graduate.

10,913. Surely the persons to whom this is important are initiated experts concerned with education?—In a case of titles and of what the degrees mean it is the public who are to be considered. It is to them that the question what a degree means is important.

10,914. I should have thought rather to educational experts who form the appointing, governing, and electing body?—You are speaking perhaps more particularly with reference to educational appointments. I was speaking of all the appointments for which a graduate might be a candidate.

10,915. The same applies to every University, people know by the different positions in the calendar. That would be an ascertainable distinction, would is not?—There would be a distinct confusion between two entirely different things. That there are different kinds of qualities implied by the testimonial which s brought by a man who is senior wrangler at Cambridge and a man who has taken a poll degree is true, but still there are elements of unity between the two. Here those elements of unity do not exist. I say that the title as a title becomes unmeaning.

10,916. You do not think those could be distinguished in the form in which the examination results would be published?—Yes, they would be stated in publishing examination lists, but the only use of a degree is that it is a short form of testimonial, and the testimonial would become unmeaning.

10,917. It states something far more than that?—The only resource would be that a London graduate would in all cases have to explain what sort of London degree he has taken. Then that particular objection is so far answered that the matter is transferred to the other horn of the dilemma. The confusion is so great that people will never understand the institution, and we know from sad experience, as administrators of an educational institution, what the drawback to education is in a confusion of names.

10,918. Then you spoke of a certain tendency to accept open examinations, by which I think you meant non-residence in London as compared with the teaching in London. You said you thought there might be some preference for the open examinations. They might be more agreeable to students, and they might be more agreeable to professors of the weaker sort?—I am supposing the University to be at work, and the two systems to be administered under some form of constitution which is common to both. I suppose then that it is quite open to the University governing body from time to time to frame regulations for a particular examination on the external side, and at the same time for an examination which coresponds in point of time, and to some extent in point of subject, with that on the other side; and I suppose that a particular professor may have pupils preparing for both of those examinations. I think there would be a very considerable inducement, and I am not at all prepared to say that that inducement ought in all cases to be resisted—to say, "To save the University trouble and expense, and to "save the professor the labour of holding two classes, "for the next year, we will take the open examination, "and use it for the teaching examination." That would be a pity. In the first place because it would be difficult to get back again, supposing it did not work well; and in the next place because in that way the whole advantage of having established the right of the teaching side to independent examination to follow the teaching might be frittered away. Such inducements to act on institutional rather than educational considerations would probably arise at the instance of those whom I called the weaker professors.

10,919. The remedy would entirely lie in the hands of the University?—Yes; but what would the University be in that case? The University would be a body composed of two elements either of which might be in the majority.

10,920. I should have thought it might be some such University as that constituted in the Gresham Charter and that single governing body would administer the two kinds of examination and be responsible?—Under what I have called the dual system it might be safe. In that case the danger would be less. I think the answer that is being referred to was given when I was discussing a scheme more nearly analogous to the Senate's scheme.

10,921. If one secures the University full power to redress the wrong it is the most one can do?—To that I quite agree; but it might still be insufficient.

10,922. There was one objection as to the impartiality of London examinations which you thought was based on distrust in the professors who would be concerned rather than in the governing body, such, for instance, as the Senate of the University of London. That was so, was it not?—I think there was an answer somewhat to that effect.

10,923. Is it true to say that the objection turned more on the substitution of collegiate and professorial examinations for certain stages of the degree than on any partiality of individual professors entrusted with the examining. I thought that was where the strength of the objection came in. I am alluding to the proposal made by the Senate of the University of London to accept the matriculation stage or the intermediate stage on the guarantee and on the criteria of London colleges. I thought that was the form the objection took. That, of course, might create uneven standards and criteria, because it might be entrusting them to different bodies. Did you mean more than that?—Yes, I meant to refer to the objections which have been taken to conferring such influence upon London teachers, which extend very much further than that; though I do not deny that I do remember a special protest against that scheme—a scheme which was rather proposed by Professor Carey Foster than by ourselves, whereby separate examinations could be held in the separate colleges.

10,924. It was proposed in one of the schemes of the University of London?—No, it was proposed to us in conference, in March 1890, after Professor Carey Foster had printed a paper recommending it.

10,925. I think in a later scheme it was practically intended to place them on an equal footing?—In the meantime we had pointed out that separate examination in the colleges was not a thing that we asked for, and therefore it disappeared from the scheme so far as we were concerned. I remember that, but what I do not remember is that the objections of outsiders to a combined University were limited to that particular point.

10,926. Supposing professors of the University or professors connected with colleges in London were appointed by some specially appointed board, do you think the governing body would object to that and feel there was some danger of partiality on the part of the Board?—I should have said so; but I do not rest the difficulty entirely on the objection of the provincial University Colleges. As I have already shown, there is a still larger number of those who are known as private students who have to be considered, and the paper which I have handed in will give distinct figures to those who examine them showing how very small is the section assignable to provincial colleges.

10,927. Would they feel inclined to distrust any governing body which had an element of London professors upon it?—Certainly, because, you see, the introduction of the London professors would be the introduction of men holding strong opinions upon all the questions which might be affected by a want of impartiality. Here is the protest which was signed by the colleges of Aberystwith, Bangor, Birmingham, Cardiff, Leeds, Newcastle, Nottingham, and Sheffield to the London University in November 1889, and it runs upon the same lines with a similar protest that was made by a deputation to the late President of the Council in August of the same year. It was a protest "against the adoption of any scheme for remodelling "the existing University of London which follows the "lines of the Report of the Royal Commission, on the "ground that any such scheme invades the vested "rights of the provincial colleges, and, by placing "them at a disadvantage as compared with the metro-"politan colleges would, if carried into effect, operate "seriously against their future progress and develop-"ment." You observe that the objection is of the most general character, that any advantage given to the London colleges which was not given to them would place them at a disadvantage and interfere with their vested rights.

10,928. Quite so, but that was allowing to the London colleges a recognition of examinations conducted by them which was not given to provincial colleges. That seems to me to be a different point?—It is a different point, no doubt, but I do not know that I can go with you (I may be wrong) in supposing that that is the only point that they object to. It seems to me that their objection is of the most general character.

10,929. One great difficulty of the London colleges has been the lack of endowments, and one great hope in establishing a University is that it would help to attract endowments. You said you drew no distinction between the endowment of colleges and the endowment of a University. I suppose you would hope to attract besides private endowments also Imperial or corporate endowments?—Certainly. What we are at present receiving in that respect is known, no doubt, to you in the shape of the grant to the University colleges in England, which is made to King's College and University College to the amount of 1,700*l.* a year each. I notice that in the Victoria University besides that college grant they have a University grant of, I think, 3,000*l.* a year. In regard to corporate endowments the connexion which has been established between the University, under the Charter, and the Gresham Committee, although it is at present merely a connexion in goodwill and intention, will, I hope, lead to giving us an introduction of value to the City companies, and to other sources of endowment in the City. With regard to the London County Council the whole question depends upon future legislation. I believe it is quite possible for county councils

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

to endow University colleges under the Technical Education Act, 1890, but I think it is hardly consistent with the intention of that Act, and I do not suppose they will do so.

10,930. In such grants a very important distinction would come in, and the endowment of the University would tend to remove those difficulties from the test side of which you were speaking very effectively. In one case the grant or endowment would be given to an undenominational University, and used by it for the good of the colleges, which would be precluded if the endowments were given direct to colleges, one or more of which had tests?—That is so, and on the other hand in the case of endowments they would be attracted in some cases by a test.

10,931. It is very important to contemplate both forms of endowment in the new University, is it not?—I think it is. I have no doubt there would be a certain advantage in it, though I do not rest the whole case for preserving the colleges on that ground.

10,932. The endowment of the University would largely take the form of endowing professorships. I should have thought the powers of the University were limited to acting within the terms of the Charter?—Yes, but when the terms of the Charter are so general as they are in this case, they will include everything necessary for the purpose of conducting the business of a University.

10,933. You say there is nothing in the Charter to prevent the appointment of University professors. I think you would admit that there is nothing which would allow the admission of those professors to the Faculty. I am alluding to Section II. where it says, "Each assembly of a Faculty may elect as members of "the said Assembly lecturers of the University"?—Do you mean that by calling a man a professor, he would cease to have the character of lecturer? No, I cannot admit that.

10,934. The professor throughout seems to me to have a higher status. I was guided in the consideration of the Charter by these Answers to Objections. I thought it was quite borne out by the evidence given by the principal of King's College, that it was the intention of the Charter to preclude the appointment of professors. At page 7 of the Answers to Objections, paragraph 13 says, "to institute by Charter a new staff "of professors, with the title of University professors, "would be unfair to existing bodies, and either futile, in "the absence of endowment, or wasteful, if the endow-"ment could have been obtained." I quite understood from the principal of King's College that it was the intention to exclude that power?—The paragraph to which my attention has been recalled points out exactly and in terms the objection which I have endeavoured to urge, and to which I attach importance; that to institute a new staff of professors would be a mistake. The question that is now put is, as I understand, whether in objecting to the institution of a new staff of professors we are further objecting to the conferring of the title of professor upon some three or four lecturers.

10,935. Does it mean that the Charter objects to the appointment of individual professors by the University?—The force of the objection as it was presented to me is that the University having power to appoint lecturers might be precluded from calling them professors. In individual cases I do not think there would be any reason to object to this, or any power to prevent it if the University chose to do it. But perhaps I rather undervalue the importance of the question. It appears to me that a greater stress is being laid upon it than it holds in my mind. The professors of University College will be looked upon by the world as University professors, and it will be the same with regard to those of King's College. That appears to me to be sufficient. I do not at all agree with the depreciatory language used of the professors of those institutions, as if they were unworthy of the title of University professors.

10,936. I am thinking of large endowments, great bequests or gifts being made to the University. Supposing the University received 10,000*l.* from some donor, what would it spend it upon so rationally and so well as upon professors, who, I hope, would support and strengthen the colleges in their action, supplement them on their weak points, and act loyally, and in the most thorough co-operation with them?—I have nothing whatever to object to in that.

10,937. And you would not object to making it explicit in the terms of the Charter that the University could so apply endowments, would you?—Subject to the considerations I have already urged, I could not.

10,938. And you think expressly that the Charter should provide powers, though certainly not compulsion. You would object to there being compulsion to appoint professors but you would include it amongst its powers?—It seems to me hardly worthy of practical consideration whether it should be put into the Charter that the University shall appoint professors.

10,939. But shall have power to?—"Shall have power to" is, of course, the way in which it should be worded, if the provision were to be inserted.

10,940. In considering the question of endowment it is almost the most important point, is it not?—No, I do not think it is a very important point. I think it is a comparatively unimportant point that the University should take power to appoint teachers with the title of professor. That it should take power to devote endowments to the payment of professors, provided that such professors might be within the colleges, is certainly not objectionable, and they might be also, in particular instances, outside the colleges.

10,941. Now I will turn to section 24 of the Charter. You said that in dealing with the Gresham Committee it was felt that the Gresham Institution as it stood should not enter as a college. I think you said it was agreed to work out the plan after the Charter was established: that the whole question had been reserved for future consideration. Was not that so?—Yes.

10,942. Some such difficulty evidently arises with regard to some or all of the 10 Colleges of Medicine. Their right is expressly saved in the second paragraph, is it not?—No; I think that is a misapprehension. The 10 Colleges of Medicine have a clearly ascertained right to be admitted which is recognised by their admission without question as efficient Colleges of Medicine. The saving was necessary, in view of their claiming hereafter to be admitted also as Colleges of Science.

10,943. I am referring to the words, "Notwith-"standing that they may not be under the indepen-"dent control of their own governing body." That verbally is probably not true of all the Colleges of Medicine. The same difficulty arises with regard to the College of Science. Probably that is what you alluded to when you spoke of its admission being perhaps impracticable?—I alluded to other difficulties besides, but I know there is that difficulty.

10,944. Then, again, it would arise in connexion with the British Museum. You can conceive that a Chair of Archæology could be founded in the same sort of connexion with the British Museum. There, again, the same difficulty would arise. One could not speak of the British Museum as under the control?—That teaching connected with the British Museum and a Chair of Archæology is contemplated is true enough. I may mention with regard to these points, since they are raised, that it must not be supposed there has been any oversight or neglect of those institutions. On the contrary, we have been from the very first in communication with the principal authorities of them all. The position taken up with reference to the Normal School of Science at South Kensington is in strict conformity with the view stated to me personally by Professor Huxley as dean of the school many years ago, to the effect that the difficulties of introducing the college were so great, that it was not wise even to suggest that it should be introduced into the programme of the association we were starting, but, on the contrary, that we should do the best we could to found the University upon lines fully explained between us at the time, and that, when the University was founded, the Normal School of Science, if it could comply with the conditions, and if it were agreeable to its authorities, should be brought in. Professor Poole, who is one of the authorities of the British Museum, and since then has become the tenant of the Chair of Archæology at University College, was consulted with reference to the especial purpose of forming a plan by which the teaching done at the British Museum might be worked up in the teaching University. That has not been lost sight of, and much has since been effected in reference to that teaching and in communication with the authorities responsible for it.

10,945. I thought that was the principle which was actuating the promoters of the Charter or at any rate

most of the promoters, but I think these words are unfortunate as excluding a possibility which you speak of as contemplated. Assuming that these institutions cannot be admitted as colleges, which they obviously cannot, the Charter would preclude the power of recognising the study in them as qualifying for a degree. Coupled with paragraph 3, which defines the only recognition contemplated, the clause seems unfortunate in the draft scheme. I want to know how far the point has been considered?—They have all been considered most carefully. If that difficulty exists which has been indicated with regard to the Normal School of Science, and if it is thought proper that a school constituted for an entirely different purpose should be brought into the University of London—a course to which there are objections not yet considered—then undoubtedly before it can come in under the Gresham Charter there must be some change in its constitution. But if it is to continue exclusively administered by a Government Department, and if it is desired to include that Government Department in the London University, I think the objection is insuperable. As regards the British Museum, the question really does not arise.

10,946. With regard to other institutions the same difficulty has arisen. One case is the Inns of Court. Again, in hearing representatives of the theological colleges, we had the case of one college which was not managed independently by its own governing body, but which was managed by the central body. Surely the right principle for a University of London would be the recognition of institutions. Then a certain recognition might be given to the British Museum or the Theological Colleges, or the School of Science, or the Inns of Court, or the other numerous institutions in London?—The case of each institution must be considered on its merits. In some cases it will be found easy to put schools under the control of their own governing bodies, with a view to their admission. In other cases it will be found that it is not the absence of control by its own governing body that renders the school unsuitable. I do not know that any single case has been made out of a school otherwise suitable that will be excluded because it is not under the control of its own governing body.

10,947. The existing clause in the Gresham University would preclude the recognition of any such institution. The University of Edinburgh has gone on the opposite principle that I am speaking of, recognizing given institutions, and even given individual teachers in such institutions. You would feel an objection to that, would you?—I see very great objections to it. I am not prepared to say that the objections that I see are conclusive of the whole case, but the demand is not one which has arisen in any practical form, and I do not think any single case has been made out. There may be a great many institutions which will find conditions here preventing them from coming in, but that does not show that the conditions should be abolished, though the institution may be a very good one in its way.

10,948. (*Professor Sanderson.*) The principal purposes of the promoters of the professorial University is to establish University teaching on the same level, or a level corresponding to that of first-rate Universities elsewhere, is it not? I wish to know whether that is really the object which the Gresham University puts before itself?—Yes, so far as we can attain to it.

10,949. Then in the case of the colleges of medical science I should like to ask what is meant by a man having pursued a regular course of study as a condition for a degree? What would be included in that course of study? Would that be a scientific course of study or not? Would it include the sciences?—It would include an adequate scientific course as generally understood both by the medical profession, and also by the academical bodies which are interested in medicine.

10,950. In fact, the whole course of medicine would be intrusted in that case to the college at which the student had carried out his regular course of study?—The college or colleges.

10,951. How do you mean by colleges?—In this way. I will suppose that some medical schools in London—which I think is possible from what I have heard—will be found insufficiently equipped for the purpose of a college of science in the University. In that case their students will have to get their scientific teaching elsewhere. A student in that case will enter some other college, and will be in fact a science student. At the proper period in his career, which I believe is pretty well marked now in medical education, he will pass to a medical college as a medical student. In that case you see the course will be taken in two colleges, first in one and then in another.

10,952. Then you admit that the present state of teaching science in many of the medical schools is extremely inadequate?—You must understand that I do not speak from knowledge of such a subject, but undoubtedly it is generally understood, and I am informed so.

10,953. What I mean is that in the Gresham scheme it is intended that, in such a case as that, a man should be practically compelled to carry out the first part of his course of study in a school of science, and the remainder of it in a school of medicine?—Yes, quite apart from the question whether the present medical schools are efficient in science or not. There is no doubt that a student who is studying science will be looked after by the Faculty of Science, and that whether he is going to take a medical degree, or a degree in science.

10,954. When you were speaking on the subject of adaptation of examination to teaching you said the Gresham University scheme would provide for that in a sufficient way. Would you explain how this adaptation would be possible under the proposed arrangement in which you have schools of such extremely different character as those which are included in the scheme, teaching the same subject at the same time, and consequently men of considerable eminence teaching it in one place, and men of extremely small capacity or competence in another?—I would not allow a man of extremely small capacity or competence to go on teaching in a University at all. I am not prepared at all to accept what you say—that there are men now teaching who are of extremely small capacity or competence.

10,955. Not in University College or King's College. I would not suggest that; but it is admitted that in the medical schools people teach subjects with which they are not sufficiently well acquainted?—Pardon me, I think that is overstated. There were, much more frequently in olden times than at present, in medical schools students who, having got through their examinations, were appointed to take a chair in botany or some other scientific subject, while waiting for an appointment as a clinical teacher. I believe that state of things does not now exist. The teachers in most of the schools are competent, I will not say up to the standard of the most fully-equipped and best furnished institutions elsewhere, but still they are competent. Where I think they fall short is rather in appliances. They try to teach scientific subjects without a proper laboratory.

10,956. Would you not admit that there is a great difference between the competence of some University professors—King's College and University College—and the competence of the professors of many, say, the majority, of scientific subjects in the medical schools?—I should be inclined to say that University College stands highest in that respect, and that St. Bartholomew's, and Guy's, and King's College in science stand very well, as in medicine also; that the others follow at varying intervals, and that there is a considerable difference between the first and the last. I am not prepared to accept the terms in which the question was put.

10,957. All that I meant was is it not clear that there is an immense difference between the character of the teaching in the different schools which are included in this scheme?—Yes, taking the teaching in science as a whole there is an immense difference.

10,958. You could not have an adaptation of examination to these different styles of teaching, could you?—But where the teaching is found to be inadequate it would cease to exist for University purposes. Teachers may go on preparing students for the conjoint board examinations if the schools find it worth while to keep up the classes, but they will not be recognised for University purposes, and therefore the objection has no application in the form in which it is put to me. The way to overcome the difficulty of adapting examination to different styles of teaching is to bring the teachers into a room and let them settle the examination under proper supervision all together.

10,959. Then you think that there exists in the Gresham Scheme as it stands an effective mechanism for

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

putting an end to bad teaching?—Yes, I think as effective as it can be made for the present. But when I say effective I do not mean that it cannot be improved as time goes on. I should be far from saying that the Gresham Charter represents a perfect University working perfectly. In fact, the language I have used with regard to it elsewhere is that it is not the foundation of a University so much as a commission to certain authorities to go on and found the University.

10,960. At all events it may be admitted that the representation of science and literature is not very strong on the Council?—Do you mean relatively to the representation of medicine, or do you mean that it is not strong enough for all practical purposes?

10,961. Relatively to the representation of medical schools?—Relatively to the representation of medicine, it is weaker perhaps than it might be consistently with the best plan. As I have already said, it was not the original plan of those who framed the Charter; but it must be remembered that the consideration which no doubt weighed with their Lordships of the Privy Council as to the immensely preponderating numbers of the medical students and medical teachers at the first starting of the University may have had something to do in affecting their decision, and that it cannot be lightly passed over. If the question is put in the other form, "Is it a weak representation?" I should say no. It is strong enough for all practical purposes. I do not think these matters are settled by divisions as between arts professors on one side and medical professors on the other. If that were so, I do not think there can be a sufficient number provided either of arts professors or of medical professors to prevent a stronger party carrying anything which might unreasonably weigh upon the weaker of two parties. I may refer to the 18 members of the Senate of the University of Cambridge, which contains only four professors to represent the whole number in all faculties, and I refer again to the Hebdomadal Council of Oxford containing 20 members, which has only six. I cannot conceive that four representatives of the Faculty of Arts will be found to be too weak a representation. I think it is sufficient.

10,962. (*Professor Sidgwick.*) I think you said you had not had an opportunity of reading Professor Karl Pearson's evidence?—I have not.

10,963. One of his objections is that the Gresham Charter "would not have led to the formation of "central, fully-equipped laboratories, but the per- "petuation of the present system of second-rate com- "peting laboratories"; and in an earlier part of his evidence he dwelt upon the fact that the rivalry between University College and King's College practically forces both colleges to compete in any direction in which there is a strong interest and movement. For instance, he says, "At the present moment at "King's College we are spending between 15,000*l.* and "16,000*l.* on engineering laboratories. I think that is "really a point very much in example. The reason "why we are spending that money is on account of "competition with the Central Institution and with "King's College. We cannot afford to let the elec- "trical laboratory at King's College or the electrical "and mechanical laboratory at the Central Institute "be superior to our own." Another of the witnesses, also speaking on the point of inter-collegiate work, dwelt on the fact that the relation of the colleges and the inevitable and natural competition between them was a practically insuperable obstacle to inter-collegiate work. Could you tell us anything on that point?—The objection seems to me to contain a truth, but it seems to me not to have the importance that would be assigned to it if it is mentioned as a serious objection to the continuance of the colleges as such, or to the allowing of them to develop their teaching as their Councils may think proper. In the course of my experience at University College, which has been considerable, I have not found the reason pressed upon the Council or advocated there that we ought to extend laboratories because of the better equipment of institutions elsewhere in London. I do not think such an argument would ever have been looked upon at the Council as important; but of course it does happen that when such a study as electrical engineering comes to the front, and there are a large number of students who desire to learn it, more than one institution at a time is desirous of extending its laboratories, and that is also the case with the engineering laboratory, which we founded years ago on rather a large scale even before the Central Institute was ever heard of. Competition of this kind if carried beyond limits is no doubt pernicious, but I am not convinced that we have proceeded beyond proper limits, either at University College or elsewhere. I do not speak with so much knowledge of the subject as to be able to lay it down with any authority, but I do not think it is possible that there could be a central fully-equipped laboratory for all the chemical students in London on the one hand or for all the electrical students on the other. In some subjects it may be possible; in others it may be possible for a time. Then you will have to furnish another laboratory, and both would cease to be "central." The objection seems to me to be overstated. If it is asked, "Does the Charter provide any check upon abuse?" I would say, "Yes." The attempt we have made to provide a central Board of Studies by which all these matters would be considered, and without the recommendation of which it will be very difficult to get endowments in London for any university purpose, is sufficient for the present. If it is found insufficient, as time goes on others can be suggested.

10,964. Do you think, so far as one laboratory or one professor in an advanced subject was all that was required, that practically when the Boards of Studies were at work it would not be difficult to divide the subjects where no competition was thought desirable between University College, King's College, and other colleges? You do not recognise that financial considerations would lead the councils of the institutions to take a different view from that of the Boards of Studies, do you?—Without entering into particulars, I recognise that there would be difficulties; but we have provided some means for the division of labour, and one of the reasons why we have urged that this should be provided is that attempts at amalgamation in past days have been found to be nugatory, owing to the dislocation between the two institutions it was desired to amalgate. Professor Karl Pearson uses the difficulty as a reason for sweeping University College and King's College away. But that is an extreme measure.

10,965. On the point of the lowering of degrees Professor Karl Pearson represented to us that there was clearly an attempt on the part of certain of the medical schools to cheapen degrees in order to attract students, and he referred to a letter received from Professor Christopher Heath, in which it was said to be mainly the outrageous demand of the preliminary scientific examination of the University of London that had brought about the agitation for a University of moderate requirements. Does it appear to you that the true interpretation of Professor Christopher Heath's view is what you before suggested with regard to the objections to the University of London; that he attacked not so much the standard as certain other points?—I do not know that I could say that of Professor Heath. I think Professor Heath holds a stronger view as to the unnecessary difficulty of the University of London examinations than I indicated, and there are many who do the same. But that point is not one upon which I can speak with authority. I see the importance of taking into account the other source of difficulty in obtaining degrees, but I do not deny that there are many medical men who think the examinations too severe. With regard to Professor Heath's statement, if he has made it to the Commission, or made it to Professor Karl Pearson for communication to the Commission, that he thinks the movement took its rise in the desire of medical men for cheaper degrees, I remember his saying something of that kind at the Council of University College, and I took exception to it at the time, on the ground that the movement, so far as University College was concerned, had an entirely different origin. But in the medical profession it is quite true that this was the origin of the movement, which Mr. Macnamara has described in the evidence he gave before the previous Commission, which was started by the British Medical Association.

10,966. Do you conceive that the constitution of the Gresham University would be such as to keep any such desire on the part of the medical men under due control?—Yes. When I say medical men it must not be supposed that that is the desire or the intention of the great majority of the medical teachers of London who alone are to be considered within the limits of the University. The teachers in the various medical schools will differ in their views in that respect. We may expect that a large number of them, amongst whom I do not know if I may include Professor Heath, but amongst whom I do include a great number of the

professors of University College, will have no other desire than to maintain a high standard of qualification for medical students both in science and in other respects. Whether it ought to be as high as that of the University of London is a point upon which I have no intimation to give. I do not suppose the University will consider what its standard shall be from that point of view.

10,967. I suppose you would hold that the Medical Faculty would certainly be divided on the question of the standard of the degree, and this being so larger or smaller representation would not have such fundamental importance?—Yes, that is so. That is one of the chief reasons why I thought the claim of the medical schools for 10 representatives did no serious injury to the efficiency of the charter.

10,968. One very minor point is this. With regard to the inter-collegiate arrangements in clause 3, would it seem to you that there would be any objection if, instead of saying "A regular course of study in a college" it said, "In a college or colleges of the University." The phrase does not seem clearly to recognise that it may be divided between more than one college?—I think it would certainly be an improvement.

10,969. With regard to the conditions of the admission of colleges, when we compare the clause of the Gresham Charter with the corresponding clause in the scheme of the Senate of the University of London, the difference appears to lie chiefly in the word "buildings." The Senate's scheme says that the following points should be considered; the character of the teaching and of the educational appliances. But it does not expressly require the college to possess buildings of its own. Do you attach importance to that difference?—I think a great deal of importance should be attached to the possession of buildings. I quite recognise the difficulty there would be of carrying on the work of what has been rightly called in this respect a federal University if the federation was to become more widely spread than circumstances justified; and the possession of buildings, which after all in London guarantees that the college has received so much support from the public as to testify to the general want which it supplies is, I think, a very fair test. I think there is a further difference between the two sets of conditions, is there not?—that nothing indicating efficiency in the college appears in the scheme of the Senate of the University of London.

Sir G. Young, Bart., M.A., LL.D.

27 July 1892.

10,970. It is certainly not so far expressly required. It says the Senate shall consider the character of its teaching—which I suppose might be construed to mean "shall require evidence of its efficiency"; but it is not so expressed?—I think that most objectionable. I think it would inevitably tend towards the same slope which is part of the history of the University of London, that is to say, to the admission of inefficient institutions, as often as they could show that they had sent up a few successful candidates for the open examinations.

The witness withdrew.

WILLIAM RAMSAY, Esq., Ph.D., F.R.S., examined.

W. Ramsay, Esq., Ph.D. F.R.S.

10,971. (*Chairman.*) I think you wish to supplement something that was not touched upon by Sir George Young, or you wish to point out something in which you did not quite agree with him?—Yes.

10,972. Would you proceed to those points at once?—I wish to say that University College is really a University in the work it does. I do not think that point has been brought out sufficiently strongly. We do a very large amount of research—an amount of research which compares favourably with, if it does not surpass, the amount done at Cambridge or Oxford individually. In the last two years the Science Faculty of University College, of which I have been Dean, has produced 84 distinct memoirs and books, of which 40 have been by professors, 13 by assistant professors, 18 by students or jointly with professors, and 13 by what we may term outsiders who are not strictly students, but who usually have been past students. I should like also to say that University College fulfils the function of a University as regards teaching. There are three tests which one might apply. One is the passing of students through London University which I do not regard as very much of a test; secondly, education of persons for research; and thirdly, that students take positions in future life. As regards graduation in medicine in the University of London the graduates from University College take more honours than those from all the other London schools put together. Then in science many of the graduates take honours. I should also like to point out that the examinations of the London University are not taught for by the professors of University College. We do not profess to instruct students to pass London University examinations. That is another thing that ought to be made clear. If the students like to take the London examinations after attending our classes we are perfectly willing that they should do so. I am speaking of the science side of the college. We mention in our syllabus that such and such courses are generally suitable for the London University examinations, but for my own part—and I know it is the same with many of my colleagues—I do not specially prepare for the London University examinations.

10,973. Do you think the system of the London University is, on the whole, opposed to research. Is that what you mean?—Yes, I think the system of the London University is, on the whole, opposed to research.

10,974. You wish to state that, do you?—Yes, I wish to bring forward several reasons which would make me state that; one is that no research is introduced in any one of their degrees up to the D.Sc. degree. I am speaking now of science specially. A person who presents himself for the degree of Doctor of Science is obliged to present a thesis on some original subject. From cases which I have known, of which I could give particulars, the thesis accepted is not necessarily a thesis of research, but it may be a compilation of former work. Cases occur where persons who have done genuine research, suggested and carried out by themselves, have not had the doctorate given them, whereas others who have made compilations have not gained the doctorate. The standard changes from year to year it depends upon the examiner; other regulations are constantly being made; and from my own point of view I should prefer to see some sort of training in research given at a much earlier stage of the students' career. I think that is a point which one can argue in favour of, from the experience of foreign Universities and from what one knows of the character of young men; we want to train them in a certain amount of originality, not to exercise their memories to a very great extent. Then as regards the results of teaching, the London University examinations depend very greatly upon the examiners. At present in two of the subjects of examination there is a very great lack of confidence on the part of the students. It happens that the examiners are persons whom the students do not trust, and the result is that students leave University College and go for a degree to Durham or try to get an Irish University degree rather than take the University of London; degree that is to say, I have known two or three instances of persons who have done so. Then the third point I wish to speak of is with reference to what we really wish as regards teaching; we want to be able to found a school of thought. The Dean's Report, copies of which I have sent to the members of the Commission, shows what we are doing in the way of advancing knowledge. We do that in spite of the discouragement which is caused by capricious examinations and haphazard degrees, degrees which are given very often against the judgment of the teachers. I could give many instances of persons whom I know not to be competent who in the examinations have passed, and persons whom I think to be competent who have not been passed. As an examiner I should have equal difficulty in judging of the capacity of a candidate. It is impossible to judge of anyone whom one has not had continuously under one's eye. There are cases of persons who present a good front to the examiners and make the examiners think that they know all about the subject, and on the other hand there are persons who are shy and who put on the very worst face.

10,975. Then I understand you wish to say something about the freedom of teaching?—Yes, that we wish not to be dependent on the London University, that our

W. Ramsay, Esq., Ph.D., F.R.S.

27 July 1892.

students' attention should not be distracted from certain branches of the subject which we consider necessary by having to ignore them for the sake of preparing otherwise for the London University examinations.

10,976. You wish to frame your own degrees and examine your own students?—Yes.

10,977. With the assistance of external examiners?—Yes, with the assistance of external examiners which we should value, I think, speaking from the point of view of others as well as myself.

10,978. Then you have some remarks to make concerning tests of candidates?—Yes. I think one of the witnesses who was examined before—Dr. Collins—put the point very conclusively in answer to some questions put to him by Professor Ramsay, I think. He says that there are two entirely different ways of regarding examinations. One is as a test of knowledge, and the other is as a means of ascertaining how the student has been doing his work. London University applies examinations purely and simply to test knowledge. The examinations of foreign Universities are for a different purpose altogether—to ascertain if the student has been following a reasonable curriculum of work in a definite way. We find that we are hampered entirely by this testing how much knowledge a student can take in and give out in a definite time. I regard the London University examinations as not having a very high standard as regards subjects, but so many subjects are required up to a certain point, that they really are very difficult examinations. They strain pupils very greatly. We find, for instance, that to be obliged to study three subjects for the Bachelor of Science degree, prevents a student from knowing any one well, in Victoria University he devotes a greater amount of time to one subject and has a much more perfect acquaintance with it. The standard of Victoria University honours examination is, therefore, very much higher, incomparably higher, than the standard of London University honours examination, but probably not so difficult, because the Victoria University examines only in one subject whereas the London University examines in three.

10,979. (*Bishop Barry.*) You are speaking of scientific examinations now, are you?—Yes, I am speaking of scientific examinations wholly just now.

10,980. (*Chairman.*) Do you think it is concentrated into too small a space of time?—Yes, it is concentrated in too small a space of time.

10,981. Have you anything more to say concerning external examiners?—I have nothing to say except that I regard them as a help. I think an external examiner is not merely a person who gives confidence to the public, but, he is, as an actual fact, a help to the teacher. He brings him into contact with other methods of working, and gives assistance which is of very great value. Then, with regard to another point, any proposal to establish research professorships would be a complete mistake, and, again, quite opposed to all continental opinion. It is essential that the professor should see the student from the beginning; awake enthusiasm, and then out of the large classes which he necessarily has for elementary subjects he is sure to find a number of persons who are worth bringing on and who will do credit to themselves in after life.

10,982. Would that apply to the question whether they were to have University professors besides college professors?—I think it would. I should be sorry to see college professors debarred from doing work which they do at present, and probably very much better, because they have small laboratories and not quite such a large organisation to carry on than they would if they were confined to one large laboratory. It would ultimately come to this, that the chief professor of a subject would practically cease to teach the subject. He would become a director. If there were one laboratory of chemistry the director of that laboratory of chemistry would have no time to teach; he would have to direct others.

10,983. Would there be competition between the Chairs?—I do not think it could be avoided, and I do not think it would be advisable to avoid it. I think it would be advisable to have no pecuniary competition. The fees charged for instruction in the various colleges of the University should be the same. I should like to see continued what goes on at present—people attracted from one place to another by the celebrity of the man who teaches, as is the case abroad. Students in Germany go from one University to another because they know that they are going to come into contact with a celebrated man.

10,984. This would not be competition between different Universities but between different colleges?—Yes.

10,985. (*Lord Reay.*) Are the professors of University College satisfied with the amount of influence they have in the college over the course of studies, and over the internal management of the college?—I should say certainly they are. I should say there is absolutely no difficulty whatever with the council on that matter. I think I may say that the six professors on the council are usually a majority on the council. At most of the meetings of the council which I have been at, they constitute quite half the number, perhaps more.

10,986. With regard to the appointment of professors do you think sufficient guarantees are given by the council to the opinions of the Senate?—Every guarantee. I agree with Sir George Young. I cannot conceive a better plan of appointing professors than ours, for one reason: that it is so very much for our self-interest to appoint the best men. We are so exceedingly anxious to keep up the reputation of the college that we do all we can to get the best men.

10,987. The difficulty experienced at University College is not to obtain the best men, but to retain them when they have been appointed?—Yes.

10,988. Have you put in the Dean's report?—I have sent copies.

10,989. The examination of the London University, according to your description, is really a pass examination in a multiplicity of subjects, and not an honours examination which tests the high proficiency of the students in special subjects?—Yes, that is my opinion.

10,990. And your chief complaint against the examinations of the University of London is that they do not test the originality, the critical faculty and the capacity for research of the student?—Yes.

10,991. You have stated that your lectures do not aim at preparing students for the London University, and I also understand that several of the students do pass London University examinations?—A great many.

10,992. Do they go to coaches?—No.

10,993. Then whatever addition is required to the teaching they acquire by individual effort?—In actual fact there is no addition required to the teaching. It is quite the other way. I teach a great deal more than is required for the London University examination. In fact, the London University takes no cognisance at present of the most recent discoveries in chemistry. I should say the London University examinations are quite 10 years behind date as regards chemistry.

10,994. If you were to examine your students, your examination would be conducted on a higher standard than the examinations conducted by the present University of London?—I examine for the Victoria University, and I should be inclined to apply a standard such as theirs, which is very much higher than the honours standard of the London University. It is higher in several ways. It not merely follows out one subject further, but it includes many more branches of the subject. In chemistry it follows out into detail certain branches of organic chemistry, and it includes several other branches of inorganic chemistry, which that of the University of London does not include.

10,995. (*Professor Sidgwick.*) With regard to the question of teaching are you satisfied with the amount of control over the examinations that under the Gresham scheme each individual teacher would possess, because in the medical department the teacher in each place would only have a small part of the control. Would you be satisfied with that?—As regards science I do not much care. My own opinion is that it does not matter very much who takes the junior examinations in any subjects. The preliminary examinations may be conducted by anyone with fair justice.

10,996. As I understand you, this is exactly the reverse of what the Senate's scheme gave. You do not so much mind the pass standard, but it is in the honours that you want freedom?—I regard it in this way: that one does more good in training a small number of men to the highest possible standard than by passing a great number of persons.

10,997. Do you think that this demand for freedom of teaching exists throughout the department of science?—Yes, and also in the department of arts. I have taken down words from Professor Ker, my col-

league in literature, to the effect that he is very much hampered by the present examinational system of the University of London, and that even in literature they are considerably behind the times. Criticism in literature has made progress which is not taken cognisance of at all in the University of London. As regards physiology, Professor Schäfer says this (this remark, perhaps, does not bear on the point at present, but I should like to give it here): a contrast has been made several times between the Conjoint Board Examinations and the London University Examination in medical subjects not to the advantage of the former. Professor Schäfer authorises me to say that in physiology the University of London Examination is not nearly so thorough, and does not require nearly so complete a curriculum as that of the Conjoint Board.

10,998. One objection urged by Sir James Paget to the formation of two Universities dwelt upon the cost of duplicating the examinations. Do you feel that the necessity of having to supply materials and rooms for conducting two examinations would be a burden upon the colleges? It has been pointed out to us that for some time the examinations of the University of London did not pay their way, and that, in fact, it is only recently that they have begun to pay. It was said that the burden of the additional and superfluous expense would be a serious objection?—It would no doubt cost a great deal, but its cost would so far be balanced by fees, I should think.

10,999. You think the cost would not amount to much more than fees?—I think we should require to keep down the cost below the fees at present.

11,000. You think there would be no difficulty in doing that?—I really cannot tell.

11,001. To put it plainly, you think that the professors in examining their own pupils might be paid comparatively little compared with the external examiners?—I should think so. We do at present examine our own pupils at the end of each session. It would add very little trouble.

11,002. (*Profesor Sanderson.*) Do you think that the defect in the examination of the University of London is dependent upon circumstances which the examiners could avoid, or on the want of competency in the examiners themselves?—I am convinced that if I were an examiner in the University of London I should decide very much as the examiners do. They have no data to decide upon.

11,003. What is the unfavourable circumstance which would compel you to examine inadequately?—That I do not know the candidate—that there is no way in which I can test, in a week, what an honours candidate knows, and can do.

11,004. Is it because the amount of practical examination is insufficient?—No one can get to know in a week what another man knows.

11,005. It does not last long enough?—No.

11,006. The examination is not sufficiently extended?—No.

11,007. I suppose that would apply particularly to the practical part?—Yes, it would apply particularly to the practical part.

11,008. What do you think are the differences between the examinations of the London University and the examinations of Oxford and Cambridge?—The practical part of the London examinations is very slight. The excuse given is that there is no room.

11,009. They cannot give time or space to it?—They cannot give time or space to it. Obviously if there were fewer persons examining, and the examinations lasted a longer time it would be better. But I do not think that is the goal one ought to aim at. The goal ought to be training for a certain number of months or years, and the only person who can judge as to whether the pupil does his work well is the person who teaches him. At the same time I have no objection to tests being applied by an external examiner.

11,010. The things which are wanted are longer space, and the assistance of teachers?—Yes.

11,011. (*Mr. Rendall.*) Do I understand that you are a member both of the Senate and the Council of University College?—Yes.

11,012. How many professors are there on the Council?—Six.

11,013. Were you present at the time the resolution was passed by the Senate favouring the establishment of one homogeneous University?—Yes.

11,014. I understand there were 12 present out of a total of 45?—I should think there are never more than 20 or 25 present. I do not think I ever saw more.

11,015. Would 12 in rough terms represent a large part of the interest and influence of the Senate in University matters?—I think I can explain that point. I am glad you have given me an opportunity. You notice that the resolution is in two heads. First of all it suggests that a homogeneous University is possible; secondly, that if such a University cannot be established the Gresham Charter might be modified in certain directions. Speaking roughly, one half of the Senate accepted this general resolution on account of its first head, and the other half accepted it on account of its second head.

11,016. Were the 12 at all unanimous in accepting the resolution?—Yes. There was a previous resolution which was rejected perhaps I ought to say, in which external examinations played a part. I notice that in some evidence which has been given it has been stated that the motion which I made did not find a seconder. The reason it did not find a seconder was that it contained a possible proviso that the University might conduct external examinations as London University now does. That did not meet the views of the Senate, and the resolution did not find a seconder. The clause was cut out, and the resolution as it stands was passed.

11,017. It was practically unanimous, you say?—Yes.

11,018. Does that mean that the dissentients stayed away?—No.

11,019. There was nobody in opposition?—No. You see there were two alternative schemes. I had private talks with people afterwards, and that is how I know. One half of the Senate said, "There will never be "a chance of the Gresham Charter getting through." The other half said, "The first part of that scheme is "chimerical; it is out of the range of practical politics. "The Gresham Charter lies there which we are willing "to accept."

11,020. Then the resolution came up to the Council?—Yes.

11,021. It was discussed I understand at the Council?—Yes, it was discussed at the Council, but it was not put.

11,022. How far is there a promise of its enlisting the support of the Council or a large body of the Council?—I really cannot tell.

11,023. The discussion did not go far enough even to determine that, did it?—No, I do not think it did. I cannot gauge the feeling of the Council as regards the matter.

11,024. (*Mr. Anstie.*) I do not quite understand your answer to Mr. Rendall on this last point as to the division of the Senate. You said half the Senate voted for the first half of the resolution, and the other half voted for the second?—It was an alternative resolution.

11,025. Yes, but to some people who have read, or heard read, that resolution it appears that there was no substantial difference whatever between the first and the second. That is not your opinion is it?—It was not the opinion of the Senate at the time.

11,026. But it might be the opinion of some other persons who considered it?—It might be so.

11,027. I understand you to say that high honours are obtained in the London University by your students—not your own personally—at University College?—Yes.

11,028. And not uncommonly?—Not uncommonly.

11,029. But to such an extent that their University honours taken by students of University College exceed those of all the other London students put together?—In medicine, yes.

11,030. You do not teach for the University of London, but if your pupils choose to go in for those examinations they may?—Yes.

11,031. My difficulty is to reconcile that with the third statement, that you are exceedingly and continuously hampered in your teaching by the requirements of the London University?—They are perfectly reconcileable; for, although we do not teach for the examinations of the London University, many of our students have to prepare for them. A student has to prepare for the examination which, as is perfectly inevitable, is given on somewhat different lines. That distracts his attention from us, and prevents him doing us the credit we want him to do us.

W. Ramsay, Esq., Ph.D., F.R.S.

27 July 1892.

11,032. It is not that the professors are hampered in their teaching, but the students are hampered in their attendance?—That is really the case. You have put it perhaps more correctly.

10,033. It is the hampering of the students, and not the hampering of the professors?—It is annoying for a professor to see that a student is not doing what he would like him to do.

11,034. But nevertheless you achieve remarkably successful results?—I think not. We are not very successful compared to Aberystwith, for example, or compared to the Correspondence College, where they direct attention absolutely and directly to the examinations.

11,035. I understood the former part of your evidence as rather celebrating the triumphs of University College students?—We are very much larger; that must be borne in mind.

11,036. Surely you are not very much larger than the medical schools which are what you particularly referred to. You are considerably less in number than the medical schools?—Might I dissever medicine.

11,037. Pardon me; you particularly referred to medicine, and it is in that regard that you have made this statement; now you are stating that your students in medicine, would largely exceed those of the other medical schools. Is that so?—The remarks I made applied to science. The medical schools, I understand, are taught for London examinations exclusively.

11,038. Does not this seem to suggest that it is necessary to examine this statement very carefully to go very carefully into the details of it?—If you like, yes.

11,039. It is not in my option to like. I am afraid the time does not allow me to put the necessary questions?—I think I see your point. The medical teaching at University College directly prepares for London examinations. The students take, as I said before, very high honours in Medicine at London University. The science teaching at University College is not directed towards London examination. In spite of that the students at University College come out fairly well. At Aberystwith and the Correspondence College the teaching, I believe, is entirely directed, in Arts and Science, towards the passing of the London examinations. For their size they do better than University College does.

11,040. I understand, from the lists, that University College does extremely well at the London University. Is that a misapprehension?—They take more honours perhaps.

11,041. They have done extremely well, have they not?—Yes, I think so.

11,042. So that, although the teaching is not directed to that examination, yet the pupils have done extremely well?—Yes.

11,043. Does that strike you as at all impeaching your other view as to the inadequacy of the examinations?—We teach far more than is required for the London examinations, say in chemistry, and the result is that a student who attends reasonably well passes those examinations without any special preparation.

11,044. In fact, then, notwithstanding the disadvantages which belong to the examinations of the University of London, your good teaching is such as to secure a great success for the students?—If they choose to follow the London University lines, which are not the ones I should take.

11,045. But you take your own lines, and your pupils take your own lines, and achieve great success in the examinations?—They do.

11,046. Do they not do credit to the teaching? May it not be said that the examination does credit to the teaching, and the teaching credit to the examination?—I should hope so, if you put it in that way.

11,047. Do you think you are not quite done justice to?—I should put it on totally different lines. What I want is not that my men should pass an examination, but that they should receive the power of original thought, which they do not receive in the least by the present method of training.

11,048. Not by your training?—No, not by our training, unless they stay on.

11,049. Do you mean that your training does not give them that power of original thought?—Not unless they are not going in for the London examinations, or unless they have passed them.

11,050. I cannot put the two things together. You tell me that your teaching is independent of the London lines, and yet you tell me you cannot give your men that power of thought which scientific training ought to give. I do not understand it?—I regard it as essential for persons who are being trained in chemistry that they should learn the methods of research. There is nothing in the London B.Sc. examination to make them learn the methods of research. It comes to this: they get up a considerable amount of memory work, and they do a certain amount of practical work. If they take a degree, they go on to research with me. Many of the best men do not try for a degree at all.

11,051. Is it your view that the examination ought to stimulate research?—Yes.

11,052. Then it is your view that the examination is not on a right footing?—Yes.

11,053. Is it your view that it ought to be put on a right footing?—It would be advisable, but how are you to test it?

11,054. You think it should be put on a right footing?—Yes.

11,055. Would it not be put on the best footing it could be put on if it were put under the management of those who are experienced in the teaching of science?—I should think so.

11,056. Would it not be a desirable thing that the existing University of London should be so re-formed and altered as to place the examinations in the hands of those who are experienced in teaching the subject?—Does that mean that there should be one University?

11,057. It means only what it says?—Then I think I may say yes.

11,058. In the alternative what you desire would be that the London University should remain as it is, taking over all the junior examinations, to which you attach practically no importance?—I do not mind who conducts the junior examinations.

11,059. (*Bishop Barry.*) You have told us that so far as you judged the Senate of the University were rather divided, half approved of one of the alternative schemes, and half of the other?—Yes.

11,060. Is it too much to ask to which section you yourself belong?—My position is that I would welcome freedom in teaching. This freedom in teaching can be got in several different ways. The Gresham University Charter would give it us, and I can conceive of the University of London being so modified as to give it us.

11,061. Have you any preference between the modified University of London and the modified Gresham Charter?—I am afraid my instincts make me despair of modifying the London University to the necessary extent.

11,062. Your views are those contained in the paper?—Yes.

11,063. You are aware that that strikes at the very root of the Gresham University, because it provides first of all for an amalgamation of the colleges, which is contrary to the notion of the University, and also the future appointment of all teachers, I suppose in the colleges, by a central board?—As regards the amalgamation of the colleges, that paragraph was put in. The "ultimate amalgamation," I think it reads.

11,064. Still it presents that as the ideal?—Yes, it presents it as the ideal.

11,065. Which is certainly contrary to the whole principle of the Gresham Charter?—Surely the Gresham Charter might consist in the federation of the colleges, with powers for the ultimate amalgamation of the colleges of it should be thought possible.

11,066. That would involve a reconstruction of the whole of the Charter?—I could conceive a Charter in which there was such a clause.

11,067. I think it would cease to be the Gresham Charter except in name. Then I think one important point has always been the autonomy of the colleges. That would be considered by you as only to be tolerable for a time, and to be removed in the future?—I should hope that would be the result of the Gresham Charter.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Twenty-Second Day.

Thursday, 28th July 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I.
The Right Rev. Bishop BARRY, D.D., D.C.L.
Sir WILLIAM SAVORY, Bart, M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

STANLEY BOYD, Esq., M.B., B.S., F.R.C.S., examined.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

[*Mr. Stanley Boyd handed in a statement. For this document see Appendix No.* 19.]

11,068. (*Chairman.*) You appear on behalf of the whole body of medical schools?—Yes.

11,069. The paper which you have handed in contains those points upon which they are all agreed?—Yes.

11,070. We will take it as our guide in the questions I put to you. You are agreed upon the necessity for the founding of a teaching University for London?—Yes.

11,071. And on the whole you are in favour of the Gresham Charter, are you not?—No, I cannot say that.

11,072. What plan, as far as you have been able to form an opinion do you think would be the best for establishing a teaching University for London?—I am afraid if we go to the plan it will be found that the schools differ very decidedly, and it is impossible for any one witness to represent their views; some are in favour of the Gresham Charter, some are not.

11,073. Which do you think the majority are?—I am afraid it is impossible to say. There are at least three views among them.

11,074. As far as you have gone into it how many different plans are there practically before the country now?—As far as I know there are the scheme of the Senate of the University of London, the Gresham Charter, and the professorial scheme.

11,075. And the opinion of medical schools is divided among those three, is it?—I believe so.

11,076. The points you agree upon might be compatible with any of those schemes?—Yes. We think that upon those points the Gresham Charter would be satisfactory.

11,077. You would wish, for instance, in the first place that the degrees should not be beyond the reach of the majority of the students. That, I suppose, implies that the present degree of the London University is beyond them?—We think so.

11,078. When you say it is beyond their reach does that mean on account of the difficulty of the examination or the accidental circumstances connected with it which might be removed?—Many things; but the difficulty of the examination is certainly a very important thing—the great width that has to be covered within a certain time.

11,079. (*Bishop Barry.*) The large variety of subject?—Yes, and the very great knowledge of them to be got up, say within a year.

11,080. (*Chairman.*) You would not wish to interfere with this degree, but would leave it as it is now?—I believe that is the wish.

11,081. You would like to have another degree which would fulfil your wishes?—Yes.

11,082. If you agreed to act through the University of London this could only be by having a second degree?—Yes.

11,083. In any scheme, whatever it might be, you would be anxious that the teachers of London should have a great voice in the management of the curricula, and in the conduct of the examinations?—We should.

11,084. You are in favour of forming the teachers of London into a Faculty and having boards of studies?—Yes.

11,085. You approve of that plan of bringing your influence to bear, do you?—Yes.

11,086. And you would also wish to insist, as far as you could, upon the representatives of medicine being upon the Council?—We should.

11,087. This would bring the curriculum, syllabuses, and arrangements for examinations in medical subjects into closer relation with the teaching of the London schools. You are in favour of something besides mere practical work in medicine being required from candidates for a degree?—Certainly.

11,088. You are in favour of a good general training in arts and science?—Yes, all of us.

11,089. An idea has got abroad that the reason that a great part of the medical profession are in favour of the Gresham University, or some other University, is that they want the degree to be what is considered unduly easy. You would rather repudiate that, I think?—Among the schools, quite.

11,090. You would not be in favour of any institution in which there was the smallest danger of degrees being made too easy or of too little value?—We should object to it extremely.

11,091. You have already told me that you have no wish to depress the standard of the existing University of London?—No.

11,092. All of you consider that the Gresham Charter is satisfactory in so far as it proposes to institute a purely local University for graduation in which residence would be essential?—We think both very desirable.

11,093. This seems to imply that none of you have any fundamental objection to a second University?—I think most of us, theoretically at all events, would prefer that there should be only one if it could be so modified as to meet our wishes.

11,094. If it could be modified?—Yes, that is essential.

11,095. But no modification would be satisfactory which did not provide for the granting of degrees restricted to London students, and under the substantial control of the London teachers. This would point to having two entirely separate sides to the University of London, for you have already said that you do not wish to do anything to alter the existing degree?—The existing degree we think might be the honours degree.

11,096. You think the existing degree might be conferred as honours, and there would be another degree confined entirely to those who have been brought up in the London colleges. Would this degree in honours be open to the London students as well as the other?—Certainly.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,097. Would they have to take both?—Not necessarily.

11,098. They might choose between the two?—Yes.

11,099. The one restricted to London teaching would be the Pass Degree?—Yes.

11,100. And therefore the probability is that the majority of those who were brought up in London would go in for that?—Yes.

11,101. And it would be only those who wished for honours who would go in for the other. Some objections have been made that the present degree of the University of London is not only very difficult to obtain, but is not very practical in its nature; and is not therefore, always a good proof that those who have taken it, have the most intimate knowledge of their profession. Is that the case?—I have no doubt that there are faults in the degree, but still a high standard might be maintained for honours.

11,102. But it would come to this, that a man who had taken honours in the University of London, would very often have shown less evidence of real practical ability as regards his profession, than a man who had only taken a Pass?—I should not think so, not at all often.

11,103. If it is true that the present degree is not always a proof of practicability, and that the degree which you would wish to found, which would be more in harmony with the teaching, and in which the medical profession had had more voice in determining the curricula, would be a proof of greater practical ability, it would rather seem to come to that, that the honours degree would be less a sign of practical ability than the other?—I do not think that the premise is true.

11,104. With regard to the candidate being examined by his own teacher we have had a great deal of conflicting evidence about the advantages or disadvantages of this. I gather that those whom you represent are, in general, in favour of his not being examined by his own teacher?—That is so.

11,105. What is the reason for that? Do you believe the teacher would be partial?—There is a possibility of it. I do not think they suspect one another at all.

11,106. Would you object to his having a voice in the examination provided that an external examiner is appointed also?—That is not the plan we are used to in London.

11,107. You generally have an examination carried on by an entire outsider?—Generally speaking, at a different table altogether from that at which the teacher, if he is in the room, sits.

11,108. You have already said you wish the teachers as a body to have a leading voice in arranging the curricula of the examinations?—Yes.

11,109. But the actual examinations you would wish to be by an outsider?—That is the opinion of the majority; not an outsider, but a member of a different school.

11,110. A teacher who is not the pupil's own teacher?—Yes, a teacher, but a member of a different school.

11,111. By that means you might still preserve the connexion between the teaching and the examination, even though you did not have the actual teacher to examine?—We think so.

11,112. You have put this in rather a prominent position. You would make it a *sine quâ non* in any scheme to which you gave your support, that care should be taken that a teacher did not examine his own pupils?—I do not think we feel so strongly about it as that.

11,113. The London schools would wish to be recognised as colleges in any scheme which was adopted, as they are in the Gresham scheme? They would wish that, even if the scheme adopted were a different one, in connexion with the University of London?—Yes; but I think that sentence must not be taken as implying that all the schools think it desirable that the colleges, as such, should be represented on the governing body.

11,114. At present in the draft Charter of the Gresham Scheme you have very large representation. Each college has a representative, making 10, upon the Senate?—Yes.

11,115. Would you be content with a less share than this?—I should not like to answer that for my colleagues.

11,116. You say you would like Medicine to have a share equal to that of any other Faculty in the government of any University. That seems perfectly just. According to the Gresham scheme you have a great deal more than any other Faculty?—A great deal more.

11,117. You would not like to say that you would be content with less?—I should not like to say that in the Gresham scheme we would be content with less. I would not like to answer that.

11,118. Under another scheme would you be content with less?—That is what is implied here. I think that is what is meant.

11,119. Why would you be content with less in that case than in the other?—It was a new institution. We did not know in the least how it would work.

11,120. So far you are all of you in accord, but as far as I gather you yourself are strongly of opinion that it would be better to bring the present London University into any scheme which might be adopted;—That is so. I did not know that I had said so.

11,121. I gather it?—It is not part of my brief.

11,122. Now I think I have exhausted what you have to say in common with the others, and I will come to those points upon which we are to have your individual opinion?—Then I speak as the representative of Charing Cross Hospital now; not at all as representing my colleagues of all the schools.

11,123. You speak now not only in your own character and of your own opinions, but as representing Charing Cross school?—Yes. The first point is one about there being only one University for London. We think that is very desirable indeed. We think there should not be two Universities in London, because, in the first place, it would lead to a competition, which we should regret, between the Universities; and that competition would lead to the splitting of support—State, municipal, private, and support from students—a thing which we believe, as it is against existing institutions, would be brought into play between the Universities. So that, in order to concentrate support for the University, we should wish to see only one.

11,124. Is that the chief reason, that it would interfere with endowments, that the endowments would be divided between the two?—It is a matter of money, we think, very largely.

11,125. I see you go on to say that the best scheme now before the teaching bodies is that known as the professorial scheme?—We believe that to be so.

11,126. And you would develop that scheme in connexion with the present University of London. One of the chief points in that scheme is that it contemplates the absorption, either immediate or gradual, of all the existing colleges. Is not that the case?—It does not contemplate in any way the absorption of the medical schools. Of course that would be impossible.

11,127. The medical schools are to be an exception, but the general principle is that institutions are to be absorbed?—The general principle, as I understand it, is that amalgamation is a good thing, up to a certain point at all events, for medical schools as well as for others; but the medical schools have not the power to place their buildings and their plant at the disposal of the University.

11,128. You think University College, and King's College, and any other institutions that there might be which would join it, should be absorbed and their buildings appropriated, but that this should not apply, and could not apply, to the medical schools?—It is impossible to the full extent for the medical schools—quite impossible.

11,129. In what way would it affect the medical schools? Would the teachers still belong to the medical schools as they do now, or would the teachers all be University teachers?—The teachers would belong to the medical schools as they do now, unless any medical school saw fit to request the University to appoint the teachers in a particular branch.

11,130. Would the University have the power to appoint professors outside the medical schools, and to compel attendance?—There is to be no compulsory attendance, as I understand.

11,131. Not as regards the University professors, but of course as regards school teachers there must be compulsory attendance?—Certainly, where a license is concerned.

11,132. This professorial scheme, so far as it affects the medical schools, would merely be that there should be outside professors appointed whom the students might or might not attend as they pleased, though still being obliged to attend their own teachers?—I imagine it would be a very long time before there would be outside professors—or University professors, I suppose you mean?—in certain branches.

11,133. I used the word "outside"?—I imagine it would be a very long time before University professors would appear in certain subjects. In the first place funds would be wanting, and professorships could not be established until funds were found. Then, as the funds did come in, the professorships, I imagine, would be devoted to subjects which are not taught or not taught fully in the medical schools—things which no medical school could keep up. Those, I imagine, would be the first to appear. Then by degrees, if the idea is recognised as a correct one—only by degrees—the professorships would develop to the required extent. If it were found better that each hospital and each medical school should continue to teach medicine and surgery, we will say, if it were found that that was the best plan, no University professor who would interfere in any way with the teaching of medicine and surgery in the medical schools would appear, I take it, in the process of evolution; but if it were found that it was a distinct advantage to have the University professor of medicine dealing with certain subjects in a certain way, in the course of time that professor would appear.

11,134. As far as I gather the essence of the professorial scheme would be that the government of the University should be mainly in the hands of the University professors. This would not suit you, I suppose. You would wish your own teachers to have a share in the Government of the University?—I think the teachers ought to have representation equal to that of any other Faculty.

11,135. And the teachers of University College and all the other colleges until they were absorbed, would have a voice in the government as well as the University professors?—Yes.

11,136. It seems to me it would be a very mixed kind of professorial University and hardly to be designated by that name?—The title may be perhaps badly chosen if we did not agree to the government of the University in large part by the professors, but I do not think that is an important part in the scheme; that is not what strikes me as important. It is the idea of amalgamation where competition does harm and prevents the higher development of the University.

11,137. There would always be a certain amount of competition among the different medical colleges as long as they were not absorbed, would there not?—There would be a competition as there is now, but I do not think that would be so great as it is now, if we were all blended in one University, and if all our students were undergraduates or a large number of them at all events. But with regard to the Senate, in this statement, which is the only authorised one put forward by the Association, it is not stated that the Crown nominees, or at all events outside members, would constitute something like half the Senate, and it is not necessary, I imagine, that every University professor should have a seat upon the Senate; otherwise it would be a very large body. That is not necessary I take it. I am not a member of this Association. I have simply endeavoured to understand what they do mean.

11,138. As far as you do understand it you are in favour of it, are you?—I think it offers a chance of development very much greater than the Gresham Charter.

11,139. Then we may take it that the Charing Cross school and hospital are in favour of it also?—With regard to saying that, I called a committee, and a large majority of that committee were in favour of it, but it was not a very full one. We have got quite to the end of the season, and many of my colleagues did not attend.

11,140. With regard to the Royal Colleges of Physicians and Surgeons you are of opinion they ought not to form part of the new University?—I think not.

11,141. Does that mean that they are not to be represented on the Senate at all?—I see no objection at all to there being representative members of the Councils of the two Colleges upon the Senate, but I think they ought to be on the Crown half, so to speak.

11,142. What your observation is particularly directed against, I suppose, is the draft Charter of the Senate in which the Royal Colleges were to have a very strong voice indeed in determining the medical examinations?—Yes that is so. I think the University ought to hold the examinations itself.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,143. You think practically that it would be objectionable for an outside body like this to be joined with them?—I think so; and also if it were in any way to come between the teaching body and the direction of the examinations or the conduct of the examinations.

11,144. Would it not have one good effect by reducing the number of examinations to which a student is liable now?—I believe it is quite unnecessary that the number should be doubled, as it would be, supposing that the Gresham Charter as it stands were carried. I believe it is quite unnecessary. In this way, if I may explain: I think the degrees should not carry a license, but that the Royal Colleges, as the licensing body, should be required to inspect all the examinations constantly, and that the Inspectors should certify to the licensing body that those who have passed the University examination are worthy of a license; and in consideration of performing that duty they should receive a certain fee, say, one about equal to the German licensing fee, say, 10*l.* or 10 guineas.

11,145. But they would be able to inspect every examination to see that it was conducted according to their view?—To see that it is up to or above licensing standard.

11,146. This would amount almost in an indirect way to letting them form a part in the University? It would come very nearly to a conjoint examination, would it not?—No, I do not think they would be examiners. They would be inspectors.

11,147. But still they would have power to disallow anything. That would give them power to make recommendations and to interfere?—If they found the University examination was sinking below the licensing standard, I should say that we ought to be thankful to them for doing so; but that seems to me to be a way, and a very practicable way, of having but one set of examinations; and although the degree does not carry a license, still the license will be given for one set of examinations, and the expense ought not to be much larger, if any larger, than at present, for the double diploma. I do not think the diplomas of the two colleges should be given upon that inspection or upon that examination. I do not think we have a right to demand it.

11,148. You think the medical degrees of the University should not carry a license: but the present University degree does carry a license?—It does.

11,149. Would you take that away from them?—I am sorry that degrees should license. I think we ought to insert the thin end of the wedge in constituting a new University, and endeavour to render them academic.

11,150. You would have two degrees, and allow the London University to give two different kinds of degrees, one—the present one—to all comers, and another one to be confined to persons taught entirely in London?—Yes.

11,151. And the new degree would not carry a license, but the old degree would continue to do so?—I would prefer that it did not.

11,152. You would propose to take away the power that it now has of giving the license, would you?—Except under inspection and certificates from the licensing bodies.

11,153. Is there any information which you would wish to put before us about Charing Cross Hospital and Medical School?—I do not know whether this Commission desires to have evidence with regard to the government and so forth of the school.

11,154. No, I do not think we do.—I put it down in case you wished it; that is all.—(*A prospectus of the School with a statement as to its government and system if discipline was handed in.*)

11,155. Is there anything else you would like to say, either as representing the whole of the Schools, or as representing Charing Cross Hospital, or on your own account?—I do not know whether I have made it quite clear why we, at Charing Cross, prefer the professorial scheme. If I may summarise the reasons the first is, as it seems to us, that it is the only attempt to put

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

compromise aside—that it is an honest endeavour to start with a clean sheet of paper. The next one is that, supposing the bodies to agree, it would constitute one University in London, with the advantage that support would be concentrated upon that University; this would enable that one University to attract teachers and workers in numbers sufficient to meet the demands of London—for, of course, the teaching is not to be confined to the University professors—there may be any number of extra-ordinary professors, lecturers, and readers placed anywhere within the metropolitan area under the University direction. Further, undivided support would enable the University to provide laboratories and libraries, such as our present experience, show that the competing institutions are unable to provide. It does not seem to us that the Gresham Charter holds out any real probability that the power to grant a degree will enable these institutions to make first rate provision of this kind.

11,156. They will provide University laboratories by, in the first place, taking possession of those which already exist, belonging to King's College and University College, and any others that they can get?—Certainly.

11,157. Making them belong to the University?—It is a change of trust, a handing over of trust, I imagine that that is what is meant. Then, again, the process is not a violent one. There is no compulsion. A medical school need not join in the University; that is to say, it need not have any of its teaching done by University lecturers, it can continue much as it is. But on the other hand, the University will provide, say, the best science teaching, and it will be open to the medical schools to make use of that science teaching on neutral ground. The difficulty, I believe, which has hitherto fought against any combination among the medical schools, has been that where a student starts there he is likely to remain. For example, if students went up to University College or King's College for their science it was feared (I do not know that it was a well-grounded fear), that there they would remain. The result has been that all kinds of endeavours have been made to teach science without having recourse to either of those institutions, or to one of the larger schools which has efficient laboratories. The University would provide such teaching upon neutral ground. The student would go there and would be taught his science subjects; then he would make choice of his medical school.

11,158. He would make use of the medical school for the actual professional instruction, and go to the University for science and for general knowledge?—Yes. Then, of course, with regard to the absorption of institutions—as we understand it, it is to be quite a voluntary thing. If the councils of bodies which we ask to allow their institution to be absorbed see fit, they will transfer their trust to the Senate of the new University. This is a business part that I am not at all an authority upon, I am afraid, but, as I understand it, trust funds would be maintained as trust funds with special purposes, by the University instead of by the colleges. Supposing certain institutions consent to be absorbed in this way and to place their buildings and their plant at the disposal of the University then the University would arrange how teaching should be conducted in those buildings. The same subjects would be taught, but in much larger buildings and with much finer plant, the apparatus, &c., being combined. With regard to the existing teachers, I understand—it is the only thing I should support—that these teaching institutions shall be taken over as going concerns.

11,159. And the professors taken with them?—At first. It is only as vacancies occur that this idea, if it is recognised as a right one, can be carried out. At the start the University will almost necessarily be somewhat clumsy in its working, but the only alternative to clumsiness is injustice. Therefore it seems to me, if we recognise the idea as a right one, we ought to put it as far as possible into working order without doing injustice. We must take over existing concerns and endeavour to work them; but as vacancies arise there will be a fusion of teaching—chairs will be blended.

11,160. It would be a gradual process. I understand you would avoid everything in the shape of compulsion. It would be entirely voluntary, and it would be hopeless to establish this unless the different colleges would be willing voluntarily to come in?—I imagine so.

11,161. You say that one advantage of this is that it would not be a matter of compromise, which any other scheme would be, but I think you have already laid down on behalf of the medical schools pretty stringent conditions without which you would not be willing to come into any scheme of the kind?—What were they my Lord?

11,162. That you must have a strong representation on the Senate?—Only equal to the other Faculties.

11,163. That the degrees must not be beyond the reach of the students?—That, my Lord, would be arranged, I imagine, by the teachers and the examiners.

11,164. And that the teachers are not to examine their own pupils?—That is a mere matter of detail.

11,165. But, at any rate, you have made your conditions, and do you not think that any other body who joined would be likely to make their conditions also before they would come in. For instance, the representatives of the Bedford College appeared before us as advocates of the professorial scheme, but they made a condition that their own plant was to be kept untouched, and they were to have separate laboratories for women, and various conditions of that sort. Everybody who supports the professorial system makes conditions, and the only way to form a University that would have a chance of their support in starting would be by giving way to all those conditions and making them fit in as a compromise. It seems to me as much a matter of compromise as any University we could start?—At first I think it is so. It would be clumsy and there would be difficulties, but it is the chance of development that we are looking forward to.

11,166. Any scheme which starts must at the beginning be a matter of compromise whether professorial or any other?—Yes, at the start. Then, to continue, on the professorial scheme, I imagine the teachers would have the position which all the medical schools wish; they would have an equal share, that is to say, in the government of it. And with regard to the constitution of the Senate, although it is not stated here, I have understood officially from members of the Association that what they do anticipate is a Senate consisting half of Crown nominees, nominees consisting of outside parties, and a certain number of Convocation ultimately; whilst the other half is to be the teaching half. With regard to the University professors having *ex officio* the right to sit upon the Senate, I do not know that that is absolutely necessary and many people feel objections to it. They suppose that the professors would become absolutely autocratic; that they would feel quite irresponsible, having been elected once for all, and it being impossible to get them out again. Then, again, many object to their receiving all the fees in their department which, I imagine, it would not be at all necessary they should do. Again, they suppose that they might stay on after they were incapacitated. All those things might be guarded against quite easily. But it seems to me that, if thought desirable, it would be quite possible under the professorial scheme, to provide for Faculty representation. The representatives might be professors, or they might not, according as they were sent up by the Faculties.

11,167. That is the scheme you would prefer. Now I will ask you a few questions about the Gresham Charter, which is really what is referred to this Commission, at all events as the starting point. Your main objection to it is that you think there ought to be only one University instead of two?—Yes.

11,168. Then, besides that, have you any objection to the scheme as a whole?—I should object to the Gresham Charter that its governing body is founded upon the representation of institutions as such. I do not think they ought to be represented as such. I think it would be much better if we had teachers represented as such.

11,169. I thought you said the medical schools would not come into any scheme unless they were represented?—Unless Medicine was represented; not as individual institutions.

11,170. (*Professor Sidgwick.*) The words are "claim recognition and representation as colleges"?—I took occasion to explain that if that representation were taken as representation of colleges some of us do not agree with it.

11,171. Then you, individually do not agree with this?—No, not on that point. It slipped in at the end of our drafting the thing.

11,172. (*Chairman.*) You yourself, then, and some of the medical colleges, disapprove of the Gresham University because it depends really upon the representation of institutions?—We regard that as a flaw, because it preserves institutions, with all their jealousies and rivalries.

11,173. All that part which refers to Faculties and Boards of Studies you approve of?—I think so.

11,174. That is a great part of the scheme?—Yes.

11,175. What other objections can you mention?—Additional objections may be inferred from the reasons I have given for supporting the professorial scheme—for preferring it to the Gresham scheme. I do not think this offers the same chance of development.

11,176. Of course you are aware that, though it only starts with two colleges besides the medical schools, there are provisions for bringing in any others which would be real working institutions, with autonomy and other requisites; and if bodies apply to come in and are refused they have an appeal to the Privy Council?—Yes.

11,177. Therefore, though it appears to start on rather narrow foundations, there is great capacity for development, and it might become larger than at first sight appears?—There is no provision, so to speak, for extra teaching here, nor is there much chance of obtaining extra funds.

11,178. There is a provision at the end of the third clause which might be made compulsory, which might include professors as well as lecturers, and very little alteration would give that power?—In the first place funds will have to be found for it. I do not think this is likely to get a large amount of funds. In the next place the lecturers, according to the Charter, do not seem to occupy a very prominent or a powerful position in the University, although they would be University lecturers, and they would teach with the authority of the University.

11,179. That is a detail that might be easily remedied?—Of course the Charter might be altered.

11,180. Is there anything more you wish to say against the Gresham Charter?—I think not.

11,181. Is there any other statement you wish to make with regard to the general question?—I think not.

11,182. (*Lord Reay.*) What you aim at is that in a new University there should be a greater co-ordination between the various medical schools?—Yes.

11,183. You wish that, with regard to scientific and clinical teaching, the students should not be allocated to one school, but should be allowed by inter-collegiate arrangements to make the most of all the opportunities which London offers?—I think that would be very advantageous, although there are certain stages of the curriculum at which it would not be at all advisable to have men wandering about.

11,184. Certainly not, but the students, for instance, at St. Bartholomew's, might be allowed some time or other to exchange with the students of another hospital?—I think during the earlier part of their clinical career it would be objectionable to change their schools.

11,185. Would the same objections exist during the later stages?—At the end it might be a great advantage for them to see the practice at other institutions.

11,186. I should not have ventured to put the question unless I had known that this view was held by medical authorities. Would you object to the various medical schools being inspected by the University authorities?—Personally I should think it would be a very good thing.

11,187. Then with regard to examinations, do I understand that the University alone is to examine? The students of the University are not to be examined by any outside body?—Not for degrees.

11,188. But to obtain the license, would you require examination by the Royal Colleges?—That was not what I suggested. My suggestion was that the University examination should be inspected by the licensing bodies, and that the licensing bodies should receive fees for that inspection, and that they should certify to the licensing bodies that any who passed those examinations were worthy of the license.

11,189. Then University examinations would, to that extent, become subordinate to the influence of the Royal Colleges?—Perhaps I do not quite understand the question. It is not in any way under their influence unless it falls below the licensing standard.

11,190. It is hardly conceivable that if the Royal Colleges appoint inspectors of the examinations, and those inspectors are not satisfied with the examinations, a representation from the Royal Colleges should not be made to the University with regard to alterations in the examinations?—Yes, that is so.

11,191. Then, as I say, to that extent the Royal Colleges would have an influence over the examinations of the University?—Yes.

11,192. I see that you insist upon residence as being essential. Are the schools all agreed upon that point?—I believe they are.

11,193. Would that residence be made compulsory for the last two years of a medical student's career?—It was believed that that would be the best time to insist upon residence in London.

11,194. Do you claim for all the teachers of the medical schools membership of the Medical Faculty of the new University, or do you only claim it for a selected number of teachers who would be recognised by the University?—We think it would be better if all had a seat in the Faculty, the Faculty being electoral.

11,195. All the teachers appointed as they are now by the governing bodies of the schools?—Yes.

11,196. And those appointments by the governing bodies of the schools not to be subject to any veto or to any recognition of the authorities of the University?—Not necessarily.

11,197. Would you distinctly object to the exercise of the power of veto?—On the appointments in the schools, do you mean?

11,198. Would you object to the University refusing admission to a medical teacher as a member of the Faculty?—I do not see a case in which it would seem to me desirable. Could you instance a case in which it might seem desirable?

11,199. I should hope it would not arise, but it is conceivable that a teacher might not be considered by the University sufficiently efficient to be a member of the Faculty?—Then they would not recognise his teaching.

11,200. You admit that?—Yes. If they declined to recognise his teaching I should think it was a very wholesome thing.

11,201. Then with regard to the appointment of medical professors by the University, you see no objection whatever to that?—Do you mean the University professors?

11,202. I mean professors of the University who would, I suppose, mainly take post-graduate classes?—I think it is very desirable that there should be teachers of the higher branches.

11,203. You have distinctly stated, and all the schools, I suppose, are agreed, that the standard of the existing degree of the London University should not be depressed, and that the new degree should not be a lower degree but rather a degree of a different kind?—It is difficult to define exactly what is wanted in the pass degree. It will be very different from the present honours degree, as we call it, of the University of London. But there are distinct defects in the present degree of the University of London, to my mind, which might be remedied.

11,204. Is the chief defect the multiplicity of subjects which makes it difficult to test the quality of a student in a particular subject?—They are too much for a man to get up well in the time—the average man.

11,205. (*Professor Sidgwick.*) I do not quite understand your view with regard to the examinations. You think the Royal Colleges should inspect the examinations of the University, and that they should give a license to those who pass these examinations?—Yes, I am reversing the other suggestion really.

11,206. Are they likely to give a license for work done in examinations that they do not conduct?—I think I was suggesting that they should have sufficient control.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,207. You wish to exclude them from conducting and to let them inspect. Is that it?—I wish the University to conduct, and the licensing body to certify.

11,208. Do you think it at all probable that they would agree to allow their license to be obtained by examinations from the conduct of which they are excluded, although they are allowed to inspect, considering the breadth of the claims that they have hitherto put forward?—I do not know what view they would take upon that point, but I can see no reasonable reason why they should not.

11,209. If I understand you, you think with regard to the standard of the degree, that the examinations of the Conjoint Board, at any rate in the strictly medical subjects, maintain a sufficiently high standard for a University degree?—I should have thought that it would have been a little higher.

11,210. A little higher even in those subjects?—Yes, I should have thought so.

11,211. I suppose the difference, however, would be more marked as regards the general training in arts and science?—Yes.

11,212. There the University standard would be very decidedly higher?—I should hope so.

11,213. In order to maintain that you approve of a conference among the Boards of Studies so that the Faculties of Arts and Science should have a sufficient control over the medical curriculum?—Certainly.

11,214. You talked of the existing London degree remaining as a degree in honours. If the ordinary degree was expressly said to be a degree in honours, it would, according to the usual meaning of the degree in honours, imply a considerably higher attainment in strictly medical subjects, otherwise the term would hardly be appropriate. Do I understand you to think that the degrees of the London University now represent a distinctly higher standard, even in the strictly medical subjects, than the degree you would propose to institute?—I think so.

11,215. Would it be enough to justify the distinction between honours and an ordinary degree?—I think so.

11,216. You say that the majority of London teachers are in favour of a system of examination in which the student is not examined by his own teachers. According to a good deal of evidence which has been brought before us the representatives of science, or at any rate a large number of them, are very decidedly in favour of the other system. I suppose, therefore, in the Preliminary Scientific you would, if necessary, allow their view to prevail?—Personally I am not at all strongly opposed to, in fact I think I am rather in favour of, the teacher examining.

11,217. Do you think it probable that that could be arranged, that the science teachers could have their own mode of examining in science?—I should not object in the least.

11,218. I see that in the last clause, as worded, the demand of the London schools is only for a share equal to that of any other Faculty in any new University?—That was the reason why we fought with the suggestion of pushing the demand—I beg your pardon. I am afraid I have misunderstood the question.

11,219. I understood you to say that in the Gresham University, being a new University, you demanded a somewhat larger share; but, as this is worded, the demand for medicine is only for a share equal to that of any other Faculty even in a new University, so I suppose we may take that as expressing the demand in which the schools are agreed?—That is so.

11,220. Though your own view is that the share of control allotted to medicine in the Gresham Scheme is rather desirable than a new University?—Personally I am not in favour of making one Faculty more powerful than the others.

11,221. We may then take the more moderate demand here as representing all that the London schools are agreed to claim?—Yes, that is all that we are agreed to claim.

11,222. With regard to what is said about having one University instead of two, that it would prevent the splitting of support, do you not conceive that it might stimulate municipal and private benefactions, municipal benefactions from the Corporation of London or bodies in certain parts of London, or private benefactions from London donors—to have a distinct University entirely for London rather than to have it mixed up with what would remain an examining board for the United Kingdom?—I do not think so, because, in the first place, the University would bear the name of "London," and, in the next place, it would be most intimately associated with London in its teaching; its great work would be done in London.

11,223. But its graduating functions would remain Imperial?—It would teach only in London and its governing body would be constituted only from London.

11,224. But it would have to retain the functions of examining, and arrangements would have to be made by which that function should be exercised with impartiality as between London teachers and other bodies. Do you not think that would require a scheme somewhat as complicated as the scheme of the Senate was, and bearing in every part those features of compromise to which you seem to object?—I understood from the signatures that the scheme of the Professorial Association had received the support of those who oppose the Gresham Scheme.

11,225. The opposition to the Gresham scheme was, at any rate to a great extent, from provincial institutions; and, although the names of individual teachers in those institutions are, no doubt, among the supporters of the professorial University, we have no evidence that the institutions would approve of a University in which the examinations were so completely under the control of London teachers. Suppose they objected, and something resembling the scheme of the Senate was brought forward, that would not, I understand, meet your views?—Not at all.

11,226. The one University that you would support is distinctly the professorial University?—Yes.

11,227. May I ask whether you would be still more strongly opposed to the scheme of the Senate than to the Gresham scheme?—I do not know that.

11,228. You are opposed to both, and you prefer the professorial?—I think perhaps the scheme of the Senate might develop more freely.

11,229. The scheme of the Senate would involve the maintenance of complicated arrangements?—Yes; but perhaps that might be eliminated in course of time.

11,230. You would trust in the future?—We must give time.

11,231. With regard to your preference for the professorial scheme, if I understand it, it is a preference for a scheme in which the London medical schools would remain independent and retain control over their own teaching in medicine and surgery at least, according to Clause 9 of the professorial scheme?—Yes.

11,232. I have no doubt you have seen that in the professorial scheme, although, as you say, it is comparatively free from the characteristics of compromise, the medical schools are treated very differently from the other institutions. It is supposed that the other institutions will under a gentle compulsion be forced into the melting pot, but the London medical schools are to be left out of the melting pot. May I ask if that characteristic is one of the grounds on which you approve of the scheme?—I should not call it forcing them into the melting pot; I call it a handing over of trusts, and a different appropriation of material, funds, and so forth. I should like to see a monument raised to the people who handed over the trusts. It does not seem to me to be at all derogatory.

11,233. One idea of the promoters of the professorial scheme is that if any one institution agreed to be absorbed, other institutions would wish to be absorbed also?—Believing in it, I should hope so.

11,234. But the medical schools would have to remain?—Well, it is not their own property.

11,235. The scheme in which the other institutions are absorbed and the medical schools remain distinct, meets your approval?—Yes.

11,236. (*Professor Sanderson.*) The expression "beyond the reach" in this paper, applied to the examinations of the University of London, might mean either that unnecessary subjects were introduced, or that the times of the examinations were inconvenient, or, in other words, that the organisation of the examinations was unsuitable. Does that express what is meant by "beyond the reach"?—My belief is that one of the great difficulties, particularly in the preliminary scientific examination of the University of London is

that too much is required to be got up in the year given to it.

11,237. That the time is too short?—Yes.

11,238. At all events, one may understand that the examinations would admit of being easily modified so as to make them useful for the purpose intended?—Yes.

11,239. For instance, with regard to the practical examinations of the Conjoint Board, is there really any reason to suppose that there is any difference in standard, and excellence of method, between the practical examinations of the Conjoint Board, and those of the London University?—Is there any reason to suppose that the examinations of the Conjoint Board are in any way inferior, either as regards efficiency or suitableness, to those of the University of London?—I have never shared in those examinations, so I really could not say positively, but my strong impression is that many men who hold the double license could not pass the M.B. of the London University.

11,240. In those subjects?—In those subjects.

11,241. So you say that any scheme which would involve the use of those examinations for the purpose of the University would not do. Is that your opinion?—Yes, that is my opinion.

11,242. (*Mr. Rendall.*) In favouring the scheme for a homogeneous University, I suppose as far as the trusts of the medical schools are educational, you would not mind their being put on the same footing as others, and transferred, so far as they are willing, to University control?—I do not think we have any trusts.

11,243. Is no part of them educational and devoted to the endowment of teachers?—I do not think so.

11,244. They are in all cases attached to the hospital and blended with the other trusts?—Yes.

11,245. In paragraph 4 of the paper you have furnished us with, you say, "The London teachers of "medicine are of opinion that a good general training in "arts and science should be required of candidates "for a degree in medicine." Are we to understand that you would be disposed to distinguish the degree tests from the diploma tests?—Yes.

11,246. You would be prepared to see the degree tests maintained at a somewhat higher and more exacting level, would you?—Decidedly.

11,247. Higher than the revised regulations of the conjoint colleges?—Yes.

11,248. With regard to the scheme of the Senate of the London University, paragraph 47, you take exception to the strong representation and the equal co-operation of the Royal Colleges of Physicians and Surgeons with the Senate?—Yes.

11,249. I did not quite gather all your reasons; one was that you wished to preserve the independence of the University in the determination of its own degrees and tests. In fact, it gives them an equal voice?—Yes.

11,250. Was there any other objection, or does that practically sum up the whole of your objections?—I do not think the royal colleges are at all desirable bodies to have in a University.

12,251. You think it might tend to confuse their function as licensing bodies with the powers and jurisdiction as degree-giving bodies?—Yes. I think they would greatly complicate the working of the University.

11,252. You think that instead of a conjoint action between two bodies there should be quite different purposes and jurisdiction?—Yes.

11,253. Then with regard to the suggestion you put forward, which was new to me, of the Royal Colleges recommending or granting licenses on the strength of University examinations, have you thought what sort of machinery could be adopted, or what sort of provision could be introduced into a University Charter which would secure that?—No.

11,254. How could this Commission, or any commission have power to introduce a clause that should compel the colleges, or even permit the colleges, to take that course?—Might it not be stated that the Royal Colleges should be asked, or could it not be found out beforehand from the Royal Colleges, whether they could undertake the duty?

11,255. Do you mean that it should be put as a proposal to them?—Yes.

11,256. And supposing the Royal Colleges assented at the present time through their governing bodies, how could it be secured permanently as an operative machinery for the University?—Do you mean the colleges might withdraw?

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,257. Yes; they might withdraw, or they might decline to give the license. Would it not place the University somewhat perilously in the hands of the colleges?—Is there no means of binding the colleges—giving the colleges the duty?

11,258. I should have thought not. In a University Charter it would be quite new, would it not?—It would.

11,259. You have not thought of that constitutional difficulty, have you?—No. It seems difficult in constituting a new University to give it a license.

11,260. At any rate, so long as there was harmonious action it would work well, but if there was a conflict I think the University would be left at the mercy of the colleges?—What kind of conflict could arise?

11,261. By their declining to give a license?—Is there no instance in which a licensing body undertakes to inspect the examination and give a license upon that examination? I suggest that it should be placed in the hands of the Royal Colleges to inspect the examinations and to certify that the examinations are up to or above the licensing standard.

11,262. Another question which I have to ask is, whether you would extend a similar arrangement to the Society of Apothecaries?—It is not for me to say. I have no objection, but I have nothing to do with it.

11,263. In either case it would have to be by previous negotiation with the licensing bodies?—Yes.

11,264. Do you think the Commission would do rightly to approach the Apothecaries' Society on the same terms as the Royal Colleges?—I think there ought to be only one licensing body for England and Wales.

11,265. You would not fear to tie the University definitely to the prospective harmony between its own action and the Royal Colleges in this particular?—I should like to see it made a part of the duty of the licensing body.

11,266. But you cannot quote any parallel instance?—No. I see no reason why it should not be done.

11,267. (*Mr. Anstie.*) I understand you to recommend that the Royal Colleges should have the power of inspecting University examinations for the purpose of ascertaining whether they are up to the licensing standard, but at this moment is it not the case that the Medical Council has the power of inspecting University examinations, because they carry with them a license, and also the examinations of the Royal Colleges themselves because they carry a license?—Yes.

11,268. No doubt you suggest that we might make a recommendation for legislation, but would you suggest that we should recommend so complicated a system as that, with respect to the London University degrees, the Royal Colleges whose examinations are themselves inspected by the Medical Council, should take the place of the Medical Council, and form a new inspecting body?—It would be quite a different thing. This inspection would be constant.

11,269. I do not see the difference. The Medical Council has by statute a power to inspect, in order to see that the licensing examination shall be up to a certain standard, and it has that power over the Royal Colleges themselves. Now you suggest that that subordinate board of the Royal Colleges, subordinate to this extent, should have an additional power of inspection running alongside?—I was regarding the Conjoint Board as the State licensing body, but apparently it is not. I had forgotten that the Medical Council inspected. But the Medical Council is not really a licensing body.

11,270. No, it is an inspecting body. You had forgotten the function?—Yes.

11,271. In point of fact your suggestion would require a reconstruction of the Act, and an alteration of the policy which at present governs the matter?—Yes, but with the views of, in the end, getting the licensing bodies reduced in number, and the standard uniform.

11,272. Do I understand you to say that you would be willing that no college teacher should be recognised

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

without the sanction of the University governing body? —I did not say so.

11,273. Would you be content that no college teacher should have the status of a University teacher without the sanction of the governing body of the University? —I think that would be fair.

11,274. Then you would be willing to allow that?—The title of University teacher I think would go only with University sanction.

11,275. With those rights and advantages which accompany the position?—What rights?

11,276. Having his teaching recognised as University teaching, and having a position on the Faculty?—As I understand all teachers in the medical schools would have a seat in the Faculty, would they not?

11,277. I think you have a little forgotten one provision in the Gresham Charter itself. Clause 11 says that "no designation of persons to be members of the "assemblies of the Faculties shall take effect without "the approval of the Council." That actually gives that power to the University?—Yes, it does.

11,278. Would you wish to abridge that?—No.

11,279. Then you are content that no one should occupy the position of a Faculty member without receiving the sanction of the governing body?—Yes, I think so.

11,280. Now, to go one step further with regard to the difficulties you have indicated, might it not be better if the medical schools could be united into one common body, or their number diminished by a union amongst themselves?—To a certain extent I think it would be an advantage.

11,281. Might not that be a more practical recommendation for this Commission to make than the other?—I hoped it would come.

11,282. Do you desire that the Commission should recommend that some such association should take place among the medical schools themselves?—I think that with regard to certain subjects it would be a distinct advantage that they should be taught in common by certain schools.

11,283. Do you mean that instead of there being a dozen separate bodies they should be reduced to one or to a few?—No.

11,284. That you would not recommend?—No, it is not desirable in the least.

11,285. And that you do not think is a recommendation that the Commission ought to make?—No. I think it would be harmful.

11,286. Why do you think it would be harmful? Suppose, for instance, that a school which was properly equipped were to unite with a less well-equipped one, would that be harmful?—I think the classes would get too large.

11,287. Which classes? Do you think the science classes would get too large?—The science classes certainly.

11,288. Has there not been a suggestion that there should be a central school of science connected with various medical schools in the metropolis?—Yes, for certain ones; but the number of students attending all of them would not have been very unmanageable, I imagine.

11,289. If that be so with respect to science, to what point is it that the unmanageable number applies?—In all classes it becomes difficult if you get more than a certain number of men together for teaching.

11,290. I understood you to say that they would not be so numerous as to create a difficulty if a central school were established?—Would you include anatomy and physiology under "science" also?

11,291. No, anatomy is not, as I understand, included under the subjects which have been described as "science"?—The same thing holds exactly with regard to them. The same thing would hold, of course, with regard to all practical subjects.

11,292. Then would you say that with the present arrangement of London schools the number of localities in which scientific education in medicine is given, is in excess of the requirements?—I think it is.

11,293. Then if it is in excess of the requirements, I do not quite see where the difficulty would arise of uniting them?—Difficulty arises as to the amount of blending—as to how far it should go.

11,294. Was your answer only directed to the suggestion that they should all be united to one?—Yes; I should object to that most strongly.

11,295. But you would not object to the union of some of the stronger with some of the less strong, would you?—No: not for the teaching of certain subjects, providing the classes could be kept of a certain size.

11,296. Would it not be more convenient that they should all be united into one body with a distribution of centres of instruction, having due regard to distance? —No, I do not think it would be possible.

11,297. Why not?—Because of the size of the classes. Do you mean to say some new building should be put up to accommodate everyone?

11,298. No. I am suggesting the large hospitals as centres?—It could not be done.

11,299. Why not?—I thought you said they were all to be united.

11,300. No; I have dismissed the consideration of a complete union of all, on the ground that alleged that it would be too large; but if, as you say, the localities are in excess of the requirements why should there not be some modified form of union?—That is what I have been wishing for.

11,301. Or that there might be instead of three schools one school. Would not that be more convenient than having a mere interchange of classes?—For certain classes it would be desirable, for others it would be undesirable.

11,302. Why would it be undesirable, assuming the number is not too large?—For clinical purposes we cannot possibly get the people together. We must use the material where it is.

11,303. No doubt, but you would in the case I am suggesting have the clinical opportunities, say three hospitals, and there would be this advantage arising out of the union that there might be cases in one hospital which would be inaccessible to the students of another hospital?—The men would have to keep running round three hospitals. It would waste too much time.

11,304. But assuming that the distance would not be too great—— ?—You would never know where your men were. They would be in the street, and you would think they were in the other schools.

11,305. Do you think that is a practical answer?—Yes; you would never know where they were.

11,306. You do not seem very cordial in your desire for a union of the schools?—Not for a complete blending of that kind.

11,307. (*Sir George Humphry.*) This is said to be a statement of the points upon which the London medical schools are agreed. Are they all agreed upon the statement?—I understand so.

11,308. What is meant here by "the London schools"?—What was done was this. The London schools sent delegates to a committee; that committee appointed a sub-committee to draw up certain questions (*for these questions see Appendix* 20) which they thought were of vital importance with regard to this matter. Those questions were sent round to each of the delegates; the delegates then considered them together, and then each delegate went to his school and summoned a school committee, and put the opinion of the delegates upon these questions before the school committee. Then he brought back with him the opinions of the school committee, and those were reduced to the points upon which the schools are agreed.

11,309. Then we may assume that practically the London medical schools are agreed upon all the points stated here?—So we believe.

11,310. Beyond that, in the various points to which you have called attention, we must not consider what you have said as representing the agreement of the schools?—No.

11,311. It appears as I judge, that the London medical schools are on the whole in favour of there being one University. It is not explicitly stated, but I infer that?—Yes, if it meets their demands.

11,312. Then that one University must be the one University now existing, I conclude?—That is the idea, I believe.

11,313. They are agreed that the University of London should be made the basis of this new University which is proposed?—Yes.

(*Professor Sidgwick.*) I thought you said they were not agreed upon that.

11,314. (*Sir George Humphry.*) "With regard to the "establishment under Charter of an efficient teaching "University for London, the medical schools of London "are agreed upon the following points, which form "part of the Gresham Charter, and which, in their "opinion, ought to be included in any University "scheme for London." I conclude that means in one University scheme?—Yes.

11,315. They agree upon certain points of the Gresham Charter which they wish to be added to the present University of London?—Yes. They would wish to see this kind of system introduced in any University, either the re-modelled University of London, or any new University which may be established.

11,316. But they would wish for one University?—Yes.

11,317. And that one University must be the one now existing?—I suppose so.

11,318. (*Professor Sidgwick.*) Mr. Boyd, I think, has already said that only a majority is in favour of one University, and that is why there has been no statement in the scheme?—Yes, there are one or two schools at all events which are distinctly in favour of the Gresham Charter, and then there must be two Universities.

11,319. (*Sir George Humphry.*) Then the medical schools are not agreed upon this statement?—I have not got all the evidence of the different schools together. You will see in a paragraph lower down we refer to the two possibilities.

11,320. It appears then, on the whole, that the medical schools are not agreed on that one cardinal point of whether there should be one University, or more than one?—I think I must say no, because I know there is one, and I believe there are others which are absolutely in favour of the Gresham Charter.

11,321. Added on to the London University?—Certainly.

11,322. The terms of this statement do not imply that. I infer that this means that they were in favour of there being one University, but they agreed with the plan of the Gresham Charter added to that one University or united with it would be what they wish?—In those particular details I think they would be satisfied with that. No, I am wrong in that, because there is one school which prefers to have the Gresham Charter as it stands.

11,323. They would prefer to have two Universities?—Yes.

11,324. So that is not clearly laid down?—No.

11,325. On the whole they desire that there should be a medical degree accessible, as it is stated here, to the majority of students?—Yes.

11,326. But that they do not wish the standard of the present degrees of the University of London should be lowered?—No.

11,327. They do wish that there should be sufficient examination in general knowledge?—Yes. Might I just say one thing? You are asking me now questions as the principal witness of all the schools?

11,328. Yes?—Then you will not take any notice of the evidence I have given.

11,329. No. It is the feeling of all the schools in London that there should be a degree which the majority of students may obtain, which is accessible?—Yes.

11,330. They wish them to have an efficient examination in arts and science?—Yes.

11,331. Do you know whether they desire that the examination in arts and science should be the Matriculation Examination of the University of London?—I have never heard them say so.

11,332. Because they especially say that they "have "no desire to depress the standard of the existing "degrees of the University of London." You see they draw their example from the University of London. Do they desire the Matriculation Examination of the University of London should be the one which they should be required to pass?—I suppose it would follow that they would accept that examination, but what they mean is that they do not wish to alter in any way the existing degree of the University of London if the University of London is to be re-modelled to suit their purposes. They wish those degrees to remain at their present standard.

11,333. Supposing the University of London to be remodelled, would they require the Preliminary Scientific Examination to be continued?—I suppose they would regard that as the honours' examination in science. They do not wish, I should say, to have the Preliminary Scientific Examination of London as the science examination for the new degree.

11,334. They would wish that to be settled by Boards of Study of Medicine conferring with other Boards of the University?—Yes.

11,335. Then the medical schools are agreed in desiring that this should be a purely local University?—Yes.

11,336. And that the degrees should be restricted to London students?—Yes.

11,337. That would, of course, exclude all provincial students from the obtaining of those degrees?—If a new University is constituted.

11,338. They make that a *sine quâ non* in the modification of the University of London?—Yes, with regard to certain degrees.

11,339. So that, whatever University is to grant degrees in future, the provincial student should be excluded from it?—Yes, with regard to those particular degrees that they stipulate for.

11,340. The particular degrees of any University which is to grant it?—Of any new University.

11,341. Or any modification of the London University?—No, they wish the honours standard to remain open.

11,342. They have not stated that here, but for the regular degree, such as is now given if the University of London be remodelled, the degree of the University of London as now given (which would be the degree accepted by them) provincial students would be excluded from?—I do not think I have made it quite clear what they did mean. What they do wish is this; if the University of London be remodelled, that a set of pass degrees shall be instituted, which shall be open to London trained students only.*

11,343. All pass degrees are to have the standard of the existing degrees?—No. The existing degrees are to remain as honours degrees. We do not wish to depress those. They would remain open to the provincial students as well as anybody else.

11,344. It would not follow from this sentence: "The "London medical schools have no desire to depress "the standard of the existing degrees of the University "of London." Then they wish for a separate examination for this degree which is not to be a pass degree after all, but which is to give the degree for the ordinary students?—That is the pass degree.

11,345. That is to be a different examination from the present examination of the London University?—Yes. It is something like the old system of the London University in which there were two examinations, one for pass and one for honours.

11,346. That would be on a somewhat lower standard?—Yes, somewhat.

11,347. And the provincial students should be excluded from that?—Yes, it is to be a degree which will indicate that the student has been trained in London.

11,348. The object of the degree is to improve the position of the practitioners of England, is it not?—Not only their condition, but I hope their education.

11,349. To improve the status, we will say, of the practitioners of England. They feel themselves to be at a disadvantage at the present time because they cannot obtain the degree easily?—We would rather put it that it is unfair that they should not have it.

11,350. You would not feel it to be unfair that the provincial students who now obtain the licenses in London should not be able to obtain this degree?—Not at all.

11,351. Why should not that be unfair?—There are provincial Universities for provincial students, and I hope there will be more of them.

* London trained = having "resided" at least 2 years in a College in the University.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,352. There are not at present?—There is the Victoria University.

11,353. There are a large number of provincial students. One-fifth of the students now come to obtain their license in London?—Do you mean at the London University?

11,354. No. I say there are a large number of students who come to obtain their license?—We do not propose to touch that at all.

11,355. But you would not allow them in addition the opportunity of obtaining a degree?—No.

11,356. Why should they be excluded?—Because if they came in they would want a voice in the government of the University at once.

11,357. No, not necessarily. Would that be the only reason?—Is not that the meaning of provincial Boards of Studies, London Boards of Studies, and so on.

11,358. No, it is a matter of passing examinations and obtaining the degrees simply?—I thought the difficulty was that the provinces declined to come into any examination under the control of London teachers.

11,359. On the pure question of obtaining the degrees on the same terms as the London students would you exclude the provincial students without regard to the representation?—I should say yes, because it does not signify then that the student is a London trained student, and that is what we wish this degree to state.

11,360. At present there are one-fifth of the students from the provincial schools. Are they less well trained than those who come from the London schools?—I would not say anything about that.

11,361. You would not infer that they are less well trained?—No.

11,362. Then there is no reason on that ground for saying that the London training is better than the provincial training?—I do not wish to institute any comparisons at all.

11,363. But you would exclude them?—Yes.

11,364. One cannot quite see the ground of that?—It is because we wish the degree to be the stamp for the London trained students just as the Cambridge degree is the stamp for the man trained in Cambridge.

11,365. Hitherto London students and provincial students have stood on the same ground with regard to licensing diplomas and University degrees?—Yes.

11,366. Would there be any advantage to anybody in excluding them from this proposed degree?—May we look at it in this way? The London University has not been a success very largely, because it has been distributed all over the world, the provinces, and elsewhere. Why carry out the same system again?

11,367. Has that in the least been the reason why London University has not been a success?—I thought so. I thought the share in the government which was demanded in the London University by the provinces was a distinctly complicating element, and that it prevented it from meeting the London views.

11,368. Neither the provincial nor the London medical schools have demanded any share in the government of the London University?—Because that is not the system upon which the London University governing body acts.

11,369. Then the failure of the London University cannot depend upon provincial schools requiring any government in it?—Not as schools.

11,370. The failure of the London University cannot depend upon the fact that provincial students have been admitted to the examinations?—No, because schools have not been represented.

11,371. Therefore, that cannot be the cause of the failure of the London University. One wants to know what advantage there will be to any one if the students from provincial schools are excluded feom this new degree?—The advantage will be that this new degree will mean a certain thing.

11,372. Is there any particular advantage in its meaning a certain thing, which certain thing seems not to be different from the other thing?—I declined to institute a comparison.

11,373. Now you do institute a comparison?—No, not at all.

11,374. You say that would signify that the student had been trained in London?—Yes.

11,375. Does not the provincial student do as well as the student trained in London?—I do not know, so you must not take me as assenting to that.

11,376. Would there be any advantage to London students in this exclusion of provincial students?—Yes, I imagine so, because we hoped that the arrangements for this degree would be in the hands of London teachers quite undisturbed by outside influences.

11,377. But it may be, and it is at present, much in the hands of London teachers, and the regulation of the future London University in this new proposed scheme might be entirely in the hands of London teachers, and yet provincial students might be admitted to the examinations?—We propose to admit them to everything that they have been admitted to hitherto.

11,378. You are admitting a new thing which you feel to be important to the practitioners of England, and yet you desire to exclude provincial students from it?—Because we think we have a right to.

11,379. Do you think that is a liberal view that would be accepted. Do you not think it is illiberal?—No, because we wish to see the establishment all over England of Universities wherever there is sufficient money to support them.

11,380. The point of depriving the University of licensing powers is entirely your own view, I apprehend?—Yes.

11,381. That view is not at all shared by your school, is it?—No.

11,382. Perhaps you have not considered what that would lead to?—You mean applied to all Universities I should like to see it so.

11,383. All Universities in the empire?—Yes.

11,384. So you would not allow even an Edinburgh degree to grant the license to practice?—I should rather see that it did not.

11,385. How would they obtain the license?—From the State licensing body.

11,386. What would be the State licensing body?—The Royal Colleges.

11,387. You mean that all the students in Edinburgh should be required to pass an examination which is approved by the College of Surgeons and the College of Physicians, Edinburgh?—That is what I would suggest.

11,388. Now with regard to the combination of the schools; Charing Cross has, I believe, lately increased its laboratories and its equipment generally?—Yes.

11,389. And they regard that as sufficient for the education of their students in the preliminary sciences for medicine?—Yes.

11,390. Would they wish to combine with any other schools, do you think?—It is very difficult to speak for one's colleagues upon that. I think a certain amount of blending would be an advantage.

11,391. Would that be compulsory?—It would be much better to leave it optional, to make it to their advantage to do so.

11,392. Would you make it compulsory?—I think not. They would soon find out if other schools do it, and their students get on better.

11,393. In the case of how many schools in London do you think it would be desirable?—I am not sufficiently acquainted with the other schools to say.

11,394. The greater number of schools in London are, I suppose, what one may regard as fully equipped?—I suppose so. I really do not know sufficient to give an answer of any value to the question.

11,395. Then you hardly know whether it is desirable that there should be any combination at all?—I think I know enough to say that. That is my own opinion, of course.

11,396. Then do you know enough to say that there are many schools with regard to which it would be desirable?—I think there are several.

11,397. And you would leave them to that voluntarily?—Yes.

11,398. When you spoke of University professors you did not mean that these University professors would be teachers in the schools, did you?—No.

11,399. What was your idea with regard to University professors?—Do you mean in medicine?

11,400. No, I rather mean in preliminary science?—The University professors, I suppose, would have their laboratories, and be at the head of them.

11,401. They would have their laboratories quite independent of any existing institutions?—Of course their laboratories might be anywhere.

11,402. Supposing University College to join in a building with South Kensington, would you wish that the London medical schools should go through the preliminary science teaching of the University of London?—I think in many cases it would be very desirable, but nobody connected with this scheme contemplates teaching huge classes, inviting 500 or 600 men down to one class.

11,403. I suppose the result of men going to preliminary scientific teaching in University College would mean that they would go to University College Hospital, and continue their studies at that school?—Why?

11,404. Do you not think it is very probable that it would be so?—I do not think I quite understand your question.

11,405. Do you not think that the school at which a student commenced, whether it be preliminary science or other, is probably the school at which he would continue?—It is said so. I do not know that it is true.

11,406. It seems natural, does it not?—I think there is proof to the contrary. There is always a large entry of men in preliminary science at University College, and they do not keep them. They do not stay there.

11,407. Do you think it would be well that there should be instituted through the medium of this University or other some inspection of the schools of London?—I think myself that it would be good.

11,408. So that they would be able to ascertain what is the character of the teaching and the opportunities for study, and suggest means for improvement. Do you think that would be a desirable thing?—Yes. I think it would be best conducted by having practical examinations held in the school with an outside examiner.

11,409. You mean examinations in medicine and surgery should be conducted in the schools?—And the practical work.

11,410. (*Professor Ramsay.*) May I ask what is your position at Charing Cross Hospital?—I am one of the surgeons.

11,411. And you have a lectureship, have you?—On anatomy.

11,412. I understand the view of the body you represent to be this: you do not in this paper assert definitely that you want one University rather than two Universities. That is an open question as far as this paper is concerned?—Yes.

11,413. What the paper states is simply this: whatever University is instituted, a part of its constitution shall be to contain the conditions which you lay down here?—Yes.

11,414. As a matter of fact the majority of your body is of opinion that those conditions can be realised by one University?—Yes.

11,415. A small number think they cannot, or at any rate would prefer two Universities as contemplated by the Gresham Charter?—Yes, they would prefer it.

11,416. Your own opinion is that one University would be best?—Yes.

11,417. Then from your answers to Sir George Humphry I gather that this one University is to constitute two separate and independent degrees in medicine?—They would be separate for the outsiders, but they would be continuous so to speak. They would stand in the relation of pass and honours degrees for the London students.

11,418. I understood you to say that there should be two kinds of degrees, each on a different platform. One would correspond to the existing degree of the University of London, which you say does not meet your requirements?—It would remain as the honours degree.

11,419. It would not meet the requirements of your school?—No.

11,420. You want another degree which would be of more easy access?—Yes.

11,421. When you talk of an honours degree and a pass degree, do you mean two different degrees, or do you simply mean a degree given in one case with honours and in the other case without honours?—I mean that the pass degree shall have no honours.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,422. Do you mean anything more than the system which prevails at every University, by which one student takes an ordinary degree, the pass or poll degree, and another student takes the same degree, but instead of the ordinary examination he takes a higher examination? Both those persons at Cambridge or Oxford simply style themselves B.A. or M.A.?—Yes.

11,423. There is no distinction as to the degree: the distinction is as to the examination?—Yes.

11,424. Is that the plan you propose for a single University for London?—Yes.

11,425. With regard to the question of admitting outsiders, you do not propose, of course, that the University of London should abnegate its present functions of examining those who come from all parts of the world?—No.

11,426. You would not look upon that as at all an essential?—No.

11,427. Therefore the University of London would go on giving degrees exactly as it does now, only instead of calling its degrees in medicine simply M.B., M.D., it would be M.B. or M.D. with first, second, or third class honours, as the case may be?—Yes.

11,428. To the degree with honours you would admit the whole of the world, but you would not admit anyone outside London to the degree without honours?—No.

11,429. Therefore, there would be no such thing as a pass man from the provinces?—No.

11,430. There could only be an honours man from the provinces?—Yes; what they have at present with a slight change.

11,431. No, not exactly what they have at present, because every man who takes the London degree is not an honours man?—No, but we should suggest that the pass M.B. at present should be the third class honours upon that standard.

11,432. You mean the present M.B. of the London University?—The present pass examination.

11,433. Should be third class honours?—Yes.

11,434. And the present examination of the two colleges would be the pass examination?—Yes.

11,435. It should be given, I suppose, on a different examination?—Yes.

11,436. I suppose one of the objects of giving a degree of that kind is to improve the education of the bulk of the profession?—Yes.

11,437. And you consider that a degree founded upon a course of training which is in your own hands, that is in the hands of the teachers of London, a more solid, sound, and satisfactory degree than one which is founded upon examination only?—Yes.

11,438. But do you see nothing anomalous in this, that you propose to admit those who have had *ex hypothesi* no special training to take honours, and honours only, whereas you would admit none but those who have taken a superior course of training to take the pass degree?—That is what I understand by the system of examination at the London University carried out over a considerable time; that with questions selected because they are very difficult the examiners are able to find out whether a man has had the advantage of training or not.

11,439. Then you mean to say that all the men who get the present London degree have obtained that training?—Yes: in medicine.

11,440. And a man so trained in London you would think only worthy to get a pass?—Not so: he may go on to honours in any or all subjects.

11,441. At Oxford and other places if a man goes in for honours and fails he may yet be thought by the examiners to come up to the standard of a pass. That is a reasonable proceeding, is it not?—Yes.

11,442. That would be wholly impossible under this scheme you suggest?—Yes, for the outside student.

11,443. And you would have, as I understand, the same set of examination papers for both sets of candidates?—In honours.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,444. But a totally different set for your pass examinations?—Yes.

11,445. To which no outsider could get access?—Yes

11,446. Then an outsider failing to get honours would get nothing?—He goes in for the examination as he does at present.

11,447. Your difficulty is not founded upon the difficulty of setting examination papers fair to both sets of candidates?—No.

11,448. You would not say that a set of examination papers which is suitable for the London student, trained in the London schools would be unsuitable or unfair for the student from the provinces who has received his training elsewhere?—Certainly not.

11,449. For this pass degree you said you desired a high standard?—Yes.

11,450. If it were not a high standard it would not improve the education of the profession?—No.

11,451. It is to be something higher than that required for the qualification of the Colleges of Physicians and Surgeons?—Yes, especially in arts and science.

11,452. But it is to be lower than that required for the present London medical degree?—Yes.

11,453. And you said one main objection to the London medical degree was that it contained too many subjects for the period of study?—Yes.

11,454. You have a course laid down of five years?—Yes.

11,455. Do you conceive that the programme for the M.B. of the London University is too much for five years of good ordinary study?—I think it is very difficult to get up well the science portion in one year.

11,456. And according to the scheme of the London University there is only one year laid down for that?—From the matriculation to the preliminary scientific is one year.

11,457. That is the minimum permitted by the University, is it?—Yes. Five years for a medical student is long time.

11,458. But I suppose a medical student would generally take two years for that part, would he not?—No, he crams and gets through anyhow.

11,459. If he does get through anyhow, does not that show that one year is sufficient for the purpose?—Or he fails and he takes one-and-a-half years.

11,460. But with a five years course is it not intended to give the first two years to general scientific education?—By general science you do not include anatomy and physiology, do you?

11,461. No, preliminary scientific?—One year.

11,462. And four years for the subsequent part of the course?—Yes.

11,463. Are you prepared to say how much you would strike out from the London syllabus if you were laying down your scheme of an examination?—No.

11,464. You do not complain of the examination of the London University in the practical subjects?—No.

11,465. That is the medical, surgical, and obstetric subjects?—No.

11,466. Therefore, it is only in the preliminary scientific subjects that you would make the change?—With regard to that, I had really not answered the question straight off as to what change might be regarded as necessary in this pass degree from the present degree.

11,467. You are not prepared to lay down anything definite?—No.

11,468. But you would reduce somewhat the science subjects?—Science runs through all the London University examinations on a higher level than is necessary, I imagine.

11,469. Now, would you state the reason why you prefer one University to two?—The main reason is to avoid the competition and the division of support.

11,470. What would the competition be between?—Two Universities.

11,471. But if the London University has no teaching functions?—The London University, I imagine, would very soon assume them It is quite open to it to do so at all events

11,472. You think, that if a special teaching University were created the present University of London would immediately, out of a spirit of competition, add on teaching to its present functions?—I do not know what it would do, but it might.

11,473. That is what you imply?—Yes.

11,474. The tendency of competition, you think, between the two Universities would be rather in a direction downwards than upwards?—It might be.

11,475. You have no definite opinion about it?—No.

11,476. With regard to the position of the schools under the University, I do not quite gather how much power you propose to give to the University over the schools?—The University would, of course, regulate the examination, and the schools would have to teach to those. They would have to teach up to them.

11,477. I think you propose that the University should have some voice in the appointment of teachers in the schools?—I am afraid I could not in any way promise that that should be so.

11,478. You suggested that there should be certain teachers called University teachers?—Those would be appointed by the University. I think that is generally understood.

11,479. Do you mean that the University should single out in any particular school certain eminent teachers and make them professors?—I think the idea was this: Supposing a school wished to have its lecturer on anatomy with a seat in the Science Faculty as well as in the Medical Faculty it should apply to the University to appoint its lecturer, and that the University would then refer to a board of experts on the subjects as to who was the best person to fill this Chair. Then the University would make appointment with some kind of consent of the schools.

11,480. Do you mean that only those teachers who are represented on the Faculty should be considered University teachers, and not the whole body of teachers?—We take it for granted that the teachers of anatomy in the medical schools would be in the Medical Faculty; but, supposing a school wished its teacher of anatomy to sit in the Science Faculty—as teaching the science of anatomy rather than medical anatomy, which are two different things, he could not sit in the Science Faculty, unless the University had appointed him. The University would not trust the schools to appoint a scientific anatomist.

11,481. Do you mean to say it would not trust the schools to appoint a scientific anatomist to teach in the schools, or to represent them in the University Senate? I do not quite understand what the University appointment is to do?—The University appointment would give the scientific anatomist a seat in the Science Faculty and increase the University status of the school.

11,482. He already existing as a teacher of scientific anatomy?—Yes.

11,483. Then the University would have the power of electing certain professors to be members of the Faculty?—Yes.

11,484. But according to the Gresham Charter, all the teachers would be members of the General Assembly of the Faculty?—Yes, of the Medical Faculty.

11,485. Are you speaking now of the special representatives chosen by the General Assembly to represent them on the Council?—No, I was not speaking of the Council at all. That is the way in which it was put to me by members of the professorial association, that all the teachers in the medical schools, if they wished it to be so, should have seats in the Medical Faculty——

11,486. That is in the General Assembly of the Faculty?—Yes—but that the teachers of science in the medical schools would not have seats in the Science Faculty, unless they were appointed with the approval, at all events, of the University.

11,487. That is only a special point to meet the difficulty of science professors who might belong to the two Faculties?—Yes.

11,488. But taking the teachers as a whole, do you or do you not contemplate that the Council should have any say in their appointment?—I am afraid there would be opposition to it.

11,489. You would object to a system of recommendation by the school to be followed by approval by the University?—I thought that would be the best way of arranging it, but I am afraid there would be great opposition to it on many sides.

11,490. Otherwise the University would only prescribe the course of study, and have the necessary power to see that it was carried out?—Yes, and also, I think, it would be desirable that the University should be able to inspect the schools.

11,491. It should have the power of inspecting the schools, and of striking out any if they thought the teaching in them was not efficient?—I do not know that they have the power of striking them out if they think the teaching is not efficient.

11,492. You recognise that there would be an advantage in consolidating the teaching of the schools?—Yes.

11,493. There is waste of teaching power going on now?—Yes.

11,494. Could that be made at all to apply to the clinical work?—No.

11,495. Is it your opinion that there is abundant clinical material in the hospitals now?—Yes.

11,496. In every hospital?—Yes.

11,497. If the number of students were very much enlarged by instituting a new teaching University in London, would the hospitals be able to meet the demands?—Yes, I should think so. Of course it depends upon how much the numbers were enlarged.

11,498. Is it not the case that there is a very large amount of valuable clinical material in London which is not used at all for the purpose of teaching?—Yes.

11,499. In connection especially with unions?—Yes.

11,500. Are you acquainted with the Paris system?—No.

11,501. I understand that in Paris a student does not require to belong to any particular hospital school at all. All hospitals are free, and consequently every hospital may become a clinical school if it has the capacity of attracting students. I suppose any plan of that kind would interfere with the privileges of the schools as they now exist?—Yes.

11,502. Is there any way of bringing into use any part of this clinical material which is now wasted educationally?—I think it has been suggested that professors should be appointed and visiting surgeons and physicians, and so on, to the different institutions.

11,503. Would it be a desirable thing that the University, if not satisfied with any medical school, or if satisfied that there was valuable material outside, should have power to appoint professors who should go and teach, if they could get students, in hospitals not now included in the schools?—I should think not. I do not think it would be at all a desirable thing.

11,504. You do not think the extension of University teaching in that direction is a desirable or a practical thing?—No, not for clinical teaching.

11,505. The fact being that at present no student can possibly get clinical teaching, unless he is a member of a special school?—Yes.

11,506. The schools, I believe, follow mainly one common principle, do they not, in their internal management?—I think so.

11,507. I mean in the question of promotion from one post to another. Is it the case that promotion in most of the schools, in regard to most of the appointments, goes by mere seniority?—No.

11,508. Mainly?—Not in the schools; in the hospitals.

11,509. But the teaching positions are all filled, I understand, except of course the purely scientific posts, from the staff of the hospital?—Yes, all the medical and surgical teaching.

11,510. It is all supplied by the staff of the hospital?—Yes.

11,511. Is it not the case that if once a man gets upon the staff, his promotion follows as a rule by seniority?—Yes.

11,512. But before he is on the staff, when he is teaching the preliminary science subjects, that is not the case, is it?—I do not quite understand that.

11,513. I mean in those schools which give a preliminary scientific education in chemistry, and so forth, the teachers in those subjects are not taken from the staff?—No, as a rule not.

11,514. Are the teachers of those subjects usually taken from students who have studied at that particular school?—I really could not say. At Charing Cross it is not so.

11,515. Is it the case that the medical staff of each school is mainly recruited from that school?—It is not so in the smaller schools.

11,516. Is it your experience that the area of choice is thereby unduly limited?—That would be expressing an opinion about other hospitals. It is very difficult for me to do that.

11,517. But in your experience, would it be a desirable thing that these appointments should be thrown open as widely as possible to all applicants?—It is very difficult indeed to make a selection among young men. A hospital takes its own men. If they are not worth having, I suppose it would have somebody else. Generally speaking, they know their own men best, they know whether they will develop into what they want, and they take them.

11,518. And the men they take are competent?—Yes; it is always possible that another school may have a better man.

11,519. And the passing over of an inside man in favour of an outside man would be looked upon as a blow to the whole school?—I do not think the students think much of that when they enter.

11,520. Are these posts looked forward to by the students in the same way as fellowships or tutorships are in an Oxford or Cambridge College?—They are always given by examination, and they are strictly fair.

11,521. You do not see anything in the present system which calls for interference by an outside body like the Senate of a University?—No.

11,522. I think you said that it was impossible, or nearly impossible, for a student to go from one school to another?—Yes, it is difficult.

11,523. But that it was not necessary that a student should stay at one school for the whole of his time?—With the five years curriculum which we now have, it has occurred to me that if any circular ticket could be given which would enable the student to take clinical instruction elsewhere than in the school in which he had received his first two years instruction it would be an advantage.

11,524. So that if there was a man of great reputation in one school it would be a possibility for the students of other schools to attend his lectures?—Yes, not only that, but there are different views in different schools. It is an advantage for a student to know them all.

11,525. Could an arrangement like that be made?—I should think so.

11,526. You would not think it desirable that the University should do anything to encourage such a change?—If others agreed with me, I have not the slightest doubt that it could be arranged. I am speaking entirely for myself.

11,527. And if power were given to the University to exercise some kind of supervision so as to facilitate arrangements of that kind, you would not look upon that as an objection to the scheme?—Seeing that we claim an equal share for medicine, if it were carried by the Council, I do not think it would be objected to.

11,528. And it is an emphatic part of your proposals that you do not demand more independence for medicine as a Faculty than would be demanded for any other Faculty?—We are all agreed upon that.

11,529. (*Professor Sidgwick.*) There are one or two points upon which I have not exactly understood your answers. I think you said that you did think the standard of the existing London degrees higher than what you would propose in medical subjects, though more prominently so in the scientific?—That was my feeling.

11,530. And the objection to the standard is not merely to the scientific subjects, though mainly to these?—I think so.

S. Boyd, Esq., M.B., B.S., F.R.C.S.

28 July 1892.

11,531. Is that the general view as far as you know? I think the scientific parts of medicine and surgery would, perhaps, not be carried quite to the same pitch in the new degree.

11,532. You distinguish the scientific parts of the medical subjects from the more practical parts, do you?—Yes.

11,533. You think in the more practical parts it is not too high, but in the scientific part it is higher than is needed?—Yes, that is my feeling.

11,534. I think in answer to Lord Reay, you said that you approved, or did not disapprove, of the University having a right to refuse the recognition of teaching in the colleges, though you would not give it the appointment of teachers. Such an answer left a doubt on my mind as to whether in your professorial University, you would give the University a power of refusing membership of a Faculty, and refusing recognition of teaching. The reason why this is important in my view is that we have had evidence that at any rate in some of the schools the scientific subjects, or one or other of them, have been given to persons who have not been thought to be specially qualified, and the question is whether the University should have power in a case of that kind to refuse recognition, and refuse membership?—I should myself be inclined to allow it. With regard to those science teachers, I think they should not have a seat in the science Faculty.

11,535. You would draw a line between science teachers and medical teachers?—I do not know whether it would be necessary if the medical schools had the power that they wish for in the government of the University; but as it stands at present I do hold most strongly that the medical schools know their own business best.

11,536. If they had the control which you demand for them might the University bodies so constituted have this reserved power of refusing recognition to a teacher even in medicine?—I think myself it might safely be granted under those conditions.

11,537. With regard to the question Sir George Humphry urged upon you as to the exclusion of the provincial students, I should like to put a question as I conceive it, and see if you would answer it in my form. It occurred to me when Sir George Humphry was asking his questions that the retort might be made upon us at Cambridge, "Why, if you are so concerned "for provincial students, should you not throw open "your degrees to Birmingham and Sheffield?" If we were asked the question our reply would be that we conceive that the teaching at Cambridge on the whole imparts valuable qualities which is not and cannot be represented by the results of examination alone. Do you, then, think that the right to give a mark for London teaching, similar to that which is given for Cambridge and Oxford teaching, may be claimed on similar grounds that in such a University as we have to institute the London teaching of medicine would impart on the average, and to a sufficient extent, qualities that could not be represented in an examination?—I believe that is the feeling of those who formed that scheme.

11,538. Do you think that they have as much claim on the ground that I have stated as Cambridge or Oxford has?—Of course the extent covered is nothing like so great.

11,539. (*Professor Sanderson.*) Do you wish the standard of a new pass examination to agree with the standard of other English Universities, say Cambridge, Oxford, or Victoria?—I do not know sufficient about them to say. I do not know sufficient of their standard to be able to place the standard of the new degree in relation to it with any accuracy.

11,540. But on the whole would you wish the standard of the new degree to correspond in general with the standard of other Universities?—Yes.

11,541. Admitting that the London standard is too high, is it your opinion that the standard of the new pass degree should be equal to the standard of other Universities in the United Kingdom?—Yes.

11,542. (*Mr. Rendall.*) In this proposed distinction between the pass and the honours degrees you have not explicitely stated whether you would admit the students of London schools to the honours degree?—Certainly. It would be open to the world.

11,543. You would leave the metropolitan students the option of proceeding to the pass degree or the honours degree, would you?—Yes.

11,544. You said that one at least or two of the medical schools had expressed a definite preference for the Gresham University?—Yes.

11,545. Do you feel at liberty to say which of the schools that is?—They will inform you themselves. St. Bartholomew's is the one I had in my mind. University and King's College are of course bound up with the Charter.

11,546. (*Professor Ramsay.*) There is a question about the representation of medical schools on the governing body that I should like to put. It was represented to us by one witness that it was a possible arrangement that the schools might be held to be sufficiently represented in their interests through a representation furnished by the Colleges of Physicians and Surgeons, but, that, on the other hand, the Colleges of Physicians and Surgeons could not be adequately represented by a representation of the schools. In your view, as representing the schools, would you think it an adequate representation of the interests of the schools if they were represented solely by a representation from the Colleges of Physicians and Surgeons, looking to the fact that these colleges, include a large proportion of the teachers in the schools?—Certainly not.

11,547. You think it essential that the representation of the schools must be from the schools themselves?—Except that I do not wish that at all myself. I do not wish the schools to be represented as such at all.

11,548. Then what do you wish?—I wish them to be represented as Faculties, not as schools. I do not desire to see any institution represented.

11,549. But supposing it were a question of institutional representation?—Then the schools themselves.

11,550. If it were a question of institutional representation, you would consider it essential that the schools should be separately represented whether or not the Royal Colleges of Physicians and Surgeons were represented?—Yes.

11,551. (*Professor Sidgwick.*) May I ask how that clause got into the list of the points on which you are agreed?—It was just at the very end of the meeting. We talked a good deal over that, and finally it was drafted in that way by a conjoint board.

11,552. Do you think there are others of the same opinion as you?—There are others who prefer a professorial scheme and the University of London scheme.

11,553. (*Lord Reay.*) There is one point to which Professor Ramsay alluded which I want to make quite clear. Do I understand that the medical teachers in the various medical schools—I am not talking now of scientific teachers—rise to their higher appointments through certain grades by promotion?—Very often.

11,554. After having done what we may call relatively inferior work they are appointed to the higher work?—That is so.

11,555. A man who is appointed to do inferior work has no claim to be appointed to the higher office?—None at all, except what his work has given him a right to, so to speak.

11,556. That is to say, the boards of the various hospitals in making the higher appointments would look only to scientific excellence and proficiency, and the candidates standing in his profession?—That would be the chief point very decidedly.

11,557. May I put it in this way. The Board of the Charing Cross Hospital would have no hesitation if there was a man of greater professional capacity and renown in one of the other schools in appointing him rather than appointing one of their own men?—No, I do not think I could say that. It is almost unknown for a school really to go outside its own body in order to get a teacher of medicine or surgery or one of those branches—the higher branches.

11,558. To that extent they are more or less close corporations?—They are; but of course the teachers have been most carefully selected before they have got on the staff at all.

11,559. If the council of the new University when a vacancy occurs in one of the medical schools were to suggest that it would be for the good of that school, and for the good of the students in the University that a certain man should be appointed, not only from one of the other schools, but from either Edinburgh

or Glasgow to add to the renown of the University of London, how would such a suggestion be received?—I am afraid it would be received with anything but favour.

11,560. With reference to your statement just now of St. Bartholomew's being in favour of the Charter, may I ask whether Dr. Norman Moore, who, as Chairman of the Delegates, signed the paper which has been referred to, is on the staff of St. Bartholomew's?—Yes.

11,561. (*Sir William Savory.*) You are aware that the two Royal Colleges have declared in favour of the University of London, are you not?—No, I did not know that.

11,562. Are you aware that on the Council of the College of Surgeons there are four out of five surgeons of St. Bartholomew's?—Yes. You mean that you do not support the Gresham Charter. I was simply judging from a document which I have seen of the evidence which St. Bartholomew's proposes to offer.

The witness withdrew.

E. A. Schäfer, Esq., F.R.S., examined.

E. A. Schäfer, Esq., F.R.S.

11,563. (*Chairman.*) You have heard the evidence of the last witness. May I take it for granted that as to those points on which the London medical schools are agreed you are of the same opinion that he is?—Yes, I am generally of the same opinion. I must make this proviso: there has been no opportunity to lay these points before the Faculty of Medicine of University College, but I was instructed by the Faculty of Medicine to represent them, and I believe, from previous discussions on the subject in the Faculty of Medicine, that those points which are put forward as the points on which the London medical schools are agreed would also be entirely agreed upon by the Faculty of Medicine of University College. There are one or two points in Mr. Boyd's evidence, however, which I think the Commission might take to be evidence of an official character, I mean to say as representing the medical schools, in which certainly all the medical schools are not agreed. One was the constant reference to a new degree as being a pass degree as compared with an honours degree of the University of London.

11,564. I will ask you first whether you are most in favour of working through the London University, or the Gresham scheme?—The Gresham scheme. In the original document which was submitted to the delegates from the London medical schools, the words "pass" and "honours" appeared, and after discussion those words were carefully struck out, because many of us were certainly agreed that we should not be satisfied with any degree which would be reckoned as a mere pass degree; that if there were a special degree, either the degree of a new University or a new degree of the present University, we should require that honours should be also attached to that; and that there should be a possibility of obtaining honours and scholarships in examinations for that degree as well as for the present University degrees. I am quite sure that Mr. Boyd will bear me out when I say that we were not agreed on that question.

11,565. That there should be a possibility of taking honours connected with that degree which is confined to London students, and under the substantial control of London teachers?—Yes. And we considered—in fact the subject was mentioned and specially referred to in such terms by some delegates who were present—that that was a fatal objection to what is commonly known as the Senate's scheme.

11,566. Do you think that the two could not be possibly combined, and therefore you would be driven to having a second University?—That is what it practically amounts to. And, further, I should like to say this, I do not know whether it was a personal opinion of Mr. Boyd's or not, but certainly I should not be disposed to agree with the statement that the present University of London is a failure. I should have said, on the other hand, that the present University of London is in its way a great success as an examining board. I believe that the examinations are conducted with the greatest fairness, and that they are on the whole of such a nature that you are bound by them to select the best men who present themselves for examination from all parts of the world. For my part personally I may say, and I am sure I may speak for the whole of the Medical Faculty which I represent, I should be strongly opposed to any interference with the present University.

11,567. Do you think a new University would have a tendency to interfere with it or lower it, or do it any harm?—No; I do not think a new University would interfere with it any more than the establishment of Victoria University has interfered with it. Many of the best students of the Victoria University, or, at least, of the colleges which are attached to the Victoria University, still present themselves to the University of London; they still take the honours and the scholarships; and it would be the same with regard to students in London. With regard to the question of one or two Universities, the delegates of the schools were distinctly asked whether they were in favour of one or two Universities. Almost all said they were in favour of one, but they at once made the reservation which practically appears in this paper, and which would require such re-modelling of the present University of London that, as anybody may see, it would mean the establishment of two Universities. I should like to say that my personal opinion in it is a misapplication of terms to call the present London University "The University of London." It is not the University of London in the same way as the University of Oxford is the University of Oxford, or the University of Cambridge is the University of Cambridge. It is a University for the whole world, and as such we honour it, and would like to see it continue. It is not a University in the ordinary sense, nor one specially for London students, and we do not see why London students who study in what is practically the London University, namely, the teaching institutions of London, should not have the same opportunity of obtaining a University degree by attendance on the courses of those teaching institutions, and by exhibiting evidence of such attendance in examinations. We do not see why they should not obtain the stamp of a University degree in the same manner as the students who study in any other University. I should like to say—although that must be obvious to all members of the Commission—that actually the nearest approach to a University in London which has ever existed is the University which is to be found in University College, King's College, and in the medical schools—at least in the largest medical schools. A very large part of the London University work—nearly the whole of the London University work—both in teaching and in research, has been done in these institutions. If I might be allowed to say a few words with regard to the Medical Faculty of University College, I would point out that more than half of the honours of the University of London have been gained from University College, and that nearly 30 posts on the staffs of other medical schools are at present held by University College men. I am talking only of medical posts. Many of the most important posts in the scientific parts of medical training are also held by men who have received their training wholly or in part as students or professors in University College. I may refer to my own subject: the Professors of Physiology at Oxford and Cambridge, the Professor of Physiology at King's College; the Professor of Physiology at University College, Liverpool; the Professor of Physiology at Aberdeen; the Teachers of Physiology at St. Mary's, at Charing Cross, and at other schools; all have received the whole or part of their scientific training at University College. Further, I should like to point out that in other respects also, viz., in its encouragement of research, the teaching of the Medical Faculty at University College resembles University teaching. In certain subjects University College has been the pioneer of all other University Colleges, indeed of most Universities in this country. It was the first in this country to teach physiology as a special subject by a specialist. It was the first in London—and is, I believe, the only one—to teach anatomy as a special subject by a specialist. It was the first to establish a professorship of pathology, and it is acknowledged to have been the pioneer of practical teaching in medical subjects generally.

E. A. Schäfer, Esq., F.R.S.

28 July 1892.

11,568. You say that at present most of the people wishing for distinctions go for degrees to London, and form a considerable body of the people who take the University of London degrees. I suppose in the future if another University is established they will go to the new University, the Gresham, or whatever it might be?—If the new University were a teaching University which absorbed all other teaching institutions, they would go to that, but if it were a confederate University they would go to the teaching institutions which formed that University.

11,569. Therefore you would take away a great number of those who go for the London University degree, and in that way the London University might think the establishment of another University would injure them?—I think not, not more than the establishment of the Victoria University in the North. That has in no way injured the University of London.

11,570. Now I will allude to the question of endowment. Do you think the second University would intercept any endowment which might otherwise go to the University of London? Do you think that having two bodies requiring to be endowed instead of one would be a disadvantage?—I do not think the present University of London requires to be endowed.

11,571. Therefore it would not suffer in that way?—No, it would not suffer in that way. Then I should like to say that the Medical Faculty of University College does not consider the professorial scheme as a practical one. It looks to the development of a scheme similar to that of the Gresham, with, if possible, some ultimate union of the medical schools. It thinks that if a new University is to be started *ab initio*, and if every existing institution is to be swept away by Act of Parliament, even then the professorial scheme is not necessarily the best. Of course it is impossible for a body like a Faculty of Medicine to form an opinion as to what would be ideally the best scheme under those circumstances, if those circumstances are really to be taken into consideration. But there seems to be no evidence at present that the bodies which are mainly concerned would give their consent to being thus swept away. If we are to see established a new University altogether in London, and to sweep away and absorb all existing institutions, then, in my opinion, it should be purely a State-supported University, and it should be managed under statute by the Professors of the University. I should like to say that we did not agree as delegates of medical schools—it is not stated in this paper that we did agree, but from the questions which were put to Mr. Boyd I thought it was so inferred by some members of the Commission—to exclude provincial students from any degree which should be given by a teaching University. That is certainly not part of our idea. We should not exclude provincial students, but we should insist that provincial students should have a certain term of residence in London. They might perfectly well take some subjects in the provinces and some subjects in London. I think Mr. Boyd would agree with me also that we did not propose to exclude provincial students altogether.

11,572. From the new University?—From any new University.

11,573. They would be at a disadvantage, I suppose, compared with those who had received a regular training in London, and in connexion with the examinations; but if they chose to come under that disadvantage you would not wish to stop them; is that so?—I am not sure that they would be under a disadvantage; I cannot give you exact reasons, but I do not think they would be necessarily under a disadvantage, especially if the examinations were to be conducted not by the teachers of the individual students, but by other teachers.

11,574. Would you be in favour of relaxing the Gresham scheme so far that the degrees should not be only given to those who had been educated in the colleges in connexion with the University?—I think that is not the feature of the Gresham scheme. I think the Gresham scheme insisted upon two years' residence.

11,575. In Clause III. it says the University shall have the power to confer degrees on all persons, male or female, who shall have pursued a regular course of "study in a college in the University, and shall "submit themselves for examination"?—I think in another paragraph you will find that the two years is insisted upon.

11,576. You would keep that, I suppose? You would not confer degrees upon anybody who had not had two years?—That is so. Then with regard to the license, I personally am entirely opposed to what Mr. Boyd said about it. I would certainly not place the examinations under the control of the Royal Colleges in any shape or form. I do not see why a great University, such as the University of London ought to become, should be on a worse footing than other Universities. If the degrees of other Universities carry a license to practise, we ought to claim for the London degree a license to practise. I am entirely of Mr. Boyd's view that it would be ideally desirable to have one portal for the United Kingdom, or one portal at all events for England, Scotland, or Ireland—one portal for the United Kingdom I should prefer. But that, it seems to me, hardly comes within the range of practical consideration.

11,577. Then you would like the degree to confer a license?—Yes.

11,578. You have told us you are in favour of the Gresham Charter. I should be glad to hear of any alterations which you think desirable to be made in it?—There was one alteration which was brought forward prominently by the representatives of Victoria University in opposing the Gresham Charter, namely, the question of medical representation. I think that as the Gresham Charter stands, the medical representation as compared with that of other Faculties is rather high. Of course it must be remembered in connexion with this subject that the number of students of medicine in London is vastly greater probably than the number of students of any other subject, but that may not be a reason for increasing medical representation, and I think the Medical Faculty of University College would agree with the other medical schools in consenting to the medical representation being proportionately diminished.

11,579. You mean the representation of the medical schools on the Senate?—I mean the representation of medicine generally.

11,580. Do you think the colleges would be content with five representatives instead of ten?—I am not prepared to speak of the medical colleges generally, but I imagine they would take the stand which is taken by St. Bartholomew's Hospital, and they would urge that they should have at least one representative. Of course the proportion would be made right by increasing the number of representatives of other Faculties.

11,581. And that would make the Council a larger body than it is now?—Yes, it would.

11,582. I will ask you whether you agree with the last paragraph on the paper that there ought to be a representation and recognition as colleges?—Yes, I entirely agree with that.

11,583. That we were given to understand was rather got in hurriedly at the last moment. Do you believe that it does convey the opinion of the majority of the medical schools?—It struck me that the majority of those present were in favour of it. It was, in fact, discussed for a considerable time as Mr. Boyd told you. Ultimately that was the way in which it was put into the document. I believe there are one or two smaller schools which distinctly do not wish a representation as colleges; they wish a representation as faculties.

11,584. Is there any other point that you wish to make a statement upon?—No, there is nothing else that I wish to volunteer.

11,585. You said with regard to the Royal Colleges you did not wish their license to be necessary for practice, but you thought that the new University degree ought to be sufficient to qualify?—I think it should be on the same footing as any other University.

11,586. You would not be in favour of giving the Royal Colleges more intimate connexion with the new University, or more power in directing examinations than they have under the Gresham Charter?—No.

11,587. You would not be inclined to meet their wishes in any way in that direction?—Not in that direction.

11,588. Is there any other point connected with the Gresham Charter on which you would wish to recommend any alteration?—No.

11,589. (*Sir William Savory.*) I should like to ask you a question with regard to the admission of provincial schools. What is the objection to the admission

of provincial schools providing it can be so arranged that it does no harm to the London schools?—I can only speak personally. I do not personally see an objection to the admission of provincial colleges except that it is obvious that if you have provincial colleges which are at some distance from London it is a distinct inconvenience to the students of those colleges, and to the persons who would represent those colleges to come often to London, and to take part in the management and government of the University.

11,590. My question had not reference to the management and government of the University so much as to the admission of provincial students to the examinations?—I think I should have to ask you to mention the towns from which you think the students would come.

11,591. My question might include it in this way: that unless some sound reason were given it might appear to be an ungenerous step on the part of the London schools to exclude the provincial schools. But if the provincial schools were admitted it should be, of course, on the understanding that the provincial schools in their instruction, and their means of education were at least equal to the lowest of the London schools which should be admitted. If it could be shown that a provincial school was inferior to the London school that would be a valid ground for exclusion; but supposing, on the contrary, it should be shown that the means of education in the provincial schools were at least equal to the means of education in any way of the London schools which were admitted or the least efficient of the London schools, why should the provincial schools, be excluded?—I think that would be a valid reason for establishing a University in that particular part of the provinces. I do not myself see why they should necessarily be admitted to the degree of a local London University any more than they should be admitted to the degree of a local University elsewhere.

11,592. I had rather put it, Why should they be excluded? It would be, as you say, a ground in some respects for the constitution of a provincial University; but in many places that does not exist, and if a man educated in the provinces is shown to be as well educated as a man educated at the London institutions, why should you exclude that man from the London University?—I should like to answer that question by asking another. Why are they excluded from other Universities?

11,593. We need not go into that. Will you give the best ground you can for excluding the provincial man under those circumstances—a provincial man who has been as well educated in his profession as a man at a London hospital?—I do not think I am called upon to give grounds for that any more than other present existing Universities are called upon to give grounds for their excluding students from examination who have studied in other parts. I think the grounds which Professor Sidgwick put before us are sufficiently valid for the purpose. It is distinctly implied with regard to Cambridge, for example, that the system of training is a different one, and that it is a better system of training: I should be disposed to say that there is a better system of training available in London than in any provincial town at present unprovided with a University which you could mention.

11,594. I take it that the last part of your answer would include good grounds for the exclusion of the provincial men if the means of education in the provinces were inferior to those in London, or if it could be shown that a man at every hospital in London would get superior advantages to those which a man has at every hospital in the country. In that case I think you have logical reasonable grounds for excluding him. But, if you cannot show that, then I submit that the question might very properly be raised, Why exclude the provincial man? Would it not appear to be an ungenerous thing to do? Assuming that it does not in the least degree hurt the London student, why should not the provincial man have such an advantage if he wished it?—Well, I have already tried to answer that question, and to the best of my belief I have answered it.

11,595. (*Professor Sidgwick.*) Have you any desire to prevent the existing London University from supplying the needs of provincial schools by introducing a pass degree. You have no desire to depress the standard, have you?—But there is a pass degree.

11,596. I mean to introduce a lower degree for the provincial students. Do you see any objection to that?—I should be very sorry for the London University to interfere at all with their present standard of examination.

11,597. (*Mr. Anstie.*) In the early part of your evidence you said that something, I did not quite catch what, was a fatal objection to the Senate's scheme. What was that fatal objection?—The fatal objection was that there were to be two distinct degrees, one a pass degree and the other an honours degree. That is to say, that the degree which was to be given conjointly with the Royal Colleges was not to carry any honours with it. I understand that that is so.

11,598. I did not quite gather the reason why that was an objection, that a degree given under an arrangement with the Royal Colleges was not to carry honours?—I think a University degree in which there is to be pass only comes to be a diploma merely. I know of no other University degrees in which honours are not given as well or in which honours cannot be competed for. But according to this honours could not even be competed for.

11,599. An instance has been given to us more than once this morning of the older Universities where honours and pass are given?—Yes, they are given.

11,600. With a degree the same in letters, but with an examination fundamentally distinct?—But the honours degree is on a special subject.

11,601. You say a special subject. I am most familiar with Science. I know that an Honours degree at Oxford, for example, is given on a special science subject of which the candidate requires to show himself fairly master.

11,602. But that Honours degree is taken by men who might if they like go in for a pass degree, but who desiring the greater distinction elect to go in for the Honours degree. I do not know why that is a fatal objection or any objection to an arrangement with the Royal Colleges?—Those who go in for Honours in Greats have taken the other subjects in common with all other candidates, have they not?

11,603. No, that is what they have not done. If you look at the Oxford Statutes it is quite clear that they may go in for honours and take a different kind of examination from that of the pass?—That is what I meant. I know that the examination in the pass and the honours are entirely different, but there are other examinations which lead up to it.

11,604. But this clause does not interfere with those examinations that led up to it. We are only dealing now with the pass degree. I want to discover what is the nature of the fatal objection which you feel?—Let us go back to the scheme. According to the scheme the Royal Colleges were to examine for the University, I believe. Is not that so?

11,605. Not at all?—I am not familiar with it.

11,606. Then your fatal objection is founded, if I may venture to put it so, upon an insufficient knowledge of the provisions?—No, I think not. It was certainly stated at the meeting of the delegates—and nobody contradicted the statement, although one or two present were instrumental in assisting to draw it up, so they might be assumed to be familiar with the scheme—that those students who went in for the degree to be granted conjointly by the colleges and by the London University were not eligible for the ordinary degrees of the University without going step by step through them. Is not that the case?

11,607. Before I answer that may I ask what you mean by step by step?—Beginning at the Matriculation, going on with the Preliminary Scientific, taking the intermediate M.B. and the second M.B.

11,608. This clause refers to the second M.B. alone. It is a clause giving the Senate power—not compelling them, but giving them power—to enter into arrangements with the Royal Colleges for an examination by which the licenses of the colleges and the degree of the University should be at once attainable; but it limits the degree to be attainable by that conjoint examination to the pass M.B., reserving to the University complete power to conduct its honours examination as it pleases. I daresay you are aware that it is at present in the contemplation of the University to distinguish in the final examination for M.B. between the pass and the honours much in the same way as, or in an analagous way to, the way in which it is now distinguished in the intermediate M.B.?—If I may be allowed to ask a question, may I ask if I am to infer

E. A. Schäfer, Esq., F.R.S.

28 July 1892.

that that scheme contemplated giving the M.B. degree on the examinations of the conjoint board?

11,609. The terms are express. The examination is to be an examination of the two united bodies at which the pass M.B. can be obtained with this final clause. This arrangement for joint examination shall not lessen or interfere with the duty of the Senate to be satisfied as to the adequacy of the examinations in all respects?—My point is that that examination upon which the M.B. of the University of London was to be given might be made conjointly with the Colleges of Physicians and Surgeons. Supposing the student passes that examination, he would not be eligible for the honours and scholarships of the ordinary University examination without going through all the steps of those examinations. Am I wrong or right there?

11,610. I think you are right, that he could get no degree at all without going through those steps, but what is the objection?—If you have a scheme under which the candidates for degrees have not the chance of obtaining honours or scholarships in special subjects I think it would be undesirable. For example, a man might be extremely well up in surgery, but might not have been able in (consequence of insufficient opportenities) to get up the Preliminary Science subjects, and thus to take the degree of the University of London; he takes that pass degree which it was proposed to give, but he is not able to take honours or scholarships in surgery.

11,611. I do not find that he cannot. Why can he not?—There is no provision for it.

11,612. But there is no provision against it?—No; still one would have thought there would have been a provision for honours——

11,613. No, excuse me. You evidently attach a great deal of importance to this?—Yes.

11,614. At this moment the M.B. is granted on pass and a man must take his pass before he takes his honours?—Yes.

11,615. Therefore the man who takes his pass under this clause would manifestly be just as able to go in for the honours as another man?—Under the new regulation?

11,616. And under the existing regulation?—But under that clause he can only take the lower degree.

11,617. No, he takes the pass degree, and under the existing regulation of the London University the man who has taken a pass degree would be able to take the honours?—And that was so intended, was it?

11,618. Certainly?—Then that was not understood.

11,619. Then do you withdraw your objection upon that?—Upon that, if I am wrong, I withdraw it. I said that that was an objection which was taken at the meeting of the delegates. I would not have it implied that that was my only objection to the scheme. I should like to mention one other important objection.

11,620. May I understand that as far as regards this point that objection was founded upon that misconception of the result?—It appears so. I do not know that it is any part of my business to criticise the defunct scheme, but I should like to point out one important objection which occurred to me when I first saw that scheme. That is, that some of the science examinations for the medical degree of the University of London were not to be conducted by the University.

11,621. Are you aware that that is directly contrary to the fact?—No, I am not.

11,622. The preliminary scientific examinations are not referred to in the scheme, and therefore they remain exactly as they were. Let me point your attention to a document which was issued along with the scheme, or shortly after the scheme, to various bodies concerned, which states this:—"In the course "of the communications which took place between the "Senate and the representatives of the Royal Colleges "and of the medical schools, the opinion was unanimously expressed by those representatives, and was "indeed strongly urged upon the Senate, that nothing "be done which should lower the standard or lessen "the value of the medical degrees of the University, or impair their scientific character; and, "in particular, the necessity was pressed upon the "Senate of retaining the entire control of the Preliminary Scientific Examinations," and in consequence that control is in no way parted with by the scheme?—It did not appear how the control was to be exercised certainly. This is subsequent altogether to the publication of the scheme, is it not? Is that a resolution of the Senate?

11,623. That is a letter by the Senate in explanation of the scheme, and the mode in which the various provisions were arrived at?—On the face of it—otherwise this would not have occurred—it looked as if it were intended that the University should accept such preliminary scientific examinations as the Royal Colleges should submit to the candidates.

11,624. Would you kindly indicate to what portion of the scheme you refer?—I should have to ask you to allow me to look through the documents.

11,625. Then will you allow me to tell you that there is absolutely no part of the scheme which warrants that supposition?

(*Dr. Coupland to Mr. Anstie.*) I think Professor Schäfer is referring to the suggestion made by the first Commission. That Commission suggested that the Royal Colleges should undertake the scientific part of the examination.

11,626. (*Mr. Anstie.*) The first Commission suggested two or three things, and partly with reference to that this letter was drawn up because to some extent, as the result of the negotiations between the Senate of the London University, the Royal Colleges, and the medical schools, and in pursuance of the recommendation of the Royal Colleges and the medical schools, the Senate determined to retain in their own hands the control of the preliminary scientific?—The preliminary scientific was to remain as at present?

11,627. Absolutely; that is to say, as far as the control is concerned?—Then in what respect ultimately were the Royal Colleges to take any part.

11,628. Only as you will see it expressed in clause 47 in the final examination for the M.B. That is the only point where they intervened, and that was at their own desire?—Perhaps I may be allowed to mention another fatal objection. It assumes that the Royal Colleges represent the teaching of scientific medicine in London.

11,629. Do you say they do not represent any branch?—They do not represent any branch as such.

11,630. I think you do not take in your course any medical subject?—I do not know whether you call physiology a medical subject or not.

11,631. I call that preliminary scientific?—I call it scientific. It may not be preliminary.

11,632. It falls within the preliminary scientific, does it not?—No, it comes in the intermediate M.B. It is reckoned as a medical subject at the University of London because it must be taken at a medical school.

11,633. You say that in no branch of medical teaching do the Royal Colleges represent the scientific aspect of the question?—I said they did not represent the teaching of scientific medicine in the London medical schools.

11,634. That is rather a long story upon which we have already had a good deal of evidence. As a matter of fact is it not true that the two Royal Colleges, acting through their conjoint board, do to a large extent control the teaching of medicine in London, and that they do that effectually, because those who take part in their working organisation are themselves to a large extent teachers in those schools?—I do not think I should be prepared to admit that without any reservation.

11,635. Nor perhaps would you be prepared to deny it?—I should not be prepared absolutely to deny it. It is open to discussion, I think.

11,636. It is not one of those things perhaps on which any one could venture to pronounce very absolutely?—I think anybody might have a decided opinion. You might discuss it but it would take a long time, I think.

11,637. He could hardly claim to give a decisive opinion?—I do not think anybody can upon any subject.

11,638. Is that the third fatal objection?—That is a fatal objection certainly.

11,639. But fatal only under those conditions which you have just indicated?—What are those conditions?

11,640. The conditions are that opinions may differ as to the correctness with which it may be alleged that the Royal Colleges are not guardians of the scientific

education of medical men?—That would apply to any objection of course.

11,641. And therefore the fatality of the objection would depend upon the correctness of that opinion?—Clearly.

11,642. With respect to the question of the license you express the opinion that the degree should carry the license with it?—I express the opinion that the degree should in that respect be similar to any other University degree in the Kingdom. That means the same thing.

11,643. Are you aware that evidence was given before us yesterday that it was conceived by those who promoted the Charter now under consideration, that it was a practical impossibility and an unreasonable thing to expect the course which has been taken by the Legislature to be altered?—No. That is, of course, a matter of personal opinion again.

11,644. There might be a practical difficulty?—Yes.

11,645. Turning for a moment to the educational side of that question, allow me to put this to you. I may say that it is a question which I have put to other strictly scientific men. Do you see any reason why, educationally or in the public interest, the granting of a license to practise should, so far as the scientific side is concerned, be dissociated from the graduating authority. Or let me put it in this way: Why the University authority should not be the body which should determine conclusively for the purposes of practice requisite qualifications on the scientific side?—I think that every University should be able to determine the requisite practical qualifications for its own degrees.

11,646. Would you conceive that there should be any better authority than a University to determine what on the scientific side should be required for a practitioner in medicine?—That depends upon the University, obviously. Assuming a University of high standard, of course there could be no better authority.

11,647. That is what I would desire to assume. And I would add this: a University so far permeated by the influence of teachers as to make it a competent body to determine what might be justly required in that matter?—Yes.

11,648. Then so far as you are concerned you would not see any objection to a University authority determining with regard to license whether the scientific, as distinguished from the practical training is adequately complete?—I do not quite understand. Why should you distinguish between the scientific and the practical training?

11,649. I distinguish it because we are told on apparently good authority that there is considerable difference between the scientific view of the subject and the practical view of the subject; that there are many persons who are able to handle practical cases requiring medical or surgical treatment who are not able in the same way to handle the scientific aspects of the case?—I should be very sorry indeed myself to think that experts in medicine or surgery, or any exponents of medicine or surgery, were prepared to assert that. I should certainly be myself inclined to take the view that the more scientific a man the better a physician or surgeon he would be.

11,650. That, perhaps, no one would dispute, with this reservation, that a man may be a man of high scientific qualifications and yet deficient in certain practical instincts and powers which are required for life. No one would dispute that, given those conditions, the man who was more scientifically trained would be a better adviser?—Quite so.

11,651. There are men who are capable of reaching a standard of real practical efficiency, having regard to the public needs, and yet who are not men who are so scientifically minded, if I may put it so, as to be able to obtain any high standard in purely scientific subjects. You would not deny that, would you?—No, I am not prepared to deny that.

11,652. Then do you see why the latter class of qualifications should not be determined upon, and adjudged by University authority in all cases?—No, I should not agree with that. I think those cases do not come up to the standard of a University degree.

11,653. I am not talking of the degree merely?—With regard to such men as those who are incapable of following proper scientific training and of obtaining the full benefit of scientific training, I should make a distinction. I should not admit them to a University degree. I think they should be satisfied with a diploma—the diploma, for example, of the Royal Colleges.

11,654. That is what everybody supposes, but if you will allow me to say so, that is not an answer to my question. With respect to those matters to which those men cannot attain, but which are as you say material for the more perfect practice of their Art; and with respect to those more scientific branches of learning, can you see any reason why the University should not be the judge?—I think the University is the best judge with regard to those scientific branches.

11,655. Then would it not be a convenience that the University should be as far as possible united with the licensing bodies, who must in any case require some degree of scientific acquaintance with the subject. And would it not tend to raise to their due level the demands of the more practical branch that they should be in immediate connexion with a University?—May I put it in another way? Do you ask me whether I think a University can best examine through officials who are not connected with the University?

11,656. No, not at all. I am putting this to you; there are licensing bodies?—Would you kindly put it in a concrete form.

11,657. There are licensing bodies who have to issue to medical practitioners authority to prescribe and to treat disease, and those authorities also, I may say, in the course of their determination of qualification have to some extent to deal with scientific questions. That you would not deny?—No.

11,658. The higher they carry their scientific qualifications within reasonable limits the better?—Yes.

11,659. A University on the other hand has to deal, if I may say so, not with the practical side, but with the scientific side. The tendency, therefore, of a University is to raise the scientific requirements as the tendency of the more practical body will be to depress them?—The preliminary scientific requirements, do you mean?

11,660. No, I do not mean the preliminary scientific requirements only, but also that science which relates peculiarly to medicine?—Yes, I agree with you.

11,661. The University will tend to raise the scientific standard of those requirements?—Yes.

11,662. And the practical body will be under some temptation—I say no more—to depress them?—Yes.

11,663. Is it not, therefore, an advantage that the University and the practical licensing body should be so far as possible united in their action to determine the license of the practitioner?—No, I do not think so at all.

11,664. Why?—Because I think the question of a license is different altogether from a University degree.

11,665. I am supposing it to be different from a University degree, but I am supposing it to be desirable that a licentiate should be as far as possible a scientific person, but that it is necessary that the scientific element should in this branch be limited by practical considerations?—Yes.

11,666. If you could blend those two authorities it would tend on the one hand to raise the scientific standard of practical requirements and on the other hand to keep within due limits the tendency to scientific exaggeration which a University might be tempted to?—I do not admit that the University is tempted to scientific exaggeration. I would instance the University of London. I think the medical degrees of the University of London are admitted to be the highest degrees, probably in the whole world. Perhaps everybody on this board would not be prepared to admit that, but I think that the bulk of medical opinion would be in favour of the statement. I do not think there has been any tendency on the part of the University of London to exaggerate the scientific aspect of medicine and surgery.

11,667. Then you differ from a good deal of the evidence that has been given?—I think that is very likely.

11,668. We cannot accept your evidence as expressing the opinion of the medical schools?—Possibly not, but you can take it as expressing the opinion of my own medical school.

E. A. Schäfer, Esq., F.R.S.

28 July 1892.

11,669. Do you see any reason why those two parties having charge of those two different interests should not be combined in common action?—I think there might be important objections to their being combined in common action.

11,670. You say there might be, but are there?—It is a little difficult at the moment to say what those objections would be. But I am prepared at the moment to say that one does not see any reason why a new or remodelled University should not have exactly the same privileges in respect of license as any other University.

11,671. What I am putting to you is whether you see any disadvantage in the combination, the union?—I think there might be a disadvantage in the union. I do not quite see what the union is to be.

11,672. I only ask you whether you see any disadvantage at this moment. Can you state now any disadvantage that you do see?—Would you put it concretely. Would you talk about the University of London and the Royal Colleges.

11,673. There is the 47th clause?—Then that is what you are aiming at; your question is, "Is there any disadvantage in the union of the Royal Colleges and "the University of London?" Yes, I think there is one decided disadvantage, viz., that it is an unnecessarily complicated arrangement. The University of London is quite competent to conduct and control its own examinations without the assistance of a mere licensing body.

11,674. Is that your only objection?—It is one objection.

11,675. Is it the only objection that you are prepared at this moment to state?—It is the only objection that I am prepared at this moment to state.

11,676. (*Mr. Rendall.*) I think you expressed yourself as not favourable to the complete exclusion of provincial students?—Very strongly.

11,677. But only in this restricted sense; you would include them if they qualified for admission by becoming for part of the course metropolitan students?—Yes.

11,678. You would insist upon two years residence?—Yes.

11,679. They could be admitted as provincial students completing or taking part of their course in a London school?—Yes.

11,680. Chapter 3 of the Gresham University Charter limits the privilege expressly to students of any other University. That, you see, excludes provincial medical schools not belonging to a University and students unattached to a University, so that it seems to exclude all, or nearly all, who would desire to be admitted to the privilege?—Yes.

11,681. Would you be in favour of retaining that line of division?—No.

11,682. Would you have it in the same way as the University of Edinburgh or other Universities?—Yes.

11,683. As regards the two years' residence in London, do you agree with Mr. Boyd in preferring that they should be the two final years?—No, I do not think I do.

11,684. You would be prepared to accept equal reciprocity?—Yes.

11,685. Leaving it to the University to determine whether it should be the two final years or should be left open?—Yes.

11,686. (*Professor Sanderson.*) Do you agree with the second paragraph—"The provision of degrees for the "London students of medicine, *i.e.*, degrees not beyond "the reach of the majority of these students?" Do you agree that that should be one of the objects which the scheme should have in view?—Yes.

11,687. What is your idea as to this? Has any deliberation taken place between the delegates as to the standard of the pass degree?—No, there has been no deliberation.

11,688. Is there any way in which it could be put. For example, may we assume that the degree of Victoria University is of such a standard?—Quite.

11,689. (*Lord Reay.*) We have had evidence that the teaching in the Science Faculty of University College went rather beyond what was required for the degree of the existing University of London. Can the same remark be applied to the teaching of the medical faculty of University College?—Do you refer to pass or to honours?

11,690. I refer to pass?—Yes, it can certainly apply—far beyond.

11,691. And with regard to honours?—I cannot say that it is beyond the honours requirements of the London University because those requirements are not well defined.

11,692. But it is fully up to that standard?—Yes.

11,693. The fact that University College students pass the examinations of the London University is not due to any teaching which we might call cram at University College, but it is due to the fact that the medical teaching at University College leads up to University standards?—I believe that to be the case. There is no attempt whatever at cram.

11,694. Your aim is not to cram undergraduates for the London University examinations, but to educate the mind for scientific research?—Yes.

11,695. To develop latent originality?—That is so.

11,696. Is it the fact that men who have passed the Honours examination at the University of London have afterwards failed to pass the examination of the Conjoint Board?—That is unfortunately so.

11,697. To what is that due?—That, my Lord, is a very difficult question indeed to answer. I have not the slightest doubt in my mind, as I have examined both for the Conjoint Board and for the University of London, that it is due to a defect in the examinations of the Conjoint Board. It arises partly from the fact that the practical examinations of the Conjoint Board so far as scientific subjects are concerned actually do not exist. There is an oral examination, but no practical. And under the examination of the Conjoint Board where each student is examined by four different examiners, each examiner having a veto upon the student's progress in the examination it is a very difficult matter indeed for examiners to decide in certain cases whether a student's apparent want of knowledge is due to actual ignorance or whether it is due to his not having understood the question or whether it is due to nervousness under oral examination. I believe it arises mainly from that. The examiners who take the papers are not the same as those who conduct the oral examinations. Practically, it is impossible to decide in certain cases and in some of those cases unfortunately the candidates do not get the benefit of the doubt, and they are rejected. That is probably the main reason. A subsidiary reason may be that hitherto in some of the examinations conducted by the Royal Colleges there has been a restriction with regard to the examinations—especially I would refer to the College of Surgeons—in the fact that it has been necessary for the examiners to be Fellows of the Royal Society of Surgeons. In the case of scientific subjects, like physiology, it has led for some time to rather a narrowing of the choice of examiners, I think. I do not wish to make any personal allusions or to mention names, but I think in certain cases this limitation of the choice of examiners which has existed may have led to that result. So that the causes which have led up to that result may be somewhat complex, but it is an undoubted fact, and it is a point which has been complained of not only from University College, but from other schools in London, that students who have not only taken honours at the University of London (in physiology, for example), but who have even taken the scholarships at the University of London have been rejected by the examinerss of the Royal Colleges.

11,698. Do I understand that the examiners of the of the Royal Colleges after they have once given the marks do not meet to discuss the general result of the examination with regard to an individual?—No, they do not. The mark is absolute.

11,699. Each individual examiner hands in the marks to the secretary?—The examiners examine in pairs. Each pair of examiners puts down a mark and that mark is absolute.

11,700. And there is no revision of the marks?—No, there is no revision.

11,701. The various pairs of examiners do not meet together for discussion?—No.

11,702. There is not, as in degree examinations in Germany a final decision by the body of examiners?—No.

11,703. Everything depends, therefore, upon the marks?—Yes.

11,704. (*Mr. Anstie.*) Do I understand that if the marks have once been handed in there is no meeting of examiners to reconsider?—No, there is no possibility of reconsideration. The examiners meet and the chief examiner takes down the marks which are read out by the other examiner. They are totted up, and the result is published in conformity with the sum of marks.

11,705. There are two or three, or four examiners in each particular subject, are there not?—In physiology there are six examiners.

11,706. Do you mean that the six examiners do not meet to reconsider their common verdict?—Certainly not. The six examiners do not examine; but four examiners do.

11,707. Then do not the four examiners meet to reconsider?—No; they are expected to give independent marks.

11,708. It is quite different from the system of the London University?—Quite different. The system of London University does not admit of that at all. The same examiners take the practical as well as the written papers, and they carefully discuss the respective merits of the two.

11,709. And confer with each other?—Yes.

11,710. (*Sir William Savory.*) But it is not a single examiner in each case that decides the number of marks?—No, it is not.

11,711. The marks for each candidate in the written examinations are decided upon the verdict of two examiners?—Yes.

11,712. Then those marks are added to other marks?—Yes.

11,713. Have you never known an instance where the numbers have been revised?—Well, I will not say that.

11,714. You have said that. You have said that it is never done?—I do not think I have said I have never known an instance.

11,715. But you told Lord Reay that it is never done?—I think I may say that, practically, it is never done.

11,716. Have you ever known an instance in which it is done?—I am prepared to say that I have known an instance in which it has been done.

11,717. Are you prepared to say that you have not known an instance?—I am not prepared to say that I have never known an instance. If it has been done it has been done *sub rosa*.

11,718. Do you mean to say it is never done when the body of examiners is present?—It is never done in physiology. It has not been done openly since I have known it.

11,719. Did you say that the choice of examiners was limited to fellows—I said it had been limited to fellows for some of the examinations; it had been limited to fellows until recently.

11,720. But that law is rescinded, is it not?—Yes.

11,721. Then with regard to the rejection of London University men, I suppose, in the great number of men who come up to both places, occasionally some case of that kind might occur, but you would not condemn a system of examination because a man who passed one fails at another?—Considering that the standards of the examinations are so very different.

11,722. Do you know how often it has occurred?—It has occurred within the last two years in about four cases, I think.

11,723. On what grounds do you base that?—You will find the evidence of it in some letters written by Dr. Waller to the British Medical Journal.

11,724. Will you give us your explanation?—The explanation I gave is rather a complex one. One is due to the fact that the examiners are sometimes apt to mistake nervousness for ignorance.

11,725. That would be the fault of the examiners?—Well, examiners are human.

11,726. But you could not attribute the fault to the system in that case?—Yes, I would strongly attribute the fault to the system, because if the examiners had had the opportunity of looking over the paper they might have seen that the paper would unquestionably indicate not only a pass man but a man who knew his subject very thoroughly indeed.

11,727. The reason you give, then, is that the man who takes the *viva voce* does not read the papers?—That is one reason.

11,728. The examiner can always address the committee of management?—Yes, and the examiners have represented to the committee of management that it would greatly improve the system of examination if that system were adopted.

11,729. Is there not a great deal of difference of opinion between examiners in physiology. Do all your colleagues agree with you on the subject?—Did all the then examiners sign that representation, do you mean?

11,730. Do they all agree with you?—I am sure they did then.

11,731. Your advice has not always been accepted by the committee of management, has it?—No, it has not.

11,732. You made another statement, that the Royal Colleges do not represent the teachers fairly. Will you tell me what you mean by that?—The College of Surgeons, for example.

11,733. The two colleges, did you not say?—Yes, I did, most certainly

11,734. What do you mean by that?—They are not elected by the teachers.

11,735. Who are not elected by the teachers?—The Council of the Royal College of Surgeons is not elected by the teachers of physiology, for example, and yet they control the examinations in physiology.

11,736. What would you propose in its place?—I should propose any University arrangement in which Boards of Faculties, which represent and are constituted by the teachers, could arrange for and control the examinations.

11,737. Do you think the authorities of the colleges are not competent to control the examinations. Do you think they make injudicious appointments of examiners?—I am not prepared to say that.

11,738. But the examiners control the examinations in physiology?—I am strongly of opinion that they do not necessarily select the best candidates for examiners. There are other considerations which come before them.

11,739. But on the question of selection of candidates there would be considerable difference of opinion, would there not?—Take the examiner in anatomy. Supposing there were a vacancy in an examinership of anatomy; it would not be only a question which was the best examiner in anatomy, or which was the best anatomist; it would be a question for one thing as to which school he belonged to. It is clear that a school which could command a predominance of votes upon the council of the college would tend to procure a larger number of examiners.

11,740. That is to say that the Council of the College would not be guided by what was best for the examination of the college, but each member would work for his school. Do you think that is a fair charge to make?—I think there might be a tendency towards that in anybody.

11,741. Can you point to any instance in your experience in which that has occurred?—If you put it to me so plainly, I think I can. If you take St. Bartholomew's, which is largely represented upon the Council of the College of Surgeons, and if you look into the numbers of examiners, I think you will find that St. Bartholomew's has certainly an undue representation upon the boards of examiners.

11,742. But are not the surgeons of St. Bartholomew's more numerous than at most hospitals?—I was not so much referring to the surgeons as the examiners in anatomy and physiology.

11,743. Is it a fact that the examiners in anatomy and physiology are more numerous than in proportion to the greater number of men. St. Bartholomew's is a large school, is it not?—It may be a large school, but in proportion to the greater number of men I think it can hardly be said.

E. A. Schäfer, Esq., F.R.S.

28 July 1892.

11,744. Are you prepared to say that in proportion to the number of its men it has a greater number of examiners than others?—I think there are two examiners from St. Bartholomew's in physiology. That is to say, one third of the whole of the number of students at St. Bartholomew's is certainly not one third of the London schools. It is certainly not one third of the London and provincial schools.

11,745. Do they not change continually?—They change about once in five years, I think.

11,746. Then it is not always so. Sometimes there are too many from some other school?—It may be so, but that is an objection just as much against another school as against St. Bartholomew's.

11,747. But it answers the question as to the unfairness of selection on account of particular institutions?—A personal element must come in.

11,748. You give that ground, but you cannot give the fact?—The fact is there.

11,749. You say it must come in. But does it come in?—It does come in, and I believe in anatomy too.

11,750. Can you show it? Should such charges as those be made if they cannot be substantiated?—I think there are two examiners in anatomy from St. Bartholomew's.

11,751. That may be, but there are not always two?—No. There is not always such a large representation on the Council. You are asking me to point to institutions in which there is a co-relation between the number of examiners and the number of members of the Council.

11,752. How many does the Council consist of?—I do not know.

11,753. Do you know how many St. Bartholomew's men there are?—Four. [The actual number is five.—*Note added subsequently.*]

11,754. There are 24 members. That would represent one sixth?—Yes.

11,755. Do you think that one sixth would have the power of carrying a particular candidate against a majority of five sixths?—They would evidently have one sixth of the influence at any rate.

11,756. Well, they would have one sixth, but there would be five sixths of the influence against it. Supposing a St. Bartholomew's man were unduly pressed it would be five to one against him. According to your argument other schools take care of themselves as much as St. Bartholomew's takes care of itself?—Some of the other schools fail to take care of themselves.

11,757. Why?—They have no examiners.

11,758. How is that?—It is not because some of the examiners have not high qualifications.

11,759. Do you represent that four St. Bartholomew's men on the Council of 24 could secure the unworthy election of a St. Bartholomew's man?—I did not say any single man was unworthy. It is a matter of comparison. I think several members of a council could very largely influence the election of candidates.

The witness withdrew.

[*See letter and statement of this witness, Appendix No. 58, Paper No. 2.*]

W. H. Dickinson, Esq., M.D. F.R.C.P.

W. Howskip Dickinson, Esq., M.D., F.R.C.P., examined.

(*Dr. Dickinson handed in a statement. For this statement see Appendix No. 19.*)

11,760. (*Chairman.*) You represent St. George's Medical School?—Yes.

11,761. In the first place, you agree with the statement which was drawn up by the medical schools?—Yes, very generally.

11,762 Then with regard to the general subject, do you, on the whole, approve of the professorial scheme or scheme drawn up by the Senate of the University of London or of the Gresham Charter?—On the whole we are inclined, in most respects, to think that the professorial scheme has certain advantages. However, we do not wish to express any absolute opinion. We think a certain amount of compromise might be arrived at. With regard to the professorial scheme we thought it would be a great advantage, particularly to the smaller schools of medicine if there were a central point in London at which some of the scientific branches were taught, such as chemistry, physics, and biology. Speaking for my own school, we think it would be better taught at some centre place than even at St. George's Hospital, which is, on the whole, a very good school, so we favour the professorial scheme in that respect; but we think that a certain amount of compromise between that and the Gresham scheme might be arrived at.

11,763. Whom would the scientific part be taught by, a professor of the University?—We do not wish to go into that. We would rather leave that point; but probably it would be taught by some professor of the University.

11,764. Would you say anything as to the regular course of medicine?—We wish to reserve, for our own hospital entirely the teaching of medicine and surgery, which we think we can do as well as it can be done.

11,765. With regard to your own teachers, you would not wish the University to interfere with them?—Not as regards practical medicine or surgery.

11,766. Or with the appointment of the teachers?—We should very much object to that as far as regards medicine and surgery. We should make a point of doing that if we were allowed to do so.

11,767. In other respects do you favour the professorial scheme?—Yes, on the whole, although we think that a certain amount of compromise would be quite obtainable.

11,768. You approve of the absorption of colleges other than medical?—Yes, absorption or affiliation, whatever term is used.

11,769. You think that they should gradually merge in the new University?—Yes, that would be our idea.

11,770. And that their autonomy should cease?—Yes.

11,771. Is your wish for the professorial University so strong that you would oppose any other scheme?—No, not at all. We think we may say we prefer it to any other scheme that is before us. We think a certain amount of compromise might be arrived at.

11,772. Do you think that in this professorial scheme the existing London University should take part?—We have put down that we would prefer one University if possible. We have put in the words "if possible," and it looks as if it were because we really did not think it possible. I think the only attainable scheme would be to leave the London University alone to do its own special work, and to have another body to confer degrees obtainable by ordinary students. A great thing which my school wishes to urge is the fundamental matter that there should be medical degrees obtainable by a majority of medical students which, in point of fact, the degrees of the London University are not. I do not belong to the University of London, but I have been an examiner there, and I know how difficult the examinations are; they are practically out of the reach of the ordinary medical student.

11,773. And on the whole, though you would wish to see such a thing, you think there are too many difficulties in the way of a University of London undertaking this new work?—I think there would be too many difficulties, certainly.

11,774. Would the Gresham scheme, with modifications, be likely to meet your views?—I think it would if it allowed for the teaching of science as a central matter apart from the schools.

11,775. There is power in the Charter already to appoint lecturers. If that were strengthened and made compulsory, and the word "professor" was inserted instead of "lecturer," would that meet your views?—Yes.

W. H. Dickinson, Esq., M.D., F.R.C.P.
28 July 1892.

11,776. I see from your paper that the last part of your scheme is entirely in accordance with that?—Yes, I think it is. I am directed to say that we strongly think the Royal Colleges should take an essential and leading part in any scheme for the conferring of degrees in medicine. We think that the Royal Colleges have done that exceedingly well, and that no University body would be equally capable of conferring degrees which gave a license to practise. We do not insist upon their doing it entirely, but we think they should be largely represented.

11,777. Do you approve of the scheme proposed by the Senate of the University of London in that respect, that they should have joint power in fixing the examination for the medical degree. Do you go as far as that?—Yes, I think we should.

11,778. If they had that power I suppose it would not be necessary that the students should also have passed their examination before they could be qualified to practise; would it be necessary to keep that up also, or if they had a voice would you wish the degrees of the University to confer power to practise?—I do not know that I am quite prepared to answer the question off-hand, but my impression would be that if they had a voice we might leave it to them to arrange as they thought fit.

11,779. Without going into details you think they should have a leading part in fixing the examination?—Yes.

11,780. Is there any other point upon which you wish to be heard?—No, I do not think there is any other point except with regard to the limitation of the new University to London. We certainly think that in any new University here ought to be some local relation to London. Every University except the University of London at present has relation to its own geographical position. But I do not think we should make the terms very difficult. We have not fixed the amount of residence we should think desirable, we should desire to leave it open whether it is two years or one year. But we do think that the people who get the degree of the new University ought to have had some relation to London teaching because we think the opportunities for clinical medicine in London are unequalled in the world and with all respect for provincial authorities we do think that the medical profession in London contains a greater number of people who are eminent in the practice of medicine than can be found anywhere else in England and we think it would be an advantage to give anybody who gets a degree some sort of local association, particularly in relation to clinical medicine.

11,781. But whether it should be two years or one you would leave open?—Yes.

11,782. In fact you agree very much with the proposed charter of the Gresham University?—Yes.

11,783. With regard to the representation of the colleges would you like to see that rather less?—Medicine would form the most important part of any University and we think it should be influentially represented, but we would rather leave the details open for the present.

11,784. Is there any other point you would wish to bring before us?—We think the degree should not be a license unless the Royal colleges are included in the scheme, and then it should be.

11,785. You wish to see the Royal Colleges represented on the Senate and given power to assist in regulating the examination?—Yes.

The witness withdrew.

THOS. W. SHORE, ESQ., M.D., B.Sc., examined.

T. W. Shore, Esq., M.D., B.Sc.

11,786. (*Chairman.*) You appear on behalf of the school of St. Bartholomew's Hospital?—Yes. I wish to supplement the printed statement (*for this document, which the witness had handed in, see Appendix No.* 21) by pointing to No. 6 with regard to which the teachers at St. Bartholomew's think the Gresham Charter might be amended. The scientific teaching at St. Bartholomew's is of as high an order as the scientific teaching of any college in London, and we feel that St. Bartholomew's should be recognised as a college in science as well as a college in medicine. If your Lordship will allow me, I should like to hand in this written statement of the scientific subjects which are taught at St. Bartholomew's, of the standing of the scientific teachers and of the equipment for scientific teaching which we possess. In order to show that original work is conducted in our laboratories I hand in a paper showing some of the memoirs founded on original work which have been published by teachers and others connected with St. Bartholomew's scientific departments. (*For these documents see Appendix No.* 22.) We give a general support to the Gresham Charter. With the exception of amending it in that particular we are satisfied with it.

11,787. Is there any other part of these 14 clauses that you would wish to enlarge upon?—I think not.

11,788. Do you think it possible to admit you to the Faculty of Science without admitting any other school?—Upon that I should not like to express an opinion. We think our work in science is so good that we ought to be admitted as a college in that faculty as well as in the faculty of medicine.

11,789. You prefer the Gresham Charter, but if that is unattainable would you be willing to take part in the reconstruction of the existing London University?—Yes. In fact we would prefer one University if it were possible, but our feeling is that it is not possible to provide what is wanted in London by any remodelling of the existing University of London. We should very much deprecate any interference in the way of lowering the value of the existing medical degree of the University of London. What we wish for in London is a degree which can be more easily attained by the great majority of students.

11,790. Were you at the meeting of medical colleges who drew up this paper?—Yes.

11,791. Really what it comes to is that some prefer the London University scheme and some the Gresham, but you are all alike in this, that though you would prefer one you would be willing to accept the other?—Yes, except that as far as St. Bartholomew's is concerned, we wish for direct representation on the governing body of any University. If the existing University of London were remodelled we wish to be directly represented as a college in that University.

11,792. Is that the general view?—No, it is not the general view. Some schools would be content with indirect representation through the faculties. We wish for a representation as a college in addition to representation through the faculties as teachers.

11,793. Is there any other point which you wish to enlarge upon?—Not other than to direct the attention of the Commission to the status which St. Bartholomew's holds in London as the largest medical school, and to say that in any scheme which is brought forward to solve the University question for London, we feel that we should have a position at any rate equal to that of any other school or college.

11,794. Would your school assent to place the appointment of its teachers in the hand of an external body?—No, we feel very strongly on this point.

11,795. If the medical representations should be thought too large you would like to add to the size of the council to equalise it in that way?—We see no objection to the council or the governing body being a large body.

11,796. You wish the degrees to confer license to practice?—Yes, but merely from the point of view of uniformity with other Universities. We do not feel very strongly upon that point.

11,797. You think residence in London should be made essential to graduation?—Yes. We feel that two years' residence in London should be made essential for graduation, and we should prefer that the two years should be the final two years rather than the earlier two years on account of the great clinical advantages which the medical schools of London offer as compared with provincial institutions.

11,798. (*Mr. Anstie.*) You are Dean of the Faculty, are you not?—I am Warden of the College.

11,799. Who was Warden last year?—I have been Warden now about one year. At this time last year Dr. Norman Moore was Warden.

11,800-1. (*Professor Ramsay.*) It is a very important claim you have made, that the science side of St.

T. W. Shore, Esq., M.D. B.Sc.

28 July 1892.

Bartholomew's should be recognised as a science college of the University. Do you mean by that that you pursue science in St. Bartholomew's to a greater extent than is required for ordinary medical graduation?—We do.

11,802. In all the branches of science?—No; in those branches of science which are included in the medical curriculum.

11,803. Do you count chemistry as included in the medical curriculum?—Yes.

11,804. But when I went over the laboratories at St. Bartholomew's I understood from Dr. Russell that the course of chemistry was limited by what is required for the examinations of the conjoint board?—Dr. Russell is not the only teacher there. Dr. Russell has charge of the department, but he is assisted by others, and there is a demonstrator who takes higher classes and gives higher instruction.

11,805. But is there any work carried on there beyond what is required for the medical degree?—Facilities are given for higher work. There is not a regular course of instruction, but facilities are given to students to carry on work in any higher branch of chemistry.

11,806. But, as a matter of fact, is not almost the whole of the teaching that is actually given confined to the ordinary three months' course of chemistry which is required for the examinations of the conjoint board; or to preparatory courses for those students who come up knowing little or no chemistry at all?—No; that is not a correct statement at all. There is a course of chemistry going on throughout the whole year. There is a course of instruction in chemistry carried on by the demonstrator of chemistry throughout the whole of the sessional year, from October to July.

11,807. But it is to a large extent for students who come up too unfit begin the three months' course, is it not?—No, it is totally independent. The three months' course which you refer to is confined to the students under the conjoint board. The longer course of instruction which I refer to is intended mainly for students for the preliminary scientific examination of the University of London; for students for the intermediate science of the University of London, and any students who may proceed further with chemistry. Occasionally we have students who graduate at the B.Sc. examination of the University of London in chemistry.

11,808. You have then regular courses of instruction leading on to the degrees of the London University?—Yes.

11,809. And you give encouragement to research work over and above what is required for the examinations of the Conjoint Board?—There are facilities given to any students who may care to go in for research work afterwards.

11,810. Do you consider that your apparatus is sufficient for all these purposes?—Yes.

11,811. (*Professor Sanderson.*) Who is your professor of physics?—Mr. Womack.

11,812. Have you a physical laboratory?—The ordinary work of physics is carried on in the chemical laboratory, but there is attached to it a physical room for special and higher experiments.

11,813. A physical room in the chemical department?—Yes.

11,814. (*Professor Sidgwick.*) Would your school object to the University having the power to exclude any teacher?—I think that is provided for in the Gresham Charter. The provision in the Gresham Charter on that point would, I think, be regarded as satisfactory.

11,815. (*Mr. Rendall.*) In paragraph 13 you think of the professors being appointed by the University?—Yes, without interfering in any way with the functions of existing teaching institutions.

The witness withdrew.

The following statement was received from Dr. SHORE *after his evidence was in print:—*

After having read Mr. Boyd's evidence I desire to add the following statements:—

1. I do *not* agree with his view that the foundation of a new "pass" degree in the existing University open to London trained students only, the present pass becoming an "honours" degree, would be satisfactory. The establishment of such a mere "pass" degree for London trained students only, whilst the "honours" degree would be available for provincial trained students, is not at all what is contemplated by St. Bartholomew's. On this point I agree with Professor Schäfer in his remarks in answer No. 11,564.
2. I entirely dissent from Mr. Stanley Boyd's views on the subject of a "professorial" University, to which my colleagues are strongly opposed.
3. As to the suggested establishment of a central school for the teaching of science in connexion with the medical schools (Question 11,288), I consider that such a central school would be very undesirable on account of the large number of students to be dealt with and the impossibility of giving proper practical laboratory instruction to large classes. A central school of this kind would render the preliminary scientific teaching in London far less efficient than it is at present. The preliminary scientific teaching now given at the larger schools, University College, St. Bartholomew's, Guy's, and St. Thomas', is in every way adequate to meet the requirements of this part of the University of London medical course. That a certain amount of combination amongst the smaller medical schools for scientific teaching may be advantageous is, I think, a point well worthy of consideration, but should, I consider, be left to the schools concerned to deal with voluntarily.
4. I may supplement Mr. Boyd's replies (Nos. 11,512 and 11,513) by saying that the lecturers on scientific subjects (*i.e.*, chemistry, physics, biology, botany, and physiology) at St. Bartholomew's are not members of the hospital staff; nor are these lectureships held by men who are afterwards promoted to the staff.
5. As to the question whether promotion from one post to another goes by "seniority," I may say that this is not the case at St. Bartholomew's. The only question ever considered in the election to the staff or to lectureships in any of the purely medical or of the scientific subjects is, who is the best candidate for that particular office, and instances can be cited to show that "seniority" in such appointments is quite a minor consideration. Cases can also be quoted to show that men have been elected to the staff and to lectureships at St. Bartholomew's who were not educated there. On the other hand, the fact must not be lost sight of that, in addition to the education of students to qualify them as practitioners, a very important part of the work at St. Bartholomew's consists in the encouragement of medical and scientific research and the production of teachers, some holding offices at other medical schools and colleges. In connexion with six of the other medical schools of London there are at present no fewer than 15 teachers who were educated at St. Bartholomew's, whilst others hold professorships in Universities and provincial colleges, in medical or scientific subjects. We are thus able not only to select the larger number of our own teachers but also to provide teachers at other colleges from among the young men who are trained as teachers by holding junior demonstratorships in our school.
6. It does not appear to me that the present University of London would be seriously interfered with by the establishment of a new University in London. Such a new University would only give to London what Manchester, Liverpool, Leeds, Durham, Edinburgh, and other cities now possess, for the degrees of the existing University of London would remain open to all alike, and the better students in London would still proceed to the old University, just as some students from Manchester and other cities now come up to graduate in the University of London.

T. W. SHORE.

September 1892.

HERBERT WM. PAGE, Esq., M.A., M.C., F.R.C.S., examined.

H. W. Page, Esq., M.A., M.C., F.R.C.S.

28 July 1892.

11,816. (*Chairman.*) You represent St. Mary's Hospital Medical School?—Yes. I desire to hand in this book, which describes the institution (*handing same to Chairman*). What I have written down on this paper is my own individual opinion. There has been no general meeting of the school. No joint opinion has been arrived at.

11,817. You are in favour of one University in London?—Yes.

11,818. You would regard a close association of teaching and examination as essential, but would disapprove of candidates being examined by their own teachers?—Yes.

11,819. You approve in the main of the professorial scheme?—Yes.

11,820. You would exclude the Royal Colleges from controlling the medical curriculum or examinations?—Yes.

11,821. You would accord to Medicine a share in the governing body of the University equal to that of other Faculties?—Yes.

11,822. You would claim for St. Mary's Hospital Medical School direct and independent representation upon the governing body of any University which might be founded on the lines of the Gresham Charter, and in which teaching institutions as such are represented upon the governing body?—Yes.

11,823. You would also, in the event of a University being founded having such a composition of its governing body, claim for St. Mary's Hospital Medical School to be constituted a college in the Faculty of Science, as well as in that of Medicine in the University. That is the same request as that made by St. Bartholomew's?—Yes.

11,824. I will not ask you any details about what scientific apparatus or means for teaching you have got, but, shortly, can you say that you have full means for giving scientific instruction?—Yes.

11,825. And that you are in the habit of doing it now?—Yes, we are in the habit of doing it now.

11,826. The details I daresay will be contained in the book you have put in?—Practically the information on the subject is there.

11,827. Then you say that in the event of a new University being founded on and by some modification of the present University of London you would view with disfavour any interference with the cosmopolitan character of the degrees of that University, and you are of opinion that there should be added to it the means of providing degrees in Medicine attainable by the majority of London students after a period of residence in one of the schools. Should a second University be founded independent of the University of London, you think such University ought to be local in its sphere of action, that is, for London students after a period of residence. Do you agree with the two years' clause in the Gresham scheme?—I have not committed myself to any definite period of time. I think there ought to be some time—practically for the reasons for which Dr. Dickinson gave.

11,828. Then with regard to the examinations of the London University?—I think the present degrees of the University of London are not obtainable by the majority of students. They are too hard—too difficult.

11,829. Is there any other point which you have not mentioned which you wish to mention?—Nothing further than this. My reason for rather favouring the professorial scheme is that I think it will in the long run best conduce to the advantage of education in London, not simply medical education, but education in general. I think it will be to the advantage of medical schools to have an adequate or proportional representation in a first class University, rather than have an undue proportion such as is accorded in the Gresham scheme, which, I believe, would not lead to the formation of a University of the same high standard as the professorial scheme would be likely to lead to, or which one would wish to have established in London.

11,830. (*Lord Reay.*) Are you aware that the main feature of a professorial University would be that the professors and all the teachers of such a University should be appointed by one and the same authority, and not by various bodies. That is what is understood by a professorial University?—Yes; I quite understand that the University professors occupying the chief chairs would necessarily have to be appointed by some body of that kind, but I imagine that there would be subordinate teachers scattered throughout the various establishments who would nevertheless have a University status which they would not obtain in any other way.

The witness withdrew.

FRED TAYLOR, Esq., M.D., F.R.C.P., examined.

F. Taylor, Esq., M.D., F.R.C.P.

11,831. (*Chairman.*) You appear on behalf of Guy's Hospital Medical School?—Yes.

11,832. Do you agree generally with what has been said as regards the points upon which the London medical schools are agreed?—Yes.

11,833. Will you give me any particulars in which your own opinion differs from what has been said before?—In so far as my school differs from what has been said originally by Mr. Boyd, I should say that we agree most closely with what has been said by St. Bartholomew's as expressing their views. My colleagues are strongly opposed to a professorial University, and would prefer that the separate colleges should be represented on the governing body of the new University.

11,834. Do you feel strongly as regards the question whether there should be one University or two?—I do not know that we feel strongly. We feel that ideally it is desirable that in one town there should be one University; but we quite see the difficulties that surround the attempt to modify the existing London University so as to meet the requirements of a teaching University in London, conferring degrees of the standard that is required, and therefore we should not oppose, or object very strongly to, the existence of another if that were the only way of meeting what seem to be the requirements of education, both medical and general, in London at the present time.

11,835. Though you might prefer another, you would have no fundamental objection to the Gresham scheme?—I think on the whole our feelings are in favour of the main provisions of the Gresham scheme.

11,836. When you say you agree with what was said by St. Bartholomew's, does that mean that you wish to be affiliated as regards the Science Faculty as well?—We should like to send in a claim to be recognised as a College of Science also, certainly.

11,837. Have you facilities for teaching Science?—Yes. I am prepared to lay prospectuses and particulars of our facilities for teaching Science before the Commission, and I may say that I have here a list of the students whom we have succeeded in passing during the last 10 years at the preliminary scientific examination of the London University, in which it is seen that we have passed 10 per cent. of all that have passed from other schools, and also the first M.B. examination, which is in part Science, seeing that Organic Chemistry is an important subject in the examination. (*For this document and for a paper giving particulars of the teaching of Science at Guy's Hospital, see Appendix No.* 23.)

11,838. What is your opinion about the Royal Colleges being associated in managing the examinations for the medical degree?—Our school thinks that they should be included in a scheme for the University, but the school also rather thinks that they should be included mainly in the way of representation rather than as taking a very prominent share in the conduct of the examinations.

11,839. If they were represented on the Senate would that do?—Yes.

F. Taylor, Esq., M.D., F.R.C.P.

28 July 1892.

11,840. Is there any other point on which you wish to state your views?—We thought also that residence should be enforced to the extent of two years for students qualifying in the University.

11,841. Is that all you wish to say?—Yes.

11,842. (*Professor Sidgwick.*) Is the new and lower degree that you want to be in strictly medical subjects above the standard of the conjoint board, or is it to be at the standard of the conjoint board? Do you think that adequate for the M.D. degree?—I do not know what this question was exactly "think "that the subjects of this board's examination are "adequate for." I do not think we should be prepared to go as far as that, but for, say, the Bachelorship of Medicine, I think we should regard the medical part of the conjoint diploma examination as adequate or very nearly adequate.

11,843. How would you have more for the M.D.?—I think it would require a little more prolonged attendance at the hospital, and the examination might easily be made more strict, more searching, and more thorough in order to provide for the M.D. degree. I do not think there would be any difficulty about that.

11,844. (*Mr. Rendall.*) Or a thesis?—Yes, or a thesis.

The witness withdrew.

F. Payne, Esq., M.Sc., B.A., F.R.C.P.

FRANK PAYNE, Esq., M.Sc., B.A., F.R.C.P., examined.

11,845. (*Chairman.*) You appear on behalf of the medical school of St. Thomas' Hospital?—Yes. I have a statement here which, with your Lordship's permission, I will read:—"We agree with the statement "made on behalf of the medical schools by the chief "witness, but desire to add the following observations:—

"(1.) We are in favour of having, if possible, only "one University in London.

"(2.) The majority of our teachers are in favour "of some such University scheme as that proposed "by the Senate of the University of London last year. "We also think that the foundation of professorships "not replacing but only supplementing the teaching "of the medical schools would be of great value, "especially in certain departments of medicine, and "as tending to the advancement of science. As an "alternative we would acquiesce in a scheme like "that of the Gresham Charter.

"(3.) We think the Royal Colleges of Physicians and "Surgeons should be included in the proposed new or "remodelled University as they were in the scheme "of the Senate of the University of London.

"(4.) We are of opinion that if teaching institutions "as such, are to be represented on the governing body "of the proposed University each of the medical "schools should be thus represented as a medical "college; and we should also claim on behalf of "our school to be represented as a College of Science. "In support of this claim we submit our prospectus "and also a special statement of our staff and appli-"ances for teaching science.

"(5.) We think that the proposed new medical degree "should not confer a license to practise unless the "Universities should be united with some body already "possessing the power to grant a license.

"(6.) In conclusion, we would remark that in regard "to medicine the objects to be aimed at in the for-"mation of a teaching University for London are "not only the giving of greater facilities for gradua-"tion, but also the continued improvement of medical "education, (especially in those departments which "require elaborate appliances) and the advancement "of medicine and its auxiliary sciences. For the latter "object the funds of the medical schools being derived "entirely from students' fees, are inadequate, and "not altogether applicable." Then I have also a statement with regard to the scientific teachers.

"*Chemistry.*—Lecturer, Professor Wyndham Dun-"stan, M.A. There are a large students' laboratory, "private laboratories, and a special lecture theatre.

"*Physics.*—Demonstrator, Dr. Ince, Ph.D. There "is a large physical laboratory which has been in use "for some years, and is now being refitted.

"*Botany.*—Lecturer, Mr. A. W. Bennett, M.A., "B.Sc.

"*Comparative Anatomy.*—Lecturer, Mr. F. G. Par-"sons, F.L.S.

"*General Biology.*—Lecturers, Mr. Bennett and "Mr. Parsons. A laboratory for practical instruc-"tion in these subjects is about to be built imme-"diately as part of a large addition to the school "buildings. No account is here taken of the large "departments devoted to physiology and anatomy, as "these subjects are more strictly medical."

11,846. (*Mr. Anstie.*) Does it dissent from what you have just read?—No, it is an extension in further detail.

11,847. (*Professor Sanderson.*) You have had very great experience in examining in other Universities so that you know very well what the standard of other Universities is. Would you mind stating whether you think the proposed pass degree of medicine should be in accordance with the standard of Universities that you know? For example, should it be in any way lower than the standard of the Universities of Edinburgh or Oxford?—I think it might be of a standard about like that of Edinburgh or of Oxford, in both which Universities I have examined. At Edinburgh of course the number of candidates is larger than the number is at Oxford, but the standard is about the same.

11,848. Does that apply to examinations in science as well as practical subjects? Would you maintain the standard of examination in science equal at least to the examinations at Edinburgh?—Yes. I should think it ought to be equal to the standard in Edinburgh.

11,849. You do not see any very marked difference between those standards and the standard of the other English Universities, do you?—I think the English Universities, as far as I know them, are about the same as Edinburgh, with the exception of the University of London, which is, of course, more difficult, (I refer to the minimum standard for passing in each case).

The following statement was received from DR. PAYNE *after the evidence was in print:—*

I wish to add that neither I nor any of the staff of St. Thomas's Hospital, so far as I know, are in favour of a scheme such as that suggested in by Mr. Stanley Boyd in his answers to questions 11,144 to 11,147.

The witness withdrew.

W. G. Spencer, Esq., M.B., M.S., F.R.C.S.

W. G. SPENCER, Esq., M.B., M.S., F.R.C.S., examined.

11,850. (*Chairman.*) You appear on behalf of the Westminster Hospital Medical School?—Yes.

11,851. Have you any statement to make?—We support the revised scheme of the Senate which was accepted by the schools formerly. It may be modified. Dr. Allchin has put in one form of scheme showing a way in which it might be modified. In that there is a regulation for admission for a pass examination for students educated wholly or in part in London, and for an honours examination to which all the world might come. With regard to the very strict limitation of that pass examination, questions were asked before with regard to provincial students being admitted to that pass examination, and it was said that they must show as good teaching as in London. That is to say, the Westminster School imagines that the degree is to be a degree which is evidence of thorough teaching, and if provincial students are to be admitted to the pass it is only on that evidence of teaching. With regard to the honours it should be as at present, not restricted in its area.

11,852. Do you require residence?—Of course, as in other cases they would have to reside two years unless they could show the thorough evidence of teaching at a recognised medical school.

11,853. You would relax it under those circumstances, would you?—Yes.

11,854. Do you wish to be admitted as a Faculty of Science?—No. Nor do we ask for direct representation on the governing body. We wish for a representation only through Faculties. We oppose the direct representation, for one among other reasons, because if you begin to admit direct representation from teaching bodies you do not know where to stop. Besides University College and King's College, there are other colleges in arts, for instance, and you may go on until you get a council of any size almost.

11,855. Would you be content with representation through Faculties?—Yes. We also think there should be an examinational association such as is mentioned in clause 47 of the University of London scheme, and direct representation on the Senate of the Royal Colleges.

11,856. Do you wish the Royal Colleges to take any part in the examinations?—This is contemplated in the 47th clause of the Senate's scheme. We originally accepted that scheme as a whole, and we still hold to our idea. That is the first scheme we accepted, and we retain our opinion. That is as to the pass examination, leaving the honours examination to the University entirely.

11,857. (*Mr. Anstie.*) Did all the schools accept that idea?—Yes, all the schools signified to the Senate their approval. Then with regard to the matriculation examination and the preliminary scientific, we think that if they are maintained at their present standard, and in their present form, it would not satisfy the wants of the majority of students. We think that the pass examinations must be relaxed a little in those particulars, but we would desire that the University of London conduct them.

W. G. Spencer, Esq., M.B., M.S., F.R.C.S.

28 July 1892.

11,858. (*Chairman.*) Is there anything more you wish to say?—We are opposed to the professorial scheme because for one reason, putting it broadly, a professorial University means the appointment of the professors by one central body.

11,859. I do not think any of the schools are willing to have their teachers appointed by a professorial body?—They are not.

We declined the Gresham Scheme because it gave about half the representation to University College and King's College on the Council, giving them thereby a preponderant which we considered to be unfair and undesirable.

The witness withdrew.

[Note.—Dr. Coupland attended on behalf of the Middlesex Hospital Medical School, and expressed his concurrence in the evidence given by Mr. Stanley Boyd.]

Adjourned to to-morrow morning at 11 o'clock.

Twenty-third Day.

Friday, 29th July 1892.

PRESENT:

The Right Hon. the EARL COWPER, K.G., M.A., in the Chair.

The Lord Reay, G.C.S.I.
The Right Hon. Sir Lyon Playfair, K.C.B., LL.D., M.P.
Sir William S. Savory, Bart., M.B.
Sir George M. Humphry, M.D., F.R.S.
Professor George G. Ramsay, LL.D.
The Rev. Canon Browne, B.D.
Professor H. Sidgwick, Litt.D.
Professor Burdon Sanderson, M.D., F.R.S.
James Anstie, Esq., Q.C., B.A.
Ralph C. Palmer, Esq., B.A.
Principal G. H. Rendall, Esq., M.A.

J. Leybourn Goddard, Esq., M.A., LL.B., *Secretary.*

J. Eric Erichsen, Esq., LL.D., F.R.S., examined.

J. E. Erichsen, Esq., LL.D., F.R.S.

29 July 1892.

11,860. (*Chairman.*) I will first ask you with regard to the hardship of the London medical students in not being able to obtain an M.D. degree. Will you tell us your views on that subject?—That hardship is generally recognised both by the students and by the teachers in London. The London medical student is placed at a disadvantage in regard to the obtaining of medical degrees that are obtainable by the average medical student elsewhere. The only institution in London that confers the M.D. degree is the University of London, and that degree is of so high a standard that it is unattainable by the great majority of medical students in London. I believe that the number of those who take the M.D. degree in London is not more than 25 to 30 in the year out of a body of medical students of whom some 500 or 600 present themselves for examination at the conjoint board and at the Royal College of Surgeons.

11,861. What is your particular objection to the University of London degree? Do you care to state your opinion on that point?—I have no objection to the degree of the University of London. I think it a very excellent degree, and I think it is very desirable in the interests of the medical profession that a degree of so high a standard should be maintained. But I also think it is desirable, as a matter really of professional advantage to the ordinary practitioner—the general practitioner, I mean, whose education has not been carried to so high a standard—that he should be able to obtain a degree on the level of the degrees of some of the Scottish Universities, I would more especially say of the University of Edinburgh, the degree of which I look upon as an exceedingly good average medical degree. I mention the University of Edinburgh specially, because I am better acquainted with that than I am with the other Scottish Universities; but I believe that both the degrees of Aberdeen and Glasgow have, especially of late years, been greatly improved in regard to the character of the examinations for them.

11,862. With regard to the excellence of the examination of the conjoint board, do you think that would be higher or lower in point of difficulty and value than the degree which you would propose?—I think the examination of the conjoint board is an extremely good examination for the average medical student. I think it is as good an examination as can be devised, and I think it is an examination that is very much on the level of those for the M.B. degree of most of the Universities in the kingdom.

J. E. Erichsen, Esq., LL.D., F.R.S.

29 July 1892.

11,863. Has the conjoint board an examination in regard to other matters than purely medical practical matters?—I am speaking of the purely medical examination.

11,864. It is purely medical, is it?—The examination of the conjoint board is purely medical and surgical, in those subjects that lead up to the final examination in medicine and surgery.

11,865. Then for scientific and other knowledge some other instruction is necessary?—There is a preliminary examination for those purposes, and the standard of that preliminary examination has recently been raised. I think with regard to that point that the new University should hold in its own hands the examinations in literary and preliminary scientific matters, and also the final examinations for the M.D. degree.

11,866. And the qualifying examination could be done by the conjoint board?—Yes; the qualifying examination could be done by the conjoint board or by some similar institution.

11,867. So that the conjoint board and the University should act in harmony together, one body doing one part of the work, and the other the other, each supplementing what is left undone by the other?—I think so. If a scheme of that kind could be devised, I think it would be a useful one for the profession and the public.

11,868. Are you in favour of the committee of the conjoint board having any share in determining the final examinations of the University?—I think the two Royal Colleges, should be represented on the Council of the University. I think they should have a voice on the Council of the University.

11,869. Do you think that would be sufficient?—I think it would be sufficient. I think the final examination for the M.D. degree ought to be conducted solely and entirely by the University itself.

11,870. Not in the way suggested in the scheme of the Senate of the University of London in which the Royal Colleges were brought in?—No. I think the University ought to hold the examination for the M.D. degree in its own hands.

11,871. Then with regard to the final two years of residence before the examination. Do you wish to say something as to how it is to be spent?—At present a five years' curriculum is required from the medical student, and I think that he might take that portion of his studies anywhere in London, or elsewhere—in the provinces—in any provincial school. But I think the final two years—and I consider the final two years to follow the qualifying examination—should be spent in study in London, and that that study should be of a purely practical and clinical character, in the widest sense practical as well as clinical. The practical part should be carried on in the laboratories of physiology, pathology, bacteriology, hygiene and forensic medicine—the clinical in the federated hospitals.

11,872. With regard to opportunities for clinical teaching I think your opinion is that federation of hospitals can alone make use of the unrivalled opportunities?—Yes, I think that in order to give the student the fullest opportunity of profiting by what the late Royal Commission called in its Report the "unrivalled" opportunities for clinical teaching afforded in London, it would be necessary that there should be a federation of the hospitals that come in under any scheme to enable the student to attend the practice of all the different hospitals—both general hospitals and certain special hospitals of a high standing, those special hospitals, for instance, those that are now concerned in what are called the "post-graduate" courses. (*The witness subsequently sent to the Commission a statement showing the number of beds available for clinical instruction in the hospitals, infirmaries, and asylums in or near London. See Appendix No. 24).*

11,873. Would the different hospitals be willing to come into this scheme of federation?—That I do not know, nor do I know whether it has ever been proposed; but I think that one of the greatest evils of the present system of medical education in London is the isolation of the hospital medical schools from one another. I think it is very desirable that a student so long as he is *in statu pupillari*—until he has passed his qualifying examination—should be taught by one set of teachers; but I think that after that it would be immensely to his advantage if in London he could go to any hospital where teachers celebrated and eminent in certain special branches of medicine and surgery are giving instruction, and so learn from them also, instead of being confined always to instruction from the teachers of his own particular hospitals.

11,874. Would that be assisted if the University appointed the professors? They could appoint these eminent men University professors. They would at once attach them to a particular school, and enable the students to take part?—I did not mean to attend lectures given *ex cathedra*, but rather to attend practice and clinical instruction, to see the methods of investigation adopted by different men; to see the way in which they treated their patients, and so forth. It is in order to obtain that knowledge that so large a number of English medical students go to Paris, Vienna, and other continental towns. There all the hospitals are thrown open; a man goes from one hospital to another; he studies diseases of the heart, brain, and lungs under one teacher of special eminence at one hospital, and then he goes to study another disease under another teacher at another hospital. He goes about in that way and obtains a finishing course of study from the best teachers, which is unobtainable under the present system in London.

11,875. Under the present system is the instruction limited to the particular students at that hospital?—Yes. A student who enters at one hospital in London cannot attend the practice in another hospital without paying a fee, and often a very considerable fee, for such attendance.

11,876. And you would have it with a reduced fee, or no fee at all, would you?—I would have it that those hospitals that come into any scheme of the proposed University should be federated together for the purpose of clinical instruction, but for the purpose of clinical instruction only, not of professorial instruction. And I would further wish, as I have already said, that some of the larger special hospitals should be combined in the same way, so that a student having a ticket from the University should be able, without further fee, to attend the practice of any physician or surgeon that he chooses in London who is a clinical teacher in a hospital that is federated under the University.

11,877. Would it be necessary to put anything into the Charter, or might it be left to the different colleges to work it out for themselves by amicable arrangements between them?—I should think that that might be a matter of statute, and determined by the Council. I am not sure how far it is desirable to introduce into charters details of such arrangements.

11,878. Would you give the Council of the new University power to put a little pressure on to bring this about?—I would. I would say that is the only way in which the great clinical opportunities in London can be fully utilised. At present a man is confined to his own hospital; he is apt to get too narrow views; he becomes addicted *jurare in verba magistri* and does not learn the practice, which may often be superior, of physicians and surgeons in other hospitals than his own.

11,879. At present in the Gresham Charter it says: "A college in the University shall not in any way be "under the jurisdiction or control of the Council, "except as regards the regulations for the duration "and nature of the studies to be required of the "students of the college as a qualification for Univer-"sity degrees or distinctions." This would have to be modified if you wished to allow the Council to interfere, would it not?—It would.

11,880. Do you think it advisable in other ways that it should be modified so as in other matters to give more power to the University over the particular schools and colleges connected with it?—I think the colleges should be autonomous, but I think there should be a central body that should have a considerable control over the education carried on in those colleges, and the equipment of those colleges for education.

11,881. And would you give it any voice in the appointment of teachers, or would you rather leave that?—No. I think as matters are constituted in London it would be extremely difficult for a central body to exercise any control over the appointment of teachers. They might over the appointment of professors in the University, but not over the teachers in the colleges.

11,882. Would you give them a veto of any kind as to teachers?—I would give them a power of selection

or of veto, in the case of the appointment of professors in the University.

11,883. If there were professors in the University the Council would appoint them altogether, would they not?—I presume they would, but as matters stand now under the Gresham Charter, and I think that is a blot upon the Gresham Charter as it now stands, and requires amendment, every teacher in a constituent college would become a professor.

11,884. A University professor?—Yes, a University professor. I do not see that there is any provision to prevent that.

11,885. They can refuse to admit them to the Faculty?—Yes, but he would take the title of professor.

11,886. Is that according to the Charter?—It does not so say in the Charter, but I think that would be the outcome of the charter. Including University College and King's College, there are 12 medical schools that are constituent colleges, and every teacher in those schools, I take it, under the Charter as it now stands would be a professor in the University.

11,887. You think that that ought not to be the case. Do you think that nobody should be a professor who has not been appointed so by the University?—Yes, I think the colleges must appoint their own teachers, in the way in which the hospital schools are connected with the hospitals it would be impossible to do otherwise, but I think that the University should have the power of selecting its professors from amongst those teachers; that it should not necessarily admit every teacher in every college connected with the University as a professor of the University.

11,888. Are you quite clear that as it stands it would not have that power?—That is my reading of it.

11,889. And supposing that to be the case you would wish that to be altered so that all teachers should not necessarily be professors?—I would.

11,890. But with regard to the teachers themselves, you would not give a veto of any kind to the Council of the University, would you? One idea has been that the Chancellor should have a veto, and that in exercising it he should be advised by the Faculty?—I think there might be a veto very much in the same way as the College of Surgeons now possesses a veto. The College of Surgeons might refuse to recognise the teaching of any man, or the teaching of any school, if the Council of the College thought that teaching was altogether inadequate, or if the equipment of the school had fallen below a certain standard. For instance, certainly it is now a good many years ago, the Council of the Royal College of Surgeons withdrew its recognition from the Westminster Hospital as a school of medicine on account of the insufficiency of its equipment. I think the same thing might be done in the University with regard to individual professors or teachers.

11,891. There is something of that sort in the clause which enables them to exclude them from the Faculty?—Yes, it would practically come to that.

11,892. Clause 26 gives the power of exclusion of colleges, and that might be used to compel the college to make some alteration in the teaching staff?—Quite so; that would meet the case.

11,893. Then I will go to the objection with regard to the constitution of the Medical Faculty under the Gresham Charter?—I think the Medical Faculty is too large under the Gresham Charter. It would become unwieldy; it would be a sort of public assembly; there would be some two or three hundred members of it.

11,894. How would you reduce it?—I should reduce it by confining it to the University professors.

11,895. First of all enabling the University to select its own professors from among the college teachers, and then confining it to the professors?—Quite so.

11,896. Do you think the medical colleges would agree to that?—I doubt it, but I think it would be the best course notwithstanding.

11,897. You think the numbers are so large now as to be unwieldy?—Yes.

11,898. Is there anything you wish to say as to constituent colleges?—No, I think not.

11,899. Is there anything else you wish to say with regard to the Gresham Charter which was not said by Sir George Young or Professor William Ramsay with whom you appeared. Is there anything you wish to supplement?—I agree in all they have said, but there is one point, and one point only, still upon the medical question, that, I think, is a somewhat important point, so far as it affects present students, and also to some degree practitioners. I think it would be very desirable that there should be some retrospective clause introduced into the Charter, enabling men who are already in practice to take their degrees without going through the period of final study, men who have been in practice, say, for ten years might have the examinations relaxed somewhat in their favour, and so be enabled to take a degree upon more easy terms than a young man just out of his studies.

11,900. Would it look well that the older man should have an easier examination than the younger?—Perhaps I expressed myself incorrectly; I would not give them an easier examination, but I would not compel them to attend the hospital practice during those two final years. I would take their 10 years' practice, as equivalent to a final two years' course of clinical and practical instruction in the hospitals.

11,901. But with regard to the actual examination it should be the same?—Yes, that would be left as it is.

11,902. That would be a sort of temporary arrangement?—Yes, quite temporary, merely to meet the want of present students and young practitioners.

11,903. And that would not be met sufficiently by the power of giving honorary degrees, would it?—There is always a great deal of difficulty in the selection of those honorary degrees, and a great deal of heart-burning. When the Fellowship of the Royal College of Surgeons was instituted the first two batches of fellows were selected in that way. That selection gave rise to a great deal of ill-feeling and jealousy in the profession, and it always opens the door to a great deal of jobbery. I would rather trust to examination than to selection by honorary degrees.

11,904. Have you reason to believe that this is very much sought after by the older students?—I think so. I think there is a very large body of men in practice who find, after having been a few years in practice, that they are at a disadvantage in consequence of not possessing an M.D. degree, and the consequence is that they go abroad—they go to Brussels, for instance, and other places—in order to obtain that degree on a nominal examination, or nearly so.

11,905. (*Lord Reay.*) In order that the new London University should be able to compete with the Universities you have already mentioned, which are entirely supported by the State—the Universities of other capitals, such as Paris, Vienna, and Berlin—a large increase of funds will be necessary?—It will most certainly.

11,906. University College has felt, both with regard to the salaries of professors, in order to prevent their seeking promotion at other Universities, and also with regard to the scientific appliances and increased hospital accommodation, that further funds are very much wanted?—Very much so. We made an appeal in conjuction with King's College, a year or two ago for a sum of 50,000*l.*, which we deemed necessary to complete our equipment in certain directions independent of the medical school. The response was altogether inadequate. I look upon University College as extremely well equipped as a college, but if we want to extend it beyond a college to University functions then, undoubtedly, its equipment is not sufficient for the purposes of London. We should want a large sum of money to complete the equipment.

11,907. University College, I believe, would have no objection whatever to give to the new University all the safeguards the University might require, both with regard to the appointment of its teachers and with regard to its teaching. It would give to the new University the power of inspecting all its educational arrangements?—Yes. University College would be perfectly ready to throw its doors open to any kind of inspection that the University might at any time desire.

11,908. And we should also be prepared to give every safeguard that the University might require for the appointment of our *personnel* within the limits of our autonomy?—Yes.

11,909. I take it that University College would accept the measures which the University might adopt to improve and increase the opportunities for advanced study, and would be quite prepared to undertake the

J. E. Erichsen, Esq., LL.D., F.R.S.

29 July 1892.

post-graduate classes to which you have already alluded, as well as the preliminary instruction needed for the attainment of a degree?—In other matters than medicine?

11,910. Yes, in all the Faculties?—Certainly. In all the Faculties University College would be quite ready to undertake the very highest kind of instruction. The post-graduate classes, I may mention, when that term is applied to medical classes can only be conducted in hospitals.

11,911. But our hospital would be useful for that object?—It might undoubtedly be made serviceable to that object.

11,912. There is no intention whatever on the part of University College to depart from or to withdraw in any way from those progressive traditions which are inseparable from the object with which it has been founded?—None whatever. University College was founded as the University of London; was well equipped as matters were considered 60 or 70 years ago; and has always concerned itself with the highest teaching and research, the highest teaching that could be carried out in a college of that kind, and with its equipments it possesses the research work that is done at University College, and that is doing daily at University College, is of the very largest and most important character, and is altogether beyond and irrespective of the mere educational work of the college.

11,913. I also believe that University College would not be satisfied merely with a larger infusion of teachers in the examining board of the new University, but what University College wants, and the reason why it supports the Gresham Charter and has originated it, is that there may be an entire change of system, which will give the teachers such a control of the examinations as will secure a closer connexion with the teaching than the examinations at present have?—That is so.

11,914. And it is distinctly not the desire of University College that degrees should be lowered, but that a degree of high standard should be the result of teaching which freed from external and artificial bonds, will itself be able to reach its highest development?—That is so.

11,915. University College, as you have already stated, wishes to contribute not only to the lower stages of University education, but wishes to continue having its share in the most advanced scientific stages of medical research?—That has been the object of University College ever since its foundation, and University College is not prepared and would not consent to depart from that.

11,916. University College has a very decided opinion that there are deficiencies in all directions, and in all the Faculties, with regard to the opportunities which at present exist in London of obtaining the highest teaching, which is given, for instance, at such a University as the University of Strasbourg, and University College would heartily co-operate with a new University in providing for those deficiencies by greater co-ordination, as you have already suggested, with regard to clinical teaching, and better distribution of existing resources, as well as organization of resources, both in respect of the teaching *personnel* in London, and the educational material—the various appliances?—The highest teaching is not given in London, and, to my knowledge, never has been given in London. It cannot be given in London, because the teachers have to live by their profession as teachers, and the highest teaching does not pay. The highest teaching cannot be given except by professors who are well endowed by the State, and the teaching in London has always been at a disadvantage as compared to the teaching in the great continental towns in consequence of the want of State endowment of teacherships, whether you call them professorships or what not in London.

11,917. University College does not claim in any way to interfere with or to be connected with examinations such as are now conducted by the University of London in order to satisfy the demand which exists for degrees elsewhere than in London?—No, certainly not. University College merely claims to be associated with examinations in and for London.

11,918. (*Professor Sidgwick.*) Have you read the suggestion for the promotion of a professorial University?—Yes.

11,919. You are aware that one of the proposals is that the University should have power to absorb institutions of academic rank in London which may be willing to be absorbed?—Yes.

11,920. Do you think there is any chance that University College would be willing to be absorbed?—Certainly not. University College is the best endowed and the wealthiest educational establishment in London. It might absorb smaller ones, but it would not submit to be absorbed itself. I would put in this paper, which is a financial statement of the property owned by University College. (*For this document see Appendix No.* 25.) We have a total income of about 35,000*l.* a year; we have trust funds to the amount of over 250,000*l.* in the college, and 116,000*l.* in the hospitals, making altogether trust funds to the amount of about 370,000*l.* We have besides that, a sum of money in hand of upwards of 20,000*l.* available for general purposes, which we are now expending in the construction of three large laboratories, one for physics, one for mechanical engineering, and one for electrical technology. We have besides that, a sum of nearly 30,000*l.* in hand for the purpose of rebuilding the hospital. We stand upon more than seven acres of freehold land; we have very large buildings replete with museums and laboratories, which have been accumulating during the last 60 years; and we have got, I believe I am correct in saying, next to the British Museum the largest library in London, a library of upwards of 100,000 volumes. It would be impossible for those who are responsible for property of this kind to allow that property to be absorbed, as it is termed, into any institutions, more especially an institution that is not yet created, and that is to be governed by bodies of which we know nothing.

11,921. With regard to your suggestion for the mutual opening of the London hospitals for clinical teaching in the last two years of a student's course, I did not understand exactly how you proposed to reconcile the attendance at the college with the control of the University. For instance, I did not quite understand whether you were prepared to give the Council of the University the power to enforce it, or whether you would leave that to voluntary action?—I would rather leave it to voluntary action. I think the medical schools and hospitals would find an advantage in it.

11,922. Do you believe it would be brought about if the organisation is made as drafted in the Gresham Charter?—Yes, quite so.

11,923. You think the voluntary co-operation of the schools would bring about this?—I think eventually it will be brought about. I think there is a feeling and a movement in that direction. I think that for ordinary educational purposes up to the licensing standard of the conjoint board, it is better that a student should be confined to one particular hospital and one particular set of teachers, but I think that before he enters into practice, and especially if he intend taking a medical degree, it is better for him that he should have broader views instilled into his mind than he can possibly obtain by following the instruction of one set of teachers in one particular school which is very likely hampered and narrowed by traditions which have been transmitted into that school from past days. I think it is very much better that he should in those cases have the opportunity of learning under other men than those by whom he has been previously taught. He will then see that there is something to be learnt out of his own hospital, and something which may, perhaps, be very much better than that which he learns in his own hospital. Every hospital has something very good and something very special to teach, and I think it is of great importance that that kind of tuition should be available to the advanced student.

11,924. (*Rev. Canon Browne.*) You said that for the professional advantage of practitioners you thought there should be a readier degree. Can you tell me what professional advantage is meant by that?—A commercial advantage.

11,925. Really a question of fees?—It is a question of success in practice. For instance, two men establish themselves in the same town; one is a "doctor," the other is not; the man who is a "doctor," wherever he got his doctor's degree—Brussels, St. Andrews, or anywhere else—takes a better position, or assumes a better position, than his rival, who has not the degree.

11,926. Wherever he gets the degree?—Yes; people do not ask where a degree is got.

11,927. Would you mark this as a less exalted degree than the present University of London degree?—Yes. I think the present University of London degree is by far the highest degree in the kingdom. I should be very sorry to see that degree lowered. I think it is of great advantage to the more eminent members of the medical profession, and to the young men who wish to distinguish themselves, that they should have a degree of that kind which is really an honours degree, as has been repeatedly said, open to them.

11,928. My question was, would you mark this as being a less exalted degree?—No, I would not. I would no more mark it specially in that way than I would mark the degree of the University of Edinburgh or that of Durham, as being a less exalted degree than the degree of the University of London.

11,929. But those are marked "M.D., Edin.," or whatever it may be?—Yes; the holder of it might put "M.D., Gresham," or whatever else it was. To that I see no objection.

11,930. And, doing that, you know it would have no effect upon the public, because wherever the degree has been got, the man has the advantage?—The best proof I can give of that is that the four last Presidents of the Royal College of Physicians have taken their degrees in very different institutions. The present President of the College of Physicians, a man of the very highest standing and professional character and position, holds an Aberdeen degree; his predecessor, Sir William Jenner, held a London degree. Sir William Jenner's predecessor, Sir Risden Bennett, held an Edinburgh degree, and his predecessor, Sir George Burrows, held a Cambridge degree. No one troubled himself to inquire where those men took their degrees, nor are those degrees marked.

11,931. Take the case of the two practitioners that you mentioned. If the public really could understand that the doctor's degree which the man has is the least exalted of all doctor's degrees, they perhaps would not give so much preference to him?—Undoubtedly.

11,932. So we should be really taking one further step in the direction of taking in the public?—It would be very important for the public to know that a man having taken, for instance, the Brussels degree, which really indicates no examination of any consequence, or that a man who took the St. Andrews degree in what was called "the year of grace," some 30 years ago, underwent no examination.

11,933. With all that in your mind you press for a readier degree?—I press for a readier degree than can now be obtained in London, but a degree requiring a very high order of practical and clinical knowledge, and equal to any in the kingdom except that of the London University.

11,934. You said that the College of Surgeons can refuse to recognise the teaching of any man, or indeed of any school, if it thinks the teaching inadequate. I can well understand that with regard to any school; but what form does that take with regard to any individual man. Can it single out a professor who is recognised as a teacher at a medical school, and go behind the school and say, "Dr. So-and-So we do not "think is an adequate teacher, and we shall not recog- "nise your pupils who have gone to him"?—I do not know of any case in which the College of Surgeons has refused, at any rate, in the case of an individual; but I know of a case in which it has withdrawn the recognition of a school. And the College of Surgeons has also the power of sending visitors to inspect schools to see if their equipment is sufficient. That power is occasionally exercised, and I think it would be better if it were more commonly exercised than it is.

11,935. My difficulty is this: How would you refuse to recognise an individual, and penalise the unfortunate young men who happened to attend the teaching of a certain man, while all the rest of the teaching was regarded as satisfactory?—He would have to resign; his colleagues, or the students would tell him to do so. It would come to that.

11,936. With regard to the membership of Faculties, you think this proposed Faculty of Medicine would be very much too large?—I think so.

11,937. And you would confine it to the University professors. Would you not include the examiners for the last two or three years?—Yes. I have no objection to include them.

11,938. (*Mr. Rendall.*) Assuming all due respect for the autonomy of the college, the administration of the trusts, college discipline, and teaching, and so forth, I understand that University College would welcome an effective central organisation of the University?—It would. The Council of University College, which is the only governing body in the college, and the only body that has authority to speak for the college, passed a resolution at its last meeting to that effect.

11,939. Was that at the meeting that was discussing the resolution of the Senate upon the question of the establishment of a homogenous University?—No, it was at a meeting afterwards.

11,940. Can you favour us with the words of the resolution?—Yes. "Resolved.—That the Council of "University College, while still considering that the "scheme of University re-organisation for London "embodied in the draft charter of the Gresham "University is recommended by the smallness of "the changes it would involve in the organisation "of existing institutions, and by the fact of its having "been accepted by the bodies most directly con- "cerned, recognise that some scheme might be adopted "under which the existing educational corporations "in London of University rank might be completely "or partially fused together to form a University "which should be administered as a whole, provided "the details of the scheme were consistent with due "regard to the interests for which they are respon- "sible." That is dated July 2, 1892.

11,941. That is the most recent pronouncement, is it?—That is the last word that has been uttered by the college. The college council is the only governing body in the college, and the only body that can speak with authority for the college.

11,942. What is the object of that retrospective clause that you mentioned, in favour of giving the degree to practitioners, omitting or mitigating the preliminary tests?—I consider it to be an act of justice to practitioners.

11,943. To remedy the injustice of the past?—Yes.

11,944. You are aware that great exception has been taken to that, are you not?—Yes; I am quite aware of that. I may say that in speaking of this, I only express my individual opinion, not the opinion of my college in any shape or way whatever.

14,945. Would you entirely dispense with the preliminary tests in arts and science?—No. I think it is very desirable that anyone going up for an examination of that kind should either give proof of his having passed at some former period a satisfactory examination in arts and science, or else that the University, if it thinks fit, should impose any tests that are thought proper.

11,946. Your article in the "Medical Journal," I think, would have been in favour of dispensing with those tests altogether in the case of all holders of the conjoint board diploma?—Yes, because I think the preliminary examination of the conjoint board might in those particular cases be taken as sufficient.

11,947. We have heard from other quarters that the part that was eminently severe was the professional examination of the conjoint board, and, so far as it was weak at all, the weakness was rather admitted to lie in the earlier stages of science and arts?—I admit that it is not very strong, but, taking account of the practitioner being of a certain age and certain professional position, I should think that might be sufficient. It would not be in my opinion sufficient for the student.

11,948. Do not you think that would tend rather to impair and I would say discredit the degree at the commencement?—Of course in a certain sense it would be popularised? Yes.

11,949. But would not that in the public eye tend to discredit it?—No, the men who would take it would generally be men in good professional position; the other men would either not be able to undergo the requisite examination, or would not take the trouble to do so.

11,950. Assuming that it is good in itself, and that your view was desirable, do you think it would be worth facing a serious antagonism, or a large amount of antagonism to secure that gain?—No, I do not

J. E. Erichsen, Esq., LL.D., F.R.S.

28 July 1892.

think the game is worth the candle under those circumstances. I think it would be desirable, but I would not lay any very great stress upon it.

11,951. (*Sir George Humphry.*) You have suggested that this examination should be one to which the average student could go, and it should be on a par, we will say, with the University of Edinburgh, yet I think you suggest that after the five years required by the Medical Council the two years should be added on for study in particular hospitals?—Yes.

11,952. That, you see, would be a very serious addition in time and in money, and, indeed, would be requiring an obligation which is not even required in the case of the present University of London?—I do not think any one should take the degree under at least the age of 24 or 25. I think that he should not take the degree immediately after qualifying. I would look upon the registrable qualification as equivalent to a Bachelor of Medicine's degree, and then let him wait for two or three years.

11,953. Then you are speaking of the Doctorate?—Yes, I am speaking of the Doctorate only. Of the M.D. degree.

11,954. You would not require that for the M.B.?—No, certainly not.

11,955. (*Bishop Barry.*) In order to remedy the unmanageable largeness of the Medical Faculty, you suggested that the University should exercise a certain privilege of selection. Has it ever occurred to you that the same object might be obtained by requiring that the colleges should choose representatives for the Faculty, instead of sending the whole of their teachers?—That might answer the purpose that I desire. I should desire to reduce the number of the Medical Faculty; it would not work as it now is. It might be done in that way.

Adjourned to the 13th October.

Twenty-fourth Day.

Thursday, 13th October 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Right Rev. BISHOP BARRY, D.D., D.C.L.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
The Rev. CANON BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

JAMES STUART, Esq., M.P., M.A., LL.D., and ROBERT DAVIES ROBERTS, Esq., M.A. Camb., D.Sc. Lond., examined.

11,956. (*Chairman to Prof. Stuart.*) You are Chairman of the University Extension Board?—I am Chairman of the Joint Board of Oxford, Cambridge, and London, which has to deal with all that refers to the educational part of the University Extension Movement in London, and I have been so from the beginning.

11,957. Is there any other part which is not concerned with education?—Yes. The organisation of the University extension system in London at this present moment is conducted by two separate bodies. One is a council of which Mr. Goschen is president, and has been from the beginning, and the other is the joint board, of which I am chairman. The council deals with all that concerns the financial, and, if I might say so, the material arrangements as to where the lectures shall be given, and under what circumstances, the fee, or the like; but everything with respect to the subjects of the lectures or the *personnel* of the lecturers, or the method of conducting the whole educational machinery, lies with the joint board.

11,958. You have furnished me with some notes as to the information which you wish to give, and I will take it in that order. You say that "there is a growing "demand for teaching of University type amongst "persons engaged during the day in various occupa-"tions." Your efforts then are entirely confined to evening work—evening classes—is not that so?—Not entirely. There are some day classes as well as evening classes.

11,959. But the evening classes form the principal part?—They form the principal and most important part.

11,960. I think you are prepared to furnish me with statistics of the growth of University extension in the last four years?—The exact statistics can be given you by Mr. Roberts, but roughly the numbers have doubled during the last four years, since evidence was given on this matter before the late Royal Commission.

11,961. Lord Selborne's Commission?—Yes; they have been more than doubled.

11,962. Perhaps you could tell us something about the attendance and the number of attendances which you require. Can you say if you have any rule of that kind?—A single course of lectures consists generally of 10 weekly lectures accompanied by nine weekly classes.

11,963. In what space of time?—Ten lectures going over a period of 10 weeks. That constitutes a course, but it is accompanied by a whole educational system which I can describe shortly, now or at a later moment.

11,964. I should first of all like to receive any information as to what you are doing, and the exact position in which you stand. After that I will ask you what you require of us, and how you think this new University can help you. I think that will be a good division?—With regard to what is connected educationally with one of those courses of 10 lectures and nine classes extending over 10 weeks, which I have described, I may say the following. In the first place every lecture is accompanied by a printed syllabus of that lecture. Frequently that syllabus is published in the form of a book beforehand. It really consists of well-ordered notes of the whole course. Every lecture is accompanied by printed questions which are put to the pupils, which they are at liberty to take home with them and answer in writing, sending in their answers to the lecturer before the next meeting. He looks over those exercises, and brings them back with corrections and comments. The class which I have referred to is for those who wish to continue a little further the study of the same subject, whether it be in the form of asking and answering questions; of reading

any portion of a book; or in other ways supplementing what is done in the lecture.

11,965. Can they take part in that concurrently with the lectures, or are all the lectures finished first?—In some cases it takes place during the hour previous to the lecture, and in other cases it takes place during the hour succeeding the lecture, according to the way in which the lecturer feels it best to conduct them.

11,966. Alternately first lecture and then class, or first class and then lecture?—Yes. In general the lecturer refers in the class to the subject of the lecture of the preceding week. Then at the end of the course all who have, to the satisfaction of the lecturer, attended properly and done that weekly work to his satisfaction (for that is a point that we insist upon) have a right to enter for an examination. That examination is conducted by a separate examiner, whom we, the members of the joint board, appoint, but he has to examine in the subjects which have been taught by the lecturer. He does not examine at large in the subjects. He examines in the course of teaching.

11,967. The lecturer never examines his own pupils, does he?—No, never.

11,968. They always avoid that?—Yes. He submits to the examiner his syllabuses, copies of the questions that he has set, and any other information with respect to his course that he pleases, and the examiner is then free to set any questions that he likes. Then of the students who have, as I have already said, been permitted to enter for that examination because they have adequately done the work of the course, those who pass receive a certificate. There is a certificate of merit naturally, and one of simple passing, but none receives the certificate of merit who has not also been indicated for it from the work during the course.

11,969. That is to say, that the lecturer gives a list of those who, as far as the work of the course goes, would merit that certificate, and anyone who does not get the certificate from him has no chance?—That is so. That is the system, and of those who enter for the whole course, an average number of one-quarter take the final certificate. Of course there are fewer go in for the class than for the lecture; there are still fewer who do paper work, and there are a still smaller number who go in for the examination.

11,970. You say about one-fourth obtain certificates?—Yes, about one-quarter do the work efficiently. That is roughly one-quarter.

11,971. As I understand, there are two certificates, one for merely having passed, and the other for extra merit?—Yes.

11,972. About one-fourth pass, as it were?—Yes.

11,973. What proportion of those get the extra certificate for merit?—I should think one-fourth.

11,974. (*Bishop Barry.*) What proportion do you suppose submit to examination? You have told us how many pass?—I have not got here the number of those who submit for examination, but my own impression as chairman of the joint board is that the great majority of those who sit for examination receive the certificates. They have weeded themselves out already.

11,975. (*Mr. Rendall.*) Could Professor Stuart reconcile his figures with the record in the Appendix?—Mr. Roberts has called my attention to the fact that the statement that I made as to a quarter referred rather to our Cambridge experience. I think that would be right. Then you must alter the phrase "a quarter" that I made use of. The proportion of those who get certificates in London is more nearly one-tenth. (*Mr. Roberts.*) There is a point I ought to explain about these total figures. In London we have had three or four cases of very large audiences, as many as 500 or 600 persons, and in the case of the very large audiences, the proportion doing the regular work and taking the examination is much smaller than in the case of the average-sized audiences of 80 or 90 or 100 people, and while Professor Stuart's statement is nearly true for the small audiences, it is not true for the large audiences. The very large audiences to that extent have not been known in Cambridge.

11,976. (*Professor Ramsay to Professor Stuart.*) Is it one-tenth of the total entries you mentioned who get certificates?—Yes. It is given exactly in the paper. That is taken with the explanation that you have now received. The average does not indicate it quite.

11,977. (*Chairman.*) What subjects are certificates generally given for?—Perhaps I had better describe the whole system a stage further before we come to that. Then you will see why I do so, because I lead up to the value. I have now described fully the educational operations connected with a simple course of 10 lectures. We have been very anxious in London as in Cambridge, that one course should succeed another, as far as possible, in a continuity, and we have therefore created an additional inducement in London to that continuity by granting an additional certificate under the following conditions, namely that if a pupil has attended a course in two successive terms upon the same subject and in the summer time has attended a class held fortnightly of a subsidiary kind to that course (the method of conducting which I need not exactly enter into), and has been successful in gaining the certificates required through the whole of that year, he shall then get a certificate called a sessional certificate.

11,978. That is for two courses in succession and summer work?—Yes, supplementary summer work, I need not describe its character particularly. Mr. Roberts reminds me to mention that, for instance, in a science course that supplementary work would be at times in the nature of laboratory or practical work.

11,979. How many courses are there in a year. Does it go on consecutively?—There are two terms in the year, one before Christmas and the other after, and besides that there is this summer term for supplementary work. We have two sets of certificates which we give, one of them are certificates for individual courses and the other are sessonial certificates given for a year's work of the kind that I have indicated. I may say that I regard that sessional certificate as a really valuable testimoney to the pupil's attainments and success. I may say also that last session the Education Department adopted that sessional certificate as contributing partly towards the marks of the Queen's scholarships examinations, therefore rccognising its value so far.

11,980. I suppose some time or other you will tell us what the subjects are. I will leave you to take your own time about that?—You mean the subjects with which the courses generally deal?

11,981. Yes, some time or other I should like to have it?—There is no reason why I should not mention it just now. The exact list of subjects had better be given you by Mr. Roberts, but I can hand in the courses that are going on this term. Speaking generally they cover literary, historical and scientific subjects; they deal with chemistry, astronomy and physiology. They deal with general subjects and particular subjects of literature, such as some of Milton's works, we will suppose, or else with an epoch.

11,982. Nothing but English?—We have had lectures delivered on Greek literature. Mr. Walter Leaf, who was senior classic, delivered a series of lectures for us on Greek literature.

11,983. But you do not teach any languages, ancient or modern?—No. Then if you take history we deal with specific epochs, general history and particular history. Then there is political economy, in fact those subjects generally which are educational as well as interesting; and they are adaped to the locality in which they take place. In what I have placed before you of the educational machinery you have the result of a very long experience.

11,984. Is there nothing higher than the sessional certificate?—Yes, there is. It is a final certificate called the certificate of continuous study. That certificate of continuous study is awarded to any student who presents four sessional certificates obtained in consecutive years. Three of these sessional certificates must have been obtained for subjects in one group and one of them must have been obtained for subjects in another group. The two groups may be roughly called literary and scientific. That completes the educational machinery and the certificates that are given. That machinery, of which the certificates form merely a part, is the result of long experience. It is the result of about 25 years' experience. It has not been so long in London; but you will understand that the University of Cambridge began such a system in the country at large at an earlier period than London began it, and it was begun by others earlier than Cambridge began it. It began as an individual effort, was then taken up by one University, and finally taken up in London. In London the University Extension has been at work

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

since 1876, so that it is about 16 years old. The machinery now at work is the result of experience as well in the rest of the country by the Universities of Oxford and Cambridge as in London by the University Extension Society. It has been designed in order to convey education of an University type to persons who are not devoting their whole time to their education and who cannot leave their localities. That is the object of the system which we have had in view from the beginning. The idea of it in starting was based on that, and the details were worked out so as to preserve the class of work to be thoroughly educational.

11,985. There are two subjects, literature and science —no languages?—No; language has not been dealt with in the system.

11,986. Does that conclude the description of the work you are actually doing?—That concludes the description of the work that is actually being done in London. I think it fairly concludes it; but Mr. Roberts may have something to add. (*Mr. Roberts.*) I should like to add one word about the teaching of languages. In two or three instances there have been formed classes for the study of a language as the result of a course of University Extension lectures; and although those classes have not been in a formal way under the direction of the Board and the Council they have been a direct result of the work which has been done. For example: Mr. Collins, who is present here, would be able to tell the Commission that as the result of a course of lectures which he gave in Greek literature a class was formed for the study of Greek. Mr. Wicksteed gave several courses of Dante, and his students formed a class to study Italian.

11,987. (*Rev. Canon Browne.*) Professor Stuart and Mr. Roberts have both mentioned this point of languages, as you did also, my Lord. I would ask them if it is not the case that those who managed the lectures determined not to undertake teaching in any town where we were giving lectures from Cambridge in subjects which there was a proper arrangement for teaching, and our determination from the first was not to interfere with properly regulated teaching in any place at all. Is not that so, Professor Stuart?—That is perfectly correct; and I have no doubt it is the reason why we have not developed any teaching of languages in that way.

11,988. (*Mr. Palmer.*) Might I ask if mathematics is included in the course?—No. In the same way that Canon Browne has described we have avoided the teaching of mathematics. We desired, as far as Cambridge was concerned, to convey something new over the rest of the country—something that they did not have otherwise; and it is the same idea that has animated the movement in London. (*Mr. Roberts.*) I should like, if I might, to add one word as to that. Just as in the case of languages, classes for the study of mathematics have arisen in connexion with the lectures. Mr. M'Clure, who also is here to-day, was lecturing some time ago on astronomy at the Lewisham centre, and gave two courses in succession. He formed a class of the more earnest students to study in a detailed way mathematics, especially logarithms, and they did very excellent work.

11,989. (*Chairman to Professor Stuart.*) I will now come more particularly to what it is you would wish us to do for you in framing any scheme in connexion with the new University of London; what your wishes are and how you would wish us to meet them?—In the first place, I should like to say that what I come here to advocate is not the adoption of the London Society for the extension of University teaching, but it is to urge upon the Commission the adoption by the new University of London of the methods and work of that Society.

11,990. You would wish the new University to undertake what you are now doing, and you would hand it over into their hands. Is that what you wish?—Yes, we would wish them to undertake it in its own way, and to adapt it to its own conditions. I am speaking for the joint board, but Mr. Roberts tells me that the Council for which he speaks agrees with the joint board in that view.

11,991. Supposing this new University undertook that you would cease to exist?—Yes. Then I come to urge upon the Commission the consideration of such a method of teaching for several reasons. The reasons will rather point out what I want you to do. The first reason is that the old Universities of Oxford and Cambridge have already recognised that something of the kind which I have described may fairly be adopted by them as a portion of their University work; for not only do they carry it out throughout the country, but they accept something which is very similar to the certificate of continuous study which I have just described to you in lieu of a year's residence at the University when it is accompanied by a certain examination in what we may call school subjects, such as algebra.

11,992. Do they allow them to dispense with the University examination?—Yes, they allow them to dispense with the residence of a year and with the Little Go.

11,993. At Cambridge and Oxford too?—Cambridge, not Oxford. I may say that the Cambridge work has been going on very much longer than the Oxford work. Cambridge began its work in 1872; Oxford only began it in earnest about 10 years later.

11,994. Then they consider this about equal in value to the Little Go?—And a year's residence.

(*Rev. Canon Browne.*) If I may intervene I would suggest this. Professor Stuart will tell you that it is not quite the case that they regard this work as about equivalent to the previous examination or Little Go. The additional examination which is required of them is that which covers the Little Go—Latin and other languages, Euclid, algebra, and so on.

11,995. (*Chairman.*) Therefore it is not quite equal?—That is the first point that I wish the Commission to see as far as I can place it before them, that the Universities of Oxford and Cambridge have, although in somewhat different degrees, adopted this University extension system that I have described as part of their proper work.

11,996. The University of Cambridge?—And Oxford to the extent of providing lecturers and giving certificates, but it does not give them the same value that we have at Oxford. I may say that it has done so in the case of certain localities, but I think it would be going too far into detail to point the details of that out. It would not be quite fair to say that Oxford gives no University recognition of the character that Cambridge does ot the work. I think that is the fairest way that I can put it. The next point is that you cannot in any other way meet the higher educational needs of the mass of the people, because it is quite clear that they cannot go far to attend their courses of instruction, nor can they give all their time to it. I do not say that the whole of the exact system which is the work of 25 years' experience is necessary, but the main principles of the system, I believe, are necessary. The third reason is that, I believe, in London you have in the report of the last Commission had indication of what the last Commission wanted, and it would be difficult to carry out what it wanted by any other method than one bearing the general characteristics of what I have described. I think you will understand that I mean the general characteristics of what I have described. The portion of the report to which I refer is clause 12. You will see that in clause 12 reference is made to a large number of societies and institutions purporting to give teaching of a high class in the metropolis. That list is there given, and the advice is strongly given that these and other institutions should be co-ordinated. I cannot see any other way in which you can successfully co-ordinate these except either by recognising them as colleges in your institution or by recognising, superintending, and methodising courses of teaching which suit your own purposes in these places. The institutions themselves are evidently, I think, not suited to be colleges in the University.

11,997. You have nothing which could become a college?—No, I am speaking now of the other institutions which may be correlated and co-ordinated by the recognition (to put it broadly) of local courses of teaching when those courses of teaching are conducted as the central University body desires; and that would be a recognition in large portion of the very principle that I have been trying to explain under the title of University extension. Now, the next point that I wish to bring before the Commission is that, what ought to be in my humble opinion the object of a University in London is the provision of a permeating system of University teaching rendered exact and tested by as little examination as will serve effectually for the purpose.

11,998. The general principle for all degrees?—Yes.

11,999. The examination to be a subordinate part in fact, and the real thing to be the system of teaching?—

Yes, therefore, my Lord, what I urge upon you is that you should bear in your minds in what you do, that the principal and best function to be performed is the organisation of a permeating system of suitable teaching.

12,000. You are rather leaving the question of University extension now, are you not?—No, I am not, as you will see in a moment, now I come to the point; while you can do that largely by adopting courses suitable for your purposes in many of the permanent institutions, you will still require a large area to be covered. I have been laying before you to-day a system by which you may and can, cover that area and in consequence what I ask, is that in forming the new London University you form it with the capacity and the intention of adopting such a system.

12,001. What you would mean, would be that we should give a certain value like a Cambridge does, to the work done by you, but you hardly mean that we should give a degree merely for that unless it is supplemented by some additional study?—First of all, it would then be the work carried out, not by us but by the University itself. In that instance you would not necessarily say that everyone of the courses that you established, should be an avenue towards a degree. You might make courses at different stages of advancement but still the system might be adopted whatever was the height of education given in the particular course concerned. And I would say this, that just as the attendance successfully at a professor's lectures at King's College or University College or at any established institution should be made an element of getting a degree, so you have an element that you can substitute for that, and which might be easily made the equivalent for that, in one or more of these grouped University extension courses. You are going to establish a teaching University for London; you are going to make an avenue to a degree which is to be reached by means of the teaching which you are going to try and methodise and establish or co-ordinate; and you will have to consider what relation to the degree, the attendance at any course of teaching is to have. I say that you have an excellent unit in some one of the courses or groups of courses which I have just been describing, not exactly the sole unit, but one unit.

12,002. And not necessarily complete in itself. It may have to be supplemented like it is at Cambridge by examination?—Certainly, my Lord; and I will make that clearer, following out your suggestion of its not being complete in itself. Take for example, one of two alternatives. You may create one University only in London. I know you have the question before you of one or two, and a difficult question it is, but you might create one only. I will take that alternative. In that case you have the existing degrees of the University of London given by mere examination. I take it that in that case you would not alter that, you would find it very difficult to alter it, for that degree is presented to the rest of the country as well. But you want to engraft in that system, something which relates to the teaching University. I say you could do it in this way: You could say that the attendance successfully at some given course of teaching, and the passing of the examinations that refer to that course, and the doing of the work in that course, may be substituted for a portion of the examination, and you can make substitutions in that way in one or the other examination, you may say, for instance, that such attendance successfully at classes where there is teaching, can be substituted for one of the first or second examinations, and you may then say it shall not be substituted for any of the final examinations, because we might desire that all persons should have passed through the same final examination for their degree. Or you might go further, and you might allow a greater amount of substitution. But what I want to point out is this, that in doing that you ought to include courses conducted as you yourselves would then conduct the University extension system under your own guidance. You ought to take care that courses under that are included as part of that means of substitution. I hope I make myself clear.

12,003. Yes, for instance, taking the Gresham Scheme merely for the sake of convenience, according to that, the education must be conducted in King's College or University College or any other college that is affiliated to the University or forms part of it, and in addition to that you would allow those who have been through the system of University extension education, to be in the same position and to have the same advantages as if they had been educated in a regular college?—Yes, but I think that while you graft it on to the Gresham University proposed scheme, your better plan would be to invert that scheme, and instead of saying that you would give degrees to those who had pursued a regular course of study in a college in a Univessity, and then, adding something to that, say you would give degrees to those who had pursued a regular course of study approved by the University and conducted by professors or lecturers appointed or sanctioned by the University. Then you can sanction all the King's College people at once, and of course you would require a submission to certain examinations, to be indicated by the University in addition to that.

12,004. I suppose it would be impossible for you to go more into detail as you do not know in the least what sort of University we should establish, you could not go more into detail than you have gone as to the exact position which you would be in. You must leave it rather general?—I should point out this, which I think would be a detail so important that it is almost necessary—that you ought to see clearly in your minds how such a system as I have proposed could be carried out in the main lines. In the first place it is quite clear that the sanctioning of the lecturers and the teaching connected with them, and the examinations at the end of them—in fact the sanctioning of successful passing through of a course of any professor at Kings' College would be a matter that could be easily done at once, because you have the organisation existing. You would only have to consider what examination you would make by an external authority, and what length of course you would insist upon—whether a term, or year, or whatever it might be—and what number of lectures and the like. That might be easily arranged once for all. It would also not be difficult to pick out in some of the minor institutions some teachers who are doing work such as you would wish a University to do, and whose teaching might be accepted by you in some way. But when you come to the floating provision of higher education which is to go to places where it is wanted and to be given, perhaps in a polytechnic at one place or in a townhall at another, you have to make local arrangements, and you have to take very great care; you have to take the superintendence of the whole system. I should advise in that case—I do not like to say I would advise, but I would suggest—that you have in your hands in the method in which we have successfully carried out the system for 16 years, a method by which you might carry it out. That is, you might have a small committee appointed by your University to look after financial arrangements and the material arrangements, and you might have another small committee selected from different faculties, if I might say so, and persons who would probably be nominated by the Charter in the first instance—persons familiar with this work—who would select the lecturers and lay down the conditions of their work. So that I think you could organise the thing as a matter of fact.

12,005. Going to the value of the degrees, even the certificate of continual study extending over four years, which is the highest certificate you give, would not be equal in value, I gather, quite to the Little Go at Cambridge, because they do not admit to the Little Go without examining them in classics and other things?—I think it would be important to enter into that point if what I was claiming was the adoption of the system of our work as a portion of what you would sanction; but I am proposing that the University itself should take up that work. It is perfectly clear, then, that it would be for them to lay down what the exact value of that was in their system, and I do not think there would be much difficulty in some person, well skilled in education, laying down what that was worth. We have, as I said before, the experience of 25 years to show what it is worth, and I think there would be very little doubt that that could be laid down easily enough. I believe that it is worth a very great deal in one respect, and that is in the very great attention that is paid to constantly keeping the pupil *en rapport* with the professors. That I have noticed is more completely done in such a system as I have described in the beginning of my evidence than it is done in University lectures, of which I have had, unfortunately, to give a very great many.

12,006. We may take it for granted that you in 25 years have organised a system which gives as much instruction as it is possible to give or to conceive being given by purely evening lectures and classes; and the

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

18 Oct. 1892.

amount of that even under your management, and getting as much from it as possible, really does not and cannot qualify a man to take a degree or anything like it unless it is supplemented?—All that I have been going to say is that for such teaching as you are to substitute for examination this is an efficient method and an efficient scheme, and it does produce good results.

12,007. But only as a beginning; not complete in itself, is it? It strikes me that after four years of your instruction the most you can get out of a man is to qualify him to take the preliminary examination of Cambridge after he has also been examined in other subjects, and therefore you can never hope to give a man a degree that would really have any practical value merely by evening instruction unless it is supplemented in some other way?—No, I would not admit that, because you perceive that Cambridge gives a very great addition beyond what you have stated to the pupil who passes through what you have described. It gives him a year's residence, and, as regards Cambridge, I think I speak the idea of the place when I say that we regard and have always regarded the residence as the most valuable contribution that we make to a man's education. That was the real gift that we gave, and it was on the ground not of educational attainments nearly so much as on the ground of what would be the condition of a man's mind as a cultivated thing; that we balanced what you have just described against not only an examination but against a year's residence.

12,008. But a year's residence and an examination is only a very little part of the Cambridge degree. There are two years' residence still remaining and the final examination before he can get a degree, so you have only gone a little way towards preparing a man for a degree?—There is a year and a half's residence and the final examination. I am not proposing to withdraw the final examination for the degree. You will observe that what I am doing is trying to give you something which will enable youreducational work to work towards the degree.

12,009. Do you think practically that many of the people who have got a certificate of continuous study are men whose other occupations and whose position in life would enable them to go through the extra study which will be necessary afterwards in order to take a degree?—Yes, because I think that that extra study might in their case be considerably minimised. In other words I could say that if having gone through a four years' course of study such as I have described, they were to go through another four years' study of a similar kind in another branch, that again might be looked upon as a substitute of another portion of the examination. I do not say that you could ever throw away all final examinations in that way, but I think you might do away with a good deal of final examination in that way.

12,010. Do you think that a working man occupied during the working hours every day really could take a degree which would be of any value?—Certainly, and I believe that by lengthening the period of such work as we have described, and by reducing the amount of final examination that he had to undergo to what the University might itself conclude was a proportionate quantity, you would give a degree, and that degree would be taken and would mean as good an amount of mental cultivation as is practically got by any person who takes a degree at any University.

12,011. And would be of the same value as the degree obtained by people from King's College, University College, and others?—Yes.

12,012. Would you have it the same degree or a different kind of degree?—The same degree, and I should regard it not only of equal value, but in some respects of greater value than many of the degrees that are given now, because a degree so taken and got in that way would testify very continued application, and you would reach by that means a multitude of people in London who belong to classes that you would not otherwise reach.

12,013. I think the system is most admirable, and I would not do anything to discourage it. The only thing is whether they should be satisfied with the certificates or whether they should take the same sort of degree as a man of leisure who has given the time to it that he is now expected to give?—On that point I should say that the same feelings of ambition which impel you or me to take a degree if we can get it operate in that very class; and the University to them is not a real *alma mater* unless it gives them a degree finally whatever it requires from them for it. You ought particularly to provide that all those students who are coming under your work ought to be *en route* for a degree. I think there is no other way in which you can make the London University to have that hold on the general mass of the people which I take it you must desire it should have. If I may say so, you have a remarkable opportunity in London which we were never able to get in Cambridge. We have had to deal in Cambridge with places 400 or 500 miles apart; we have to send our lecturers over great distances. We may set a course of lectures in one place and the person who attends those lectures is untouched by a course of lectures in another place. He cannot go far for them. Though we have many instances of working men walking five and six and ten miles to a course of lectures in order to supplement the teaching they had before; these are of course exceptional cases. But in London you have the possibility of working the system with great ease under your immediate eye, so that people who have a course of lectures one year near them may go to one that is not very far distant another year. Then you have this: you have in London an opportunity that we never had. You have almost a *tabula rasa* for higher education. I do not say one word derogatory of the great efforts and the successful efforts that are made and the great work that is done by King's College and University College. All I mean is look at the numbers who attend these colleges and to whom they must necessarily be restricted largely. Look at the localities and the localisation of those colleges, and consider that we cover a population in the county council area of London well on to four millions. Then you have got an opportunity of making a University in the greatest capital of the world anew, so to speak. It is a wonderful opportunity, and I think, if I may say so, you should make it in accordance with the ideas that have been growing and are growing so much over the country with respect to education and the instruction desired, and the method by which it may be given. You should endeavour to found in London the most permeating system of education that you can found. Of course if it is not connected with a degree then you are really not bringing the University to bear on it. You want to bring the University to bear upon it as part of its main business and part of its coherent business. I think the object of my evidence really, my Lord, is to ask you to look at the University extension system, to see its results, to weigh it well, and to include the idea of it in your University scheme.

12,014. To sum up, what I gather you wish is that a degree should be within the reach of working men who are employed in the daytime, and who are only able to give their evenings to it; and you think this can be done without lowering the value of the degree and making it still of such value as that which the leisured classes are accustomed to take?—Yes. I think you would create a degree which would be of peculiarly great value.

12,015. You attach great importance to giving a degree and you would not be satisfied with certificates?—I attach a great importance to the degree. You might give a certificate for portions of the work as it was done. I attach great importance to the function of a University for providing education and not merely providing examination.

12,016. Is there anything more you would wish to say?—I would merely say that in this matter of stating how much a portion of the University Extension work is worth in the building up, that is to create and prepare for a degree, I have not entered into that because I regard that as for the University itself; but I should have no hesitation whatever it sitting down with one or two others who are acquainted with educational work and easily allocating what that was worth. I merely say that, so as not to appear by omitting to allocate what it is worth as if I were in doubt about that. That evidently is a matter which is one of detail and which it is not necessary to enter into at a moment like this.

12,017. In order that there may be no mistake I will put this. You do not wish to be admitted as a body as you now are but you wish the University itself to take your work from you?—Yes, to take up our work, to enter upon it, and to carry the spirit of it through a very great deal of its effort.

12,018. (*Bishop Barry.*) Is it the custom in the University extension system to group various subjects together so as to make such grouping necessary for obtaining the highest certificate given?—Yes.

12,019. Your highest certificate, I think, is one of continuous study?—Yes.

12,020. Could that be taken in any one subject, in natural science?—No. I will tell you what the two groups are. The first is natural science and mathematical science. The other group is history, political economy, mental science, literature, and art. I have briefly called those to you science and literature. If you were to get a certificate of continuous study you must have studied three years in one of those groups and one in the other.

12,021. But could you during those three years study one subject, say, physics, as ordinarily understood, and then gain your highest certificate taking no other subjects at all into your system?—As the regulations stand you could do that. You are speaking of within one group. Of course you would have to go into the other group.

12,022. No, I beg your pardon. Your highest certificate is that of continuous study?—Yes.

12,023. Supposing a person passes through that could he obtain that certificate from taking up, say, one subject only, and carrying it very far?—No.

12,024. If not, how are they balanced?—The smallest number of subjects that he could take would be two. Canon Westcott, I think, laid, perhaps, most stress upon the desirability of obliging a certain amount of another aspect of study.

12,025. To get this would you be obliged to take up one subject from the literature group and one from the science group?—You must take three years' study in one group and one year's study in the other.

12,026. That is a little analogous to what I am familiar with at King's College where we form certain groups, and on the study of these groups give what we call our associateship which corresponds with the certificate of continuous study.

12,027. (*Professor Ramsay.*) Might he take those three subjects three continuous years in physics?—Yes.

12,028. (*Bishop Barry.*) Your certificate of continuous study might therefore still argue proficiency in one subject alone?—With a certain knowledge of one other.

12,029. And would one of those subjects be literary and the other scientific, or would both be scientific?—No, they might not both be scientific.

12,030. Or both literary?—No.

12,031. (*Rev. Canon Browne.*) We have in Cambridge a rule that no two certificates shall be granted, in the same subject, and you have an analogous rule When you say physics for three years you mean different branches of physics. Physics is a large question and any idea of covering a small part and going on three years with that small part would be out of the question?—Yes, you might have a lecturer lecturing upon physics, first in one quarter of London and then giving the same lectures or nearly the same in another quarter, and then again the same lectures nearly in another. I would not allow a man to follow those three lectures to take those. They must be continuous, one in advance of the other, and accompanied by summer work of the same kind.

12,032. (*Professor Ramsay.*) Take history; suppose a lecturer gave three different courses in different years or in three different places, not higher one than the other but simply covering different periods; would that be reckoned as three subjects?—That would. We have had that subject a great deal considered, and at present that would.

12,033. (*Bishop Barry.*) To take a case, supposing a man took three consecutive courses in botany and then he took one course we will say in history, could he then get your highest certificate?—You mean three successive years in botany and one year in history.

12,034. Yes?—Yes, he could.

12,035. (*Rev. Canon Browne.*) Have you such a thing as six consecutive courses in botany?—No.

12,036. The thing is impossible, is it not?—We have not got such a thing, but I will not venture to take up the functions of a botanical professor. These cases that have been put here are all cases that do not as a matter of fact occur.

12,037. (*Bishop Barry.*) At all events there would be no difficulty in your scheme if it were thought desirable to balance the subjects more accurately so that your certificate of continuous study should cover a fairly liberal education?—Not the slightest; and I should hope that the new University of London if it were to adopt these suggestions would very gladly improve such a thing as our certificate of continuous study.

12,038. (*Chairman.*) I see in this paper that you ask that the new teaching University of London should grant substantially what has been granted by the University of Cambridge?—What we ask is that in the new teaching University for London the principle thus already adopted at Cambridge should be adjusted and extended so as to meet the requirements of the metropolis. I rather felt that the proposal so to speak, that I was making here was the amplification of those words.

12,039. What boon could correspond to the one year's residence which is granted at Cambridge? This Teaching University of London, I presume, would deal with students resident in London?—Yes.

12,040. Therefore, I do not see what boon corresponding to the one year's residence could be granted?—I submit that this endeavour to exactly fit in the system adopted to the new system is not necessary, because it could be altered, but I think you could get such an equivalent. Suppose, for instance, that you were going to give a degree after three years attendance at the work at King's College, and the passing of the necessary examination; you might perfectly well advise such a certificate for University extension courses as should exempt the pupil from one of those years.

12,041. I quite understand that under the Gresham University Scheme, or anything equivalent to it, but what puzzles me is as to how that is to be done if we are to fit our scheme in with the present University of London?—If it is to be fitted in to the work of the present University of London, you will be giving by the present University of London, a degree which anyone can take without any teaching certificate at all, simply by examination; and you should then accept in lieu of certain portions of that examination the attendance at certain recognised courses of study.

12,042. Would not there be this difficulty, that the degree of the University of London would then connote two different systems of education?—Yes, but I am not here to advocate an adoption by your body of one University of London. You will have to settle that very difficult question for yourself, but I do not myself think that that would be an objection. A degree signifies very different things. It is very hard to say what a degree signifies. Even at Cambridge itself the variety of things signified by "M.A." is very great. But what we recognise in them all is the attainment of a certain amount of knowledge by work, and I should be very glad that all degrees should require specific courses of instruction to be attended. I am not going to defend the University of London.

12,043. If I understand it one great principle of University extension work is that you are not content with passing an examination unless you have evidence of both attendance upon lectures and also attendance upon tutorial classes?—Yes, that is it.

12,044. And you lay great stress on bringing the mind of the learner into connexion with the mind of the teacher?—Yes.

12,045. Is not that diametrically opposed to the plan of the University of London?—I think it is.

12,046. How would you meet that case? You lay great stress upon this idea of one University for London?—If you agree to adopt that I would say: "I "cannot help it; I have to adopt it; I should have to "let it stand. What step am I going to take?" The best step I think is what chemists would call the method of substitution. Take it step by step. At each point try to get the pupils to accept a certain amount of teaching instead of examination. You must remember to make your teaching sufficiently permeating in London. Men do not want to pass examinations; they want information and instruction.

12,047. But you have omitted the fact that the University of London is, as it has been called, an Imperial University, and we have it in evidence that a

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

very large proportion of those who take degrees are not in London at all; hence you would have to give this degree on pure examination to the world at large, and of course to students in London who choose to take it; and side by side with that you would have a totally different system connoted by the same degree?—That is what you would have to do, unless you make two degree giving bodies in London.

12,048. Your system would fit in with two Universities rather than one?—No, I do not say that at all. I say that whatever you have to do you have to encounter two different degrees being given in London. There is no doubt of that—I mean two degrees which shall have the same name, because they will be B.A. or M.A. That is what people look at. You will have M.A. which will mean two different things.

12,049. Might we not have B.A. London and B.A. Gresham, and then you would distinguish?—That might be a very good solution of that difficulty. I would not try and solve that. I would prefer to leave it to the Commission.

12,050. (*Rev. Canon Browne.*) Does Professor Stuart think that the difficulty which is now being raised is a difficulty in the way of University extension or in the way of a teaching University for London?—I would say it was a difficulty as much in the way of a teaching University for London as in the way of University extension.

12,051. Not specially of the University?—Not specially.

12,052. (*Bishop Barry.*) Certainly not; but, if I may say so, it seems to me that your University extension work, which I quite agree is an absolute necessity for a teaching University for London, does go upon principles which do not agree with those upon which the present University of London acts?—It is the movement in England—in the world—which has most insisted upon subordination of examination to education. It can be eminently well adapted to any arrangement you adopt. I do not think the difficulty is in any way insuperable. It is a difficulty on a par with all the other difficulties as to the equilibration of degrees. We have had this difficulty in Cambridge: "What are you going to do "if you call a man B.A. when he went through my old "workshop at Cambridge, and when, on the other "hand, he attended lectures in Divinity?" We have had that all up and had it well thrashed out, and we have come to the conclusion that taking it altogether it is not a very serious difficulty.

12,053. But still, in all these various degrees, as I understand, there are two elements which are co-ordinated, systematic work and examination. Now the proposition here is to co-ordinate degrees in which on the one side systematic work is required, and on the other side examination only. Is not that the difficulty?—Yes; there is great force in what you say, but after 25 years' experience in Cambridge I wish I could admit that there was much systematic work at the bottom of the degree. There is residence.

12,054. That is a most severe reflection?—No, I do not think so. We do not demand attendance at Cambridge upon any course of lectures, but the lectures which are given in the University attract pupils, because they are the means of preparing them for the degree. But in my experience and in my time we abolished any endeavour to make pupils attend a given particular course of lectures, so that the University demand for a degree is residence plus examination.

12,055. Therefore, in that respect it is entirely different from the principle of University extension?—Yes, it is; you are right.

12,056. (*Professor Sidgwick.*) If I understand aright you want the University to be empowered to recognise as of University rank the teaching that is carried on in the University extension scheme?—Yes.

12,057. That is you want the University to be empowered to recognise the work done in this way as a substitute for a part of what is required as a condition of the degree examination?—Yes.

12,058. I suppose we may take it broadly that what Cambridge has done is what you think is desirable?—No.

12,059. I do not mean to say exactly, but generally in amount?—I would go further; I would enable a pupil to get a much larger share of his degree by means of that work in London than he at present gets at Cambridge, because I would allow him to do more of that work as an equivalent.

12,060. (*Chairman.*) I think you told me that you did contemplate under certain circumstances that the evening class should prepare a man for the whole of his degree, and that nothing else should be required at all?—Yes, with such examination in addition as the University might require.

12,061. But they should be prepared for the examination by your evening classes?—At any rate, having an examination in addition to them if the University should think fit.

12,062. (*Professor Sidgwick.*) Assuming that a system of examination similar to that of the existing University of London, can you make clear what you would think desirable in the way of substitution. I need not go into what the University of Cambridge has done; but if it was thought desirable that the examination of the University extension alone should give a degree that would be enormously beyond anything that Cambridge has done or would do. I presume that would be beyond what you would desire?—Yes. I think you must have ome final examination in any case.

12,063. Then if we take the examination of the University of London you think the final examination for the B.A. might remain unaltered, speaking broadly?—Speaking broadly the thing that I would do if I were called upon to-morrow to do it, would be to make the University extension certificates which might be dicided upon, stand instead of the first two examinations for the degrees and leave the final examination as it is, but there might be modifications of that, and considerable modifications of it which I would like to look carefully into before I advised the system if I were doing it.

12,064. Even this would be going very much beyond what has been accepted at Cambridge. There, so far as I know, the most substantial concession as regards examination is that the University extension student who takes advantage of the privilege of affiliated students, is not obliged to do Greek, but he is obliged to do Latin, and he is obliged to do mathematics; and, speaking broadly, the standard attained in Latin and mathematics corresponds with the "Little Go" at Cambridge. Do you think that Cambridge ought to go further or that London ought to go further than Cambridge?—I think we ought to go further than Cambridge goes for several reasons. But one point is that I would be quite prepared to say that you ought to have a longer continuance than Cambridge demands of the University extension period if you are going to give more concessions for it. You could equilibrate it in that way. Then, again, in answering your question, I said that there would probably be considerable modifications of the rough proposal that I made, and you would have to concede at any rate that you would get some remission in all the examinations, but you would be obliged to retain part. Personally I should be very glad to see a degree obtainable without the absolute necessity of an ancient language, but that would be for the University to determine. You are now really simply getting my personal views which are a very small matter. These would all be matters for determination by the University itself.

12,065. I was going to suggest an idea which appeared to me to be perhaps in harmony with yours. Supposing we say that the object of the examinations of the University of London is not only te secure adequate academic performance in some one department, though it is partly that, but it is to secure also a certain amount of general culture besides, would your view be that, as far as the examination required evidence of general culture, that part of it might be subject to this principle of substitution?—That seems a very reasonable method of dealing with what I have already called the equilibration of the matter. I am afraid that personally I should be very much more ready to give a degree upon very little more than a continuance of University extension than perhaps others would.

12,066. For instance, suppose a degree is desired it is desirable to enforce a certain amount of mathematics?—Yes.

12,067. You would hardly desire that the requirements of mathematics should be relaxed for University extension students; for such relaxation would lay the whole system open to the very grave objection that you are really lowering the standard of University work and making a shallower and more diffused knowledge a substitute for the more recent and thorough?—When I said what I would remit I was careful to speak about

ancient languages. I certainly feel that anything called a degree which touched scientific subjects ought to include some knowledge of elementary mathematics.

12,068. You would not desire any relaxation of conditions tending to make the student's knowledge in his own department adequately precise?—No, I would not endeavour to do it at any rate. I think there might be degrees in which it might be relaxed, but I do not think that practically you would carry public opinion with you, and I think the overwhelming feeling would be in favour of retaining one or two of what I may call school subjects.

12,069. I have gone into details to get this clear but you will agree with me in thinking that it would be very undesirable that any charter given to the new University should at all hamper its action by details of that kind?—I would not dream of laying down details like that. The University will be a body for all time. It will equilibrate all that. The time will come, perhaps, when it will be absolutely essential that every person living should knew a little bit of physiology, and the time will come, perhaps, when we shall wonder that we taught people Latin and not physiology. I would leave the University absolutely free to deal with all that.

12,070. Your desire is then, as far as it would take effect in the Charter, merely that the University should be in general terms empowered to provide for work of the kind that the University extension scheme undertakes in organising its examinational system?—Yes.

12,071. Without describing how or in what degree?—Yes; and in electing, as the body you indicate will have to do, the first Council of the University (because of course you have to start the whole thing, which is a little different from carrying it on), you must take care that that Council shall consist of people minded in the direction which I have been endeavouring to describe.

12,072. But you do not desire that the existing Society for the Extension of University teaching should have a formal representation?—No, it will disappear. It might have a function in trying to raise money to keep your different centres going, and that is a very serious point for the University to consider. You will want 50,000*l.* a year at least surely. Where are you going to get it? I ought to say that I am a member of the London County Council, and we are at present a committee sitting to consider what we are going to do with 150,000*l.* a year that we get. We are not allowed to use it for anything but technical education. I fancy that there can be no doubt that both sides of politics will be willing now to extend the idea. I do not know whether something might not come out of that, but it is quite clear that your powers to get funds will largely depend upon the permeating character of your offer of education.

12,073. It is your view that the existing society should go on, in fact, until it is seen what the new London University will do?—Yes, because the new University is not to be established during the next six months is it?

12,074. There is one argument I have heard used which I should like to mention. It is with reference to your view that a degree is of great importance in promoting the University extension. I have heard it suggested that the success of Oxford at present in competition with Cambridge is a proof that this is not of great importance, because, as you have explained, the University of Oxford has declined in a marked way to do what the University of Cambridge has done; and yet the number of students attending the University of Oxford is larger than the number attending the University of Cambridge. Of course I am aware that there are other causes, but still it has been urged that this fact shows that the class to which the University extension system appeals does not care for the degree?—I will answer that by saying that where we have started the affiliation scheme, which, as you know, is partial in its operation, although very few students have come up for residence, there has been a marked increase in the number of pupils attending the courses locally; and I would point out that the holding by the University of the power to grant a degree gives a control over them until they get the degree. But if you give them a certificate you cut them loose at an earlier part of their study. (*Mr. Roberts.*) I should like to say a word about that. The ground which the London society has always taken in pleading that this work should be incorporated in the degree system is that the Universities Joint Board have found in endeavouring to encourage continuous and systematic work that the establishment of an advanced certificate has induced the students to pursue the continuous study in a way that mere ordinary certificates never did. We believe that the offer of a degree would be a powerful lever to improve and increase the efficiency of the work done, and would make it possible to lay down the work on more systematic lines, and to secure altogether better educational results. The Oxford system does not aim at thoroughness of work in the same way that the Cambridge system does. In fact the marked difference between the two Universities' work is that Cambridge and London have tried every way to increase the efficiency of the work and the continuity of study, while the Oxford system has been to offer short courses of study of a more popular character which would be attended by large audiences.

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

12,075. (*To Mr. Roberts.*) It is rather to improve the quality of the work than increase the number of students?—Entirely. It would be only for the few students, not the many.

12,076. (*Rev. Canon Browne to Prof. Stuart.*) The Commissioners have had often before them the question of lecturers and examiners joining in the examination. As far as the work that we have been concerned in goes, we allow no communication between the examiner and the lecturer, except that the lecturer sends his syllabus annotated through the secretary to the examiner?—That is so.

12,077. The examiner is told to examine strictly on the syllabus, say, in chemistry, for instance?—That is so.

12,078. The reason of that is that we desire that those who attend this course should be able to get a certificate for it, though they have no knowledge beyond that which they acquire in the course?—That is so, but then I would like to point out that as a great corrective of that the examiner is encouraged to, and, in fact, does report critically upon how far the lecturer has properly covered the subject.

12,079. The report of the examiner may be hostile to the syllabus?—The report of the examiner may be saying that he has examined the pupils who have done very well in what they have been taught, but that the Universities Joint Board ought to examine the syllabus for themselves, and they would see how inefficient it was; and if satisfied the lecturer has been at fault the Universities Joint Board through Mr. Roberts gives the lecturer a wigging or appoints somebody else.

12,080. Now another point. We say that the certificate of merit cannot be given unless the person to whom it is assigned has appeared on the lecturer's list of those who during the term's work have done well enough to obtain a star. But, as a matter of fact, is it not the case that there is a good deal of informal correspondence going on. The examiner reports that certain persons who are not in the star list have done remarkably well, and that report is also sent to the lecturer for his opinion?—Yes, and sometimes very valuable points are brought up in that way. Of course there are exceptional cases.

12,081. So that what seems to be an iron rule is really worked on the lines of common sense, and in an intelligent manner?—I hope so.

12,082. A question put by my Lord was to the effect that no one has a chance of a star unless his name appears in the lecturer's list. Your answer was, "that is so"?—(*Mr. Roberts.*) That is a point which very often arises. When a lecturer is communicated with he will sometimes reply "This student did very admi- "rable work for me, but in a small number of ques- "tions. If he had done more he would have been well "recommended for distinction." In such cases the Board have not infrequently said, as the quality of his work was good he shall have distinction.

12,083. (*To Prof. Stuart.*) There is another point with regard to the star. The lecturer judges of the work of a man, we will say, by his answers to the questions. The man has taken those questions home, and very often the answer is the result of a family conclave. We know that these questions are discussed in a family, and the man brings up an answer which represents the wits of the family. The lecturer is never satisfied whether it is actually the work of the individual man or the result of discussion in a family, and, therefore, he is a little disinclined to put a man down for a star unless he is sure that it is individual

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

work?—That is true, and I should just like to say that the family work in producing the answers that the students give to the lecturer is a thing that we all—but most certainly I for one—in the initial stages of this system largely desire to encourage. It is a most admirable and useful thing.

12,084. (*Mr. Anstie.*) You do not give a family certificate?—No, but it does not go towards the certificate, because it only permitted him to come in for the examination. It does not count to his certificate at all. His certificate is not one whit the better because he did well with regard to these answers, but he is permitted to enter for the examination.

12,085. (*Rev. Canon Browne.*) Then the secretary informing the lecturer that so-and-so has done an admirable examination, the lecturer says: "Then his "work has been independent work, and, therefore, I "will give him the star gladly"?—Yes. That is a very important point.

12,086. Now, with regard to the value of the certificate with reference to which a question was put, are you familiar with the report from the examiner of a certain student or three or four students being "The "work done by these students is of a really good tripos "type"?—That was common before I left Cambridge. It is a point very well worth bearing in mind that that class of report has become every year more common. I have watched with great care the London part of it, and this I can say, that the statements by the examiner of the high class of the work of a few of the students such as you have referred to have been becoming in per-centage much more frequent, and when inquired into it is usually found, or, at all events, it is frequently found, that these are exactly the people who have been going on for four, five, or six years attending these courses.

12,087. So that as a matter of fact you are familiar with this phrase: "So far as this subject is concerned "this student would pass in honours the final examina-"tion of the University of Cambridge"?—I am thoroughly familiar with it, and Mr. Roberts has here a number of reports of examiners taken at random in which you will find a considerable number of such phrases. We not only have that statement, but we have that statement from examiners who are exceedingly skilled examiners. Take, for instance, Prof. Garnett, who has examined in every kind of examination—tripos and everything thing else—and who is, therefore, well capable of judging.

12,088. That is a very simple fact and very familiar to those who are concerned?—Yes, very familiar.

12,089. Then with regard to the "Little Go." Is not the reason why they do not recognise this as excusing pupils the "Little Go" that the examination is not in any sense in *pari materia?*—That was the ground at the time.

12,090. We are in Cambridge very unflinching about the "Little Go," and the Senate of the University would never vote for giving a man a degree unless he is on the whole proficient on those points?—The Senate is very particular.

12,091. We require it, but regard it as a sort of drudgery?—Yes.

12,092. Therefore, we say, however admirable you may be on other points, you must pass in your arithmetic, algebra, and so on?—That is because we did not want to be settling, or trying to settle, two questions at once. We accepted the decision of the University. We wanted the remission of the residence.

12,093. I want now to compare the work in chemistry, biology, or physiology, done by any one of these students, who obtains the certificate of merit in that subject with the Pass Final B.A. degree in the University of Cambridge. Take chemistry or history. Is it your opinion that those who obtain a star from the lecturer and the examiner could on the spot the very next day pass easily the Pass B.A. examination of the University—the final examination on that subject?—Yes, I think in general they would be able to do so.

12,094. You are familiar with that examination?—Yes; and you must remember that I have examined also very frequently myself, both in Cambridge and in the University extension examinations, and I could corroborate the views of those examiners by experience.

12,095. I mentioned just now history. You were asked the question: "Is it in the University extension "system of London necessary that your courses in "history should rise higher and higher?" And your answer was "No." We are familiar in Cambridge, are we not, with this, that in examinations in history there are a great many parallel subjects. It is not the case that the subjects rise higher and higher, but there are parallel subjects in this way; the history of one country and the history of another country, the history of one reign and the history of another reign?—Yes; we do not seriously depart from the idea of Cambridge itself in our University extension dealings on such a point.

12,096. Now one further point. With regard to the view taken by the University of Cambridge, is it a fact that the University of Cambridge assumes as a matter of course that those who avail themselves of the privileges of affiliation will take honours?—It assumes it as a matter of course, and it is worth while remembering that when that point was raised there was some question raised as to whether it would not be a hardship on the student to have to take honours when he came up, and then if he did not take honours lose the whole of his work, and it was agreed at once on all hands by everyone concerned who knew the subject that there was not the slightest doubt of his taking honours, because he had practically already almost done enough to lay a sound foundation for it. So we accepted that as part of the regulation, because we felt that we were not putting our students to the slightest advantage.

12,097. So that the Ordinance, as we call it, is to this effect: "He shall be admitted to his degree provided "he obtains the degree in Honours"?—Yes, only if they pass a Tripos Examination. I think I might say *à propos* of that, that this is evidently a very great tribute (because it is indirectly made) to the University of Cambridge's belief in the efficiency of that teaching.

12,098. Not only the University of Cambridge, but that was as a matter of fact drafted by those who thoroughly knew those students, and were familiar with the work, and knew what they could do?—Yes; we drafted it ourselves.

12,099. Now one point with regard to the B.A. degree. You were asked about the amount of attraction which the idea of a degree had. You are very familiar with mechanical works. Have you the experience that I have, that there are a considerable number of men in mechanical works who have ambitions of this kind, and to whom one of the greatest delights they could have on the face of the earth would be that by their own work they could earn a Bachelor of Arts degree?—I have been surprised to see how eager many working men were to obtain a degree, knowing privately how poor a thing it often is. I was very much surprised. It is remarkable—pathetic almost.

12,100. Now, one more point with regard to these examinations. When you spoke about not requiring Latin, and so on, is what you meant this, that it was quite possible that a new University would frame, not for any special purpose, but for general purposes, a degree without a language other than English?—Yes, that is my idea, and that is what I would wish to do if I were to frame a new University to-morrow, but I do not know that I could carry the rest of the people with me. I was speaking on the general ground of what the University should be.

12,101. Then it was said that, though some preliminary examination might be excused to those University extension students if they passed their own examination, yet with regard to the final examination of the University, they must, as a matter of fact, pass that. Is it your idea that the University extension would easily prepare them for those examinations, and in the best manner?—I think it is the best preparation.

12,102. So it is not the idea that University extension students would cease to be University extension students when they came to prepare for the final University examination, but they would become more than ever University extension students, and would merely go up to the central place, and pass the examinations, which all candidates for the degrees are required to pass, on the work done in their own lecture room?—Yes, that is the idea.

12,103. And supposing there is a note of difference between Imperial degrees and degrees given on residential work in London—whether there are two Universities or not—supposing there was such a note of difference you would prefer that these people should not

have the note of difference of the Imperial degree, but the residential one?—Certainly.

12,104. Without any further step whatever?—Yes.

12,105. I am a member of the Council, but, as Dr. Roberts knows, I have never attended a meeting. I am a little surprised to find that you report it as the opinion of the Council that the University Extension Association as such would at once cease to exist on the establishment of this University. Would it not be an extremely good thing that absorption should be gradual?—I am not responsible for the memorial of the Council, although I think, on the whole, that it is an excellent memorial. Mr. Roberts tells me that the memorial does not say so.

12,106. It is not in the memorial, but it was a question put, and you, I think somewhat incautiously, answered straight off "Yes"?—I quite agree that it was incautious.

12,107. I did not mean incautious in a wrong sense at all. You answered in a genial manner?—What I wanted to make clear to the Commission was that the Association does not desire to be continued, but I presume if it could afford any assistance it would be only too glad to be continued.

12,108. The University would be very glad indeed, for some considerable number of years it may be, to have the assistance of this body, and I should think the University of Cambridge would be glad to send representatives. All you meant was that you did not claim that your association should become an integral member, so to speak, of the new University?—That is what I meant.

12,109. So long as it could help it would do so, and then it would cease to exist?—I think so.

12,110. (*Professor Sanderson.*) You stated just now that the courses of the Oxford extension scheme were shorter and more popular than those of Cambridge. Is there any evidence that the number of students who obtain certificates of extended study is very much less under the Oxford extension than that of Cambridge?—(*Mr. Roberts.*) As far as I know I have not heard of any students obtaining certificates of extended study. It is possible that they have obtained them, but there has been no public statement of any certificates like the Vice-Chancellor's Certificate of Cambridge, or the affiliation certificates being granted to Oxford students.

12,111. Could the work now done by Oxford and Cambridge probably be done by any of the teaching agencies of London, or by all acting together?—(*Professor Stuart.*) No, I do not think so. It requires some organisation, whether that of the new University, or Oxford, or Cambridge. When I tried this in London, many years ago, I tried to get the existing teaching bodies to combine, and it was hopeless. You see they do not supply the men, because the men are adequately engaged already. You require men, as a rule, who can give their time to this work and to this work alone Though no doubt we have often got very great assistance from professors in University College and King's College for specific classes, the great bulk of the work is done by persons who give their whole time to it from Oxford, Cambridge, and London University also; and some people who have never been to a University have lectured extremely well and taught extremely well.

12,112. I understand that if the new University had powers by charter for teaching and examining persons not entirely engaged in study, and consequently power for accepting those studies and examinations as qualifying for degrees, that would be all you think desirable to introduce?—I should think so long as there were powers in the Charter to do what we have spoken of, that is enough. I think you should put very little in the Charter for anything, except to start the body.

12,113. You would leave the question of equivalence of examination entirely to the University, would you?—Absolutely; and I think that while you make the Charter capable of allowing all this, the important point that you ought to keep in sight, if you want to get this adopted, is to see that the first organising body of the University is composed of people who hold the ideas or have amongst them those who hold the ideas that we are now dealing with.

12,114. When you, some time ago, said that the working man of the future might possibly obtain a degree, you did not contemplate that a man should be engaged during the whole period of his study in other occupations, did you?—Yes. I think it would be possible from what I have seen—quite possible. I should hope that he might get some relief at some time by scholarships, if successful, so as to get a little more time for his studies; but I think it would be quite possible, in fact, I think it would be common.

12,115. Is there any evidence that such a thing has been done in any other University or any other country?—I could not say; but I should not regard that as an objection. But it is done in the University of London. There are many people who study for the degree of the University of London who are busy all the day at work. Take your schoolmasters who take the degree of the University of London. They are working at their own work all the day; they cannot obtain that information at any other time than at night, and they do obtain it somehow or other. So that I should say that there did exist in the London University something of the same kind as I am hoping will exist here.

12,116. (*Rev. Canon Browne.*) Has not a working man in his leisure hours much more time than a large number of undergraduates of either University devote to work?—I think so. The undergraduates I think work often eight hours at rowing and other games. You know you must lay your account for what is coming. This is an University, if not for all time, at least for a great time, and there is no doubt that the employed classes are gradually getting more leisure, and want to get it. Then you want to give them the opportunity of employing the time well. I have kept off the social aspect of this University, but its social effect may be extremely great. That, of course, is hardly for our consideration here, but it may be very great indeed. It may give that innocent employment of leisure which everybody must desire to see, and that leisure will be filled up in some way if it is not filled up in this way.

12,117. (*Professor Sanderson.*) In relation to what you have been saying are you thinking of the future degree being inferior to the present degree?—No, I think it would be decidedly superior. It is a matter of consideration whether you should separate it by any badge, but I should regard the badge as one of honour and not of dishonour.

12,118. (*Mr. Rendall.*) You said the important thing is for the Commission to secure on the governing body of the University gentlemen who would be sympathetic with the design?—Everything depends on the men who would have to carry it out always.

12,119. Could you give any practical suggestion in that direction? What do you think of as the body of men who would be so minded?—I presume you would have a first organising body of this new University—I presume that would be a step—and that you would have to appoint a dozen or it may be five or six—a small Commission—possibly your own selves, or it may be a selection. I should hope that that body would bear in mind the great principles that we have been talking about to day.

12,120. Still you say you would leave all details to the governing body of the University?—I hope that governing body would apply to such people as Mr. Roberts and others who are well acquainted with this matter to get information from them.

12,121. The governing body of the University would not be at all identical with the small Commission for drawing up the Charter, whose business will not be dealing with details but introducing empowering clauses into the Charter?—I should think that introducing empowering clauses into the Charter would be really your work. I mean you would indicate it so clearly that anybody who did it would be acting as really your agents in the matter.

12,122. I do not see in what way you think that this Commission could secure the end you have in view, because necessarily in composing the governing body of the University we have to think of research, we have to think of ordinary and honour degrees, we have to think of constituent colleges in whatever relation they are to be to the University, and we have to think of public bodies, perhaps represented by members selected by themselves, or selected by the Crown—of law, medicine, and the like?—I cannot imagine a worse body than that for initiating and creating the first step of a University. You will have to have an operative body of experts, or people whom you are prepared to trust in this matter. But when they have once started the new University will have to give way to such a *caput mortuum* as you have described.

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

12,123. And you think that operative body would have to describe the character of the courses, conditions of attendance, equivalents to University courses, and so on?—I should think that that operative body would be the best body to lay down the general lines of what you say.

12,124. Do you wish to interpose this popular body of which you speak between the present Commission and the University as eventually organised?—I do not see very well how else you can do it, but I have not considered that matter fully. I think you must have some very strong powerful Commission to initiate this new University, and you must have that Commission instructed on certain general lines. For instance, it is quite clear that the medical people will not want much interference by anybody of that kind. They will have their own scheme. You want a body of sensible men who will deal wisely with all the situation—a body which it would not be difficult to get. There are a good many Commissions of that kind going about. I would like to say something which this Commission might do. If this Commission stops short of organising it can recommend organisation; and it has a report to make, and it is quite clear that anybody must pay very great attention to the decision by such a body as this of what ought to be done, and this body will, I have no doubt, express its opinion largely upon details.

12,125. I quite feel with you, but I wished to know if you had any suggestion to make as to what seems to me to be a very real difficulty. You yourself feel the great unwisdom and almost impossibility of inserting clauses with regard to details in the Charter?—Yes.

12,126. You feel the importance of the University dealing with this work?—Yes.

12,127. Suppose you make your operative body, directly it has drawn up its conditions, they are likely to be opposed by what you call the *caput mortuum*?—Yes, but you quite see that the Commission which is here can perform the two functions. It can perform the functions of indicating perfectly definitely the nature of the Charter, and it can also perform the function of saying what can be done at any rate to begin with under that Charter. I should think that second part will be a most valuable contribution; this Commission can do that, and I should think that from the evidence, that this Commission must have been getting on the whole it is in a position to do that more easily than anybody can do it. And this Commission can easily indicate a large amount of detail which it would not dream of putting into the Charter.

12,128. Make it part of the report you mean?—Yes, make it part of the report. It could report that such and such a thing must be done by the first governing body, leaving power to change it. It could report that such and such another thing may be done, and that such and such another thing was advisable to be done. It could make reports of different stages so to speak, to guide the first governing body; but I still think that the first governing body had better be a Commission than the final body which you describe. You know how bodies like that are selected, it is not from any fitness of the men. I would not dream of allowing a body like that to meddle with the thing until it was all set going.

12,129. The highest testamur given by your society is the certificate of continuous study. I understand that that means 12 terms of consecutive study, implying 120 hours as a minimum of work spreading over four years given partly to literature and partly to science. Is that a correct statement?—(*Mr. Roberts.*) I do not think the figures accurate, because some of our classes are fortnightly and some weekly.

(*Rev. Canon Browne.*) It is double that, because there is an hour for the class as well.

12,130. (*Mr. Rendall.*) True, it is double that.—(*Professor Stuart.*) 240 hours teaching under the direct lecturing of the lecturer.

12,131. (*Chairman.*) And the summer work as well, has it?—That is included.

12,132. (*Rev. Canon Browne.*) Plus the necessary paper work, so that 240 hours is not the minimum. There must be paper work or the lecturer would not allow the students to go in for examination?—And also the work getting ready for the examination at the end.

12,133. (*Mr. Rendall.*) How far does that seem to be an equivalent for the one year's University study?—I think it is a good deal more.

12,134. You said it would become almost impossible for any University student to fulfil the condition that would be equivalent to two years of University study, and I want to know how you regard the present rate of equivalence?—I think it is undoubtedly very considerably more than the equivalent, I have always thought that.

12,135. Eight years would be almost out of the question for University extension methods, would it not?—No, I do not think so. We have very many University extension students who have worked more than eight years with us, I would not regard eight years as out of the question at all.

12,136. As an equivalent for two years?—I think it is a great deal too much to be the equivalent of two years; but still I do not think it would break down on the fact of its being too much for them to do.

12,137. How far have these certificates of continuous study been successful. What are the number of students who have obtained these certificates?—(*Mr. Roberts.*) Very small as yet, for the reason that the certificate in its present form was only established less than four years ago.

12,138. With retrospective action?—No. But there was a previous certificate of continuous study, the conditions of which were found to be unworkable.

12,139. Could you tell us what the particular conditions were?—(*Mr. Roberts.*) I do not carry the exact details in my head because it was laid down before I became connected with the London society. Broadly it was this. The board insisted upon a certain definite connexion of subjects with one another, and at that time there were no centres sufficiently well organised in London to provide the necessary consecutive teaching, but when the sessional certificate was established the offer of that alone induced a number of centres to make such arrangements as met the requirements of that certificate by providing continuous work for a whole year; and from that time on the numbers who have taken the sessional certificate, and who will eventually take the continuous certificate are increasing. It is possible under such circumstances for a student to do the work in three years instead of four by taking their extra subject in the same year as one of the three continous subject.

12,140. Then you say there is no experience or no statistics yet that can show how far this certificate of continuous study will work?—(*Prof. Stuart.*) No, none in London, but the correlative of it which is the Vice-Chancellor's certificate in the Cambridge University system (although they are not exactly equivalent) has been very much sought after.

12,141. Are you able to tell me there how widely the Vice-Chancellor's certificate has been taken?—(*Mr. Roberts.*) I think I can give you the list for the last year. About 60 were given last year, and I should think about that number every year.

12,142. That is not accepted by Cambridge as the equivalent for the year of residence?—(*Prof. Stuart.*) No. It is a thing that leads to nothing else. It stands purely by itself.

12,143. And with regard to the affiliation scheme that is accepted, how far has that proved effective? Can you give me any figures as to that?—(*Mr. Roberts.*) The like statement is very nearly true of the affiliation scheme, viz., that it has only recently been in operation sufficiently long to make it possible for any student to complete the work.

12,144. And it has been in force for some time?—Yes, but it takes three years to complete it. I have had a note from Mr. Berry of Cambridge stating that of those who have actually come into residence there, (and I may say that it was never expected that many would come) have been three women and two men, and there is another man and two other women who are fully qualified now to go up as second year students.

12,145. That is a total of five who have availed themselves of the privilege?—Who have done everything.

12,146. (*Rev. Canon Browne.*) In the first possible year?—Yes, in the first possible year.

12,147. (*Mr. Rendall to Prof. Stuart.*) Have you any suggestion to offer at all of any modifications that would make it more widely operative, or is that a tolerable result?—I think the only thing is to put a bigger prize at the end.

12,148. That is a somewhat greater remission than the one year's attendance?—Yes. That would make it more widely operative. But I think they are operating very well, and very much more largely over those who do not come up, because those who do not come up go through a greater portion of the course.

12,149. (*Rev. Canon Browne.*) Do you not think it is the conditions and not the prize?—(*Mr. Roberts.*) The bulk of extension students cannot leave their homes and work to go to Cambridge.

12,150. (*Mr. Rendall to Prof. Stuart.*) Of the comparatively few who have come into residence can you tell me how many belong to University colleges, such as Newcastle and other places?—I have no idea of the actual numbers. I am afraid I cannot tell you.

12,151. (*Mr. Anstie.*) One observation of yours struck me, which was this. You seemed to consider that a University governing body, we will call it, so largely representative of collegiate elements as was indicated by Mr. Rendall would be in regard to this question a *caput mortuum*. May I ask on what you found that view?—I meant to convey that I thought it would be a bad body for drawing up and launching the University—not for managing it—because I thought that generally the composition of a body which was meant to carry out a great piece of constructive work of this kind had better be thought over by the same head and not supplied so much by chance as such a body would be.

12,152. Why do you suggest that that body would be supplied by chance?—You would have no necessary adding of a missing element, because there would be no co-operation between those who were acting.

12,153. Do you not think it would be very important to engage, so far as possible, the collegiate bodies in London, speaking quite broadly?—I think it would, indeed, and I think it would be very good that they should ultimately have a voice in the matter; but I think you would get too large a body, when you come to that body you speak of, to deal with such a complicated job as this.

12,154. Of course a Charter in founding a new institution often has to contain a great deal of what in older institutions grows into unwritten law. Supposing the Charter created a special organ, would not that largely answer the purpose?—No doubt that would answer the purpose.

12,155. Then you would not object to this Commission reporting in favour of a body which would contain an organ of the new governing body which would have in especial charge the conduct of the tuition and testing of external students?—No, provided that that did not carry along with it a subsidiary position for this work. I look upon this work as essential to the University, but if there should be a direction given by this Commission as to how that special work should be dealt with, I could see no objection. Would it not be, however, overloading the Charter if you put that in the Charter? The Charter should be very simple, surely.

12,156. No doubt the Charter should be as simple as possible, but still it may be necessary in a new Charter to do a good deal which in older bodies which have somewhat undefined powers and constitutions is done by their own inherent vigour?—I admit that might.

12,157. Would it not answer your purpose to have inserted in the Charter something which would necessarily give rise to a special organ which would be charged with this special kind of work?—That would be one way of doing it. Of course you put me at once into a critical attitude of mind about the proposal. One thing which I should not desire to see excluded by that arrangement would be that the method adopted by the University extension work might permeate more of the work of the University than merely the University extension work itself.

12,158. I am not quite sure that I follow you?—Take the University extension work as it exists to-day. I think the principles of that work might be established more widely in the work of the University in other directions, and that it would be desirable that the University should have power to deal with external lecturing, if I might say so, without necessarily dealing with it through a statutable body—a body made by Charter and obliged to deal with it separately. I think the head governing body of the University ought to be empowered to deal with organised teaching, external to existing institutions, on its own account, although you might very well indicate that most of the work of that kind might be dealt with through a specific body.

12,159. That brings me to an important question. I suppose you would agree that so far as the grouping of subjects is concerned, and the amount of proficiency which ought to be attained in the subject, it ought to be the same in the colleges recognised in the University and forming part of it, and in the extension work?—Roughly, that would be so no doubt.

12,160. Then assuming that you had the colleges incorporated in the University, and the advantage of their advice and experience in the construction of lines of study and examination, you would have, I may assume, a very competent body to indicate the sort of lines on which the University extension should go?—No, I would not say necessarily that; I think it would not be absolutely desirable. Let me see if I am clear about the question. It is supposing King's College and University College were to draw up a scheme of study and examination for a degree, the University extension system might be fairly fitted into that. Is that it?

12,161. Putting the thing broadly and without begging the question as to whether those ought to be the only two colleges, but assuming that the colleges incorporated in the University were to draw up a scheme, that would express my question?—Then I would say that if I were to draw up a scheme for the teaching University for London, I would proceed to lay down its first lines on a wider basis than would be laid down from the point of view of existing important institutions.

12,162. Do you mean by a wider basis, one that would give a greater opportunity in point of time and occasion to the students, or a wider basis in what I may call the academical sense?—Both, I would lay it down on a wider basis of time. I cannot say how wide the academic basis of the representatives of King's College and University College might be, but I would undoubted lay it down very wide.

12,163. Assume for a moment that there are a certain number of London Colleges incorporated in the University, and which will undoubtedly, when incorporated, to a large extent, affect the determinations of the University, would not the lines which were laid down for the sort of education and attainments required for a degree be good lines, as in the case of Cambridge for determining extension work?—I would rather see the lines of the new London University laid down by an independent body which consulted these bodies, than I would see it laid down by a group of representatives of those bodies. The reason is this, you do not want the scheme of London education to be the result of the contention of those bodies.

12,164. The contention with whom?—The contention with one another. You have, I think, a sufficient approach to a *tabula rasa* in London in respect of higher education for it to be better to begin by a consultation with those bodies which exist, than leave it to their action. I am not saying that I feel very strongly on this point. I am arguing it with you rather than taking the other view.

12,165. I am anxious to get your opinion. I am not suggesting that the colleges, to use a loose expression, are to have it all their own way, or that they should be able to use their power for the purpose of throttling any such institution, or for the purpose of narrowing its operation, but that they are to help in constituting a body which will bring certain academic traditions to bear on the matter, and be able to frame for themselves a course such as may reasonably be required for the purposes of graduation. Would not that course be a good course to guide the operation of this rather looser and wider organisation?—No, I should think this looser and wider organisation has such a large area to cover, and contains so many ideas different from what are located in any body, that I would not expect a satisfactory scheme for such a system of education to be drawn up by the representatives of existing London institutions.

12,166. In what respect do you think it would fail?—I think it would fail in this—that the representatives of existing London institutions would take the view of their own institutions in drawing up the scheme. Mind you, I can imagine that many members of those institutions would be most admirable members for the body, but I rather look upon it in the light of your

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

proposal that they would come there to protect the interests of their institutions.

12,167. I see your point, that there would be interests in respect of which they would desire to protect their institutions against this rather wide-spread system of education?—What you might call a free lance system.

12,168. But assuming that tendency to be controlled by other elements in the body, would not their experience of what ought to constitute the amount of educational attainment required for a degree be likely to be right?—It would be a very good and useful contribution to what would be required for a degree, but I should like to hear a good many other sides heard about it. I do not think that when you have such a magnificent problem to solve as the creation of a London University you have a sufficient force to solve that problem in the representatives of existing higher institutions of education in London. Take your polytechnics, for instance. The people connected with those have not yet had any experience. I should be delighted to think of them being involved in any scheme, but they have no experience to bring to bear upon the matter, though they are full of very good ideas. Then take King's College and University College. Their experience is absolutely along the line of the already established lecturing institutions. Then take the Polytechnic at Regent Street, which has been established together with the Birkbeck Institution, which is another one which has been established for some time. I think you get very valuable hints from those, but I do not see that these, as a body, are at all competent to say that their experience enables them to do more than make a contribution, and a valuable one, to the general solution of the problem. I would like to hear all their views, but I do not say that I would entrust the creation of the scheme to them.

12,169. What I gather from you, correct me if I express it wrongly, is that those who are full of desires, but who have no very great experience, should have the opportunity of having those desires gratified, but that those who have had experience should be the persons to determine in what way those desires would be most effectually complied with?—Yes, that is a very fair statement.

12,170. Should not we rely upon these Polytechnics, and the like, as persons who might properly be asked to express their desires to a well-organised body, and should not we go to that well-organised body to determine from an academic point of view what is the method in which those desires should be most adequately given expression to?—With the first part of that, I quite agree, but as to the second part I should like to know what the organised body are that you are going to refer it to.

12,171. Such an organised body as would combine the great teaching power of the metropolis?—Then I think it would need to cover a wider ground than the great teaching power of the metropolis at present covers, because I do not think that the great teaching powers of the metropolis at present are anything more than a drop in the bucket of metropolitan requirements. I am now putting it strongly.

12,172. With regard to extension, I suppose everybody would entirely agree with you, but with regard to knowledge of what is needed and the character and quality of what is needed are they not adequate?—No. I think they know one side of what is needed, and know it well, but I do not think they know all that is needed or anything like all that is needed for the education of this metropolis.

12,173. Not all the methods?—No, not all the methods.

12,174. Do they not know the standard which it is desirable to reach?—I do not know whether King's College and University College for instance, and the medical schools——

12,175. The City and Guilds?—Well, they can give a great deal of contribution to the standard, but the question of the standard which it is desirable to reach, I should say was best determined by such a body as this.

12,176. You surely do not suggest that this Commission should write down an academic standard?—No, but I meant a body that represented a great deal more than London.

12,177. Do you not think London contains elements which are quite adequate to the solution of this problem?—No, I do not.

12,178. Considering that London attracts to itself the ability from other Universities?—You could select out of London a very competent body to deal with this matter, but I would not select them as representing London institutions.

12,179. But, as a matter of fact, would not those institutions contribute some of the very best elements?—No doubt they would, and I would ask them to contribute elements probably.

12,180. Would not they naturally send their best men, and would not those men represent the best traditions of learning and research, not only in London but also in other Universities?—I expect you would find that they would largely send people to protect their own interests.

12,181. Would the teacher do that, or would the institutions do that?—I should think both.

12,182. But I suppose you would say that the teachers would do it less than the institutions?—Yes, I should think so.

12,183. Teachers are persons who are interested in the subject for its own sake?—Yes. My contention is in no way connected with the fact that they are London bodies, and London teaching bodies. I should always look rather askance if it was wished that those who occupy the field at present should draw the scheme for a wider system which was to occupy the rest of it.

12,184. Granted if they were left in the sole control of the matter. But supposing you have other elements who are determined or moved by those interests which you have spoken of, might not they be entrusted in conjunction with the skill, judgment, and experience of the others?—They would no doubt improve the compound, but on the whole I would prefer to have them guided by the advice that they could get from the members of the existing institutions. When you have existing institutions and when you have to create something, of which they are only to form a part, you have a very touchy state of things to deal with. I should have felt that the best way was a strong outside acting body for the moment which consulted and took the opinion and largely followed the opinion of all those concerned.

12,185. Then having regard to the fact that we have not only to deal with this external interest, but also that we have to enlist the co-operation of those who are at present one may say at the head and in charge of the best University teaching in London, may it not be a practicable thing to endeavour to conciliate the two interests?—That may be well worth considering in the light of getting over the difficulty, but the line I should take up in forming a University for London would be to see the best thing to do and then to see if I could fit existing institutions into it. My desire is that existing London institutions and the University extension should be fitted into their own proper place in the work for getting a degree.

12,186. Then your view is that the three objects should be combined?—Yes.

12,187. Then if the three objects are to be combined does it not follow almost of necessity that we must take whatever help we can get from the existing University institutions in London for the purpose of carrying out your own views of University extension?—I have no doubt of that. I will admit that perfectly, but I think the best way will be for this body to lay down certain general elements and then a body elected *ad hoc* should with consultation with these bodies carry them out into further detail.

12,188. That would involve considerable delay and postponement, would it not?—No, it would be as easy to make this intermediate body as it would be to call together these bodies that you speak of. They would form an intermediate body. All the difference of opinion between you and me at this moment is about the form of the body for drawing up details.

12,189. I want to see how this thing is to be worked out?—No doubt it would be worked out either way, but I should have thought that much the best way would be to work it out independent of existing institutions, but after due consultation with them. I should work out the London University scheme in that way if I had to do it.

12,190. There is another method which would associate all those three objects in one scheme, and perhaps give a rather earlier introduction to the facility you desire to extend to general culture by incorporating the degree

giving body and the collegiate bodies, and providing a special organ to deal with the extension. Would not that be a practicable method?—It is certainly a practicable method. I should prefer my own plan, but that is certainly practicable.

12,191. I think you will agree with a great many other witnesses that a great deal of money will be needed to carry out this adequately?—A very great deal. I should think 50,000*l.* a year at a minimum.

12,192. You have no suggestion to make perhaps with regard to where that is to come from, have you?—Yes. You have the grant that now comes from the beer and spirit duty.

12,193. That would not be applicable?—I should have thought now that the body possessing that money might very well have come forward to the new University when you were crying out, and said "We will give you 20,000*l.* a year for that specific purpose."

12,194. You mean the London County Council?—I think it is possible to conceive of its doing that. Observe that I am not speaking for the London County Council at all. I could not do that.

12,195. But that is a public administrative body?—Yes it is an administering body, and that is a suggestion which it seems to me is conceivable. Of course the London County Council has its own fish to fry. You know that they have at present got a committee which is considering how to apply this.

12,196. To the extent of 30,000*l.*?—No, excuse me. They have taken 30,000*l.* and laid that by and secured it, and used the rest in the meantime in paying the rates. But they have told this committee to bring up a general scheme for the whole thing and the committee is now doing it. I am a member of it.

12,197. (*Mr. Palmer.*) I do not quite understand Professor Stuart's views as to the starting of the new University. Do I understand that he would prefer an inquiry commission to be followed by an executive commission to deal with the practical settling of the University?—This being the inquiry commission, yes.

12,198. I should like to point out this. No doubt you are familiar with the old Public School Act, 1868. There was an inquiry commission for Eton and Harrow and the other schools. That was followed by an executive commission which made statutes, schemes, and regulations for the schools, and left governing bodies to carry out the statutes, schemes, and regulations then made. Is that anything like the solution you would suggest?—That is the solution that occurred to my mind, because that has been so often employed. It has been employed in connexion with the Scotch Universities. There is an executive commission now in connexion with them which has followed an inquiry commission. And it was carried out with respect to the Universities of Oxford and Cambridge and with the public schools, to which you have referred, and it seems a reasonable method of doing it. I had thought of that in my own mind as the way in which I should set to work.

12,199. And you think that would be preferable to a commission like the present recommending in its report the constitution either of a federal or of a central University, and leaving a senate to settle and carry out the general scheme?—The only difference there would be between those steps would be that in the latter proposal the general senate that you speak of, would practically require to appoint an executive commission, so that the difference would really lie in who was to appoint the executive commission. That would be where the difference would lie, but the method of action would be very nearly the same in either case.

12,200. You are familiar, no doubt, with the latest London institution, the City and Guilds Institution. That depends, as this University might to some extent have to depend, upon annual funds. For that purpose it was found necessary to have a large representative council. That council, as you have indicated, appointed an executive committee. That executive committee has certainly for ten years worked and done the whole work of its council, and it has left the three several colleges of which that institution consists practically in the hands of its professors. Thus whilst the council and executive committee are the representatives of the people who contribute money, funds are forthcoming; and the professors having the organisation and teaching of the several colleges in their own hands are conducting them to public satisfaction. Would that kind of constitution suit you?—I think that a very reasonable plan, but on the whole I feel that it would be in London better to propose an executive commission from a central authority rather than by the selection of the representative Senate that you speak of. But it is a matter of opinion. I do not see that the action of them would be very much different. I should prefer the plan of an executive commission appointed by the central authority, because of the largeness of the problem in London.

12,201. (*Mr. Anstie.*) What central authority?—The Government.

12,202. You mean by Parliament?—Yes.

12,203. A new commission?—Yes, on the same lines as the public schools and others.

12,204. (*Mr. Palmer.*) You mentioned that you would have to have the Society for the Extension of University Teaching dealt with in a subsidiary manner. As has been stated in a question, the extension society is hardly *pari materia* with institutions like King's College and University Colleges, but without being dealt with in any way in an inferior manner it would necessarily require a different treatment, would it not?—Yes.

12,205. I mean an exceptional treatment. Its treatment by any University in regard to its different standing, or its different position need not be inferior to the treatment of colleges. But you must contemplate with a society of this kind a somewhat different treatment from what might be expected in the case of a permanent institution?—Certainly, and whereas I should deal in a marked and individual manner with places like King's College and the City and Guilds, I should wipe out of existence the London Association. But what I referred to when I spoke of not being dealt with in a subsidiary manner was this. The basis of my view, as I tried to put it forward, of what the formation of your teaching University ought to be is the passing through organised courses of teaching by the pupils. These organised courses of teaching are the basis of your action. Then you would treat King's College and University College and those other places as certain exceptions to that rule, inasmuch as they were already existing bodies which had what you were going to base your University on. Therefore, when I said that the University extension point of the business should not be subsidiary I meant that I regard the existence of organised classes as the foundation of the thing, that the treatment of these should be the normal treatment of the University; and the treatment of existing institutions should be the exceptional treatment.

12,206. It merely comes to exceptional instead of subsidiary?—Well, the saddle is on the other horse.

12,207. (*Mr. Anstie.*) I do not quite gather the effect of your observation. Which other horse?—I meant that I would regard the creation of an organised system of teaching not necessarily confined to institutions as the normal object of the University, and the exceptional dealing of the University would be with those places with already possess an organised system of teaching.

12,208. (*Mr. Palmer.*) That is to say the normal condition would be what is commonly called the external student and the exceptional one the collegiate student?—Yes, I am speaking of a method of teaching.

12,209. As the society exists now, the joint board governing the educational side appoints the lecturers and governs the course of lectures; but the subjects of lectures, I think, are settled by the students who attend the lectures, are they not?—They are settled by the locality in some form or by representative bodies, but they are frequently now settled by the pressure brought to bear by the continuous study certificates of the joint board.

12,210. Does that in any way explain the absence of mathematics or of languages?—No, we have intentionally avoided those believing that sufficiently good instruction in those exist without our organisation.

12,211. In the words of the old Commission you stand as a voluntary and not necessarily a permanent institution?—Yes.

12,212. And your connexion with a new University would put you in a permanent position in the first instance, would it not?—No, it would extinguish the University Extension Society.

12,213. I mean the work you undertake would be made more permanent, but as you said before, you

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

would hope to extinguish yourself, and hand over the whole of your work to the University?—Yes.

12,214. Of course under those circumstances the University would be expected to direct the course of study and to deal with it in such way as the University authorities might be advised?—Certainly.

12,215. You have, I think, no funds that you could induce the authority to take over with that work?—No.

12,216. You are, therefore, in a totally different position from King's College and University College in that regard?—Yes.

12,217. Now one question with regard to degrees. Technically, of course, anyone can go for a London University degree at this moment, but I take it that the conditions of the London University at present are such as to make it impracticable for a University Extension Society student?—The London Extension Society student would be very greatly assisted by the extension lectures in the subjects to which those lectures refer, as, for instance, if he had to pass an examination in history there would be no doubt whatever that he would be greatly assisted in the preparation by the lectures that he could attend on history; but there are portions of the examination in which he would not be in the least assisted; for instance, mathematics and languages.

12,218. At present the existing conditions which obtain in the London University are inconvenient, if they do not altogether preclude the ordinary extension student?—An ordinary extension student is assisted towards the degree by attending the extension classes.

12,219. But still there is some reason why you would like to have the time for obtaining a degree lengthened or shortened. It is not obtained easily by an extension student as a matter of fact, is it?—It is not obtained easily by any student but more easily by an extension student than by one who is not attending any lectures.

12,220. Then is there any reason for your requiring any exceptional treatment as at Cambridge with regard to a year's residence?—I am not asking for exceptional treatment, except so far as the work of the student is exceptionally better. I take it that a year's attendance at such lectures and classes together with all the work that they do in connexion therewith and the passing of the examination at the end of it is better than some of the work that is done in an examination and may be substituted for it.

12,221. The purpose of my question was merely to ask whether under the existing University an extension student can obtain what he wants or whether it is not necessary to have some alteration of the existing system?—An extension student can obtain a degree in London University more readily by being an extension student; but the extension lectures do not instruct him in all that is required for that degree.

12,222. Let me put it in the other way. At present the London University is precluded from teaching under its tacit understanding with University College. Therefore, they cannot influence the teaching of extension students in a way which, I take it, you would wish the University if it took over the work to do so?—The London University does not enter into teaching at all.

12,223. Because it is precluded by that understanding which I have mentioned?—Yes, I understand that is the case.

12,224. But your society were taken over and if the students had to undergo a course of study fixed by the University, you would wish the University to have some influence on the teaching of the society?—I should wish the University at all times to direct what should be done in the classes, and what standard of attainment should be required from them; in fact, I should wish the University to be supreme.

12,225. You really do wish, then, that the University should take over your work and govern and direct the studies?—Yes.

12,226. (*Sir George Humphry.*) I think what you have laid before us is that in fact the teaching which combines lecturing and examination under this University extension system is very good?—That is what we have tried to make it.

12,227. You think that it attracts large numbers of men, that it improves them very much, and gives them such education as facilitates very materially their passing examinations for the degrees either of London University or any other Universities?—Yes, I think so.

12,228. And your object is that the privileges already granted, we will say by the University of Cambridge, should be more largely given by this new University?—Yes.

12,229. And that this new University should use its degrees as a lever to stimulate and to organise in a still further and better degree the teaching on the extension system?—Yes.

12,230. And not only to organise and to improve it, but also, we will say, to perpetuate it. It would be better continued, at any rate, under such privileges granted by the University of London?—Yes.

12,231. That is the main point which you come before us to impress upon us?—Because I believe that the University of London would be rendered more efficient in carrying education over a wide area of persons in London if such an arrangement were carried out.

12,232. Precisely; by conferring higher privileges on those who are educated under the University extension system?—Yes, by conferring higher privileges and by itself directing a work which is so aliquot a portion of what in my belief the University ought now to undertake.

12,233. Through the medium of its granting degrees it would possess such a power by inspection, and in other ways over the University extension system, as would tend to promote, if possible, better teaching and better examination?—Yes, certainly.

12,234. If it exercised that power through the medium of its degrees it would exercise power in organising even in a better manner than the University extension?—Yes, certainly.

12,235. The University extension system has the experience of 25 years, and it is able to meet the requirements of the several students and to adapt itself to them. Then there would be thus combined the advantages of that independent system organised, still further controlled, and directed by the University through the leverage afforded by its granting degrees?—Yes, I think you have stated it very fairly.

12,236. There are other institutions also directing what is called secondary education in London, and the University might well exercise a similar controlling influence over those too?—Yes, and it might in many cases find that the methods of control and the methods of teaching might be assimilated in the two.

12,237. You think they would find that there might be combinations effected?—Yes.

12,238. And that probably as the combinations were effected among them such regulation and controlling by the University of London would enable those various institutions to maintain their independence to a certain extent, and exercise their various educational influences under this one common University direction?—And that one common University direction of all that you have described would facilitate what I might call the due supply of fit education in given localities. There would be a certain amount of organisation. All that would come under control which is now at present under no controlling influence whatever. It is haphazard now.

12,239. General controlling influence over the various bodies which might still retain their independence to a certain extent?—Yes, that is it.

12,240. The remarks have hitherto been confined entirely to London, but the University extension system affects also the provinces, does it not?—Yes, it did so before it came to London.

12,241. And it would not be necessary that a University, although it might be a teaching University for London, should ignore this provincial University extension. It should still exercise the same influence?—No, I doubt that. I think the great thing you want to create in London is a great entity of whose existence the London people will know, and which they will feel proud to belong to. You want to create that entity, and I should not meddle with anything outside London. You may have your arrangements if you like.

12,242. You may have your examinations?—Those examinations at present go outside. That you find existing.

12,243. It would give the opportunity also of exercising some controlling influence there, would it not?—No, I would not allow that. I think you would make a great mistake if you put any influence of this University outside London. As long as the existing London University, as it is called, gives degrees to everybody, I do not see that you can stop that. But it does that not because of any connexion with London. It is London only in name. It would be better called the National University, the Examining University, or the Imperial University. "London" is a pure misnomer. But if you are obliged by the necessities of the case to accept it as a part of the new London University, which is to be a real London University, I should accept so much as existed of outside work, but I would not go beyond with the outside work. I would not go for the new work beyond the County Council limit of London.

12,244. (*Mr Anstie.*) As in the case of Dublin?—Yes.

12,245. (*Sir George Humphry.*) And your feeling is that the Charter should be a general Charter not going too closely into details, and not tying the hands of the University in details?—Certainly.

12,246. A Charter which might be modified as years goes on?—Certainly; and they would be able to modify their own details then without continued applications to Parliament. What is our Charter in Cambridge? I should think almost nothing at all.

12,247. (*Prof. Ramsay.*) The Chairman asked you a question about the possibility of students taking degrees who are engaged as working men in active work. You have, of course, experience, actually before your mind. You are aware that that takes place to a large extent in the case of Scotch degrees?—When I started the University extension scheme it was because of my experience in that direction in the Universities of Scotland. In the class I attended in St. Andrew's, which consisted of about 20 pupils, for it was about the minimum time of St. Andrew's, there were four who were earning their livelihood in the summer at a trade. There were four out of 20.

12,248. You will not be surprised to hear that in the Universities which are in large towns the proportion is much larger?—No doubt it is larger.

12,249. You would not be surprised to hear that in some of the Glasgow classes, it has been ascertained that in one year as many as three-fourths of the students may be actually engaged in work during some portion of the year?—If you include teaching among that three-fourths I am not surprised.

12,250. Including teaching and almost every other form of work: professsions, trades, and industrial work of all kinds. Some students employed in this way travel considerable distances daily from their work to the University. You are, of course, also aware that in the Scotch Universities the hours are made so that students can attend classes either before business hours or after, which comes very much the same thing as your evening classes?—Yes.

12,251. Such students take a much longer time to complete the course for their degrees?—Yes, often a long time.

12,252. I do not know whether it was the case in St. Andrews, but there are cases where students protract a four years' course over six or eight years?—I have heard of that, but in St. Andrews it was different because there was not much work to be got on the spot. In St. Andrews it was not at all uncommon for men to degrade, as they called it, and omit one year.

12,253. One great point you have made is that the extension movement not only helps to give students information, but that it brings out their ambition to do more?—That is so.

12,254. The proportion of them who were better gifted than the others would be tempted to prolong their studies?—Yes.

12,255. As you have stated to-day, it is no part of your case that the University should lower its standard for degrees in order to meet the wants of your students?—On the contrary, I should desire it to be used as a means of raising the standard for degrees, I should like to point out this: it would be in the power of the University—and I hope the University would exercise the power—to raise wherever it could the standard of a University extension class and to exclude from the right to a degree any class that it did not think was conducted on principles which came high enough.

12,256. Then as to the question how far a particular course or courses of study can be held equivalent to a unviersity examination it is quite unnecessary to consider that here, because you have stated that that should be a matter left to educational experts?—Clearly. As long as a basis exists the amount must be settled.

12,257. There is one point on which I should like to know your opinion. I do not want to raise any controversial point. It is simply a matter of opinion. You spoke of your own desire that the course of study for degrees should be so altered as to strike out entirely some of what have hitherto been thought to be fundamental subjects. Would that be the general feeling of all those who are interested in the extension movement?—No, by no means. I was very careful to say that I do not think I should carry others with me. If you consider the people who have been most active in University extension work they do not by any means necessarily share my view on that point. That has nothing to do with University extension and neither the Council nor the Joint Board would take that view.

12,258. You have no desire to substitute a system of cram for a system of education?—Exactly the reverse.

12,259. When you speak about equivalents you mean an equivalent in fair intellectual training?—Yes, you have exactly placed it.

12,260. The next point I wish to question you upon was raised by Bishop Barry. You declined to express any opinion as to whether a single University or two Universities would better carry out your objects. Have you read the proposed Gresham Charter?—Yes.

12,261. The first business of this Commission, you will remember, is to consider the terms of that Charter?—Yes.

12,262. Does that Charter as it stands from the University Extension point of view seem to you to be satisfactory?—No. And from the point of view of London I think it is inadequate.

12,263. Would you state your points of objection to the Charter?—The points of objection to the Charter will be principally embodied in the use of those words in clause 3 where it says the student who becomes eligible for a degree shall have pursued a regular course of study in a college in the University. I believe it is essential for the well-being of a proper London University that it should be based upon approved teaching organisation, and not upon institutions.

12,264. Then to meet your view you would alter those words and substitute, "shall have passed through such "a course of instruction as may be approved by the "Senate"?—Well, I should go further than that, and make the Senate nominate the professors and the lecturers. I do not think it would do merely to hold up to the public that you were quite satisfied if people went through a course of instruction and then went through the examination. I think you yourselves would need to control the appointment of lecturers or professors or teachers to whose hands you would entrust that.

12,265. Then your desire would be that the University should be paramount, and not the several bodies out of which the University might be composed?—Certainly, and that is point number 2 in which I should rather feel that the proposed Gresham Charter was at fault.

12,266. Suppose you were altering that Charter, would you go the length of saying that the University should appoint the professors in the Colleges which were made constituent colleges?—You touch a very difficult point there. I think you will have to compromise with those institutions. I think the right idea is that the University should appoint all the professors, but I think you would have to compromise with those institutions and say that you accept in one block the whole of the existing professors.

12,267. Appoint or recognise?—Yes, that would do.

12,268. In every case the University would have the power of appointing professors outside the professors already appointed?—Yes. In most of those cases where University extension was carried on and in those cases, too, of the other institutions mentioned in clause 12 of the late Royal Commission's Report, you

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

might find suitable teaching going on for your recognition.

12,269. So the teacher might be recognised in any college?—In any place.

12,270. Where they were doing work of a University stamp?—Where they were doing work of a University stamp in ways and subject to conditions which the University laid down.

12,271. Then in constructing the governing body of the University, your idea would not be to proceed upon the principle of representing institutions, but of getting together the best possible representation of the various kinds of educational work going on?—You are now putting clearly what I imperfectly endeavoured to express in my answers a little while ago.

12,272. Then I suppose it would be an objection to your mind if any one particular subject or group of subjects were more strongly represented upon the governing body than any other?—Certainly I should try to make a catholic body.

12,273. You are aware, of course, that the medical profession is very strong in London?—Yes.

12,274. And in the Gresham Charter you would observe that the representation of medicine is extremely large?—Yes.

12,275. Does it seem to you to be too large?—I think it is too large for the purposes of the regulation of the general University. It is dominated by the medical element in this. But I should have the Medical Faculty very much its own master in the University, you understand. I think that the Medical Faculty, while very fit to take care of itself and best able to look after the whole question of the education of its own pupils, is over-represented on the general governing body. I think the position of the Medical Faculty could be quite well safe-guarded when you come to put the position of the Faculties to the general governing body.

12,276. Would you be prepared to recommend a relation between the Faculties and the Senate analogous to that which prevails in the Scotch Universities? All medical questions are naturally referred to the Medical Faculty; if their opinion is unanimous it is acted upon, but it has no force until it is approved by the Senate?—I sketched down on a piece of paper before I came here what I thought should be the relations between the Faculties, and I put in a note after it, "Scotch Universities." My experience as a student and also as an examiner—though I never was a professor in a Scotch University—has been that friction does not exist.

12,277. Then you would object to any scheme by which there should be a division of authority?—Quite. There must be a recognised head, and that must be the University Court.

12,278. Sir Andrew Clark made a suggestion to the effect that if the Medical Faculty was unanimous or nearly so, no body in the University should have the power to override their opinion?—The medical people are well able to settle their own affairs. I should not like to see an independent authority on anything that I had to pilot. If the University Court interfered too much with the medical people they would suffer.

12,279. Now, with regard to the proposed Charter: have you read the revised scheme of the Senate of the University of London?—I am afraid I cannot recall it to mind now, but I did read it at the time.

12,280. Without going into the details of that scheme, do you think that the objects for which a teaching University for London has been demanded would be best carried out by having two Universities or one?—There can be no doubt that it is extremely desirable if possible to have one University in London, if for nothing else than the confusion of the names really. If you call it "Gresham University" it would be a different thing. There is no doubt that it is desirable to have one University; but the difficulties in making it would be extremely great.

12,281. Bishop Barry suggested that it would be a difficult thing for one University to fix equivalent standards of work for two different classes of students. Might I ask you whether in your opinion it is not more difficult for two independent bodies to make an equivalent standard?—I did not think there was much in that argument.

12,282. Lastly, with regard to the question of the whole *modus operandi* of setting a-going the new University. I think your view of an executive commission has been to some extent taken from what has happened in regard to the Scotch Universities?—Yes, entirely.

12,283. You know that in our time there have twice over been, first, commissions of inquiry, and, secondly, executive commissions, to deal with the Scotch Universities?—Yes, and twice in my time in the English Universities.

12,284. Instead of proceeding by way of Charter, or supplementing Charters, in both those cases commissions have been given certain statutory powers by Acts of Parliament, those Acts having laid down the general principles of University government and constitution as matters of public concern. The Act set the University machine a-going; the Commission issued ordinances on all details specially referred to them. These included the courses of study for degrees, regulations as to fees, examinations, financial details, &c. Such ordinances have to lie on the table of the Houses of Parliament; and can be objected to there, or before the Privy Council?—I thought it was a very good method of proceeding. I thought it worked very well, and that it produced good results on the whole.

12,285. Is not the alternative before us this: that either this Commission must report upon certain general leading principles, such as may find expression in an Act of Parliament, all details being referred to a Parliamentary Commission; or else this Commission must itself enter upon all the details—a proceeding which would probably result, or which might result at any rate, in a considerable postponement of the whole question?—I think that this Commission, if it enters into details, will be a terribly long job, but I think it might perfectly well decide such a question, for instance, as this: was the course of study to be in a college, or was it to be under professors approved of and appointed by the University. There are a number of leading points of that kind which I think it ought to determine, and the information before it ought to enable it to determine those. They should be binding by Act of Parliament. That is to say, in appointing a separate Commission the Act of Parliament should say that certain things which were laid down by this Commission had to be done. That will be discussed in the House of Commons, and probably altered.

12,286. Would you say this further, that there are certain fundamental points with regard to which it would not be politic to give absolutely plenary power to any University body, however well constituted?—I should have thought most of its work would be liable to come before Parliament. I will go further and say that nothing that it does could suffer from free discussion. There are certain things that certainly ought to come before Parliament, particularly its relation to the medical profession.

12,287. At any rate the ordinances should be so framed that those framing them would know that they might have to run the ordeal of possibly adverse criticism in Parliament?—Yes. Though Parliament is not always the best critic of good work done, still I think it is a good influence on the whole.

12,288. (*Mr. Anstie.*) At any rate it is essential?—Yes.

12,289. (*Professor Ramsay.*) Now one other question with regard to endowments. You recognise that this University could not be started satisfactorily without money?—Of course it requires a great deal of money.

12,290. Do you think it is likely that if the University were started on large lines, Parliament would be ready to give the necessary funds?—Well, you know there are 70 representatives of London in the House of Commons, and they can exercise a considerable pressure upon any government. I should think both parties of politics would probably unite in pressing the claims of the University of London. I cannot tell whether they would or not. Of course it depends upon the popularity of that University, but it seems to me that you have the possibility of making an exceedingly popular University, one whose main lines would catch the imagination of the people. I think, therefore, that as Parliament has given large sums of money to education recently, it is likely to do more. Both sides of the House are committed to it; the Conservatives very largely, and the Liberals by promise.

12,291. And would Parliament be more likely or less likely to give money to a University whose scheme had to go ultimately before Parliament for sanction?—Of course it is no use answering that question.

12,292. (*Mr. Anstie.*) And with regard to one University or two?—That would depend upon how it represented itself to them.

12,293. (*Professor Ramsay.*) It has been represented by some that endowments in this country do not go to Universities but to colleges, and that if the colleges are made the important part of the University, they will be more likely to attract endowments than the University would be, because in England a University is regarded as an abstract affair, in which nobody is sufficiently interested to subscribe to it. Do you think there is anything in that argument?—There is something in that argument, but then you see your University, as I am endeavouring to urge it, would have a definite existence. I should have a central building in the first place, but besides that it would be making itself felt, not as a mere abstraction which examined, but as a body which was responsible for sending A.B. down to this or that place, and seeing that the people were being taught. I think the University would be taking the function that is largely assumed by the colleges in doing that.

12,294. I think I understood you to say that you see no insuperable difficulty in one and the same University performing both functions, that of examining students who come from the whole of the Empire, and also that of examining those who have gone through their prescribed course of study?—No, I do not see any difficulty in conducting the two together, and making portions interchangeable.

12,295. (*Chairman.*) You referred to Clause 3 in the Gresham Charter, and you expressed great dissent from it. The part that you objected to was as to the degree being conferred "On all persons, male or female who "shall have pursued a regular course of study in a "college in the University." That clause, whatever its faults may be, deals a most crushing and complete blow against the system of cramming, does it not? It has that merit. Do you think your substitute for that would be equally efficacious in that way?—I think it would be better. As long as you see that the pupils are taught by professors and lecturers, appointed by the University, you do by that strike a blow against cramming. As long as you leave these professors to be appointed by an institution which is not amenable to the University you have not the same guarantee.

12,296. It is rather vague that they should be instructed by certain professors, would you require them to attend a certain given number of lectures?—I should require them to attend a course of study, I will not say in a college in the University, but a course approved by the University, but "conducted by professors or "lecturers appointed or sanctioned by the University."

12,297. That would practically mean that they must attend a certain number of lectures a year, would that be an equal safe-guard with requiring continual attendance at the college?—It is the same thing, because clearly you would assume that the University would not approve of attending at a course which did not involve attendance at a proper number of lectures, and doing the proper work. And attendance at a course of study in a college is nothing different from attendance at a course of study at a polytechnic or a town hall as long as the appliances are satisfactory and the conditions of attendance and work imposed upon a pupil are the same.

12,298. Is there the same intimate connexion between the pupils at a polytechnic as there is between the pupils at a college itself?—If a man is teaching at a polytechnic, I can impose upon him exactly the same conditions with regard to his dealing with his pupil, as I can upon a professor at University College.

12,299. (*Professor Sanderson.*) You said just now that a University extension student would have no privilege as regards examinations, and I think before you told us that extension students would be privileged in so far as they might pass examinations belonging to the extension system which would not be open to other students which examination would be considered a part of the qualifications for degrees?—I should propose that, because I regard that as something more valuable than the passing of the examination.

12,300. I am right in supposing that you meant that extension students should be privileged to present themselves for special examinations, and examinations belonging to the extension system to which other students would not be admitted?—Yes, and by passing those examinations which referred to the class they had attended as extension students, I should allow them to be let off a certain portion of examinations.

12,301. Would you allow other students to pass those examinations?—No, because that examination which the extension student would then pass was essentially a portion of the teaching which preceded it for 10 weeks.

12,302. But that would be a privilege, would it not, which extension students would enjoy, and other students would not?—Well, the examination that they passed would be something at the end of their own course, and no doubt unless a person had attended that course he could not get that portion of his degree by that avenue.

12,303. And you would not allow him to try?—No.

12,304. (*Mr. Anstie.*) You have laid much weight upon attendance at lectures, but may I ask would you attach much weight to attendance upon lectures, unless the fruits are vouched by some test?—I attach very little consequence to attendance at lectures unless the fruits were vouched for by some test. But I should propose that in all the lectures that were attended, you should seek for some test whether in the University extension or King's College, or any other, and that test in the University extension lectures, I propose to be the weekly paper work to an extent which satisfies the lecturer and the passing of the examination at the end of what they have been attending which satisfies the examiner.

12,305. The University examiner?—Yes.

12,306. So you would have two methods, would you not; either the appointment and taking the responsibility of the appointment of the lecturer, and his determination and verdict upon the result of his own examination or an independent examination over his head with reference to his teaching?—These two we depend upon—both.

12,307. You combine the two?—Yes, we combine the two. We require them both, and I think it would be well to require them both. I hardly think that King's College and University College professors would submit to both, but they would probably submit to the final examination by an external examiner.

12,308. Do you mean for the final degree examination?—No, for testing adequate attendance at their own classes.

12,309. Even the intermediate?—Yes.

12,310. And you think that would be desirable?—Yes, it is desirable I think.

12,311. But not essential?—Yes, I think it is essential. Wherever you ask that a course of lectures should be made an avenue to a degree, you should ascertain before it is permitted to be so that the person has profited by that course of lectures.

12,312. Would you not accept the certificate of a professor at recognised institutions of that kind for intermediate purposes, even intermediate examinations short of the final degree?—You might.

12,313. But mere attendance as such is of no value?—No, mere attendance as such is of no value.

J. Stuart, Esq., M.P., M.A., LL.D., and R. D. Roberts, Esq., M.A. Camb., D.Sc. Lond.

13 Oct. 1892.

The witness withdrew.

Adjourned until to-morrow morning at 11 o'clock.

Twenty-fifth Day.

Friday, 14th October, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir J. Lubbock, Bart, D.C.L., LL.D., M.P., F.R.S., R. J. Mure, Esq., M.A., and Mr. H. R. Jennings.
14 Oct. 1892.

Sir JOHN LUBBOCK, Bart., D.C.L., LL.D., M.P., F.R.S., REGINALD J. MURE, Esq., M.A., and Mr. H. R. JENNINGS, examined.

12,314. (*Chairman to Sir John Lubbock.*) You appear on behalf of the Working Men's College?—Yes, with Mr. Mure, the Vice-Principal, and Mr. Jennings as secretary.

12,315. Would you tell us shortly exactly what the nature of the Working Men's College is, and give us any information about it which you think may be useful to us?—The Working Men's College was founded in 1854 by the Rev. F. D. Maurice with the view of giving higher education to the working men of London, and of re-producing, as far as possible, the life of an Oxford or Cambridge College. With that view there was a common room established, and the teachers are not only good enough to give lessons, but they take a great deal of interest in the men themselves, and are very frequently down at the College, and have done their best to create a corporate life and a fellow feeling amongst those connected with the College. That was Mr. Maurice's idea, and those connected with it at present have done their best to carry on the principles upon which it was founded.

12,316. The work is almost entirely carried on in the evening, I think?—Yes, that is so.

12,317. What courses of lectures are there?—I will put in, if you will allow me, two reports of the Working Men's College, and also the programme which places it all on record. Would the Commission like me to read it out.

12,318. Is the attendance compulsory?—No, the attendance is voluntary. We have somewhat over 1,000 students.

12,319. What is generally the result at the end of the course? Do they get a certificate?—Yes, they get a certificate. We have been endeavouring to raise the standard, and to encourage them to go in for the examinations of the London University, but I cannot say that they have done that to any very great extent. One object we have in wishing to be connected with the University of London is to encourage our students to go in for the examinations of the University.

12,320. For the Matriculation Degree, I suppose, you mean—not, of course, for the Final Degree?—I am afraid very few would be able to carry their studies so far as that, but we should not altogether despair of some going in for the higher degrees also; of course it would be mainly for the Matriculation.

12,321. Any other information that we want or that the public may want as to the state of the College I suppose may be found in the papers which you put in?—I think you would really find all the information which the Commission would wish in the papers. If there is anything else upon which you would wish for any more information we should be happy to give it. We have been working for the education of the working men in London for 40 years, and we are naturally anxious to be included in any scheme for the general education of London. We should very much prefer to be associated with the existing University, both on account of the prestige of its degrees, and for other reasons.

12,322. Whatever University we should recommend you would wish to be associated with it?—Yes, we should.

12,323. Do you contemplate that it would be possible for your students to take a degree without any supplementary work afterwards? From what you have said about the London degrees that could hardly be your feeling?—I should think it would be very exceptional that they would go as far as the degree. I think many of them would go in for the Matriculation, and some would take the degree, but I am afraid that would not be a large number. Perhaps Mr. Jennings, our secretary, can tell you more about it. (*Mr. Jennings.*) I think it was rather our hope that we should so influence the feeling of the students, that we should systematise and organise our course so that it would be quite possible for some of the students at any rate to proceed to a degree. I am not quite sure how far the training which would be necessary for that would be carried on at our College, but we certainly thought that it might be possible so to systematise the education in London that what it was not possible for us personally to give we should obtain from other institutions. I think that is in the minds of the committee. We hoped in the first place from the very considerable impetus to the force that the College could exercise if we were included within a University, that the result would be a good one in that way, and whilst we could not hope for any very large number of our students to obtain any final degree of the University a very considerable number would be tempted to go on further than they go now, by the hope of so doing. Where we could not do it for ourselves we thought it might be possible so to ally ourselves with other institutions, that some of our advanced students could obtain those advantages at other places which we could not pretend to give them. Of course I am speaking now for an institution with which I have been myself connected for a very considerable number of years, and which I feel is unique in its way. Its properties are not very large. It certainly contains a large number of, on the whole, very poor people. I always regard it as containing the poorest class of real students in London. Of course we are very different from any other institution. Our education and training has been to a certain extent irregular, which is due to the fact that there has been a succession of teachers who have come there voluntarily. The great mass of teaching has come there voluntarily. That has brought a certain amount of irregularity into it, but on the other hand, we have had a very great amount of enthusiasm brought into it. I mean enthusiasm for teachieg. Especially the people who have come as unpaid teachers have necessarily had a very considerable amount of enthusiam for teaching, or they would not have been tempted to join us. That enthusiam has proved contagious, and the same sort of enthusiam has touched those who have been there whom we have paid. With regard to the students, I must say with reference to the mass of them, that the taking up of their different subjects has been very much a labour of love. They have had no definite idea of its having any particular influence

on their life in the world. I have one instance in my mind at the present moment of a man who has come there who is down in the book as a carpenter, but who is now a schoolmaster, and one who was a pupil teacher and who is now a barrister. Education has had a great effect upon them, even upon their ordinary lives, but it has not been intentional. They have not laid themselves out for it definitely at the beginning.

12,324. You say that you were in hopes that some of your advanced students could take advantage of some other institution and finish their preparation, and be able perhaps to take a degree?—Yes, I think so.

12,325. Would they be able to afford the leisure to give up the day-time as well as the evening to their study?—They would be able to give up part at any rate. I think as a matter of time and study, if a man feels it of importance to himself, and if he has enthusiasm enough while he is earning his living to work, he will make his best efforts in that direction.

12,326. I presume you would wish something of the kind that is wished by the University Extension Association. You would wish that the attendance at your lectures, and the work the students do with you, should count as part of the course, something in the same way that the University of Cambridge counts the attendance of the students at the University Extension lectures?—Yes.

12,327. I undertand that you wish to be affiliated as a college to any University which might be established?—Yes, so far as regards the higher part of our education.

12,328. But if you should not be prepared to send students up to take a degree, you would be in rather an anomalous position as a constituent College, would you not?—I think we might ally ourselves with other colleges for certain subjects and certain portions of subjects.

12,329. Then the education would have to be completed in some other institution before your students could present themselves for a degree?—In a sense the education would have to be completed in some other institution, but I think for certain subjects we might be allowed to ally ourselves with other colleges.

12,330. Then if we form a University with constituent colleges, you would wish to be one of them?—Yes.

12,331. In the same way that in the Gresham scheme, University College and King's College are affiliated?—Yes.

12,332. On the same footing?—I do not know whether we should claim to be on the same footing. I am not sufficiently acquainted with that. I think we might claim for our higher work that it is distinctly work of a University character. (*Sir John Lubbock.*) I think there are several of the other colleges in London which would probably send but a few students for the higher degrees of the University of London, several of them would look rather as a general rule to Matriculation, and the degrees would be exceptional.

12,333. (*To Mr. Jennings.*) What subjects do you give instruction in?—Almost every subject that is asked for.

12,334. Classics?—Yes.

12,335. Foreign languages?—Yes. We have four foreign languages—four modern languages—French, German, Italian, and Spanish.

12,336. Science?—Yes; science to a very considerable extent.

12,337. Including mathematics?—Yes. We make rather a special point of that in our programme. There is one special division as to mathematics. Some of our pupils go on very well with mathematics. The number is not large, but they have made considerable progress. The difficulty with regard to a good many of our students I am sure in going in for the Matriculation examination at London has been rather in the number of subjects than in the intrinsic difficulty of the examination. What we call our first stage examination in French is certainly more difficult than the Matriculation examination paper.

12,338. I think there is a general complaint about the examinations of the University of London, with regard to the number of subjects that have to be taken up in a very short time, and you feel that strongly, do you?—Yes. We should prefer a more stringent examination if the number of subjects might be lessened. (*Sir John Lubbock.*) I do not think we at all object to the difficulty, but, so far as we are concerned, the subjects are too numerous for the time allowed, and we would suggest that some of the subjects might be taken up one year and some another. That is to say, we are quite satisfied with the standard, and quite satisfied with the number of subjects, but our students not being able to give their day to it, but only the evening, have a difficulty in working up the number of subjects in the time. I have no doubt the view of the Working Men's College is that if they could be allowed to take up some of the subjects at one examination and complete them at another, they would be prepared to do so, even if the examination were made more difficult.

12,339. (*Chairman to Mr. Jennings.*) I presume you adapt your examinations to the examinations of the University of London?—I do not know that we have thought much about it of late years, but now there is an idea on the part of the Council that it shall all be supposed, at any rate, to lead up to the Matriculation examination.

12,340. Have you a fixed staff of teachers? Are they tolerably permanent?—Yes.

12,341. And they become tolerably well acquainted with the pupils?—Yes. I should say that in few places would the teachers know their pupils better.

12,342. And if you were affiliated to a University, would you wish that the teachers should have some amount of representation on the governing body?—That is a matter that might ultimately come, but the Council of the College have certainly expressed no special view with regard to it.

12,343. As far as I can make out, the close connexion between teachers and pupils which is thought by some to be so desirable, exists to an unusual degree with you?—I think so. (*Sir John Lubbock.*) In London, we feel that the educational institutions have been so independent and so dissociated from one another, that if they could be brought into greater co-operation, that would be an advantage, and, if that were so, we should wish to take our place amongst the educational institutions. If that were so, we should regret the establishment of a second University, because that would create another new institution; whereas in our idea, what is required is to bring the existing institutions into more harmonious co-operation.

12,344. (*To Mr. Jennings.*) As far as the degree of the old Universities is concerned, you would be content with one of the preliminary degrees, but you would wish to be able to take the higher?—Yes.

12,345. In order to take the higher, you think the students would have to take advantage of some other institution?—Yes, in many cases; but my idea was rather that we should have joint classes, for instance, because I apprehend that for a large number of the evening institutions—most of them, in fact—the number of persons who could proceed to the higher degrees would always be limited. (*Sir John Lubbock.*) We do not wish to give the impression that we should probably send up fewer than any other institution. The number in all cases probably would be few for the higher degrees. Probably the formation of an association of the institutions might result in a larger class, and that would be a most convenient way of giving the higher part of the education.

12,346. How many years do your pupils generally attend? What is your longest course? Is there anything answering to the systematic arrangements of the University Extension, where they have two courses in the year, get one certificate for that, and then for four consecutive years get a higher certificate?—(*Mr. Jennings.*) No, we have no arrangement of that kind. The time that a student will attend will vary very much. Our courses are laid out for different periods. It depends very much upon the subject. For instance, the course in earlier mathematics, treating with algebra, Euclid, and trigonometry is laid out for three years, and it is intended to be a tolerably complete course.

12,347. (*Mr. Rendall.*) Is registration from term to term or from session to session?—From term to term, but some of the pupils would be on the list for several years in succession.

Sir J. Lubbock, Bart., D.C.L., LL.D., M.P., F.R.S., R. J. Mure, Esq., M.A., and Mr. H. R. Jennings.

14 Oct. 1892.

12,348. (*Chairman.*) Is there anything further you wish to say as to the position you wish to fill with regard to the proposed new University?—No, I think not.

12,349. And no further information that you care to give or that we shall not find in the papers that you will hand in?—Nothing occurs to me at present further than you will find in the report.

12,350. (*Mr. Anstie to Mr. Jennings.*) You referred, as I understood you, to some alliance with other bodies. May I ask what bodies are in your mind?—The bodies that are specially in my mind at this moment are the Birkbeck Institution and the City of London College. I think that we might for certain classes—especially for the higher classes—ally ourselves with those bodies. We might in some cases in which there would be a very small class at either place ally ourselves with them for the express purpose of carrying on the class.

12,351. Then your view is that one institution would look after one subject and another institution would look after another?—They might arrange it in that way.

12,352. They might mutually make arrangements by which the members of one institution might attend the classes of the other?—Yes.

12,353. You did not mean an alliance with any other institution which would carry education to a higher level than that which you attain to?—Not necessarily. I was thinking that in point of fact what we should do would be to do those things in common which it was possibly out of our power to do individually. I was only thinking of those.

12,354. You are aware that the Birkbeck Institution and the City of London College now form part of the City Polytechnic?—Yes.

12,355. Would your view be merely an external alliance?—Yes, merely an external alliance for special subjects.

12,356. But that is not an alliance which would carry your work to any higher level than that to which you now attain?—It might be made so.

12,357. Was that the object you had in view?—That was the object we had in view.

12,358. Do you desire to introduce into this allied body, whatever it is, the higher branches of education, so as to bring it to the level of University College and King's College?—Yes.

12,359. Do you think that is a probability?—I do not consider that is an improbability. We have gone so far and gone so high that there is no reason why we should not go higher.

12,360. You have no funds, have you?—We have very little funds.

12,361. You have no apparatus of a scientific kind?—We have some, but it is not too complete.

12,362. And, I suppose, you have no great library accommodation?—I cannot call it a great library, but it is a good library as far as it goes.

12,363. In fact, speaking generally, I suppose neither you nor the institutions you refer to are very well provided with apparatus?—I am not quite sure how far the other places are provided. I am not quite sure how they would compare.

12,364. You do not produce evidence on that subject, do you?—I have no evidence to offer on the point at all.

12,365. (*Mr. Rendall.*) In the report for 1889 that you have submitted to us all the classes, so far as I observe, are in the evening. Is there any element of day work at all?—Only an occasional class on Saturday afternoon.

12,366. How far does the College adhere to its original name and object as the Working Men's College? Is it confined in any way to working men in the sense of artisans and those engaged in manual work?—Rather more than half the pupils are people engaged in manual work.

12,367. The other half would be engaged in commerce, clerks and others?—Yes; some few are teachers, and there are shop assistants to a considerable extent. If I might point it out, so far as new students are concerned they are very carefully tabulated in this report.

12,368. I see it gives the per-centage of the different students, clerks, shop assistants, and so on. Are any lady students admissible?—None have been until recently. Recently we have had an alliance with a still smaller institution in Queen Square, under which lady students are admitted.

12,369. Apart from the love of knowledge and general intellectual interest, what would you regard as the main inducement that brings students to your classes? Is it in many cases directly commercial?—In very few cases it is directly commercial. Of course it is so sometimes.

12,370. For studying such a subject as Latin, to take an extreme instance, to what do you attribute their coming to the institution?—I should say in that case they have a fancy for some kind of science, and then finding themselves at sea with regard to the terminology they come to study Latin.

12,371. There would be law clerks who would wish professionally to have some knowledge?—There might be a good deal of that, but a very large proportion of them would be people of all sorts whose attention has been drawn to Latin from the terminology of some science.

12,372. I want to know broadly what advantages you look forward to from the establishment of a University connexion?—I should look forward to a very considerable advantage in the fact that it would help us still further to organise our classes. We should be still further enabled to get people to go in for a definite course of instruction instead of simply taking up some particular subject that interested them, and leaving all others out of sight. Our idea of an educated man is that he should be a many-sided man. Our men on the contrary, thanks to the small amount of time at their disposal, are to a certain extent one-sided men. I have a man in my mind at the present moment who is really a very good mathematician, but whose English is very indifferent indeed. That is the sort of man that we want to improve. We can exercise no definite control over the pupils, but we want to impress upon them the advantage of being more or less all-round men.

12,373. Why do you think connexion with a University will directly tend to that? Do you think the direction of studies will be taken over by the University, and that the present governing body will be superseded?—No, I do not think it will be superseded. I think some extra force will be given from the mere fact of their being associated with a University. A University has so much higher tone.

12,374. What form of association do you think of? The forms of association with such a University can be so various. There may be association with the University by means of certain representatives of the University being placed upon the governing body; or there may be some explicit form of affiliation of the College to the University; or there may be complete incorporation in the University by which the whole direction of studies and the determination of curricula shall be taken over either by the central body of the University, or by some particular committee or organ appointed *ad hoc* by the University. Which form of connexion do you think would be most advisable, and best further the work?—I think to a certain extent the latter. I think it might well be the work of the University to advise and insist upon a certain curriculum.

12,375. By appointing a special organ, deputed to undertake the work by the governing body of the University?—That I am not prepared to say.

12,376. Do you think a body in which the professorial element was very largely represented, and which was concerned with the direction of University studies in arts, science, law and medicine, would be the most qualified sympathetically to direct this somewhat different stamp of evening classes?—I can hardly say. I do not see why the fact of the education being carried on in the evening should render the conditions different from its being carried on in the daytime.

12,377. The work of the professors, and their sympathies, are necessarily more in the severely University channels than in the work which is preparatory to the University degree with regard to which you speak. You say that few of your students can hope to enter for University degrees. Will you get as free and unrestricted facilities from University bodies as from some freer body?—I cannot say, I have no experience to guide me on the point. All I can say is that our own Council has always been very free and liberal in its sense of the organisation necessary, and

it has been composed to a considerable extent of University men, some of them of very good standing.

12,378. Quite so, but that is rather a reason against than for the supersession?—Yes, it is that. My view was that I should not expect any body of University stamp to be particularly unsympathetic.

12,379. You have secured on your governing body at present all those whose natural sympathies have drawn them to that work?—I cannot say that we have secured all. I hope not.

12,380. Then you have no particular suggestion to make as to the form of University organisation that would be most appropriate to help forward and not to stifle the work?—No, I have no particular suggestion to make.

12,381. There was one remark which was made quite incidentally about the permanence and continuity of the teaching and teaching body. In the memorial presented to us it says: "The teaching is to a considerable extent given voluntarily by Oxford and Cambridge graduates, and directed to subjects that would form part of a University course. Some teaching also is given by former students of the College itself, but the classes in modern languages and a few other subjects are conducted by paid professional teachers." Do you wish at all to modify that or to qualify it? I thought your remarks implied that there was a larger element of permanent paid and continuous teachers than that statement gives?—"Permanent" in my mind did not necessarily connote paid. We have teachers who have been teaching for years.

12,382. Graduates give their services as teachers voluntarily, do they?—Yes, for a long time.

12,383. I thought they perhaps usually took it for a short term?—Teaching is a particularly attractive occupation to some men. We have some who have been teaching for a considerable time.

12,384. Then you only wish to corroborate, and not in any way to qualify, that statement?—No; I do not wish to qualify it.

12,385. (*Professor Sidgwick.*) You are aware, of course, that this Commission is appointed to consider modifications in the Charter of the Gresham University? Therefore, supposing the result of the deliberations of the Commission is to recommend a modified Charter for the Gresham University, and their recommendation is adopted, we shall have in London a University in the ordinary sense of the term which will be called the Gresham University, and the existing examining board, which is called the University of London. Supposing that to be the case, with which of these institutions, the University in the ordinary sense, the Gresham University, or the existing examining board, would you prefer to enter into alliance? Which do you think would be most adapted to your needs?—I think my Council would care most to be included in the Gresham University.

12,386. Then, as I understand from your answer to Mr. Rendall, you conceive that the advantage that you would derive would be in a greater force to induce the students to go through a systematic course of study?—I think that is so.

12,387. And it would be derived rather, if I may say so, from the superior prestige of the University?—To a great extent.

12,388. That is the great advantage?—That is one of the great advantages.

12,389. But, of course, it would be quite possible for the co-operation of which you speak to be effected voluntarily? It is not at first sight, perhaps, clear why the intervention of the University is required to enable you to combine with the City of London College, or with any other institution. It might be done voluntarily?—All these things, I take it, might be done voluntarily, but they are very often done much more effectually when there is some directing body.

12,390. I was going to ask what in your view is the obstacle to its being done voluntarily. If this co-ordination is desired, what is the object that has prevented its being carried into effect before? I ask this, so that we may see exactly how the University would be able to overcome that obstacle?—I do not see any answer to that question. The only answer that occurs to me depends upon this. I can only explain the answer that occurs to me by an illustration. A man's culture may go on quite independently of other people, but it is likely to be carried on very much better for the individual in a University or a college than if he simply goes on alone.

12,391. What I rather meant was that if this co-ordination has not taken place, it has been, I suppose, because there is not a majority of the governing members of the different institutions in favour of it. Therefore, I should rather have inferred from that that if the University, either the Gresham University or the existing London University took the work in hand, it would have to coerce a reluctant majority, otherwise the work would have been taken in hand before?—I do not think it is a reluctant majority. The majority in a very large number of cases now is not so much reluctant as somewhat indifferent. The work of a college, like the work of the world, gets directed really by comparatively few people.

12,392. Do you not think there would be a danger that this intervention of the University might possibly be prejudicial, as it might be carried into effect by eminent persons who have not had previously very much experience of the kind of work that is carried on at your institution?—I should not anticipate any danger. The more eminent the people were who were concerned the more modest they would be, and the more they would take care to see what had already been done before interfering.

12,393. You also attach importance to the modification of the examinations?—Yes.

12,394. Do you think that that is a fundamental point, or do you think the co-ordination would be beneficial to the University apart from any modification?—The modification I was thinking of was in regard to the Matriculation examination. I think in that case, the difficulty with regard to our students is not that they are not prepared to go as far, but that they must take a very much longer time over it; they must necessarily, from the mere fact of their being occupied so much of their time by their duties. There is a very considerable difference of opinion I know upon the Council on this point, and, therefore, I am speaking rather more for myself than for the Council. A large number of students might pass some of the subjects of the London examination now, but they would not be prepared to pass in all the subjects.

12,395. Then may I ask again why some effort has not been made to get this change made in the examinations of the existing University of London?—I do not know that there is any special reason why the change should not have been made, but I think a great deal has been due to the interest that has been excited by the mere talk about the Gresham University—about the necessity for a teaching University in London. That in itself has had a very considerable effect upon those who are engaged in evening tuition, and tuition generally.

12,396. It seemed to me that apart from the institution of the Gresham University, or any new University, it is perfectly open to your institution, and has been for a good many years, to approach the University of London, and to ask for this co-ordination. Is the reason that you have not done that at all that you did not think the University of London would grant it? If so why should you suppose that when the change has been made it would grant it any more than it would before?—I do not know why.

12,397. No appeal has been made?—No appeal has been made. I think the answer to that is contained in the answer to the previous question, that there has been very much greater interest excited, and people have been thinking about it much more than they did before.

12,398. (*Professor Ramsay.*) I suppose you are aware of the work that has been done by the University Extension Association?—Yes.

12,399. And I suppose more or less what you would claim is to be put on the same sort of footing as that on which they ask to be put?—Yes.

12,400. That is to say, if it were a question of University degrees, whatever modifications may be made in the present arrangements, you have no desire that the standard should be lowered for the sake of your students?—No, certainly not. We might ask for modifications, or we might without asking think modification desirable.

Sir J. Lubbock, Bart., D.C.L., LL.D., M.P., F.R.S., R. J. Mure, Esq., M.A., and Mr. H. R. Jennings.

14 Oct. 1892.

12,401. You do not want to be treated on an exceptional footing?—Not in the slightest degree.

12,402. One part of the University extension proposal is that attendance upon University extension lectures should be reckoned upon some system of equivalents as equivalent to some portion of residence. Is that what you aim at?—Yes.

12,403. The proposal is that a certain amount of work at your evening colleges, which amount will be decided by the authorities of the Universities, shall be held to be equivalent to a certain amount of residence in the colleges where the students devote their whole time to education. That would of course imply a much longer course of study in your colleges than in the residential colleges?—Yes.

12,404. Could you formulate the amount of attendance in your college which would be equivalent to say one year's attendance according to a strict University system?—I could not say that I could do it at once, but it would be quite possible to do it.

12,405. And all that you would ask would be that the amount of attendance exacted from your students should be held by competent authorities to be the educational equivalent of the residence, and corresponding examinations that the other students go through?—Yes.

12,406. Your proposal consists of two heads. Only a small portion of your students would contemplate going forward to take a degree?—It is only a portion of our students that we should consider as being University students in any way whatever.

12,407. But you would like that a body having the sanction and prestige of a University should conduct certain courses of instruction of a more general and popular character, which being carried out by the University and by University teachers would have a higher standing than courses of education carried on by a body such as your college now is?—May I ask in what sense you use the word "popular"?

12,408. For instance, such work as Oxford and Cambridge test by their local examinations?—I only want to know in what sense you use the word "popular." If by "popular" you connote any suggestion of lowering, then we certainly do not want it to be popular. If by "popular" I am simply to understand that it may be improved without lowering the amount of education comprised in it, and that it is simply to be so arranged as to provide for our students, I quite agree.

12,409. I mean courses not connected with a degree, but something inferior. You would wish the University to organise courses of instruction, not high enough or wide enough to qualify for a degree, but leading to some form of University certificate which you would regard as being of value?—Yes, I think we should regard a University certificate as being of value, but I should desire certainly that the courses if not sufficient in themselves to qualify for an examination for a degree, at any rate should be leading up to it.

12,410. But I understand you have a large body of students who never under any circumstances would think of a degree?—That is so.

12,411. Then with a view to them you would like to see organised some system of examination and certificates which would have a value as coming from the University, though not professing to be sufficient for a degree?—Yes.

12,412. The advantage that you would gain from connexion with the University would be that the course of study would be arranged, and the certificates given by a University body of acknowledged position in the country?—That would be one advantage.

12,413. You have no desire to send representatives to the governing body of any such University? You make no claim of that sort?—We make no claim, certainly.

12,414. Would you desire your teachers to be appointed or approved by the University?—I think that for the classes which we regard as belonging to the University curriculum we should desire them to be approved.

12,415. And you would say the same, I suppose, with regard to courses of study leading up to a mere certificate?—Yes.

12,416. You would think it an advantage to be able to say that your teachers were either approved or recognised by the University of London?—It is a question I am hardly prepared to answer.

12,417. Is that one of the reasons why you desire connexion with the University?—Mr. Mure, I think, could answer that question better. (*Mr. Mure.*) That is one of the points we put forward, approval of the teachers in the curriculum that would lead up to a degree. Some of our classes do not in any way lead up to a Matriculation examination or a University degree. They would be outside the curriculum, and the teachers would be left as heretofore. We should not propose to submit their names to the University authorities, but within the limits of the curriculum we should wish for the approval of the University.

12,418. With regard to subjects outside the curriculum, you would not think it desirable that the University should take cognisance of them?—They would go on as heretofore. Vocal music, for instance.

12,419. And with regard to those you would not expect a University certificate?—Probably not.

12,420. Then you would be quite ready to adopt this principle, that with regard to any course of study for which a University certificate was granted, the University should have something to say in the nomination or appointment of the teachers by whom such course was conducted?—Yes.

12,421. (*Sir George Humphry.*) From what I have understood it is not the desire of the college that the University should take upon itself the work which the college is doing. The college wishes to retain its autonomy, and its independence, and as far as the University is concerned it wants to have simply approval and recognition?—I think so. I think the internal details are better managed by a committee there.

12,422. It is better with regard to your institution and others of a like nature that they should retain their independence?—Subject——

12,423. Subject to University approval, recognition, and so on?—That is so.

12,424. You merely wish for that. You do not wish the University to step in and do everything. Do you wish the University to appoint teachers?—I think approval would be sufficient. I do not think the University should appoint the executive committee, for instance. I think the autonomy should be retained.

12,425. (*Mr. Anstie.*) May I ask whether you would agree with the view that has been laid before us, that it would be desirable to favour what has been described as an alliance between the Working Men's College and other bodies, by means of which common instruction might be available for various institutions?—I think that would be a good thing. We have lately started a sort of alliance with the Birkbeck Institution. We each put a member on the Council or the educational committee of the other institution, and we are beginning to try and work in one with the other. That would be done better if we had a common superior in the shape of a Board appointed by the University.

12,426. Would it meet your view that in the studies in relation to the University there should be a class, officered by a teacher common to these various institutions, and that the teacher of that course should be under the sanction or approval of the University?—I think so. It is waste of power to double the staff completely at two institutions, or to treble it at three institutions.

12,427. Would you favour the establishment of a course of classes officered and conducted under the direction of the University, and which might be common to various institutions which are of sufficiently near to make the attendance available to the students?—I think so.

12,428. Rather than have the separate bodies dealt with as such?—I think so. I think it would be an economy of power to put it as you have put it.

12,429. (*Chairman to Mr. Mure.*) Do you wish to say anything that has not been said by the other witnesses?—I think our council is not quite represented correctly in saying that they would prefer necessarily that the board of supervision should be appointed by a new University altogether. If the London University gave their institution what they want, I do not suppose they have any predilection in favour of creating a second University. (*Mr. Jennings.*) I should be sorry if my answer gave that impression. The answer was

given to a question as to which we should prefer. Assuming that there were two Universities, if the present London University is prepared to modify its position so far as to take over the position of a teaching University, as far as I understand the feeling of our council it is that it would certainly prefer that course instead of instituting another University.

12,430. (*To Mr. Mure.*) You would prefer the London University ?—Yes, I would.

12,431. (*Professor Sidgwick.*) I think I asked the question with regard to which the remark was made, and, therefore, I may be allowed to put it again to you. As this Commission is appointed to consider the Gresham scheme, we may assume that there will be a teaching University in London, and it is at least not improbable that the existing examining board, which is called the University of London, will go on exercising the functions which it now exercises after the institution of the new University, supposing that state of things results, with which of those institutions do you think it is desirable that this alliance should be made ?—It is a little hypothetical, because it is difficult to weigh the standing and prestige of the two Universities one against the other. The London University is an existing one, and I should be inclined to lean towards that if they gave the institutions what they want and what they ask for.

12,432. But the new one would be a University in the ordinary sense of the term, and the other would continue to be as it now is, an examining board which has the name of a University, but has no other of the characteristics of a University in the ordinary sense of the term. This was what my question was designed to lead up to. I do not quite know how far you consider that the existing examining body would supply all your needs, or whether it would be with the teaching University that you would prefer to ally yourselves ?—If the London University were willing to supply our needs and appoint this board of supervision, I could see no reason for wishing to be connected with the second body.

12,433. Then the question comes, if that is so in your opinion, why has not that effort been made before to induce the London University to undertake this function ?—Four or five years ago the whole question was rather dormant. It began to wake up when the question of distributing the City Parochial Fund came forward. It is only within three or four years that these matters have been discussed with interest and eagerness; and the question of combining one with another among the evening institutions is a new one. There was very little of that, or hardly anything, four or five years ago. It is merely from negligence, or inertia, I think, that the evening bodies have not combined and presented their claims to the London University, and asked the London University to undertake this work.

12,434. If you are quite able to obtain now from the institution, which you say you would prefer, the supervision and the modification of the examinations which you desire, why should you wait ? Why not try to obtain them ?—We are not quite sure that the existing London University without any modification, being a purely examining body, would undertake all that we are asking for.

12,435. (*Mr. Anstie.*) I do not know whether it might enter into your mind to suppose that the London University, whilst this Commission is sitting and deliberating, and until it has made a report, would probably be unwilling to undertake the responsibility of initiating a new movement ?—Possibly that is so.

12,436. It might occur to you that this would not be a very suitable time to begin with anything new ?—I do not think this would be a good time.

12,437. (*Professor Ramsay.*) I should like to put the question that Professor Sidgwick put to you in rather a different form. Assuming that the present University of London is not a University at all, but an examining body, or an examining board, and assuming further—which I suppose is the foundation of our deliberations—that there is to be founded in London a University in the proper sense of the word, which shall carry on teaching, and test teaching, the question I would put to you is this. Would you prefer to see the existing London University assuming this second function of teaching, so as to have in London one University only, combining the functions of an examining body and a teaching University; or would you prefer to see the line of demarcation clearly cut between those two functions, leaving the University of London in exactly the same position as it is now, and establishing outside and independently of it altogether a teaching University in the proper sense of the term ?—Speaking independently, I should very much prefer to see the London University step forward and take up these two functions. Of course, it would have to fundamentally modify its constitution. That is my individual opinion.

12,438. (*Chairman.*) Is it the opinion, do you think, of your council ?—I should think it was on the whole.

12,439. Have you any connexion with the London University yourself personally ?—No.

12,440. You speak as a member of the Council of the Working Men's College ?—Yes. I am not prepared to speak for the whole of them. I do not think we have divided on that subject.

12,441. (*Professor Ramsay.*) You would see nothing undesirable or inconsistent in the London University enlarging its functions so as to include all that is required ?—Nothing at all.

12,442. (*Professor Sanderson.*) I should like to ask Sir John Lubbock and the other witnesses a general question as to their view with regard to the scheme which it is our function to submit to Her Majesty for an efficient University. Will Sir John Lubbock state his general view on that point ? If he had rather not answer I will not put the question as it does not relate to the Working Men's College. We are all agreed in thinking that our scheme must in the first place co-ordinate all the existing teaching institutions in London, but we also feel that there is another object that we have in view, that is to say, that there is a higher function of a University, viz., that it should provide an opportunity to all students of pursuing every branch of science and literature to the uttermost. The question is whether by merely combining the existing institutions that end will be answered, or whether it will not also be necessary to provide by other means, agencies which do not at present exist, in addition to any agencies for teaching which do exist now ?—(*Sir John Lubbock.*) I only heard yesterday that I was to have the honour of appearing before the Commission, and, therefore, I have not had time to formulate my views so much as I should really wish to do, and I should prefer not to answer Professor Sanderson's question without further consideration. If the Commission do me the honour of wishing to hear my views I should be happy to come again, but I certainly think that co-ordinating the existing institutions is a very great good, and would be a great advantage for London. Whether something beyond that might not be done is another question that I should like to think about further before answering. I have not liked to answer questions that were not addressed to me, but there were several answers given by Mr. Jenning's evidence with which I do not entirely concur. In the first place with reference to the question of the wishes of the Working Men's College to be represented on the governing body of any University that there may be in London, I believe that the view of the council would have been that we should wish to be represented. But the reason why I have never brought it before the Council of the Working Men's College was that as long as the Senate of the University are appointed partly by the Crown and partly by Convocation it would be perfectly useless for us to have asked to be represented. If other bodies are going to be represented we should wish to have our fair share of representation, and the whole of the circumstances would be altered. That at any rate is the reason why I have never moved in the Council of the Working Men's College, as it would have been perfectly useless for us alone to have done so. With reference to interference or assistance which the University of London might give to the Working Men's College I think the view of the council would be that if we were in some way represented, not perhaps directly, but by Boards of Studies or in some other way so that we really were a part of the University, we should be very glad indeed to be guided by the University of London. But as long as we are a totally independent body, and have no representation at all inside the University the state of things is entirely different. Then also I did not quite agree with Mr. Jennings as to the proportion of our students who might go in for the University examination. I think he said a small proportion. If he was speaking of the higher degrees that would be the case with us as with other institutions in London. But I hope that a proportion of our upper division might go in for the

Sir J. Lubbock, Bart., D.C.L., LL.D., M.P., F.R.S., R. J. Mure, Esq., M.A., and Mr. H. R. Jennings.

14 Oct. 1892.

Matriculation examination of the University of London, particularly if any modification were made as to their not having to take up the whole of the subjects at once. If a question had been put to me in which the Gresham University was called a teaching University, and contrasted with the present University of London, which was styled a mere examining board, I should have ventured to demur to the form of the question, because if the proposed University of London is to be composed of existing Colleges, but the Senate is only to determine what teaching is to be done in those colleges, I should say that was an examining body just in the sense that as the University of London is an examining University. I should have ventured to demur to that description as hardly applying to that University in its present form.

12,443. (*Chairman.*) The teaching body would have a very great weight upon the council, and there are Faculties and Boards of Study through which they might give an opinion. They would have more weight in determining the curricula of the examinations, and bringing the examinations into harmony with the teaching than they have now?—I merely did not like to sit here as a witness and hear a description applied to the University of London which I could not myself recognise as correct. I should like to point out that although it is quite true that we have no formal Boards of Studies, still any representation that comes to us from our examiners is always most carefully considered by the Senate, so that though we have no formal Boards of Studies, yet we have the advantage of considering the views of those engaged in the examinations.

12,444. I understand that you do not want to go deeply into the question as to which University you would like, but I will ask you one question. Supposing the University of London has to be taken as the starting point and made to perform the duties of a teaching University, it would require very great modification and very great alteration, both in its Senate and in various other ways before it could fufil the purposes. It would have to be almost entirely re-modelled, would it not?—It would. At present the Senate is nominated partly by the Crown and partly by Convocation. Our view would be that it would be desirable that the teaching institutions of London should be co-ordinated with the University, and that would be by giving some representation on the governing body of the University. Of course that would be a very important modification indeed.

12,445. You would have Faculties and Boards of Study, and things which you have not got now. I suppose very much the scheme which the Senate recommended to Convocation, and which Convocation rejected?—There are various modes in which that might be done, and at the Working Men's College we have hardly considered that it was any part of our function to devise a scheme for the University of London. What we particularly wish to bring before the Commission is that, if the teaching institutions of London are co-ordinated, we should wish to fall into our proper place as one of the older teaching institutions of London, and to take a part in the University. And as one of the evils has been the multiplicity of separate institutions in London, we should prefer to have one strong University of which we might form a part rather than have a second one.

12,446. (*Professor Sidgwick.*) I should like to understand clearly how far the kind of intervention which the institutions desire would properly come within the functions of the University of London as at present constituted. Of course it is clear that the examining University, not to use any term which will be disputed, naturally and inevitably prescribes a course of study in the sense that it prescribes what subjects should be prepared for examination. But I shall interpret Clause A. on page 2, as further asking that the University should not merely give a schedule of examinations, but some prescription of the order in which the subjects ought to be taken. I should like to ask Sir John Lubbock how far that interpretation is right. I feel that it is not quite clear what is meant by Clause "A." You say that such a scheme should in particular embody the following points. How far does prescribing a course of study mean more than would be done by the students who would be examined in such subjects. Do you mean only that, or do you mean more that?—I do not think we mean more than is already done by the University of London. What we meant there, was that if we formed a more integral part of the University, we should follow more the course prescribed by the Senate than we do at the present time.

12,447. Then I am right in concluding that the kind of intervention which is desired, or at any rate the most important part of it, would naturally and properly be carried into effect by a merely examining University; that the existing University could undertake to prescribe a certain course of study, and require it to be adopted?—(*Mr. Mure.*) Subject to Sir John Lubbock's agreement we might go one step further, and submit not only the names of the teachers, but the syllabus. No doubt the examinations have exercised a certain amount of influence. We have just revised our syllabus taking it almost entirely from the requirements of the London University. But I think we might go that one step further and submit the names of the teachers and the syllabus to the Board of Supervision.

12,448. (*Mr. Anstie.*) I do not know whether Professor Sidgwick has noticed this further paper from the Working Men's College which is marked "Addendum." The development of the point that Professor Sidgwick was referring to is contained on the third page, and it runs as follows: "It would, "perhaps, be premature to attempt to bring forward "an elaborated scheme, but we submit as a basis: "(1.) That evening colleges in London should be entitled, on satisfying prescribed tests and requirements, to obtain official connexion with the University. (2.) That the functions of the University with regard to the connected colleges should be exercised "by a Board, which should be appointed for that purpose by the governing body of the University, but "on which the colleges should have some right of representation. (3.) That (taking this College for "example) certain courses, in two or three subjects, "leading to degrees, should be marked out in the "college scheme of study in accordance with detailed "syllabuses to be issued by the University. (4.) "That the teachers of classes comprised in these "courses might be appointed subject to the approval "of the University Board; and that the work done "should be tested by periodical examinations in the "college, conducted by examiners approved by the "Board, and not teaching in the class examined"?—(*Mr. Mure.*) These are suggestions emanating from the Working Men's College alone.

12,449. (*Professor Ramsay to Sir John Lubbock.*) Might I ask a question or two from the point of view of the University of London?—I had rather be excused, if I might. I am coming here for the Working Men's College alone, and I have no authority to speak for the University of London.

12,450. (*Chairman.*) You are not prepared to go into it?—No; if the Commission wish me to give evidence of that kind I should like to have an opportunity of preparing myself.

12,451. If the Commission wish to hear you upon the question of one University or two, you would like to have a little time to prepare yourself?—Yes.

12,452. Then we will not ask you any question about it to-day, and it is for future consideration whether we shall require to hear you. Have you anything further to say with regard to the Working Men's College?—(*Mr. Jennings.*) May I venture to set right a possible misapprehension with regard to what I said as to the number of students. Sir John Lubbock, at any rate, misunderstood me, and, therefore, probably the members of the Commission would. I was quite under the impression that a very small number of our students would attain the higher standards of the University, but certainly there would be considerable number who could go in for Matriculation. (*Mr. Mure.*) May I endorse what Sir John Lubbock said about representation; I was not present at the beginning of the secretary's evidence, and I think this addendum to the memorial perhaps escaped the notice of the Commission until Mr. Anstie brought it forward. It is a point of importance, and even if the Working Men's College individually could not be represented, the evening institutions qualified to be on the list of the University might send up a number of representatives to the governing body; or at any rate as a second alternative, representatives on the Board which might overlook the evening institutions; and also that the

machinery by which the connexion with the University would be worked, might be by a special Board, whose function it would be to supervise the evening institutions, because they have many circumstances not altogether in common with other institutions. There are special circumstances that have to be considered.

12,453. (*Mr. Anstie.*) How far would it meet your view upon that point if the Senate of the future were to constitute a special board, and on that board nominate the heads or representatives of the more important institutions?—That is the alternative I suggest. Supposing there were objections to allowing evening institutions to nominate members of the Governing Body of the University, I should suggest that persons nominated by their councils should have the right of sitting on the Board of Supervision.

12,454. You have a little altered the form in which I put it. I want to know whether you would be willing to leave to the Governing Body of the future University the nomination of such persons as were from time to time thought suitable to be members of the board which was responsible for that branch of work?—Making it imperative on them——

12,455. Making it imperative on them to have a board of that kind, and on that board to nominate whom they should see fit?—My idea would be that there should be a schedule of institutions sufficiently qualified to be connected with the University, and to have a right of representation on the Board. A name could be struck out if an institution decayed.

Sir J. Lubbock, Bart., D.C.L., LL.D., M.P., F.R.S., R. J. Mure, Esq., M.A., and Mr. H. R. Jennings.

14 Oct. 1892.

12,456. It might be easy to draw up a schedule of places capable of giving higher education, but would not there be a difficulty in drawing up a schedule of institutions which in their nature are more transitory and variable?—There must be some power of removing names from the list, and of adding names, of course.

12,457. Would you not be willing to leave that power in an almost unlimited sense to the Senate?—Yes. I think the Senate would be the proper body to exercise that power.

12,458. (*Sir Geo. Humphry to Sir John Lubbock.*) You think the Working Men's College and other institutions of a similar kind should retain their autonomy, and should not be expected or desired to fade out. You think they should retain their autonomy under the supervision of the University?—Quite so.

12,459. Not that the University should take upon itself to institute teaching of that kind?—No. I think that would tend to weaken the energy which is now thrown into these institutions.

12,460. They are important bodies doing great work and they should not be too much interfered with?—Quite so.

The witnesses withdrew.

ROBERT DAVIES ROBERTS, Esq., M.A., D.Sc., further examined.

R. D. Roberts, Esq., M.A., D.Sc.

12,461. (*Chairman.*) You were present during Professor Stuart's evidence yesterday; you heard everything that he said, and you expressed some wish to supplement his evidence, and to give some views of your own, which may, perhaps, be different from some parts of Professor Stuart's evidence. We shall be glad to hear what points you wish to take?—I am extremely obliged to you, my Lord, and to the members of the Commission for permitting me to come here to-day. I think there are certain aspects of the question which were not very definitely brought out in Professor Stuart's examination and cross-examination yesterday, but which, I think, it would be of advantage to the Commission to have before them. In the first place, I am extremely anxious on behalf of the Council to make quite clear what the position of the London Society for the Extension of University Teaching is in this matter. They have never either before the first Commission or in any public statement asked, nor do they before this Commission ask, for anything for the London Society as such. The position of the Society is very different from that of any other institution which will appear or which has appeared before this Commission. It is a voluntary organisation doing a pioneering work established in London merely because there was no teaching University in London at the time to make the experiment which it was desirable to make, and therefore working under considerable difficulties; and they regard the results at which they have arrived as results of great importance in view of the settlement of this important question of University reform in London. The Commission will understand that in the case of Oxford and Cambridge the University extension work is carried on by the University through a delegacy at Oxford and a syndicate at Cambridge. But in London, owing to the fact that there was no such agency, it has been carried on by this association. The Council have always regarded their position therefore as a temporary one. They have always looked to the establishment eventually of a teaching University in London which would do for the work in London what the old Universities of Oxford and Cambridge do for the work in the country; and it is in that sense that they say they are prepared to entirely give up the work and pass out of existence as soon as a University is established, which will carry on the work efficiently and in a large and broad way. I should like to remind the Commission of the answer which Lord Ripon, who was the acting Chairman of the Council, gave to a question put by Mr. Welldon at the last Royal Commission:—The question was, "If I understand rightly, my Lord, the work that is now done "by the University Extension Scheme would be included in the work of the new teaching University?" And the answer was: "Nothing would give us greater "satisfaction than to hand over the whole of our work "to a teaching University for London if it would be "good enough to undertake it, to be done as widely "and broadly (more widely and broadly if possible), and it seems to me that that must be the "inevitable end of the work we are now doing." and it is only on that understanding and provided there is security that the University is prepared to develop and carry on this great work that the London Society would feel that it would be right for it to abandon that work. It is in that sense—and I am anxious to make that point clear—that they say to the Commission that they desire to hand over the work to the new University. They believe that the principles which are embodied in the University extension movement are of the utmost importance towards the solution of the problems that lie before this Commission. They believe that it is only by means of these principles that it will be possible efficiently and satisfactorily to co-ordinate the various institutions of the most diverse educational rank which are doing higher educational work in London, and, also to meet the growing educational needs of adults—men and women—who are by their attendance at the extension lectures already established and in other ways, indicating that there is a real demand for teaching of the University stamp to meet the needs of busy men and women. The principles which we take to be the essential principles of University extension are these: in the first place there is a special method of teaching; there is not only a weekly lecture but the tutorial class following it, the regular paper work by the students for the lecturer, and the final test of examination. We contend that that method is more efficient than the ordinary college lecture. We hope that the Commission will take the view that these principles embodied in University extension have a much wider bearing than merely upon the case of evening students. Speaking from my own experience as an old college lecturer at Cambridge and also as a University extension lecturer I can say without hesitation that I always felt it a more difficult matter to prepare my University extension lecture than my College lectures, for this reason: in the College lectures the lecturer has before him a number of students who are coming there with the view of preparing for examination. His object is to furnish them with such information as will enable them to pass the examination. Whether the lecturer is interesting or not he knows the students will come because they want the information which he is prepared to give them. Often the lecturer will go without preparation into his lecture room and pour out the information which he wants to give. The University extension lecturer cannot do that. He is bound to set forth the larger aspects of the question; to put the principles and illustrate the methods of investigation and not merely to state results; and having prepared his lecture with

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

great care so as to pack into it as much as can be included in an hour's work intelligently and interestingly he then has his tutorial class to drive all this home. At that class he has before him a number of earnest students whose object is to master the subject, who are never tempted to ask, "Will this pay in the examination," because the final examination is held upon the work done by the lecturer as set forth in the syllabus. So that neither the lecturer nor the student is under any temptation to scamp the work in order to meet the requirements of a schedule set down by an outside body. The result is that the lecturer is often able to introduce side points that further illustrate the main subject of his lecture. He is able to spend more time in explaining the methods of work to students, and by the paper work he receives and the questions put in the class he is able from week to week to see how the students are succeeding in getting a grip of the subject. The student finally goes in for the final examination without any necessity for cramming in the least. If he has done his work satisfactorily and the lecturer has certified that he is entitled to enter for the examination, he passes without difficulty. It makes a teaching system of peculiar efficiency, and it is upon that that we lay very great stress. We believe these principles of teaching adopted in ordinary college lectures would prove very useful in securing better educational results. I have frequently myself heard from students the strongest testimony as to the progress which they were able to make under this system, and which they felt they would never have been able to make without it. I might mention one example. A course of lectures on electricity was given in one of the towns in the north when I was connected with Cambridge. It was a difficult course—so difficult a course that the examiner spoke of the syllabus as conveying the idea that it was a preparation for the tripos at Cambridge. Some of the students who were attending that course informed me that they would never have been able to follow the work from week to week and make progress if it had not been for the class, where they had an opportunity of discussing with the lecturer the different points that were raised and putting questions to him. The results were very satisfactory. I have here a great pile of statements by examiners and lecturers of the excellent work that was done for them, and I will give the Commission as little or as much as they like from it. I might, for example, quote one or two. Here is a report on an examination at the end of a University extension course in psychology last year. The examiner was a distinguished member of the moral science department at Cambridge, Mr. Stout, himself a college lecturer. This is what he said: "Considering the extreme difficulty of the subject, I regard the work sent in as, on the whole, very satisfactory, and as doing credit to the students. Some of the answers come up to the standard required for a fair second class in the Moral Science Tripos. One or two are remarkably good, showing unmistakable power of psychological analysis. The results obtained have convinced me that it is possible to treat psychology effectively by means of extension lectures, a point which I had previously doubted." Dr. Verrall, who has frequently examined courses, in a statement which he has made upon the work says: "Many of the extension students show abilities which would enable them easily to take degrees (some of them probably honour degrees) in the Universities." Dr. Walter Leaf, who lectured says: "I have no doubt, however, that so far as the best of my students were concerned, they were much superior to the average pass-man both in intelligence and application, and that the educational value of the course was at least as much as the pass-man would have likely to gain from corresponding attendance at a course of college lectures." Dr. Walter Leaf was a lecturer, and therefore his testimony is from the point of view of a lecturer. Mr. Stout and Dr. Verrall were examiners, and they speak from the point of view of examiners. I have here a very large number of these reports if the Commission would care to have any more. This all shows that the method of teaching is peculiarly adapted for securing valuable educational results. The second point which we regard as characteristic of the extension method, is that teaching is provided in subjects not necessarily those that form the ordinary curriculum for degrees at a University, subjects, that is, that men and women are likely to be interested in from the point of view of citizens; courses by no means elementary in literature, history, philosophy, and different branches of natural science. Those are the subjects which the men and women who attend the University extension lectures wish to study. I am anxious to impress upon the Commission the point that the bulk of the students are not very young people who have just left school. The majority of the persons who attend are grown up men and women of very various ages, some middle-aged and even old. The majority, I should think, are in the prime of life, between 20 and 40. There can be no doubt that the success of the movement has in part been due to the fact that teaching was provided in subjects of special interest to adults which they could not have obtained within the limits of the ordinary college curriculum, even at evening classes say of the colleges in London. As an example of a type of subject treated in University extension lectures, but which would not be found provided in the ordinary college curriculum anywhere. I may mention a course on "The English Citizen Past and Present." The subjects treated in this case are: I. The Manor. II. The Parish. III. The Poor Law Union. IV. The Town. V. The County. VI. Parliament. VII. Public Education. VIII. Police and Justices. IX. Political Forms. X. Local and Central Authorities. We have everywhere found that the courses of study which dealt with the subjects of general culture, and those which bear upon the large affairs of life are of more interest to people than purely academical subjects. I mean to the people who are specially met by the University extension system.

12,462. I should like to ask you a question about who the lecturers of the classes in general are?—The lecturers are all men of the same class as those who are lecturers or professors at colleges or Universities. In many cases they are actually so engaged. For instance, one of our most successful lecturers on chemistry in London is Professor Lewes, of the Royal Naval College.

12,463. Who appoints the lecturers?—The lecturers are appointed by the Universities Joint Board, of which Professor Stuart is chairman. I am the secretary of that board, and also the secretary of the council of the society which has in hand the business arrangements.

12,464. How long are the lecturers appointed for?—The usual plan is that the lecturer is placed upon the list, and if the results of his work are satisfactory, he goes on from term to term. The list of lecturers is laid before each local committee, and they select out of the approved lecturers and the approved subjects such lecturer and subject as they may wish for.

12,465. And he is only engaged for one term, is he?—All that the Universities' Board does is to place his name on the list as an approved lecturer. There is then no security that he will have work; that will depend upon the demand from local committees. It often happens that a lecturer will have in one term three or four courses; in another only one, and in another none at all.

12,466. He is removable at any moment by the committee?—By the Universities' Board.

12,467. I think Professor Stuart said that if the teaching was not in harmony with the class and was not leading up to anything and was not satisfactory, you would soon take care that the lecturer was kept up to the mark, and if it was not so he would be sent about his business. That shows that you have very great power, and you change the lecturers very much as you like?—Yes.

12,468. (*Sir George Humphry.*) May I ask you how the lecturer is paid?—He is paid by fee which is received from the local committee. In London, for every course of 10 lectures, classes, paper-work, and examinations, a fee of 27*l.* 10*s.* is charged.

12,469. And that money is derived from what?—It is derived in the main from the fees paid by students.

12,470. (*Chairman.*) Does the payment of the lecturer depend upon the number of students in his class?—No. The Council require that each local committee shall guarantee the full fee. The local committee protect themselves by a form of guarantee fund.

12,471. You have a large number of lecturers altogether?—I should think that, as a rule, every session there are from 20 to 25 employed, some giving a large number of courses, and some only one or two.

12,472. And these lecturers have no representation on the governing body of any sort or kind, have they?—No, they have not directly. There is one lecturer

who is on the council, but he is not appointed as a representative of the lecturers.

12,473. How is the Joint Board composed?—The Joint Board consists of nine members, three appointed by the University of Oxford, three appointed by the University of Cambridge, and three appointed by the Senate of London University.

12,474. And one of these you say is himself a lecturer?—No. One of the members of the council is a lecturer. There is no member of the board who is a lecturer.

12,475. The Board have nothing to do with lecturing or examining, they merely govern. Is that so?—Occasionally a member of the board has himself examined, partly in order to satisfy himself of the standard and so on, but, as a rule, the members of the board do not examine.

12,476. Professor Stuart was asked whether he would not prefer a gradual absorption, that you should continue under the new or the remodelled University, to perform your work as before and only give it up gradually to the University in course of time when it was able to undertake it. Is that your view?—My view is that the University if it is to do the great work that I think lies to its hand in London should adopt the University extension method and should immediately place itself in the position of carrying on this work; and that it would be a matter purely for the University itself to determine whether it would take over the whole, whether it would ask the London society to continue for the present, or whatever arrangement would be most satisfactory. That is a question which the University ought to determine entirely for itself when the conditions are known.

12,477. I do not think you contemplated any connexion with the University itself in the way of having representatives on the Senate. Would your lecturers be in a position to belong to the Boards of Faculties. They seem to be such a shifting body that they would not be able to do that?—I have not made myself clear. I am imagining that here is a University which wants to do a great work in London. There is a certain floating movement which is doing very excellent work in certain directions. I think the University ought to lay its hand upon that, take it, and make what arrangements it thought well for embodying it in its system. I certainly think that all the lecturers carrying on such work ought to be University lecturers appointed by the University, and therefore represented of course on the Boards of Faculties just as much as a lecturer within the walls of the college would be represented on the Faculty. I would in my own mind make no distinction between University lecturers attached to a college and University lecturers doing the work at various suitable places all over London. It might be necessary for convenience to make some difference, but theoretically I think there should be no difference.

12,478. A lecturer attached to a college cannot be sent off at a moment's notice?—I think if the University were doing this work it ought to appoint permanent lecturers. We have no facilities at our hand; we are dependent from year to year upon the subscriptions which we can scrape together. The University ought to appoint permanent lecturers at suitable salaries for this itinerant work. They would deliver their lectures in halls in various parts of London instead of delivering their lectures at King's College or University College. It would be for the University to make all the financial arrangements with the districts in which the lectures were given, or with the bodies under whose auspices they were given.

12,479. Would you also leave it to the University to decide upon the exact connexion between the lecturer and the main body?—Entirely.

12,480. If they thought fit they might appoint a standing committee of the Senate to superintend evening classes. The evening classes might be managed in that way without anything like an association affiliated to the University?—Entirely. The only point would be to make sure that the University body was sympathetically inclined to this work.

12,481. They would be willing to leave all those details to the University as long as they undertook the work?—Yes. I would not be prepared to see the work handed over to such a body as is constituted by the Gresham Charter, because I think there is no sign that they would take the work up thoroughly or heartily. By the very framing of the Charter I think they show that they do not in the least grasp the problem.

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

12,482. But they would have a Senate, and the Senate could appoint a standing committee to superintend your work as easily as the University of London. There is no reason to expect more from one institution than the other, is there?—Except that this is new work. There are only a small number of men in the educational world who really believe in the importance of this work, but the number of them is increasing every year. Many who are most intimately associated with the academic work in London do not believe in its importance. What we would like would be security that the body which lays down the lines of the new University has really grasped the magnitude of the problem and the importance of it.

12,483. What reason have you for thinking that the newly-constituted Senate of the University of London would have more sympathy with you than the Senate of the Gresham or any other University that might be established. It is mere supposition?—I have not said so. All I say is, that whatever the body is I should like to see how it is constituted before I should be quite sure that it would take up this work heartily.

12,484. Then you would like to see the names of the new Senate, or at any rate, the composition of it, before you would trust yourself to it?—Yes. When the new University is constituted, and it is seen whether the work will be taken up heartily the University Extension Society will be willing to do whatever is best.

12,485. But you would like to see what the University is like before you give up your authority?—Yes.

12,486. (*Professor Sidgwick.*) I asked Professor Stuart the question with reference to the relation of the examinations to your work and the modifications that would be required. Have you anything to say in addition to what he said in answer?—Does your question relate to the point as to the proportion of students doing real earnest work for the lecturer?

12,487. What you conceive would be desirable modifications in the examinations. You remember in Professor Stuart's evidence reference was made to the action of the University of Cambridge. I tried to ascertain how far what the University of Cambridge has done in the way of affiliation would suffice, or whether it is desired that the University of London should do anything more, and if so how much more, and why more?—I would say in answer to that that I think the new University for London ought to do much more than Cambridge has done. I think it ought to do more, not because there is an articulate demand in London that it should do more, but, because the problem which the University will have before it will be a larger one. It will have to settle how it is to bring exact and systematic teaching within reach of the largest possible number of persons; how it is to render the education which men will get in taking their degrees as efficient, thorough, and systematic as possible. If it approaches that question from that point of view I think the University will find that by adopting and extending these principles of University extension it can do that work most thoroughly. It can lay down a course of study for degrees which will turn out the men at the end of their course better educated, with more intelligent interest in the subject than can be secured by any examination system or by any mere system of college lectures preparing for examination of a University. Therefore I think the London University ought to go much further than Cambridge, not because of the demand for it from outside, but because that is the way in which the University will best solve the educational problem in London.

12,488. Do you think, therefore, that the University ought to give its degrees for a continuation of the courses you speak of without exacting any knowledge other than what has been gained in connexion with them?—That is really a question of detail which I think the University will have to settle for itself; but this is the way I would put it. I think if the University laid down broadly the lines of study which it thought a man should follow in order to take a degree, it should then endeavour to teach as much as possible by the University extension method; but where that was not possible, where in a subject like elementary mathematics for example, the work would be more efficiently

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

tested, and more efficiently done by having an examination and letting the student do his work as he chooses, it would be for the University to determine in the case of what subjects the University extension method would produce better results. Wherever it was found that that would be the case, it would be advantageous that that should be substituted for the mere passing of examinations in the subject.

12,489. How far would you think it desirable that a preliminary knowledge of elementary mathematics should be required from the students?—I should be inclined to say, as things are at present, that it would be well that the University should require in elementary subjects pretty much what is required by every University, but striving as far as possible to prevent the work in those elementary subjects being merely cram work for examination. For instance, as Cambridge demands, in addition to extension work for the privilege of affiliation the passing in elementary mathematics, Latin, and one other language, the University might well require some knowledge of languages and elementary mathematics, tested by examination if it thought right. But in the end, I expect the University would find that more and more students would come, having already gained in their school days the education that was necessary in the elementary subjects, and would be more and more prepared to begin at once serious study in some special department, which, continued over a sufficient number of years, would lead them to their final degree.

12,490. You would not want materially to reduce the amount of the school subjects now required in the London Matriculation?—Again, look at the problem in this way. Look at the number of students in London, some elementary school teachers, some clerks, others engaged in other occupations, who for some reason or other want a degree. They are persons who are beyond the school age. It is mere cram work to them to get up a large number of elementary subjects like the subjects that are wanted for Matriculation altogether at a particular time. I would endeavour to meet their case by letting them take them at different times.

12,491. Then I gather that the only change which you consider important is that a less amount should be required at one time. You do not consider it desirable that the standard in the preparatory subjects should be reduced, but only that the student should not be obliged to carry so much in his mind at the same time?—I regard that as very important, but I am only saying that at the present time in order to carry out practically a new scheme it would not do to depart very much from old lines. I am content to let those elementary subjects very much alone. If you could get a beginning with subjects which are peculiarly adapted to treatment by the University extension methods I believe gradually it would extend downwards and include within it these more elementary subjects later on. For the present I would say that it might be wise not to make very much change in the requirements with regard to elementary subjects. It is not that I think it an ideal arrangement, but because under the circumstances I think it would probably be wise not to attempt too much. I think if the new University could be established on broad lines and have its hand on the whole of the higher teaching of London there would be gradually created a public opinion that boys should on leaving school begin to carry on their higher work even if they were not going to be day students but going into business; and that gradually the schools would begin to give the elementary knowledge which was necessary, and that there would be certificates of some kind which would enable the boy of 15 or 16 to begin his higher studies at once. The University should have its hand directly on the higher education and indirectly on the secondary education.

12,492. Then may I say that it comes to this. What you think ultimately desirable is, that a boy should be able to pass from a school straight to University extension teaching, and that the preliminary knowledge required of him should be the kind and amount that an intelligent boy would acquire before the age of 15 or 16?—Yes, that is so with the London Matriculation practically. A large number pass that at 16. A great number of schools are preparing their boys for it.

12,493. You hardly contemplate within any time that we need look forward to that the mass of the students who ultimately will come under the University extension would have gone through school training of that kind?—I am afraid it would be a long time; but, I think, once it began to permeate downwards the work might move more rapidly than we have any reason to expect now.

12,494. (*Professor Sanderson.*) I suppose one may put your view practically in this way: that your certificate of continous study should be accepted as part of the qualification for a degree?—No, not at all so. I am anxious to distinguish clearly between anything we have done hitherto under the imperfect conditions, and what might be done in the future. I should think it would be better for the University to lay down its course of studies and say when a man has done so much of one thing he has done what is required for the first stage; when he has done so much of something else he has done what is required for the second stage.

12,495. Is not that what is meant by the certificate of continuous study—that it means that a person who has received the certificate has thoroughly studied certain subjects and been examined in them?—Yes; but my position, I am afraid, might be misunderstood if it were put in that form. What we are asking is not that anything which now exists under the London Society should be accepted by the new University, but that the new University should adopt the principle. The University might say that the certificate of continuous study is not good enough for it. I do not know what it might say. I had rather not put it in that form.

12,496. The point is this: that you would accept in lieu of examination merely evidence of studies outside?—Yes.

12,497. And your view is that that should take the place of the Matriculation Examination of the London University?—My point is that I think it would be wise for the University to frame a scheme or course of study covering the ground between the Matriculation and the Intermediate Examination, so that the final examination would be one test of degree, the whole preparation of which should have been by attendance at courses of study approved and directed by the University and tested by examination under the University.

12,498. Then you would substitute it not merely for Matriculation but for Matriculation and the next?—Yes, for everything up to the final examination for the degree.

12,499. (*Mr. Rendall.*) In your preliminary statement you pleaded mainly for the recognition of University extension as part of University work, and did not insist with quite the same strength as Professor Stuart upon the necessity of recognising the University course and training as a necessity for a degree. At any rate, he used language stronger than yours. I think he said there was an almost pathetic craving for a degree among the working class. How far does your experience lead you to think that?—That was a point that I have not yet reached in my notes, and that is why I omitted it. I feel very strongly on the subject. I know well from my personal experience that what Professor Stuart said was literally true—that there are a number of persons, working men and others, who have a longing for a degree; who regard it as representing great knowledge which they would like to possess. I want further to point out that to my mind the importance of this question in relation to degrees does not depend upon the articulate demand, if I may put it so, from existing extension students. I do not believe that there are a large number of extension students who consciously want a degree. Then it may be said, "What then is the use of taking a degree. Why pro-"pose to offer a degree?" It is because I think that is the only means by which the work can be rendered more exact, more systematic, more thorough. I base that statement upon experience. In former years when the work was first started in London 15 years ago, and up to five or six years ago the complaint was that students were only inclined to attend desultory courses, it was said, "It is no use your arranging two courses "of lectures in sequence. No students will come to "them." And such inquiries as were made seemed to show that that was the case. Then the Board established the sessional certificate, although I was told, "If you "establish that advanced certificate no students will "take it." We believed it was possible; we established it; and the result immediately was an increased number of students doing systematic work. The local committees immediately felt induced to arrange courses in sequence, and an increasing number from that time to now have attended those systematic

courses, and done the work necessary for a sessional certificate. Now we find students do not always begin by aiming at it. They often begin in this way: a student goes through one course and then another, and then discovers that it was possible to get the certificate if he goes through a third, although he did not start with the intention of getting the sessional certificate. So that there has been a gradual evolution of pupils by this means. I say if that is true through the offer of a sessional certificate, and through the offer of a certificate of continuous study, if you arrange a course of work leading up to a degree which has a decided value, you have a very powerful lever to get an increased numbers of students to do continuous and thorough work. That is the ground upon which I would rest the claim for the recognition of the work as part of the scheme for degrees.

12,500. The instances that Professor Stuart alluded to and that you have given are rather sporadic?—Yes.

12,501. You say they look upon a degree as representing rather a methodised knowledge which they do not possess?—Yes.

12,502. Any one interested in this subject must feel that there is a considerable danger that the mere acquisition of the letters of a degree may seem to convey those qualities which they covet and desire to possess, and which they associate with a degree. What we want in England and I think generally in Europe is not a stamp of intellectual capacity but rather good intellectual acquirements. Degrees are very various; a good deal confused by divergent intellectual and social criteria, but broadly the distinction of a University degree has meant mainly two things; first, a continuous period of concentration and devotion solely to intellectual pursuits; and, secondly, the possession of a professional qualification, or at any rate the basis of a professional qualification, such as in medicine, in the Church, or in the learned professions. University extension does not appear to me quite to meet either of those, and that is the distinction between it and the degree course. It does not imply concentration of intellectual pursuit, and it does not imply a basis of professional qualification. How far would that seem to you to be a just distinction?—I would reply to that, that supposing the University of London, had never been started it would be a question perhaps that would be difficult to answer. The position in London is this that there already exist the University of London the degrees of which do not imply what you have now said, because a large number of evening students do now obtain the degrees of the University of London. I am a graduate of the University of London, and I was myself for five years an examiner in the University of London, and I was very deeply moved and touched by the signs in the papers I used to get that the students had been working alone from text-books without adequate help, and it was clear that they had been cramming up for the examination without teaching. I say it would be a great boon to London if you could, as far as London is concerned, lay down courses of study leading up to degrees which would detach from the University of London those evening students who are now taking their degrees there. You could turn out students more thoroughly trained, and far more cultivated than the existing evening degree student of the University of London, and you would very largely encourage higher advanced and systematic work in London. Therefore, assuming now that we have to deal with the condition of things that exists, that evening students do now take their degrees, the interests of the University of London would be greatly served if you framed a scheme by which University teaching and training under University teachers could be provided for students, and they could be made to go along that avenue to a degree.

12,503. You rather stake your case upon the present practice of the present University of London?—Universities are compelled to attain their ends by various methods. They generally do it by residence, but you would be in favour of the newly constituted University taking up the non-residential basis of the London University, and acting chiefly as an examination board?—By "non-residential" I presume you mean the student not giving his whole time to study, because I would regard a student who is carrying on his work under a University lecturer as getting the very best instruction that he could have.

12,504. Social intermixture is a main point?—He does get it in the evenings.

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

12,505. He can hardly be said to have the social intermixture with his fellow students and the contact between the teachers and the taught?—There are students associations at which students meet on other nights than lecture nights to discuss questions. Then they have the kind of intercourse which students who meet in a college would have with one another. So that many of the elements of residence are really secured by the extension system.

12,506. Assuming that the London University gave us on the whole the best analogy, would you think it advisable to relax the test. The London University has insisted perhaps on a higher intellectual test than other Universities which have made residence their criteria. Do you think it would be wise or necessary to relax the stringency of the Matriculation Examination?—No, I should say that I should not like to see the stringency relaxed. I should like to see the final examination for the degree the same for the student who has reached it by passing the two examinations—matriculation and intermediate—and the student who has reached it by passing through courses of study.

12,507. You would be prepared to maintain the Matriculation, would you?—No, the Matriculation is a block. Something would have to be done to make it possible for the student to make a start at all.

12,508. You speak of Matriculation as dealing with rudimentary knowledge, and, I think, you used the phrase "mere cram work" Matriculation may fairly be taken to mean school subjects of education. Do you think it would be necessary to insist upon those or that one could relax them to enable the class of students you have in mind to proceed to a University degree?—I should not like to see any relaxation except merely in the question of adjustment. What I would like to see would be the examination adjusted in such a way as to bring it within the reach of an intelligent evening student without its being necessary for him to merely cram the work.

12,509. (*Mr. Palmer.*) From the point of view of your society it is a degree and nothing short of a degree which you would wish your students to be able to arrive at?—No. Our position is that we are really here not as beggars but as givers.

12,510. Looking forward to a degree you think centralises and confirms the work that your students do, and, therefore, you wish at any rate to be placed as I might put it, on the same basis as the most favoured institution by arriving at a degree?—I think a University can only really carry on the work by incorporating in it its system for degrees.

12,511. And your society cannot but be benefitted by its students being enabled to arrive at the free denotation of attainment which is afforded by the University degree?—I never think of the society in looking at the question.

12,512. I understood you to say in detailing the history of how the sessional certificates were given that that had proved an advantage, and that looking forward to a degree would be an advantage and an interest which would confirm the purpose of your extension students?—Yes, quite so.

12,513. May we take a degree as the sum of the career of an undergraduate in the University. It is the degree and nothing short of the degree which would satisfy the aspirations of the society?—I would not say that it is a question of the aspirations of the society at all, but that that is the only way I believe in which the University can really do the best that can be done for London.

12,514. Would the society regard favourably the University if it only gave your students an Associateship?—It does not matter a straw what the society feels or thinks about it. It is a question of this sort; here is obviously the way in which the University can do the best possible work. If the University chooses to do less than that, well and good as far as it goes, but eventually the University ought to do more.

12,515. It may not matter a straw what the society feels about it, but I should like to have your view as to the associateship differing from the degree in connoting the attainment by an extension student of proficiency in the curricula laid down by the University?—I do not think anything would be satisfactory in doing the best possible for education in London,

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

except the incorporation of the work in the degree system.

12,516. Then you would say that the University would not be satisfactory, that is to say, that a proposal for a University would not be satisfactory to yourselves unless it gave a degree to the University Extension Society as to other institutions?—No. I must apologise if I appear to be hair-splitting, but I am really anxious that the Commission should not misunderstand our position. Our position has been very much misunderstood abroad and in the press generally. If I answered that question "Yes," I might be likely again to give colour to the misunderstanding of what our position is.

12,517. (*Professor Sidgwick.*) Might I suggest a form of words?—It is really only a form of words.

12,518. I understand that what Mr. Roberts would say is that it is desirable that degrees should be attainable by the class of students with which his society is concerned?—Yes; not the students that there may happen to be at the present time.

12,519. (*Mr. Palmer.*) Now one other word as to your financial position With regard to these centres in London, some are self-supporting and some are not?—Yes.

12,520. Those that are not self-supporting have to be maintained by local committees in the best way they can?—Yes.

12,521. And, therefore, from the side of the Council which you represent the financial element is a matter which is of some concern to you, and would have to be a matter of some concern to the University who took over the work?—Yes.

12,522. (*Mr. Anstie.*) Will you permit me to see whether I clearly understand the amount and nature of the demand contained in your claim, that the University should undertake or take over the work of the University extension. I will ask you to see whether this accurately expresses what you would want: that the Senate should appoint a competent body of recognised teachers for the purpose of evening tuition at various centres in the Metropolis. That would be the first?—I should not limit it to teachers. It is conceivable that you might have an eminently suitable person to manage the work who was not himself a teacher.

12,523. But would you not demand first that they should appoint a competent number of teachers for the purpose of carrying it on?——Quite so; I beg your pardon, I misunderstood you.

12,524. That the University should appoint a competent body of recognised teachers for the purpose of carrying on evening tuition in various centres of the Metropolis?—Yes.

12,525. Secondly, that a properly organised system of teaching should be framed by them, leading up to the final degree?—Yes.

12,526. And thirdly, you would demand a recognition of such teaching and examination as entitling the candidate to enter for the final degree examination?—Yes.

12,527. What I want to direct particular attention to, is the first of those conditions. You are supposing the University to appoint a competent body of teachers to carry on the instructions in the Metropolis, at, I presume, a very moderate rate of tuition fee?—Yes.

12,528. Now, considering that these teachers would come with all the prestige and sanction of the University authority, would not that create, what I may term a very severe competition with existing teaching bodies and institutions of the Metropolis?—I should expect and hope that the University would do what the Council and Board of the Society have done, endeavour not to encourage any competition with bodies already doing the work. I should hope that the University would adjust it so that there should be no competition.

12,529. You mean institutions locally?—Yes.

12,530. Take, for instance, these two colleges which have petitioned for the Charter, University College and King's College. They are within a short distance of each other in the heart of London. How could this work be carried on within the walls of the two colleges?—I understood you to mean that it might be possible for a course of lectures to be arranged close to an institution in which a similar course of lectures equally suitable and connected with the University was then going on.

12,531. Mere proximity would not make any very great difference. Of course it is known that the students at King's College and University College come from a long way round. It does not seem to be of very much importance whether this new centre was established in immediate proximity to one or other of those two colleges, but whether it was established at all with this sanction, and with this strong pecuniary support?—I think there would be a certain amount of competition, no doubt, but we find practically that the people who attend the lectures at local centres are the people who live there, and wherever we do arrange a course of lectures they meet the views of the people who live there.

12,532. That is my point. By dealing with each particular centre you would exhaust the store of educational zeal which exists in various parts of the Metropolis?—I will answer that by saying that at the present time the colleges have not been injured by the University extension lectures.

12,533. You are expressing your own view?—Yes, but I have never heard it advanced or suggested. There has been no public outcry.

12,534. Have you never heard that suggestion?—No.

12,535. Have you never heard of any suggestions as to signs of reluctance or suspicion on the part of the colleges?—Yes, I have heard suggestions of that, but I have never heard it said that there were any signs of public outcry. I admit that there has been a great deal of jealousy and suspicion, and a feeling that the work was a work which ought to be done by the colleges.

12,536. Can you doubt that under such a system as you are proposing there would be a severe competition with the two colleges?—I can conceive that there would be some students who had attended King's College and University College who would attend locally; but there are a large number of students who would never have gone to King's College or University College who would come to the University extension lectures. I think the duty of the colleges would be to lay themselves out to have drafted into them the students from the centres—the students who began their work at the centres. At a centre you cannot expect to do much more than continue the subject for a session. You cannot have a very high degree of continuity at an ordinary local centre without special facilities. Therefore I should expect that the best students from the local centres would be drafted into the central course We have already a system of that kind. We have by the kind permission of the Gresham Committee established such central courses at Gresham College. Also, there was arranged last year as an experiment at King's College a practical class in physics; at University College a practical class in electricity, and also a practical class in chemistry; and to those classes a certain number of extension students from local centres were drafted. I think the way the colleges would meet the competition would be by drawing into them picked students from the local centres.

12,537. That just meets the point of my difficulty. You say you are able by your existing organisation, perhaps with a little pressure here and there, to enter into these arrangements with existing institutions by which you would be able to pass on your more promising students to the higher kinds of education which exist in those institutions, and which cannot easily be provided without. I want to know why it would not in future be a good and expedient course to pursue to allow that still to continue, and as the University will not be asked to teach in any other sense than this—to sanction and recognise the teaching staff of professors in those colleges—why should you claim that the University should not only do that with respect to your teachers and lecturers, but also pay them, and thus enable them with all this advantage to create this, which I cannot but call a very severe competition with existing institutions, which must, to a certain extent, exist upon fees?—I am afraid I have not caught your question, or at any rate, I imagine there are two distinct points involved in it.

12,538. No, only one point, that is the employment or payment by the University (it is best to be explicit on this matter) of a set of University teachers who will at small fees, and under peculiarly convenient

circumstances for the pupils, give education which is to be recognised as on the same footing with that which is given at these institutions which cannot exist save by the expenditure of large funds of their own and the fees of their students?—The obvious answer is that University College only provides for day students. King's College has evening classes it is true. The difficulty with regard to the central courses at those colleges, to which I have referred, and which were only brought about by very great trouble, was that the colleges had no facilities, as they said, in the way of laboratory accommodation for evening students; that they wanted the laboratory for their own day students, and they were not prepared to take any steps in the way of putting themselves to much trouble to arrange work in order to get students in that way.

12,539. You say that University college has not cared to meddle with the business, and King's College does meddle with the business. But does not your answer come to this with respect to King's College, that it has not only meddled with the business, but it has to that extent done the business; that it certainly has this University extension evening business going on at its own responsibility, its own cost and expenditure, and it naturally looks to the fees. Why compete with them?—Saying all that can be said for the King's College evening classes, putting the number of students at 500 or 600, what is that to the 13,000 that attend University extension lectures in London now?

12,540. If King's College were to take the attitude of standing in the way of the extension of University teaching, I have nothing to say on that point, but what I am suggesting to you is why the extension movement should not be allowed to take care of itself, and why you should give it this great advantage of employment and payment by the University of a staff of lecturers?—My answer would be what I said at the beginning, that we believe that the new University will want to do a great work for London by providing for the needs of London. We say that there is a large need for adults who cannot go to the day colleges and for whom there is no adequate provision in the evening classes that are already established at King's College; and if the University is to do the best it can for London, it must adopt some such system as that of University extension.

12,541. There are two modes by which a University may provide. A University may provide as a University, that is to say, by its intellectual methods, by organising the scheme of studies, superintending the tuition and testing the result. That is what a University as such may do, but you seem to claim that it shall do more and provide pecuniary resources. It is a very important matter whether you desire and demand that the University shall get and provide the pecuniary means by which this system is to be carried on?—What I would say about that is, that if the University can do that, and will do that, it will be very much better for the University and for the work, but I do not think it is in the least essential. All that the University of Cambridge provides for carrying on the work is the salary of the secretary. Oxford contributes out of the chest 200*l.* or 300*l.*, I believe. The whole of the work is carried on by fees received from the local centres. It is possible that the University of London might carry on the work in the same way with the aid of any subscriptions it might get; but if the University wants to do it as efficiently and thoroughly as possible, it would do wisely to try and secure funds to enable it to do what we have failed to do for want of funds.

12,542. You decline rather to meet the practical difficulty that I am suggesting?—I have not intended to decline. I am afraid I have not seen it.

12,543. The difficulty is pecuniary competition. Really it is no use to blink the matter. It is unquestionably an important point in the case. There are institutions which are supported in the main by fees. You are suggesting, and I understood Professor Stuart to suggest—I think he mentioned 50,000*l.* a year—that the University should employ persons to do the same kind of thing under more easy conditions for pupils at a very considerable expenditure?—I do not want to blink the question at all, but is not the point this, that we should try to get at a scheme which shall organise and develop the whole of the higher teaching in London. We want to find what place University and King's College can fit into in such a scheme. We do not want to say, "Here are two colleges "and nothing must be admitted if it is in the slightest "degree to hinder these two institutions." It seems to me that that is a mistaken point of view. What we say is, "What is the best to do"? I believe it will be possible to develop such an itinerant system in London as will strengthen these colleges immensely by pouring advanced students into them if they would adjust themselves to the conditions.

12,544. Do you consider that these local committees or local centres would consent to have the matter dealt with in that way? Is it not your experience that when an educational body or committee establishes itself, and does actual educational work, it refuses to acquiesce in the position of being merely a subordinate agency, and claims to do the whole range of educational work. Is not that your experience in London?—I am not sure whether I quite see your point. If I have seen your point I should say no. Take our local committees. They organise the lectures; they are most ready to acquiesce in the proposals we make to them; there is the greatest ease in getting the local committees to accept suggestions as far it lies in their power to do so.

12,545. From my own experience I should have said that it is with the greatest difficulty that you can get an educational body to consent to take on any point a secondary position?—It depends on what the body is. It never enters into the head of a local committee.

12,546. If the University were constituted in this much more definite way do you think we could equally rely upon their forbearance?—I think so. The University would have to lay down plans of study. A local committee we will say would decide that it would like to carry on historical studies. The University would have the nomination and sanctioning of the lecturers. It would have its inspector, or whomsoever it appointed, in direct relation with the place. It would have some official who would be a go-between between the committee and the University. I do not see how the difficulty would arise.

12,547. May I take it that in your view carrying out to the full extent those three conditions which I have named would not impair the financial position of the existing institutions?—I do not think it would myself. On the contrary, I think that after the immediate beginning it would strengthen their position. I do not say anything about their financial position, but it would strengthen their position as educational institutions by adding students.

12,548. I cannot leave out of my question the word "financial." It is a very important point, and every educational body has to consider it?—I do not see how it is going to impair them financially.

12,549. Then you say, "No," without striking out the word "financially"?—Yes, I do not think it would. I do not see how it is to injure them financially. Of course there may be something which I have not seen.

12,550. (*Sir George Humphry.*) How many centres of teaching in London have you?—We have about 70. They vary somewhat from term to term, some drop off, but practically speaking we have about 70.

12,551. In which this education is carried on?—In which the courses of lectures are carried on.

12,552. There are probably several teachers in these?—Yes. In some centres there are more courses than one. The number of lecturers employed in a year is from 20 to 25.

12,553. Acting in several centres?—Yes. Some of the centres take a course in each of the two terms, Michaelmas and Lent.

12,554. There are not 70 centres at work at the same time, are there?—No, not always.

12,555. They are scattered about in different parts of London?—Yes.

12,556. So that you occupy the whole ground of London?—Yes, roughly speaking. There are yet a number of districts in which it would be possible to establish centres with great advantage.

12,557. And they are all under the control of the central board?—Yes.

12,558. Which central body is quite independent, and has no relation to the University or any other body?—Except that the educational work is under the Universities' Joint Board.

12,559. With the exception of that it is quite an independent affair?—Quite.

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

12,560. The students who come come entirely of their own accord?—Yes.

12,561. Quite voluntarily?—Yes.

12,562. They have no idea in coming save that of gaining knowledge?—None that I know of.

12,563. They pay a certain fee?—Yes.

12,564. About how much?—It varies. I should think the average for the evening course is 5*s*. If it is an afternoon or a morning course the fee would be perhaps 10*s*. or a sovereign.

12,565. You regard it as desirable for their own sakes that they should pay a fee?—I think, on the whole, it is, but I think a very useful work might be done by giving courses of lectures free to begin with. At the present moment the West Ham Town Council is carrying on two courses of University extension lectures in that district: one at Stratford, the other at Canning Town; they have a large audience at Stratford of 700 or 800, and at the other place of 300 or 400.

12,566. The payment of fees is in itself a guarantee for the student having a real earnest interest in his work, and pursuing it continuously?—Yes.

12,567. At the present time you really occupy London with an admirable system of teaching?—What I feel, and what the Board feel is, that it is not as systematic, continuous, and thorough as we should like; but as far as it goes it is good.

12,568. It is an admirable system of teaching—a better system of teaching perhaps than has been carried out before anywhere?—I think so.

12,569. You have yourself compared it with the teaching under the University of Cambridge?—Yes.

12,570. You have said how much better it is, how much more satisfactory it is to you to teach, and apparently how much better, and more earnestly the students are learning?—Yes. Of course, it will always be understood that I am not stating that every individual lecturer, and every individual audience comes to that; but that is the essential character of the system.

12,571. On the whole, the important point is that you embrace the whole of London with a very good system of teaching?—Yes.

12,572. And this is a voluntary work both on the part of the students and on the part of your Board in teaching?—Yes.

12,573. Is it not a very serious question whether a system of that sort should be interfered with? Should not any new University seriously consider whether it would be wise to interfere with a system which is doing such good work, which work is increasing annually greatly, of which there is no present failure, and no prospect of failure for as much as you have yourself just said probably in a few years the number of students will be doubled?—Yes.

12,574. Should they not be very careful before they interfere largely with so great and so good a work with the prospective possibility of making it much better. Do you not think that will occur to any body of men who are organising a new University. They may think it very well, perhaps, as you have said that they should throw some kind of influence over it, and that they should endeavour to promote the teaching by the application of their own University degrees and so on to it, and making the degree valuable. That is one thing, but to expect altogether to take the work into their own hands, and to take it out of the hands of those who have so originated and so carried it out is rather a serious question with the prospective idea as you have it on these broad grounds, which are somewhat ideal and uncertain of improving the education of London generally, especially when you bear in mind that they can hardly do it with all the teaching institutions which have sprung up with so much vigour in London. You will admit that that is a serious point for us to consider?—Yes, and a very natural point. I do not know whether you are going to ask my opinion upon it.

12,575. I have had your answer?—I only say that it is a very grave point. It is a point that had naturally occurred to me.

12,576. Then there is another consideration in connexion with voluntariness, that we should be very careful how we interfere in this free liberty-loving English country with what is carried on voluntarily; and that we should be careful how we throw anything like an autocratic influence over it. We should beware of that. You have yourself compared your teaching in this University system with your teaching at a college in Cambridge. Is there not a very important difference in this regard; in this place you have had voluntary students and in the other case you had compulsory students?—Undoubtedly.

12,577. Does not that make an enormous difference?—Yes.

12,578. Has not each one of us had to do with both classes of students, and do we not know that when students come to us voluntarily we are sure of an attentive, and we might almost say an admiring class. But when students come to us who are compelled to do it by certain regulations, who are compelled to do it by University influence, and who are compelled to do it as a means of preparing for examination, it is a very different thing?—Might I put in a point here which is very important. The students who are so very much better, and so much more satisfactory than the college students at Cambridge were not the casual hearers, but those who were preparing for continuous work laid down by the Universities' Board. It was the students who had in their minds the ideal at which they were aiming, and if they had been aiming at a University degree they would have been equally earnest. The way in which they differ from the University students is that instead of being boys sent there by their parents they are men and women with a certain definite object.

12,579. That is another point I was going to suggest. You have men there of a certain age who have set themselves to work as compared with others who are put there and expected to work?—Yes.

12,580. And on the whole the influence of University examination if carried to a great extent is likely in some measure to take away from that interest which is associated with a simple desire for knowledge?—But I am pleading that this work should not be a preparation for University examination. That is the whole point of it; that the work should be arranged continuously so that the student passing through it need not pass certain examinations.

12,581. But ultimately the object of it is to look forward to passing a University examination for the purpose of taking a degree?—I do not think the larger number of them will do that. I think the effect on the system of bringing it up to a higher level would be enormous. Many students would go in, not for the purpose of obtaining a degree, but for the purpose of obtaining a good knowledge. Many would stop short of a degree, and I do not think the evils you have pointed out would arise.

12,582. Is there any danger of it interfering with the remarkably good work you have been doing?—It can be made better, and the only way in which it can be made better is, by having a University at its back. It is the University of Oxford and the University of Cambridge that carry on the work out of London. That voluntary work cannot live for ever. Those who are working in it now will pass away before long, and there will come a new set of people who have not got the same enthusiasm.

12,583. Might I alter your phrase, and say that a new life will appear?—It may. Of course, eventually it would.

12,584. (*Mr. Anstie.*) With reference to what Sir George Humphry has pointed out, have you considered the point whether the new institutions which are rising up in London now may not very well take the place of that organisation which you say is likely to disappear in a short time; and have you considered whether they cannot take it up and carry it on as you have been carrying it on without being to so great a degree controlled by the University?—I think that the only way in which the University can properly get its hand on the institution is by adopting this system and recognising lectures at the Polytechnic, so that the work which is up to the level of and can form part of the curriculum for degrees, given by lecturers sanctioned by the University, can become part of the University work in London. It seems to me that there is no way in which you can embody institutions like that in the University except by adopting the principle which I call the principle of the University extension movement.

12,585. (*Sir George Humphry.*) At present you are doing very good work, and we must take care not to injure you?—I should say we are good now, but we can be infinitely better. We can be made better.

12,586. And you can be made worse?—I cannot believe that University recognition would make us worse.

12,587. (*Professor Ramsay.*) With regard to the point Sir George Humphry has put, do you not think the success of the whole thing is dependent mainly upon local initiative and local effort?—Upon local effort and in individual centres.

12,588. If the University had the money and the will to take over the whole financial responsibility, do you not think that that local initiative would be killed?—It would all depend upon whether the University realised the importance of it and took any steps to keep it alive.

12,589. That is not what I mean. My question is whether the initiative in the locality is not in itself the principal factor in the whole movement?—I do not know whether you are aware that in certain districts the University extension movement has declined in consequence of the money given for technical education by the County Council?—Yes. I feel that very strongly.

12,590. A good thing in education is that the desire should come from the pupils themselves?—Yes.

12,591. Have you any age limit?—No, except that children under 15 are practically excluded.

12,592. Would you not think it desirable to have an age limit for work which is to count in any way for a University degree? Is it not the case that, quite apart from the quality of work done there is an essential difference between the work of an adult and the work of a boy?—I say [that between 20 and 30 a man would do his best work.

12,593. That is not what I mean. I ask is it not undesirable to admit to a University course students who are of an age at which they ought to be at school and dealt with by school methods?—Yes.

12,594. And it would be desirable to fix some age below which attendance should not count for university purpose?—Yes, distinctly.

12,595. You spoke about some possible modification of the Matriculation system with the view to your students and specially of the Matriculation examination. You said it might be desirable to relieve them from a certain amount of the elementary subjects?—Yes.

12,596. Will you define elementary subjects?—My expression, whether a wise one or not, and the idea I had in mind was arithmetic, algebra, and languages. I think that is about all. They are what is usually considered to be included in school education.

12,597. Now, let us take a subject which is essential in the Matriculation, Euclid. Some demand four books of Euclid, and some demand six books. Comparing a knowledge of Euclid, and a corresponding amount of knowledge of algebra, with that kind of teaching which you described relating to the constitution of parishes, manors, counties, and so on; would you say that a knowledge of four books of Euclid was elementary compared with that knowledge which would be gained by a student who had attended 20 lectures such as those you named?—I do not know how one would apply the epithet "elementary." I can conceive a person who has prepared the Euclid for Matriculation having a very elementary knowledge, and I can conceive a person who has attended the historical course and read the books having a thorough knowledge of it.

12,598. Could you not conceive a person having gone through that course you described and answered all the papers set at the end of it without having had any education at all?—I cannot.

12,599. Take the amount of knowledge of Latin which is required, or the intellectual formative power which has been expended upon the student who has learnt enough to be able to write a piece of grammatical French prose, and so on; would you consider that kind of knowledge elementary as compared with the knowledge given in one of those courses which you have described?—I think I should, for this reason. The elementary teaching is the giving of the mere information. The University teaching is putting the student in the way of methods, showing him how the results are arrived at, teaching him methods as well as results. Putting it broadly, that is what I should call the distinction between elementary teaching and University teaching.

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

12,600. Comparing those two subjects, I should have thought the facts were exactly the opposite—that from the educational point of view a man who has learnt enough French or Greek to pass an examination in those subjects is a man whose habits of mind are trained; he has gone through logical processes which will enable him to deal with problems of thought all through his life, and in all languages besides his own; whereas a student who has heard 20 lectures on the parish, manor, and county, have become possessed of a great many facts which may be useful in every-day life, but which will have no formative intellectual character at all?—I should be glad to think that every Matriculation student was in that condition, but I know that many of them have done nothing more than cram up their language. On the other hand, I know that a student who will follow a course of lectures on political economy and history thinking and working strenuously as many of them do, will come out at the end of it with something added to his education and power.

12,601. Any subject may be treated from an intellectual point of view; but will you say *per se* that such a subject as Euclid is more a subject for cram than a subject like social statics?—No, but it is not a subject that can be so well treated in lectures as history, because it is a subject in which a man has to follow certain detailed reasoning set down in a book, whereas in history there are certain large aspects that may be put.

12,602. Without tentering hen upon disputed educational points, will you grant that whatever changes are made in the Matriculation examination, you desire the Matriculation examination to be in subjects of an intellectual formative kind, and not of a cram kind?—Yes; distinctly so.

12,603. And whatever tests the University should impose to show that the mind of a student is in a state to be a fit recipient of University education, to that same test you are willing that your students should be submitted?—

12,604. I was going to ask you this. You attach great importance to the examining of students by persons who know what they have been taught. Is there not a danger in the system you have described of the knowledge being of a scrappy character?—That, of course, depends entirely upon what the scheme of work has been. If a lecturer in 10 lectures attempts to cover the whole range of the subject it will be very scrappy, but if he limits himself to a small portion of the subject a student may have more real knowledge and grip of the subject at the end of the 10 lectures than at the end of 40.

12,605. Referring to the reports of the examiners who have compared the work by your students to that done in a Cambridge Tripos, say in political economy or history, on which there have been 20 lectures delivered, do you mean to say that after such a course an examiner, not knowing anything about the syllabus, except the period professed to be covered by it, would come down and examine those students, and having examined them would be able to say the results were as good as those got in the Cambridge examination?—Yes.

12,606. That is an examiner would extract from students who had attended 20 lectures an amount of thought and knowledge which could be fitly compared with the amount gained at the Tripos examination?—If in both papers the period is supposed to be the same. It might turn out that a man might travel outside the period the lectures dealt with, but if the ground dealt with in the lectures was the ground dealt with in the University examination paper I think so.

12,607. In 20 lectures you might do one of two things; you might either give a very rapid résumé of some wide period without details, or you might take 10 years or five years and give that in detail. The former plan would probably be of no use for any searching examination. What you mean is that, in the latter case, one of your students might give answers in a very small field as good as the Tripos answers would be? Comparing the two together for a small portion of the field a student might answer the questions which might fit for the Tripos?—Yes, for the ground actually

R. D. Roberts, Esq., M.A., D.Sc.

14 Oct. 1892.

covered the work done was admirable, but it was small in extent.

12,608. It would be impossible to suppose that you could in the time include both the knowledge and the thought which is implied by the term "student of history"?—That is a great mistake. I have always discouraged that idea of covering a wide range in 10 lectures.

12,609. And you think that if that examiner without any knowledge of the syllabus, knowing only the period covered, were to come in entirely as an outside examiner to examine those men, without knowing anything about the lectures given the result would be the same?—Yes, I think so, unless he hit upon points which had not come within the range of their study at all.

12,610. Could you give me a period of history embraced in one of these courses of history lectures?—I have here a list of courses going on at this time. Is it worth while going into it? It is only a question of my opinion.

12,611. You mentioned political economy?—Yes.

12,612. Is political economy treated as a whole?—No, there are certain parts of political economy. Here is a lecturer who has five different courses, one on production and distribution of wealth; another on trade, currency, banking and exchange. Each of those are 10 lectures with classes. Then a third on taxation, industry, and commerce: a fourth on social and economical problems; and the fifth on wages.

12,613. "Social and economical problems" is very wide?—I am reading now the separate courses of one particular lecturer, Mr. Armytage Smith.

12,614. Does it not come to this, that in such courses a lecturer must go to a large extent upon what some people call the dictating principle? A lecturer gives 10 lectures in which he dictates certain facts and opinions, and the student takes them down. Inside those lectures the student is all right; outside them he knows nothing?—Here are some words from a statement made by Mr. Ernest Foxwell, who has examined in a large number of political economy courses: "I have constantly selected certain answers of these "best extension students in order to show them to "my pupils here," that is at Cambridge, "as models "of what an answer should be. The answers of these "best students are remarkable for pithiness, simplicity of exposition, and general business-like "straightforwardness. The ordinary Cambridge "pass-men, being on the average much younger, "and utterly devoid of experience in writing, usually "fails to exhibit any of these qualities in his answers. It has been my impression that the extension students are somewhat too sensitive to the "personal influence of the lecturer," that is a little adverse, but I may read the whole, "and too little "inclined to grapple with the printed works of the "great authorities, but the fact may be otherwise." So he does mention the point you put, that there are students among them who are too much tempted to carry away the words of the lecturer, but he finds others of a most admirable character.

12,615. Supposing the lecturer took for his syllabus an examination paper actually set at Oxford or Cambridge consisting of 10 questions; suppose on each day he lectured on one of those questions and at the end set the paper as an examination paper for his students. Would not the result be that the students would pass an extremely good examination in that paper even though they knew nothing at all outside these questions?—They might or they might not. If they had been well-taught they would. I think I could find out, even if you gave the students the books, whether their grip was true.

12,616. That may be quite true; but supposing some of them could not spell or write grammatical English?—If the answers showed that they had got hold of the principles of the subject I should feel that it was a most excellent result. May I give you an instance of what has occurred in our own work in London? Mr. Maclure was lecturing on astronomy at Lewisham. There were two continuous courses. It occurred to him that he would like to test his picked students with an outside paper. He took quite at random the last paper on astronomy at the B.Sc. examination, London. Without looking at the paper or any warning he gave it to his pupils as a time paper, and out of the ten students, seven of them would have passed. That is he showed the answers to a former examiner of the London University and said, "Would you mind telling me truth-"fully what you think of these answers," and the examiner said that seven out of the ten would have passed. If you care for me to go on to justify this by further instances I could do so.

12,617. Your point is that by improved methods on your basis, it is possible by ten lectures to enable a man to pass a serious examination?—The instance I mentioned was 20 weeks with a course of lectures and classes. That meant 40 hours under the lecturer with an immense amount of private reading, and probably as many as 40 exercises for the lecturer.

12,618. Must not the answers to a large extent consist of answers put into the mouth of the student by the lecturer?—No, and here was a proof of it. They had an outside paper. With regard to the difficulty you raise I quite admit that it must be guarded against, but I do not think it is so serious as you seem to imagine it.

The witness withdrew.

Adjourned to to-morrow morning at 11 o'clock.

Twenty-sixth Day.

Saturday, 15th October, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Rev. Prebendary Whittington, M.A., and Mr. D Savage.

15 Oct. 1892.

The Rev. Prebendary WHITTINGTON, M.A., and Mr. DAVID SAVAGE examined.

12,619. (*Chairman to the Rev. Prebendary Whittington.*) I believe you appear on behalf of the City of London College?—I do.

12,620. It would be convenient in the first place if you could tell us a little with regard to the position of the college, and what work it is doing?—I may say with regard to the college that it has been in existence for very many years. It now has between, I will say, 2,000 and 2,500 students in the course of the year. I do not say that all those students are students in what you would call University subjects; that is not so, and we do not profess that it is so. Many of them are elementary subjects which could not be classed with University teaching. But, on the other hand, we do

maintain that many of the subjects are distinctly those which may be brought under the category of subjects for the University. I think I have made a mistake. I say in this document that "in the Gresham Charter no "provision whatever is made for evening students. "Moreover, it is a condition for graduation that there "should be two years' residence in the college." I believe I am wrong there. It is not absolutely necessary that there should be residence. There must be day attendance.

12,621. (*Mr. Anstie.*) That is what residence is understood to mean?—Then I am not wrong in that. I have thought that there would be a daily attendance. When I say a daily attendance I mean almost a daily attendance. I only wished to correct that for fear I might be misunderstood. What we contend is that in our college it was simply impossible for the majority of our students to be able to afford either the time or the money to go to college to spend the day. They have to earn their money by their different employments in the middle of the day, and we should lose that class of our students who are deeply anxious to go on to something better than they can get at the college; that is to say, in the University. They could not spare the two years.

12,622. (*Chairman.*) How many evenings in the week do they spend?—They vary very much according to the different subjects in the different classes, as you will see. Some attend two or three, or four subjects four nights a week, whilst others will only take up one branch of study.

12,623. There is no regular course like there is in the University extension, is there? There is no regular course that they are obliged to go through of a certain number of classes in order to get a certificate?—That is so as regards the Science and Art Departments. In both those departments, of course, they must attend a certain number, or they cannot go up to get their certificate, but, as you say, it is more voluntary at present in the other general subjects. They cannot get a certificate from our examiners (a body of somewhat eminent men as you undoubtedly will say if you look at the list) unless they have attended a certain number of the lectures, and that proportion is a proportion of more than two-thirds.

12,624. Does that vary according to the different subjects?—No, it is the same for all subjects.

12,625. How many lectures must they attend before they can get a certificate?—20 in one session.

12,626. That means in one year?—That means in one year.

12,627. Then they get a certificate if they pass an examination?—Of proficiency, of three classes, first, second, and third, according to proficiency. The first class must be a minimum of 66; the second class must be a minimum of 45; and the third class must be a minimum of 25 marks out of 100.

12,628. What is your system of examination? How do you appoint the examiners?—The examiners are appointed by the council of the college, a list of them is on page 13 of the College Calendar which I shall be pleased to hand in.

12,629. Will this calendar give us all the information?—Yes, that calendar will give you all the information.

12,630. You might tell us shortly what the governing body consists of?—Now we are under a new scheme, the City Polytechnic scheme, the scheme of the Charity Commissioners, under which we have an endowment of 1,000*l.* a year.

12,631. Will you tell us shortly what the council consists of?—The council consists of certain vice-presidents, who are gentlemen of education and culture. They must be that for their qualification. There are a portion of professors also on the council, and there are also the members, the young men, the students themselves. It is very much a self-governing body.

(*Mr. Anstie.*) I think the 32nd clause of your scheme contains it. It is page 132 of the calendar:—"The "governing body of the City of London College shall "consist of 34 members, viz., a president, nine vice-"presidential members, 18 ordinary members, three "professorial members, and the principal, and one "member to be appointed by each of the governing "bodies of the Northampton Institute and the Birk-"beck Institute respectively."

12,632. (*Chairman.*) Have the lecturers any voice?—The professors have the power of electing three of their number on the council. That is by their own election entirely.

12,633. The examiners are appointed by the Council. Does the Council also arrange the syllabus for the study?—The professors do under the sanction of myself as the Principal. Everything educational comes before me as Principal.

12,634. You and the professors arrange for the examinations?—Yes.

12,635. And you get examiners from outside?—Entirely from outside, and so much so that only numbers and not names are sent in. The examiners do not know the name of any student.

12,636. You carefully avoid the chance of any teacher examining his own pupils. Is that so?—We do not allow it. We do not give a certificate upon that.

12,637. After a year you give a certificate, first, second, or third class. Is there anything further? Is there any extra certificate for three or four years' attendance, or anything of that kind?—As a rule, unless they are going in for composite prizes, they do not go in for certificates again in the same subjects.

12,638. Then you want some recognition of your existence on behalf of the new University, or whatever University is established?—If I might be permitted to say so, the idea is this: we do not profess that all our students are taking University subjects, but, perhaps, one half of them are taking what we consider University subjects. Whether they are elementary branches of those subjects I would not say, but what we ask is this. We do not expect anything more than this:—I will say this for myself—that we should be enabled to be associated with the Gresham University, a point being made as to the place where University studies are carried on, such studies, and even the syllabusses of such studies, being approved by the University, and the examiners also being approved by the University. What we should ask is this. We should never think that certificates gained by those examinations should be qualifications for degrees. That is more than we have any right to ask, it appears to me. But I think all certificates gained by such examinations in such subjects as were approved by the University might be taken for the Matriculation examination, and might spare them from actual attendance in the daytime, they being obliged to go in for the degree of the University in the same way as any other person.

12,639. If they were obliged to go into residence for that they would have to be attached to some institution like King's College or University College?—There is the difficulty. I do not think our students could either afford the time or the money for that.

12,640. Do you think most of them would be content with the Matriculation examination?—No; what we want is to be recognised as a place in which they could carry on their studies in the evening.

12,641. Do you think you would be able to prepare an appreciable number for degrees in that way?—Undoubtedly. We should have no difficulty in finding teachers. The main thing is that the teachers be approved by the University. I could understand that the University would say:—"We are not going to take "certificates except from examiners that we should "approve."

12,642. You want people to go straight from your teaching and nothing else to take a degree?—I can understand the University saying: "No, we cannot "do that; we must have some amount of residence." But we want the proposed University to give us some consideration, and to reduce residence to a year or some less time.

12,643. How would they fill up the remainder of the time? By being attached to your institutions?—By being attached to our institution for the first part of the time. Of course we should say that without at all attending for residence, our students might be allowed to go in for degree examinations; on the other hand, I hope that I may not be misunderstood. Supposing, for instance, a student of our college were going in for moral science, the University would have a perfect right to demand, as the Universities do at Oxford and Cambridge and elsewhere, that he should pass an examination to prove general culture up to a certain extent — corresponding with the "Little Go"

Rev. Prebendary Whittington, M.A., and Mr. D. Savage.

15 Oct. 1892.

examination—even more than a Matriculation examination. I can understand the University saying: "We "cannot accept a student who is very good for that "particular subject, who has gone in for the Moral "Science Tripos, unless he can prove that he is a man "of some culture in other subjects."

12,644. You would not demand more than Cambridge now gives?—No. I can quite understand the University saying "We are not going to have a number of young "fellows coming up in one subject, and yet being "ignoramuses in everything else."

12,645. Among your students are a number of men who have been at work all the daytime?—Yes.

12,646. Will they at any time in their lives be able to give up their daytime, and belong to any other institution which would require day work?—For a short time they might be able to do so. Many of them would not be able to do it at all.

12,647. By some system of scholarships they might be able to?—Yes, that of course would facilitate it.

12,648. You have told us clearly what it is you want from us. Supposing that the Gresham Charter, or anything like that, were taken, you would wish the clause which only gives degrees to people who belong to certain institutions or colleges, to be modified or expanded, so as to allow attendance at your lectures to count either altogether instead of that, or partly so?—You see at present the Gresham Charter does not give any recognition at all of evening study.

12,649. It obliges people to belong to certain institutions?—We are on the same principle as the University extension. I am on the council of the University extension, so I know the operation of it. The majority of their students cannot give day attendance. You might ask, is there any desire on the part of our present students for anything like University recognition. There is that. Every term we have a class for the London University as it is at present; and also for the Intermediate Examination. This year we had several students who passed the Matriculation, one taking the 12th place in the Honours division. That would be largely developed if our students could carry on these subjects which were recognised by the University as subjects to be taken for degrees.

12,650. Would any other University recognition, short of a degree, meet your views to a certain extent? Supposing the University were to give certificates; suppose, for instance, that there were some body, some standing committee of the Senate empowered to deal with the evening class business, and a system by which not degrees, but certificates of proficiency were given to those evening class students, would that meet your view?—That would be certainly a recognition. I suppose especially that would be valuable, because I am assuming that there would not be the requirement of residence at any of the colleges.

12,651. Not for a certificate, certainly?—But I do not think that would satisfy us altogether. I think there are aspirants for something better than that, and higher than that—wishing to go on with their studies. I can understand the University saying "We will not "grant that under a course of study it may be of three "or four years;" we shall be prepared for the University to say, "You cannot, in the evening, give "sufficient time for study to qualify you to come up "for examination in as short a time as daily attending "students." I can understand their saying that, and therefore, requiring a much longer time.

12,652. As I daresay you know, the University extension people are anxious that the new University should take the work out of their hands and absorb them, and do what they are now doing with regard to the evening classes?—Yes.

12,653. Supposing that was undertaken by the new University on a system of their own?—There I must answer (Mr. Anstie is present, and he knows), that we are endowed for a particular purpose, and we could not give up the others who would not be students of the University. A large number of our students are poor students.

12,654. The University would be recognising your work, while they were doing the same thing themselves. Would not that lead to a certain amount of confusion and overlapping?—No more than it is doing at the present moment, because that is going on now, and actually at our own college we have classes in connexion with the University extension.

12,655. Supposing we were to accede to their wishes, you see nothing to interfere with what you ask for now?—No; nothing will show it more than our having classes in connexion with the University extension.

12,656. You have, I think, made arrangements with the Working Men's College and the Birkbeck Institution to work together, and not to overlap each other?—Yes, as far as we possibly can, and we are associated with the Birkbeck under the scheme of the Charity Commissioners. I hope that much good may arise from that, and that we may not have the overlapping of centres. Where, for instance, we have a subject which only draws a small number, and they have a subject which only draws a small number of students we should work those together, and so make a good class out of the two institutions.

12,657. And anything we may do for you you would wish us to do for them—treat you all in a body?—I am not able to say what the Birkbeck would say for themselves. They may be aspirants for something higher. I may say that we have a large number of pupil teachers, elementary teachers. They are a class who cannot possibly attend in the daytime, and they are great aspirants for something higher than they have got.

12,658. (*Mr. Anstie.*) I should like to get a little more clearly on the notes the relation in which you stand to the various educational agencies in London. The City of London College, I understand you to say, forms, together with the Birkbeck Institution and the Northampton Institution, which is now in process of creation, a single body known as the City Polytechnic, which is under the scheme to give instruction on the lines marked out, and for that purpose receives endowments from public funds?—That is so.

12,659. That City Polytechnic is on the same footing, speaking broadly, with various other institutions of a like kind, such as the Regent Street Polytechnic, the institution at the East End known as the People's Palace, and the recently opened one in the Borough Road?—May I draw a distinction between ourselves and those, which I think you are forgetting?

12,660. You shall draw the distinction afterwards. On broad lines you are in fact working under identically similar schemes?—That is so.

12,661. Then there is the Battersea one, which is in progress, and one or two in the North of London?—Yes.

12,662. All those bodies are to some extent under the regulative influence and authority of the Central Governing Body, which administers the funds by which they are endowed?—Yes.

12,663. They are all in that relation to the Central Governing Body, which has considerable funds?—Yes.

12,664. And which has lately made a further distribution of its money in addition to that which it is directed to make by the scheme under which it exists?—(*Mr. Savage.*) It would not be within our personal knowledge. We have not received any.

12,665. (*To the Rev. Prebendary Whittington.*) Does not that form a body of secondary educational agencies, which, in fact, possess a very considerable influence, and which might be very properly dealt with on a footing of its own?—That is so; but I do not see how that would lead at all towards a degree.

12,666. What I am going to suggest is this: I understood you to say in answer to my Lord that you do not desire that you as institutions shall be personally represented on the governing body of the University?—I have not touched that point, but if you ask me that is a sore point with regard to these institutions. What they say is this. I am speaking now of the Gresham Charter as it stands. There is a clause which says they may do something for us, but if there is no representation of these institutions they never will. It will be against their interest to do it.

12,667. I think I am right in saying that the Central Governing Body contains some strong educational elements, amongst others one from University College (Lord Reay is a member, and he is also a member of this Commission), one from King's College, and one from the University of London. The School Board also sends members. Having regard to the relation in which you stand to that body, might it not answer your purpose if that body as such were represented on the governing body of the University, so as to give a kind of footing for your claims?—It certainly is an

advantage to have those gentlemen associated with us, but it is not so direct a representation as the institution would like.

12,668. But you could hardly expect anything like a direct representation on the Senate, could you?—If we are recognised as one of the teaching centres of the University, then we might expect that we should have a representative, if it was only one for all three institutions.

12,669. Have you considered the large numbers to which you would swell out this unfortunate body if all the institutions which stand in the same rank were severally represented? Would it not really answer your purpose in a practical sense if that body which stands in a regulative position to all of you were represented?—It would certainly in a great way, I am bound to admit. I am bound to admit that, when we are really in working order.

12,670. I mean assuming the scheme will be carried out?—Yes, assuming the scheme will be carried out it is a step towards representation.

12,671. There would be in fact some degree of representation?—Yes, but it is somewhat minimised by the large number of institutions.

12,672. We have to deal with several millions of population, and a great number of educational agencies, and if every educational agency insists upon being personally or institutionally represented you will easily see that anything like organisation will be impracticable?—Undoubtedly it meets a good deal of that difficulty.

12,673. Though not answering all your desires you would be willing to accept that, would you?—You are speaking now as regards representation, are you?

12,674. Yes?—Yes, I think that undoubtedly would be a decided benefit for us. That is, assuming we were recognised as one of the teaching institutions.

12,675. No, I am not suggesting that you should be recognised individually as a teaching body. That is to say, it would be for the Governing Body to say how far they would recognise you. But assuming that the central Governing Body represented you so as to obtain for you privileges which you might reasonally demand, could you ask for more?—You see you have representatives of two colleges who will be in large force.

12,676. Why do you assume that they will be in large force?—Because of the scheme.

12,677. You must not assume that that will be the scheme; that scheme is referred to us to consider?—But we are here as witnesses asking to be recognised under a system.

12,678. Under some system?—We are showing wherein the Gresham scheme does not meet our wishes. You see what I mean. Under the Gresham scheme what we feel is that there would be a large number of those institutions whose interests would not be to admit us.

12,679. Then assuming that strong institutional representation on the governing body you would regard that as hostile to your interests, and interests which are in *pari casu* with yours?—As recognised in that scheme I cannot tell what it might be in the future.

12,680. What you say now seems to point to a certain amount of competition between your educational institution and the two colleges on whose petition the Charter was granted?—Exactly.

12,681. I suppose that is true?—I do not wish to say one word against those. It is only as regards their own interests. Those institutions have evening classes, and, therefore, their object would not be to give encouragement to others who have evening classes.

12,682. Then putting the question upon a broad footing, and asking you to answer from a general point of view, as an educationalist, would it not be your view that this evening instruction, which must always occupy a somewhat secondary position, should, speaking generally, have its lines determined by those who are responsible for the higher education of the metropolis?—Yes, I think that is only fair.

12,683. You would be willing to see the educational requirements of the University substantially in the hands of those who were responsible for the higher form of teaching?—Yes.

12,684. And you would be willing to accommodate your teaching to the lines which they might lay down?—Undoubtedly.

12,685. But you would ask that there should be in the body who exercised the full control some representation of your interests, and interests which are in the same position with yours?—Yes.

12,686. Substantially that is your position?—Yes, I think that involves the recognition by the future University, whatever it may be, as in some sense the teaching body.

12,687. It might be that your own and all the rest of them might be written down in a charter or constitution as constituent elements, or it might be left to the Senate to determine from time to time what institutions should be dealt with. Would not the latter be a sufficient safeguard of your interests, assuming always that there was on that body such a representation as would secure due regard to your claims, and the especial organ or department created for that purpose?—It would to a certain extent meet us, but it would not be of course that which we would seek to have distinct recognition as part of the University teaching.

12,688. You would not be surprised to learn, I daresay, that nobody thinks he has quite justice done him?—Every man of course tries to get as much justice done him as he thinks he ought to have.

12,689. If you could not get more you would be glad to get less?—Of course. It would be a step undoubtedly beyond what the Gresham Charter at present gives us.

12,690. I think I am right in saying with respect to all those institutions which you have mentioned that there is a very strong charitable element in the constitution; that they are to afford by means of the public funds at their disposal assistance in educational matters to the poorer classes?—Undoubtedly. The only distinction at present, as you know, existing between ourselves and the Polytechnic in Regent Street, which you properly pointed to as one of the typical institutions, is that the Birkbeck Institution and the City of London College do not carry on technical work? That is to be carried on in the Northampton Institution.

12,691. In the sister institution?—Yes. So that when they are all members one of the other they will be able to go and get it.

12,692. When you have the Northampton Institution completed you will be a perfected body?—Yes.

12,693. (*Mr. Palmer.*) With reference to the last question that Mr. Anstie put to you as to your institution and the other institutions that are comprised in the City Polytechnic Institution being devoted primarily to the education of the poorer classes, may I not say that the purposes of the institutions which are comprised within the City Polytechnic the institutions are connoted by the grant which is given from the City Parochial Charities Fund?—Yes, that is so.

12,694. And the colleges which are mentioned in the Gresham scheme may be said to have their purposes connoted to some extent by the Government grant to University Colleges?—Yes.

12,695. I am only mentioning that to show that there is possibly some reason against a demand on the part of those bodies which are comprised within the City Polytechnic Institution for direct representation on the Senate or governing body of the future University. That being said of course I understand that you would be willing and would be anxious to have some representation such as Mr. Anstie has indicated, and also that you would wish to proceed in the same way to a degree?—Yes.

12,696. (*Sir George Humphry.*) How many centres have you?—Only one.

12,697. And yet you have 42 professors?—Yes.

12,698. It is a large proportion of professors; how are they paid?—In most cases two-thirds of the payments of the pupils go to the teacher, and a third towards the payment of the expenses of the institution.

12,699. Then all the payment depends on the numbers attending?—Almost entirely. In some cases where you cannot expect a large number there is a principle adopted of paying the teachers a minimum sum.

12,700. Have you any other endowment?—We have 1,000*l.* a year now.

Rev. Prebendary Wnittington, M.A., and Mr. D. Savage.

15 Oct. 1892.

12,701. In what state are your finances now?—We are just paying our way with the 1,000*l.* We were in debt before, but the Charity Commissioners very kindly paid off the debt upon the building, and so relieved us from the expense of the mortgage, so that we may now say we are paying our way, but only just covering our expenses.

12,702. I suppose you have no surplus fund for prizes, or anything of that sort?—We give prizes, but they are in a great measure provided from outside as you will see by the calendar. For instance, there are the Principal's and other Professor's prizes, and the City Companies give prizes.

12,703. What proportion of men and women have you?—In those classes which we could not reckon among the classes for University teaching, and of course the vocal music class, there are a large number of women. The proportion of women to men is about 15 per cent. for the other branches of study.

12,704. Are any of your professors women?—The teachers of pianoforte and typewriting.

12,705. Are the students just ordinary working people?—No. The class of students varies very much. They vary from the poor artisan up to the clerk who is doing very well indeed. Some subjects are those which a clerk would take. For instance, we used to give Arabic and Hindustani. The principle which we adopt is this: if 12 students come to us desiring a subject we find a teacher. You can easily conceive that there are some subjects which would attract a clerk who is doing well; English literature and the higher branches of mathematics. We have even a writing class and arithmetic class, and classes of that kind. So that you see our students vary very much indeed in their status, but a large proportion are really those that I have mentioned. Then I should tell you that, although their status may be fair as being clerks in good houses, yet the amount of money that they earn is very small. It is quite the custom for young men to come up to the City, enter a good house of business, and for two years have nothing. That is the time that we want to lay hold of them to prevent them from getting into idle habits, and to encourage habits of study.

12,706. I remark that a considerable number are studying French?—Yes, because, if I may use the expression, French is a bread-and-butter subject. A young man comes and learns French and is able to go into a counting house and say: "I can do French "correspondence," and can demand a higher salary.

12,707. Latin is not a bread-and-butter subject, is it? I see there are 128 out of the number studying Latin?—That is so. Some of them are preparing for the London University, and then again it is a foundation for other languages. There is a good deal in that. Those would be of a better class as a general rule. Some of them are the elementary teachers to whom I have alluded.

12,708. What payments do they make for attending these lectures?—They average about 6*s.* 6*d.* a term. The fees are in the prospectus which I will put in. They vary from 1*s.* 6*d.* to 10*s.* a term.

12,709. (*Mr. Anstie.*) You have reduced your fees in consequence of the grant?—Yes.

12,710. (*Sir George Humphry.*) Do your teachers conduct the class examinations?—Yes.

12,711. You have examinations in addition?—The teachers generally at the end of the terms have their class examinations. Our annual examination by outside examiners is only once a year.

12,712. What you desire of the University is that your course of study should be taken to a certain extent for the degree?—Subject. I am bound to admit, to modification, that is to say, I do not expect that the authorities of the University should take it as we have it now. They should approve the subjects and the examiners should be approved by the University.

12,713. His Lordship mentioned certificates. If those certificates were taken as part of the study required for the degree that would satisfy you?—It would go a good way towards it.

12,714. A very few at the present time pass on to the degree, I see it is only five in three years. Do you think that number would be very much increased?—Yes, by recognition. Seven students have gone in for Matriculation this year alone.

12,715. One can understand students going in for the Matriculation examination?—But you think it would not necessarily follow that they would go on for a degree.

12,716. The number following on for a degree is considerably less?—There you touch the difficulty. It is because our class education has not been recognised by the University as contributing towards the degree in any way.

12,717. You would be quite willing that the syllabus and examinations should be approved and the teachers ——?—Approved, undoubtedly. I cannot ask the University to do this unless the teachers were approved, the subjects approved, and examiners appointed. I can understand the University saying: "No, we must appoint our own examiners."

12,718. What sort of persons would they be who obtain the degrees?—Several have been clergymen who have attended my own Divinity class, and who have been led on from that to take Holy Orders.

12,719. Then they have not been this class of persons who come to you for evening work?—Yes, they have been. Generally speaking such have been members of the Divinity class, and earning their bread in the day.

12,720. Who were occupied during the day in parochial work?—No, they were not clergymen then. I hope, I may say, that it was attending the class that gave them the taste for studies of that kind, and they went on to something higher. Others are teachers as well.

12,721. Your students are quite voluntary students. What motive induces them to come?—The two motives that probably induce them to come are these: one is to give them a better position so as to be able to command a better position in the counting house or office by reason of what they have acquired; and in a large number of cases it is for getting learning *per se*. They feel their ignorance; they come to London at a very early age, indeed, with a very small amount of culture. They are stirred up to attend these classes and improve themselves. We are astonished to find how when a young man begins a subject and does well, he goes on to a large number of other subjects, not for paying purposes, but for learning *per se*.

12,722. Would you add to that expression, you are glad to find that?—Yes, I would add that I am glad to find that so.

12,723. You would not wish that that kind of feeling should be in any way repressed?—Certainly not; I would encourage it in every way possible.

12,724. Do you think that other kinds of inducements such as prizes, the hope of getting degrees, and so on, do tend somewhat to diminish that love of knowledge?—In some few cases, but I think human nature is such that in the majority of cases it wants a stimulant of some kind. There are some who think that in schools you had better not have a prize, but I was 36 years a schoolmaster, and I think human nature wants a stimulant. I think prizes are stimulants. If you ask me if learning is as valuable without prizes, there I should be prepared to say with regard to the man who did not need a stimulant that his learning would be more valuable. Going in for prizes, of course, does make a student go in for cramming more than if he loves learning *per se*.

12,725. Therefore, in endeavouring to promote the general education of London, one must be careful not by offering inducements such as degrees, prizes and so on, to damp that feeling?—I would ask Sir George whether he thought that at the University the dropping of the degree would induce students not to go to the University.

12,726. We feel that in the University?—Yes, I know, and yet I venture to say that the University authorities would not think of stopping it.

12,727. You have that feeling operating very largely in London?—Yes, but I should be very much afraid to stop that stimulant.

12,728. We have had that brought before us in a very marked manner. Persons are induced to attend these evening classes by a desire of getting knowledge, are they not?—Yes, that is so in the University extension, because there are a large number of students of the University extension who do not go up for examination. But you will find how the University teacher deplores it, and says how very few come into the class teaching afterwards.

12,729. In answer to his Lordship's question with regard to whether you would wish to be absorbed by the University, that is to say, obliterated, you replied that you could not be obliberated because you had a certain endowment?—Not only that, but considerably more than half of our students could not avail themselves of University teaching.

12,730. So that, irrespective of that reason of the endowment, you would still desire to retain your independence?—We must do it for the sake of those who cannot take University teaching.

12,731. Do you think it would be any evil to the education of London if the University absorbed you and similar institutions, and did not leave them a certain amount of autonomy and independence?—Undoubtedly. I am not prepared to say that I should not be quite willing for the University to absorb every part of it, which dealt with University teaching, but I am not prepared to say that that would meet with the approval of my council.

12,732. On the whole it could hardly do that?—No, it could hardly do that.

12,733. On the whole you desire to be left with your independence, but you desire that your teaching examination and syllabuses should be regulated and recognised by the University?—Yes; our independence not to involve lack of supervision on the part of the University, nor even the power of control by the University over such students as were seeking degrees.

12,734. You have spoken of the Gresham Charter. Are you particularly wedded to the idea of there being a separate and independent University, or would it satisfy you if the present University of London were made to fulfil the purposes which you require?—I answer that distinctly in this way; I should be perfectly satisfied with the London University if it were made to meet our interests.

12,735. Have you any preference the one for the other?—You see the one is a known body, and the other is not.

12,736. With regard to representation, it might be possible, perhaps, that there should be so much representation on the Senate. It would probably satisfy you if there were representation on certain boards of studies?—Yes, probably.

12,737. That is to say, supposing the University worked this great subject through the medium of some committee or some body of that kind, you would be content then to have your representation on that body?—I think that is as much as we could expect.

12,738. (*Chairman.*) Is there anything more you wish to say to us?—No. I should be glad to answer any questions that the Commission may put to me, but I do not know that there is any point that I wish to say anything about beyond what you will find in the papers we have placed before you showing the class of subjects of study in our college. I am happy to say that we have a very admirable laboratory; and we have a large number of students who come there for practical working, and become assistants afterwards at other places of scientific study.

The witnesses withdrew.

GEORGE M. NORRIS, Esq., LL.B., examined.

12,739. (*Chairman.*) You come here to represent the Birkbeck Institute?—Yes. I should like to state that Lord Northbrook, our President, approves of my attending here to-day. His Lordship would have been present at the deputation to Lord Salisbury but for indisposition, and if it were felt necessary he would be quite willing to appear before this Commission. If his attendance is not required he is willing to leave in my hands the representation of the institution.

12,740. You have handed in a book, but perhaps you will tell us shortly what is the origin of your institution, and how long it has been established?—It was founded in the year 1823 by Dr. George Birkbeck. In the historical sketch which I have handed in you will find that he was professor at the Andersonian Institution at Glasgow, and became impressed with the necessity for giving scientific instruction to artisans. He gave such lectures in that city. In the year 1823 a suggestion appeared in the Mechanics' Magazine to the effect that an institution should be established in London for the purpose of giving scientific instruction to artisans and others, in short we might say to the poorer classes of the community.

12,741. Is your institution endowed?—There is no endowment, with the exception of 1,000*l.* per annum, which we are now receiving from the funds of the City Parochial Charities; we have no endowment beyond that.

12,742. Fees are charged, I suppose?—Yes. The fees are very variable. They start to outsiders at 3*s.* per term, and go up to two guineas in the case of two special classes for the University Examinations. The average may be said to be about 5*s.* to 6*s.* per term. That is for three months.

12,743. How many terms in the year?—Three full terms and a short summer term.

12,744. What are the subjects taught?—We have supplied to the Commissioners a statement in which the subjects are grouped under modern languages, Latin, and Greek; mathematics; natural science, including physics, chemistry, biology, botany, geology, comparative anatomy, and mechanics; applied science; law and mental science; English language, literature, and history; and special classes for University examinations. In addition there are commercial classes for such subjects as bookkeeping, shorthand, arithmetic, with English; and several technical classes including machine construction, land surveying, building construction, metallurgy, agriculture, &c.; and there are music classes also.

12,745. The year is divided into three terms. How many lectures are there in each term? Do they vary according to the subjects?—Yes. The usual number would be 12 lectures a term, but sometimes there are special class meetings, and then the number would be increased.

12,746. Do you give certificates?—Our students attend examinations of the Society of Arts and the Science and Art Department, and many go to the London University, and at the end of our third term we hold institution examinations for the purpose of awarding certain special prizes and aggregate prizes. But we think it unnecessary to examine in every subject, because the examinations I have mentioned so well cover the ground.

12,747. Do you take into account the number of attendances? What pressure is there to induce attendance? Is it merely the examination at the end?—In the case of the Science and Art Classes we expect each student to make 20 attendances, which is the minimum number for bringing the grant to the institution, 20 out of the 30 or 36, or even more class meetings. It is a *sine quâ non* of the grant.

12,748. Does that mean that they are obliged to do it?—No, not obliged, but the fees of the classes in connexion with the Science and Art Department will be found to be very cheap. You will observe that we give instruction for 4*s.* or 5*s.* for the session. This would be impossible were it not for the grant given by the Science and Art Department. The Department requires a minimum attendance at lectures, and the minimum is 20. When we issue tickets to the students at these cheap rates we state upon the ticket that they are expected to make 20 attendances, and sit at the examination in May, unless prevented. Of course there are many causes which may prevent their doing so. A student may be called on to proceed to country to pursue his occupation; or from ill-health or other reasons, he may be unable to attend. But still, generally, the pupils present themselves for examination. I am not prepared with any per-centage, but I should think 60 or 70 per cent. present themselves.

12,749. How often are the examinations held?—Once a year.

12,750. Who appoints the examiners?—Do you mean our own examinations or the Science and Art Department? The Science and Art examiners are appointed by the Government Department.

G. M. Norris, Esq., LL.B.

15 Oct. 1892.

12,751. Are you under that Department?—Certain of our classes are in connexion with it.

12,752. Have you always worked with them since they were started?—No. We first commenced to associate ourselves with them about 25 years ago.

12,753. You have your own examinations, and the examinations of the Science and Art Department?—Yes, and also the Society of Arts Examinations.

12,754. When do your own examinations take place?—In June.

12,755. And the others?—The others take place at the end of April, and go through May.

12,756. Do the students go up for the Society of Arts examination before they go up for yours?—Yes, but very few would go to our own examinations. We think it is unnecessary to duplicate this work, and we only hold examinations now in subjects in which we have special prizes or aggregate prizes.

12,757. What is the number of your students?—The numbers attending the classes during the session which is referred to in our last published report are these. The total entries amounted to 14,472. In the first term we had 5,609; in the second term 4,569; in the third term 3,509, and in the last, the short summer term, 785.

12,758. Would they be the same men to a great degree?—To a certain extent they would be the same men continuing their studies. Some of them are so earnest that they go on through the summer. That is why we hold the summer term.

12,759. Do you have any continuous study extending over more than a year?—Yes.

12,760. How many years?—In the case of mathematics we have a series of classes which would extend over some four or five years.

12,761. Have you any extra examination at the end of that?—The higher classes would lead to the higher examination of the Science and Art Department, including the calculus in the case of mathematics. The first certificate in calculus ever given to a woman was awarded to one of our students. We carry mathematics as well as other subjects to the highest point.

12,762. Do you ever go in for degrees of any kind?—Yes. I will proceed to that. In physiology we have a two years' course; botany, two years; biology, two years; chemistry, the same; and again in experimental physics we have a two years' course, and in some cases, we even go beyond the two years.

12,763. Do you say they ever go up for the Matriculation examination of the University?—Yes. We have had some very satisfactory results. In the last published yearly report you will see that no less than 106 passed the examinations of the London University. Of these, 15 passed the B.Sc. degree, 5 in honours; 13 passed the Intermediate in Science Examination, 3 in honours; 21 passed the Preliminary Scientific (M.B.); 20 passed the Intermediate M.B., 1 in honours; 1 the B.A. degree, with honours; 10 Intermediate in Arts, 1 in honours; 1 Intermediate in Laws; 25 the Matriculation, 1 in honours. So that we have a total of 106 in that year, with 12 in honours.

12,764. (*Mr. Anstie.*) The honours being in the degree simply?—Five in the B.Sc. degree, three Intermediate in Science, one Intermediate M.B., one B.A. degree, one Intermediate in Arts, and one Matriculation.

12,765. (*Chairman.*) All in the University of London?—Yes.

12,766. Do they ever go anywhere else for degrees?—Yes; one or two of them have proceeded to Oxford and Cambridge, but as they are mostly poor they have not generally, this advantage.

12,767. They have no advantage in being with you except the knowledge they acquire?—That is so.

12,768. That puts us in possession of the nature of your institution and what you have done, what is it you exactly come to us for? Do you wish for some recognition from the new University or the newly constituted University, whichever it may be?—Yes. In the joint memorial which was sent to the Commission we say:—"The Report of the Royal Commission, appointed in May 1888, to inquire whether 'any and what kind of new University or Powers was or were required for the Advancement of Higher Education in London,' took note in an important paragraph (clause 12) of various institutions in the metropolis which give teaching of a high class, and after dwelling upon the want of mutual connexion between these various bodies, went on to suggest that, if they could be co-ordinated under a University as their natural head, the cause of education in the metropolis might gain a great impetus."

12,769. That is what you have presented in conjunction with the other institutions?—Yes, in conjunction with the Working Men's College and the City of London College. That is really the cause why we approach you. We think that higher education would be greatly advanced were it taken in hand by some great central body. We have been doing a great deal in this direction ever since the institution was started. Dr. George Birkbeck founded the institution really for technical purposes, for the purpose of giving technical education to artisans and others, but concurrently with technical education lectures were given in such subjects as physiology, fine arts, archæology, history and literature. So that from the very commencement the aim has been to give this higher education to the poorer classes of the metropolis.

12,770. When you say you think the University ought to undertake that work do you mean you would be prepared to hand it over to them, and to be absorbed and cease to exist?—The institution has a great historical position having been established now for nearly 70 years, and having led to the foundation of many hundreds of similar societies in all parts of the world, so we should not perhaps care to be thoroughly absorbed, but we should be glad to enter into a most intimate connexion with the University so far as regards our higher work. As stated in the joint memorial we should be willing for certain courses of study to be prescribed which might be adopted by the institution. The teachers of the institution might be appointed by the University and called upon to produce syllabuses; and regulations might be laid down as to the length of lectures, and the number of lectures. Our only object is to do this higher work in as thorough a manner as possible. The institution has had to contend against very great difficulties, yet the list of successes will show what a great result has been obtained.

12,771. No doubt you have been doing most excellent work; you want recognition from the University, and the University to have a voice in the appointment of your teachers, and in settling what should be taught?—Yes, undoubtedly. We have no personal interest in the matter. Our only object is to do the most that we can for higher education. I may say with regard to this higher education that we have led the way as in many other things. The Birkbeck has anticipated beneficial movements of later times, and our arrangements are regarded by various institutions and followed very closely. We look upon our institution as being the parent of the others, because in one way or other they have arisen from the Birkbeck.

12,772. You do not wish to be represented on the Senate of the University?—We should leave it to the authorities to determine whether we were worthy of a seat.

12,773. Would you be content if you have your people receive University certificates after passing examinations, and have recognition in that way?—Yes, if they obtain the degrees when they pass the qualifying examinations.

12,774. Supposing you were able to qualify anybody for a degree you would wish that he should be able to go and take it straight from your instruction without the necessity of belonging to any other institution?—Yes, that was the great difficulty with regard to the Albert Charter as it was first called, because the students had to pursue a regular course of study in a college in the University. Our students could not, therefore, attend the examinations of this proposed University. Now they go in for the London University examinations with the results which I have read which are remarkable.

12,775. You think that a certain amount of attendance at your evening classes should be equivalent to residence in one of the institutions?—Residence is not proposed, but attendance. We think it should be equivalent to attendance elsewhere. Sir John Lubbock, no mean authority, pronounced our results as remarkable, and, considering the class of students, I think they may be said to be so. I have here a copy of the Public School

Record, from which I was surprised to find that the Birkbeck Institution stood above University College and King's College in the Matriculation Examination at the London University. It was a surprise to us all. For instance, in the first column the Birkbeck is credited with 20; University College, 8; King's College, 6; so that we have more than the two colleges combined. Then in the next year we have 17 against 7 for University College, and none for King's College, and in the last column 29 for the Birkbeck against 11 for University College and none for King's College. Of course I have not mentioned the numbers from King's College School or University College School. We are speaking of the institutions merely. I take it that inasmuch as these colleges have preparatory classes they imagine there will be a fair number of candidates who will proceed to the examination.

12,776. I think you have told us what you wish. You wish for recognition, and you will be willing to leave the details very much to the new University?—Entirely.

12,777. (*Sir George Humphry.*) How many centres have you in London?—Only the one in Bream's Buildings.

12,778. Are all these 14,000 students in one building?—Permit me to say that it is 14,000 entries. Oftentimes there is a misunderstanding as to the term "students." Some institutions will say they have, as in our case, 14,000 students. We say 14,000 class entries. Some persons will enter, it may be two or three classes, and again a person will enter two or three times, so that these must be specially noted as entries.

12,779. (*Chairman.*) Have they to enter a fresh every term?—Yes.

12,780. There must be a great deal of overlapping in that number?—Yes, undoubtedly.

12,781. (*Sir George Humphry.*) What is the number of students about?—About 5,000 per annum. We say: "Total entries to all classes." I noticed with regard to a great organisation that similar results were tabulated as "students," which of course is wrong. We could not say we had 14,000 students. There are 14,000 entries, totalling 5,000 students.

12,782. All in one central institution?—Yes, in Bream's Buildings, Chancery Lane.

12,783. It is a large institution, is it not?—Yes.

12,784. Have you several lecture rooms?—Yes, 20. We should be pleased to conduct the members of the Commission over the building if they would honour us by attending on any occasion. I may say that this is a new building. The foundation stone was laid by the late Duke of Albany in 1883, and the building was inaugurated by the Prince and Princess of Wales.

12,785. And your money is derived from ——?—The subscriptions of members or students, class fees, and other payments by members in addition to the grants already mentioned.

12,786. You say "members' subscriptions"?—We have what we call a members' subscription giving admission to our reading room, the use of the library, and the advantage of attending our classes and lectures at a reduced rate.

12,787. Have you any independent fund?—None whatever, except the 1,000*l.* per annum.

12,788. Then you are entirely dependent upon those who enter in one way or other?—Entirely, with the exception of the 1,000*l.*

12,789. Are your finances pretty good? Do you pay your way?—Yes, but it is because we are favoured with the aid of teachers who accept oftentimes a very small fee for their services. In our last published report we had a balance in hand of 33*l.* at the end of the year, which commenced with 55*l.* So that you will see we just paid our way. This is up to the time of the receipt of the endowment from the Charity Commissioners, so that now I hope the institution will be in a better position, and be able to pay more to its teachers than it has heretofore. I hope the cause of education will be advanced by that grant. We have been compelled to make certain reductions in the fees for membership and some of our classes, but we hope to be in a better position.

12,790. How many professors have you?—60. They appear in the prospectus in the column headed professors, but we do not give the title of professor to them.

12,791. How are they paid?—In almost every case by a capitation grant, but in the case of the Science and Art Classes, the rule is to give the Government grant, with sometimes a capitation grant.

12,792. Then each teacher—— ?—Is dependent upon the number of his students. That is the point I want to bring out.

12,793. The class of students you have are just persons who are working all the day, are they?—Yes. There may be a few exceptions, but generally they are clerks, assistants in shops and warehouses, teachers, and artisans who come to these classes in the evening.

12,794. And the motive which induces them to come, what is that?—Sometimes it would doubtless be to advance their worldly interests, but in very many cases they come from the love of learning.

12,795. What is the proportion of men and women?—About 20 per cent. women.

12,796. In the subjects which they study I notice the larger proportion are studying natural science. That includes a very great many subjects?—Yes; it includes chemistry, physics, mechanics, physiology, botany, biology, zoology, &c.

12,797. That is the reason the numbers are so large, because it includes a great many subjects?—Yes. In the report which I have brought down you will find the number attending each subject during the first term.

12,798. With regard to Latin and Greek, what induces them to attend?—Some of them go up for the Matriculation Examination and others come simply for the love of learning the languages. You can see from the number attending the Matriculation that only a small proportion will ever use Latin for examination purposes.

12,799. So that the love of learning is a very great incentive?—It is a very great incentive in the case of those students.

12,800. Do the teachers conduct examinations of the students? Have you what is called a class examination? We have papers set from time to time, and sometimes there would be a general examination, but our own institutional examinations are conducted by external examiners.

12,801. With regard to class examination, is that conducted in a regular way?—It is conducted by the teachers.

12,802. Is it conducted in any kind of regular way?—No. We do not lay down any hard and fast rule. We let the teacher hold the examination when he feels it is advisable to do so.

12,803. Do you know whether they do it often?—I may tell you that we have a few prizes by teachers for the best collection of papers of the students during the year. So that will show that the examinations are conducted on something like a principle, though we lay down no hard and fast rule.

12,804. Is the second year's course on a higher level than the first year?—Yes. I have brought down copies of the syllabus, and you will find by referring to any of these subjects that there is a distinct advance in the second year's course.

12,805. You told his Lordship that what you desire is such a recognition of your teaching as may contribute towards the obtaining of the degree?—Yes.

12,806. Would you be satisfied with certificates?—I do not think that we should be satisfied with certificates if we were worthy of degrees, because we obtain the degrees of the London University now. We should not take certificates in lieu of degrees.

12,807. It would be an important agent and stimulus that there should be certificates given, because that would reach a great number who would not be able to obtain degrees?—Yes. You are pointing to a scheme of examination such as the Science and Art Department or the Society of Arts which give certificates in certain subjects.

12,808. You think certificates should tell to a certain extent towards a degree?—Yes, it would be a valuable arrangement. I know it is pointing to the taking of the degree piecemeal. We are not absolutely in love with that arrangement, but the award of certificates would be valuable.

12,809. I notice that of the number of your students 15 obtain the B.Sc. degree?—Yes.

G. M. Norris, Esq., LL.B.

15 Oct. 1892.

12,810. Do they not go in for any other degree?—Yes. The B.A. degree. In the particular year we are dealing with a lady took the B.A. degree with honours.

12,811. I notice that five went in for honours in the past year, whereas in the preceding two years there were 11 or 12. Does that look like a diminution of those who are taking honours?—The total number of honours was 12. We had 12 in honours that year, but only five were in the B.Sc. degree.

12,812. This paper does not quite convey that?—The statement says "These included 15 B.Sc. degrees, five "of which were in honours." It does not speak of the other honours.

12,813. So it leaves one to suppose that there were no honours?—That is a fault.

12,814. Then it goes on "the two preceding years "give 63 and 73 passes with 11 and 12 in honours?" —I will give you the numbers for the three years, if you will allow me. In 1891 we had 106 who passed the University examination with 12 in honours. In 1890 63 with 11 in honours, and in 1889, 73 with 12 in honours.

12,815. Then the past year?—106 passed last year. The returns have not been made up for the present year.

12,816. This says 106 passed the examination during the past year?—The statement was sent in some months ago.

12,817. This is June 17th 1892?—The last examination was held in June or July and the results had not then come to hand.

12,818. Then there is no diminution of those taking honours?—No.

12,819. Then with regard to what his Lordship asked you as to whether you wished to be entirely absorbed. Do you think it is a desirable thing that institutions which are doing such good work as yours is doing should be on any ground whatever absorbed?—I stated in reply to his Lordship that I thought that considering the historical position of the institution it would be a pity if we were absorbed.

12,820. Quite irrespective of historical position, which is of no great practical importance, you and all the other institutions are really doing great work in promoting education in London?—Yes.

12,821. Spontaneously of your own accord, managing it and paying your way in doing so?—Yes.

12,822. Then would it be wise that any University should take that out of your own hands and reduce you to *nil*?—I do not think it would. I do not think the cause of education would at all be aided by that course.

12,823. Would not the cause of education be materially damaged?—I think it would. We do not propose to be absorbed. Our proposition is that we should be recognised, not absorbed.

12,824. Then with regard to your representation on the University, suppose this University, whatever it be, managed its affairs through the medium of some committee or body, would it be your idea that you should be represented on such a committee or body?—I think we should desire that.

12,825. That would satisfy you and be even better than being represented on the Senate?—I should like our claims to be considered with respect to representation on the Senate.

12,826. As being more easily managed?—It would be an advantage.

12,827. Then with respect to the point as to Gresham University or the University of London. Supposing there was a proposal for each of those on the same lines, that is to say, the Gresham University being modified in the way you wish, and the University of London being modified and agreeing to give you what you wish, have you any preference between the two?—I do not know that we have any great preference, but inasmuch as we have received great favours from the London University, our students having been examined so many years by it, perhaps we should like to see the enlargement of that University.

12,828. You have a large connexion with that University already?—Yes; in fact, I believe there is no similar institution which can produce results equal to the Birkbeck Institution.

12,829. (*Mr. Palmer.*) You stated your claim for representation on the Senate, and I think you referred to the suggestion in the report of Lord Selborne's Commission that if your institution and others could be co-ordinated under a University as their natural head, the cause of education in the metropolis might gain a great impetus?—Yes, I did.

12,830. At the time of that report you were not in receipt of the 1,000*l.* a year endowment from the City Parochial Charities Fund?—No, we were not.

12,831. That was not in existence then?—No. We had the first payment in the autumn of last year, but it dated back for 18 months previously.

12,832. That being so, you would be now positively disqualified from participating in the Government grant for University colleges?—Should we be disqualified?

12,833. I put the question to you. Is it not considered that the City Parochial Charities Fund is devoted under the purposes of the Act, to working men's institutions, and the funds of the other to what are called University colleges?—I do not know whether we should be debarred from receiving any part of the grant given to University colleges if we established a claim.

12,834. It is considered a reason, and by some a cogent reason, for not receiving representatives of your and kindred institutions on the Senate of a University?—I was not aware of that.

12,835. I take it that you wish for no less advantages from a University than you obtain now from the University of London. You obtain a degree from the University of London?—Yes.

12,836. And of course you would not wish that limited in any way by the new scheme?—Decidedly not.

12,837. If I may venture to say so, all roads should lead to Rome, and if you have one of those roads clear you would be satisfied?—I think we should.

12,838. I am reminded by Sir George Humphry to ask whether you have any wish or thought that the existing standard of the degree of the University of London should be lowered?—We do not desire it to be lowered.

12,839. You would wish every existing standard to be at any rate maintained?—Undoubtedly. The results show that our students can pass examinations at the present standard, and we see no reason why there should be any reduction of it.

12,840. (*Mr. Anstie.*) From the answer you have just given to Mr. Palmer, I think I may infer that you would not be content at the Birkbeck to have imposed upon you the condition of what is called "Residence," which means attendance at any other institution as a condition for getting a degree?—Decidedly not.

12,841. I have been looking through this list of subjects, and I have been very much struck with reference to some of the answers you have given with the width and range of the instruction, not only the number of subjects it comprises, but the level which seemed to be reached in several of those subjects. Am I right in thinking that that is rather characteristic of your institution—to cover a wide ground, not only in the number of subjects but in the range or level?—Yes, that is the aim of the institution.

12,842. Then you have always had, or at least for many years have had, this higher level—what I might call the advanced course—and you have had those lectures well frequented?—Yes.

12,843. And you have achieved very satisfactory results as a consequence of the tuition given there?—I think the statistics show that we have achieved very satisfactory results.

12,844. I observe that, notwithstanding that you are now in receipt of this public money, the scheme under which you exist makes this provision: the governing body may arrange for classes of an advanced kind, the fees in which shall be on a higher scale than the ordinary classes. Do you give effect to that?—Yes.

12,845. In fact these advanced classes would be the carrying out of that portion of your scheme?—Yes, we have kept that in view.

12,846. That would fit in with your previous practice?—Yes, that was one of our arguments in support of our application to the Charity Commissioners; we felt that we were fully within the scope of the Act.

12,847. I observe also that the same scheme makes a provision for the examination of those attending the classes?—Yes.

12,848. And provides also, so far as practicable, that these examinations shall follow the rules of the Science and Art Department and other educational authorities?—Yes. We have the examinations of the Science and Art Department, the Society of Arts, and the London University.

12,849 And that is the means by which you preserve your level?—I cannot say that we have preserved our level by means of examinations. I think we should have kept the level without the examinations.

12,850. This brings me to a rather important observation which was made by Mr. Prebendary Whittington. He seemed to consider that there was what, I may venture to call a competition in many branches between your institutions and King's and University Colleges. Is that the case?—I should not like to say that there is a competition between them. I think University College and King's College may be regarded as applying to a different class of students. Their students are from a different section of society. I think any student who could afford to pay the money would go either to King's College or University College.

G. M. Norris, Esq., LL.B.

15 Oct. 1892.

12,851. Would that be equally true of their evening work?—I believe University College has not a scheme of evening work, King's College has. I know from some of my own acquaintances who have been to King's College that they have been of a better class than those at the Birkbeck Institution.

12,852. Having regard to the difference in the nature of the institutions, is that a reason why you would think, that so far as your work ought to be taken into consideration by the University, there should be some provision made (whether by representation or the governing body or otherwise) for considering and dealing with your case?—I think so. I have brought with me the syllabus for several past years giving the examination results and also reports and prospectuses.

(*Chairman.*) Anything you like to put in we shall be pleased to have.

The witness withdrew.

Adjourned to Thursday next at 12 o'clock.

Twenty-seventh Day.

Friday, 21st October, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

THE LORD REAY, G.C.S.I.
Sir WILLIAM S. SAVORY, Bart., M.B.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.

JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

MONTAGUE HUGHES CRACKANTHORPE, Esq., Q.C., D.C.L., examined.

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

12,853. (*Chairman.*) I think you are a Bencher of Lincoln's Inn, and a member of the Council of Legal Education?—I am.

12,854. You are generally acquainted with the nature of the inquiries which we wish to make?—Yes.

12,855. Perhaps you will tell us something about the Council of Legal Education, how it began, how it is constituted, and what its action has been until now?—It is difficult to know where to begin. First, I should say that the Inns of Court had no concerted or joint action in the matter of legal education till the year 1852. In the very ancient times each Inn of Court had its own set of Readers, as they were called, probably an old monastic term, for the Inns, to a certain extent, imitated monastic habits. These Readers were appointed by the separate Inns, and their work was partly to give readings in those Inns and partly to indoctrinate another set of Inns called the Inns of Chancery. These last were subordinate seminaries of legal learning, which have now ceased to exist for any legal purpose. The Readers were discontinued in the last century, and there was no legal education afforded by the Inns of Court until the beginning of this century, when a sort of revival of the readership system took place in consequence of the action of certain individual members of the Inns, who thought they ought to do something in that direction.

Unquestionably, in my view, and I believe in the view of most lawyers who have considered the subject, it is a legal duty on the part, certainly of the two Temples, and it is a moral duty, if not a legal duty, on the part of the other two Inns—Lincoln's Inn and Gray's Inn—to educate law students. I say that for this reason:—there was a debate in the House of Lords in 1875 on Lord Selborne's School of Law Bill, in which both Lord Cairns (then Lord Chancellor) and Lord Selborne (ex-Lord Chancellor) expressed their opinions as to the duties of the Inns of Court in reference to education. They both agreed in this: that without distinguishing nicely between legal and moral duties there was a duty imposed upon all four Inns to educate their students.

As regards the Temples, Lord Selborne stated (and he was not differed from in this by Lord Cairns) that they had an express trust for legal education imposed upon them by the fact that they accepted in the reign of James I. a Charter confirming them in the possession of their property. That charter provides in terms that the property so confirmed to them was to serve for the establishment and maintenance of professors of law for ever.

All the Inns having this duty to educate, in the beginning of this century certain individuals thought it was right, as I have already said, to do something to revive these readerships which had fallen into abeyance. For instance, Sir William Macintosh, a very distinguished man, gave some lectures in one of the Inns, but nothing really was done except in that sporadic fashion during the first thirty years and more of this century. Then in the year 1832 a considerable impulse was given to legal education by the Inns by the action of the solicitors. The solicitors were, like the members of the Inns, absolutely without any system of education till about 60 years ago, that is, ever since the Inns of Chancery to which they had been relegated—banished I might say—by the Inns of Court, had fallen into desuetude.

In the middle of the 16th century the Temples passed a resolution that no solicitor should have anything to do with any Inn of Court.

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

The other Inns followed suit, and the result was that the solicitors, who were originally as much members of, and as free to enter, the Inns of Court as the men who intended to practise at the Bar, were excluded from the Inns of Court, and were told that they must look to the Inns of Chancery, the subordinate seminaries, for any legal learning they were to acquire. Thus it came to pass that the solicitors were absolutely destitute of any means of legal education at the beginning of this century; they picked up what information they could in the attorneys' offices where they were introduced to the mysteries of writs, and all the jargon of the law, which at that time was much more elaborate than it is now, the law having been greatly simplified, as the members of the Commission know, by recent legislation. In 1832 a stir was made by certain private persons to form a society to bring about the education of solicitor students. It is not worth while going at length into the history of that society. It acquired property in Chancery Lane, which is now known as the Law Institution; it petitioned for a Charter, and got a Charter in 1832; by that Charter the Council of the Incorporated Law Society was formed, and it was prescribed to that Council that it should promote the legal education of the articled clerks. The Council appointed lecturers, who held classes, and that system continued in force down to a few days ago when a violent change was made, upon which I should like to say a word later on. The classes and lectures as they had existed since 1833 have been discontinued, and a new system has been set on foot. Now, to return to the Inns of Court. This action in 1832 on the part of the solicitors produced a considerable stir in the Inns of Court. Naturally, the two bodies act and re-act on each other. An effort was made on the part of the Inns to see if they could not educate their students a little more systematically than they had done during the last 200 years. Accordingly, they also appointed professors or readers in certain subjects.

12,856. Up to that time, I suppose, no education at all was required?—None whatever. There was no sort of examination; there was no sort of lectures which could be attended, and at which the attendance could be certificated; in point of fact, all that was required was that a man should be a respectable person, pay his fees, and express a wish that he should be called to the Bar.

12,857. (*Mr. Anstie.*) That would be up to what date?—The first compulsory examination was not till 1859, and that was only a preliminary compulsory examination for admission to an Inn of Court. The first compulsory final examination for call to the Bar was not till 1872. I was going to trace the alternative routes to the Bar which were open to a Bar student down to 1872.

12,858. (*Chairman.*) Before that time were there voluntary examinations to which a man might submit himself?—There were voluntary examinations to which he might submit himself. Those readers having been, as I have said, appointed in consequence of the action of the Incorporated Law Society, it was felt that there was something wanting to complete the system of legal education, namely, joint action on the part of the Inns, because up to this point, you will observe, there had been nothing like concerted action—each Inn simply acting independently of the other, teaching, so far as it taught at all, its own students exclusively, and having nothing to say to the members of any other Inn. It was thought to be rather absurd that that state of thing should continue, seeing that all the students were pressing to a common goal, and all desiring to be called to the Bar. Public attention was drawn to the question, and the result was that in the House of Commons a Select Committee was appointed in 1846 to inquire into the system of legal education pursued at the Inns of Court. There is a Blue Book on this subject, and the report is—to take it shortly—that it would be well that the Inns of Court should co-operate and establish a system of joint education. The Inns of Court having that report before them were obliged to stir, and they did. They appointed a joint committee of the four Inns, which, so far as I know, is the first joint committee which you come across in the history of the Inns. I have the report of that committee here. It is dated May 1852. It is a very scarce document, but a copy has been furnished to me by my own Inn—Lincoln's Inn—under a promise that I will not part with it. The report is this:—"That the four Inns shall act in concert with each other in the joint establishment, and maintenance of a uniform system for the legal education of students before admission to the Bar; that a standing committee or council be established to consist of eight Benchers, two to be nominated by each of the Inns of Court, and of whom four shall be a quorum"—I am only reading the material clauses—"For the purpose of affording to the students the means of obtaining instruction and guidance in their legal studies five readerships or professorships shall be established which shall consist of the three readerships already established by the Societies of the Middle Temple, the Inner Temple, and Gray's Inn on Jurisprudence and the Civil Law, the Law of Real Property, and the Common Law; and also of a Reader on Equity to be named by the Society of Lincoln's Inn, and of a readership on Constitutional Law and Legal History to be founded by the four Societies jointly." Therefore, you see the Inns were not prepared even at that time to take the bold step of all acting in concert. They said—"We will act partially in concert." The Reader on Constitutional Law and Legal History was the first Reader appointed by the four Societies jointly. So matters stood in 1852. Then the Council of Legal Education was appointed consisting of eight members, of which Lord Westbury, then Sir Richard Bethell, was elected chairman, and I may say that it was mainly owing to his exertions that this joint system came into existence. Then the next matter is this. At the time I am now speaking of, from 1852 down to 1859, the only test that a man was subjected to was that he should have attended the lectures of two at least of these five Readers for the space of one year; or, if he chose, he might submit himself to a voluntary examination. Those were his two alternatives.

12,859. (*Professor Ramsay.*) If he chose to attend the voluntary examination he need not attend the lectures?—No. From 1852 to 1859, he could enter an Inn of Court without any guarantee that he knew anything. All he had to do was to find sureties for his fees. If he was called to the Bar he must produce a certificate either to the effect that he had attended two at least of these Readers or Professors during the period of one year, or that he had passed a public examination to the satisfaction of the examiners. In 1855 a Royal Commission was appointed to inquire into the management of the Inns of Court, and also into the educational system, and they made a most elaborate report, in which they foreshadowed something like a legal University. If my memory does not deceive me they proposed the incorporation of the Inns of Court into a legal University. That report is in print, and I will not pledge myself at this moment very particularly as to its contents. That action on the part of the Royal Commission again had a great effect upon the Inns of Court. The Inns of Court have been rather slow to move, except by external pressure. But they did move, and they appointed a committee to consider the question over again. That committee sat for a very long time, and it was not until the 31st of May 1859, that they issued their report, which is called: "The first Report of the Committee of the Four Inns of Court appointed to re-consider the whole subject of Legal Education." They adopted the suggestions of the Royal Commission as to introducing compulsory examinations, and they reported to this effect shortly:—That it was expedient that there should be an examination of students previous to admission to the Inns of Court; that it was expedient that there should be a compulsory examination of students previous to being called to the Bar; that the attendance of students at lectures should be no longer compulsory; that it was expedient that no person be appointed to examine candidates for admission to the Bar who had been engaged in giving lectures or private instruction to any such candidates within two years before such examination. Then they suggested what the subjects for the preliminary examination for admission to an Inn of Court should be, and that suggestion was adopted almost as soon as made. In the year 1859 the preliminary examination for admission to the Inns of Court was first made compulsory. The subjects of the examination were fixed, and they have remained the same to the present day, namely, the English and Latin languages and English history. The examination was to be conducted by a joint board to be elected by the four Inns. The other suggestion

made by the committee, that there should be a compulsory examination previous to being called to the Bar, was not adopted by the Inns. They were not prepared at that time to take that step. In fact, they waited for 14 years, from the date of this report to 1872, when, for the first time, owing to outside action (which I will call your attention to presently), they determined that they would make the examination for call to the Bar compulsory. That was brought about again, as it appears to me, looking at the matter as a whole, in consequence of outside action, because the Commission is aware that in 1870 the Legal Education Association was called into existence. Lord Selborne, then Sir Roundell Palmer, took a very great interest in that movement; he himself was chosen the first president, and until he was made Chancellor in 1874, on the resignation of Lord Hatherley, he was practically the spokesman and advocate, so far as the Inns of Court were concerned, of that movement. No doubt he met with very great opposition. The first thing that the Legal Education Association did was to endeavour to bring about an understanding with the Inns of Court. Joint committees of those respective bodies were formed, and they met and disagreed. I have here a report of the resolution of the Legal Education Committee appointed to confer with the Legal Education Association.

12,860. (*Chairman.*) Is it the Legal Education Association that you are a member of the council of?—No. This association was an outside movement altogether, consisting of certain active spirits—turbulent spirits, I suppose, some people might consider them—who were at the time dissatisfied with the Inns of Court, and with the Council of Legal Education itself, and who desired the establishment of a general school of law, which should educate all persons who were anxious to become acquainted with legal subjects; not only members of the Inns of Court. It was a movement for a School similar to the movement which is now going on for a Faculty of Law in the teaching University of London. It was a bold comprehensive scheme; it said "There are many subjects of law "which laymen are as much interested in as law-"yers; why should we not have a central school of "law in England accessible to lawyers and laymen "alike?"

12,861. Did Lord Selborne take that view?—He took that view entirely. The history of the movement was shortly this. A Mr. Jevons, a very able solicitor of Liverpool, wrote a paper in 1868 in which he called attention to the fact that legal education was shamefully neglected in this country, not only as regards the Bar, as he conceived, but also as regards solicitors. I do not say at all that he was right. He wrote a paper in favour of a legal University. That paper was laid before a conference of provincial law societies somewhere in the Midlands, and it attracted a great deal of attention. The result of Mr. Jevons' paper was that this one man (there is generally one man at the bottom of these things) attracted to himself a number of other men. An interview was had with Sir Roundell Palmer, who at once took up the idea, and a meeting was convened in Lincoln's Inn Hall. Sir Roundell Palmer developed the idea in a speech which is in print. A society was formed, made up of such persons as were interested in the subject of the School of Law. Sir Roundell Palmer was then elected president of that society, and it is that society or association which interviewed the Inns of Court Committee and disagreed with them on the point which I am just going to mention:—"Report and "Resolutions of the Legal Education Committee of "the Four Inns of Court pursuant to the Orders of "Reference made by the several societies in 1870-71. "The joint committee of the Four Inns of Court beg "to report to the several societies that they have met "and considered the subject of legal education "which has been referred to them, and they have "considered the proposal of the Legal Education "Association, dated 18th November 1870, and they "have received and conferred with a deputation from "such association, and they have also had certain "communications on the subject of legal education "with the Incorporated Law Society of the United "Kingdom; and this Committee, after careful con-"sideration of the subject, have come to the following "resolutions:—(1.) That in the opinion of this com-"mittee it is not desirable that the education of "students for the Bar, and the education of the "articled clerks of solicitors and attorneys should be "under one joint system of management." That, of course, was the essence of the School of Law—that there should be no distinction between an articled clerk and a Bar student, *quoad* this particular subject of legal education. Both were running on the same lines; both members of a common profession, and at all events at the inception of their studies there was no reason why a wall should separate them. Then they recommended—"That there should be a compulsory "examination of students for the Bar before they are "called to the Bar, or allowed to practice under the "Bar, and that the Four Inns of Court should establish "such an examination." Then,—"That this committee "are of opinion and recommend that such examina-"tion should be carried into effect under the direc-"tions and through the instrumentality of the Council "of Legal Education." That is how compulsory examination for the Bar was brought about. In the year 1872, the Consolidated Regulations of the Inns of Court (*for the current Regulations, see Appendix No.* 26), which govern all the Inns by agreement between themselves, prescribed for the first time that after a certain date nobody should be called to the Bar who had not satisfied the examiners appointed by the Council of Legal Education that they were possessed of a certain amount of legal knowledge. The next thing that happened was this. In 1875 Lord Selborne introduced his School of Law Bill into the House of Lords. It was read a second time, and committed to a Committee of the whole House. It was opposed by the Inns of Court through some representatives in their Lordships' House. It was opposed by Lord Cairns as Chancellor. Lord Cairns, in fact, started a separate Bill of his own—at any rate a Bill which he supported—known as the Bar Discipline and Education Bill. That Bill also passed a second reading in 1876, but both Bills were dropped in that year, and were no more heard of. When I say no more heard of, the School of Law probably went under ground as an idea, and revived in the demand for a teaching University for London. As far as regards the demand for a separate School of Law on the lines of this Legal Education Association, I am not aware that since that Bill was withdrawn by Lord Selborne in the year 1876, there has been any demand for a School of Law, except in connexion with a University.

12,862. What became of the Education Association?—That died out. It was an expiring effort of the Association to get this School of Law Bill through. Lord Selborne found that he could not carry it, I suppose, and the result was that the Legal Education Association died out, and with it the School of Law as proposed by that association.

12,863. (*Mr. Bendall.*) Can you tell us shortly the lines of objection?—The lines of objection on the part of the Inns of Court were that it was proposed to place the education of students desirous to become solicitors and those who were desirous to become barristers under a common management.

12,864. (*Professor Sidgwick.*) Was that the chief ground of Lord Cairns' opposition?—No, I think not. Lord Cairns did not put it on that ground at all. Nobody who says that the two sets of students should be separately educated can, I think, quote Lord Cairns as any authority for that proposition.

12,865. (*Mr. Palmer.*) There was one other objection which I think was given in Lord Justice Fry's evidence before the last Commission, viz., jealousy, actual or supposed, on the part of the University of London in the event of the founding of an University of Law to give legal degrees only?—I have no doubt that was so. I had forgotten that. The School of Law would grant degrees by a single Faculty, and the University of London considered that that would be an innovation *pro tanto* which would affect their degrees.

12,866. (*Chairman.*) I suppose the real root of the difficulty was the barristers not liking to be associated with the solicitors?—As far as the Inns of Court were concerned that was so, because we have it on record that the objection after the conference between the two bodies was that and that only. The resolution is:—"That in the opinion of this Committee it is not desi-"rable that the education of students for the bar, and "the education of the articled clerks of solicitors and "attornies should be under one joint system of man-"agement." Now we have got down to the year 1876, and the Readers and Professors went on. Those five Readers that I have mentioned in those five subjects went on in the Inns of Court under a system of com-

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

pulsory examination as from 1872 down to the year 1891. There was not much alteration, though there were slight alterations from time to time. The Readers were converted into Professors; I do not know why.

12,867. Does it strike you who are intimately acquainted with the history of the whole thing that since the action which was taken in 1872 there was any marked difference in the ability of those who were conducting business at the Bar in consequence of this compulsory examination, or in consequence of what was done? Were they a more able set of men than they were in the old times when they were left to find their education where they could?—I cannot say that they were. Ability comes to the top at the Bar in very curious ways, and it is impossible very often to say why a man succeeds at the Bar. A great many of the best men at the Bar never emerge into public life, because they have not pursued the lines which lead to lucrative employment, and it is difficult to gauge the effect which a compulsory examination system may have produced upon individuals. I do not suppose that the general standard of lawyers in regard to legal learning was much raised by the system of compulsory examination. I should think a great deal of it was got up *ad hoc* and forgotten. But still the Inns of Court were fulfilling their duty in insisting on examination, and so they thought it right to do so.

12,868. Had it any effect in keeping out grossly ignorant people who before had a certain amount of practice?—No doubt it would have that effect, because the examinations ranged over a considerable number of subjects. It must have acted as a deterrent to some persons who would have liked to write "barrister-at-law" after their names if they could have done it without any trouble. I have no doubt that persons in the position of country gentlemen and others going in for diplomacy were deterred by the difficulty of the examination. It may have thinned the ranks in that way. But there is never any lack of persons wishing to become barristers-at-law. There is more supply than demand at the present moment.

We may now pass on to 1891 when new regulations came into force, and this time, I may say, that the movement for reform came from inside the Council of Legal Education itself. Two learned members of that Council, Lord Justice Lindley and Mr. Justice Mathew took a great interest in the subject. They put themselves into communication with certain other persons, and in the result certain changes were brought about. Lord Justice Lindley took a very active part in what I am now going to mention.

12,869. (*Mr. Austie.*) Lord Justice Lindley is the President of the Council, is he not?—Yes. What was done was this. The Readers had some years before been converted into Professors. I do not know that that was more than a change in the name. Five of them had been paid at the rate of 1,000 guineas a year each for lecturing in the five subjects of Jurisprudence and Roman Law, Constitutional Law and Legal History, Common Law, Equity, and Real Property. The salaries were reduced, and a redistribution was made of the subjects. Six Readers were appointed at 500*l.* a year; four of those Readers having Assistant Readers under them, or working with them, at 350*l.* a year each. Reader No. 1 was appointed to teach Roman Law and Jurisprudence, and International Law (public and private). Reader No. 2 to teach Constitutional Law, (English and Colonial), and Legal History. Common Law and Equity had then been consolidated, and, therefore, it was necessary to do away with the formal distinction between them in order to march with the times. Two Readers, Nos. 3 and 4, were, accordingly, appointed in Law and Equity, one of whom dealt with what was still popularly called the Common Law side of legal learning, and the other with the Equity side. Reader No. 5 dealt with the law of Real and Personal Property and Conveyancing. Reader No. 6 with Civil and Criminal Procedure. Only four of these Readers had Assistant Readers; the Reader in Constitutional Law had no Assistant Reader, nor had the Reader in Procedure. The other four each had an Assistant Reader working with them. I have here the prospectus of the lectures and classes for Michaelmas Term 1892 (*see Appendix No.* 27). The first subject is Constitutional Law, English and Colonial, and Legal History. The second is Roman Law and Jurisprudence, and International Law (public and private). The third is the Law of Real and Personal Property and Conveyancing. The fourth and fifth, Law and Equity, divided into what I may call roughly, Common Law and Equity. Then the sixth, Procedure, Civil and Criminal, and Evidence. Then in August this year it was pointed out to the Council that we have a great number of Indian and Colonial students, and that the Inns had appointed a professor of Hindu and Mohammedan Law in 1869, and continued it down to 1874 when it was dropped, because there was not a sufficient attendance. It was represented to the Council that it was expedient to try the experiment again. Accordingly the Council have now appointed a Reader in Hindu and Mahommedan Law (*for notice as to this, see Appendix No.* 28). They have also appointed a Reader in Roman-Dutch Law, which is the system of law in force in our South African and other Colonies originally ceded by Holland. Their salaries are not finally fixed, because we really do not know how far the experiment will succeed. To sum up, at this moment, the Council of Legal Education has a teaching staff consisting of 12 persons; six Readers and four Assistant Readers in the English subjects, and in addition to those 10 persons there are two more, one in Hindu and Mahommedan Law, and the other in Roman-Dutch Law, by way of temporary experiment. That is the teaching staff which the Inns of Court have now furnished by the Council of Legal Education. We have gone back to the old term "Readers," but practically they are Professors. They deliver lectures, and they also hold classes for detailed and personal instruction.

12,870. (*Lord Reay.*) For how long are the readerships tenable?—Each Reader is appointed for three years, and he is re-eligible and removeable on the vote of 10 members of the Council.

12,871. (*Professor Ramsay.*) Re-eligible indefinitely?—Yes. The Consolidated Regulations of January 1892, which are the current Regulations (*see Appendix No.* 23*c.*) provide as follows:—"Each Reader shall "be appointed for three years and shall be re-eligible, "but he shall be removable during his term of office "by the vote of 10 members of the Council. The "period for Assistant Readers and the condition of "their tenure of office shall be left to the discretion of "the Council."

12,872. (*Lord Reay.*) Is it the rule that they are re-elected?—I cannot say there is any rule at present, because the three years are not out. Professor James Bryce and Mr. Frederic Harrison who formerly lectured on Roman Law and International Law, were re-elected from time to time. Sir Frederick Pollock was for many years a lecturer in Common Law and was frequently re-elected.

12,873. (*Chairman.*) They were appointed by the Council, were they?—Yes; they were appointed by the Council.

12,874. (*Professor Sidgwick.*) Was the personal change made before 1890?—It was made in 1891.

12,875. So that, in fact, when they got rid of the professors they also changed the persons?—Yes; and you observe the salary was only half. Then I ought to say that a board of examiners was appointed. It was resolved on the 3rd November 1891, by the Council of Legal Education, that there should be a general board of examiners, "consisting of all the Readers and four other "examiners, from whom one Reader and two exami-"ners shall be selected to examine on each subject; "but no Reader shall (unless requested by the other "examiners) examine the papers of his own pupils." I should observe that the Council of Legal Education which originally consisted of eight members was enlarged some years ago to 20, and it now consists of 20 members, five contributed by each of the four Inns.

12,876. (*Chairman.*) Are they elected by the four Inns?—They are elected by the four Inns. Each Inn elects five members of the Council of Legal Education.

12,877. What body in the four Inns elect them?—The governing body or Benchers which consists of Judges, Queen's counsel, and a certain number of Junior Barristers or Stuff Gownsmen.

12,878. (*Professor Ramsay.*) Can you give us an idea of the number?—In Lincoln's Inn we are 70. The Council of Legal Education consists at present of Lord Justice Lindley, who is chairman, several judges, several Queen's counsel, and three gentlemen who are not Queen's counsel.

12,879. (*Chairman.*) Each Inn is not obliged to elect people from the same Inn, is it?—Yes; each Inn sends its own quota of five to the common council of 20.

12,880. They must be members of the Inn?—Yes. There are five Lincoln's Inn men, five Gray's Inn men, and five from each of the two Temples.

12,881. And the head? — The head is chosen by themselves. Then there is a Board of Studies composed of 11 members, namely, two judges, six Queen's counsel, all of whom are members of the Council of Legal Education and to these are added three members of the teaching staff.

12,882. Elected by the teaching staff?—Elected by the Council of Legal Education. The Board of Studies is little more than a working committee of the Council of Legal Education.

12,883. Eight of their own body and three from outside?—Eight of their own body, plus three Readers. One of these is the Reader in Roman Law, Dr. Hunter. Another is Mr. Robertson, Member for Dundee, who is Reader in Common Law; another is Mr. Hopkinson, Q.C., who is well known in connexion with Equity. Now, perhaps the Commission would like to know about the attendance at the classes and the lectures. I have a Table here which I will hand in, if you please, which shows the attendances in these six different subjects (*for this document see Appendix No.* 29).

12,884. Before we leave the Board of Studies perhaps you will tell us what the Board of Studies' duties consist of?—The duty of the Board of Studies is to settle the prospectuses of the lectures and to superintend the teaching from a more minute point of view than the Council of Legal Education can itself do.

12,885. Do they arrange the syllabuses?—Yes, they arrange the syllabuses. The course of proceeding is generally this. The Readers are requested, after an indication of the line to be followed, to prepare their own prospectuses and submit them to the Board of Studies. The Board of Studies take them into consideration. Also all examination questions are submitted to the Board of Studies, so that they see first of all that they are framed so that they can be understood easily (which is not always the case), and also that they are not faddy or crotchety. Everything is done in order to make the examination as fair as possible. The attendance at the lectures and classes is satisfactory in point of numbers. I need not trouble you with reading the numbers.

12,886. The attendance is voluntary, not compulsory?—Yes, quite voluntary. If a man thinks he can do without the lectures he need not go to them. There is, however, a mild compulsion exercised by means of a certain provision which the Council have made, and which is this. The student is told that he will be examined in the subjects of the lectures "so "far as they have been treated of in the lectures "and classes." Now, as the subjects are wide and as the minimum of learning commends itself to many students they do not want to read things which, to use a popular phrase, they do not think will pay, and, therefore, they are driven by a mild compulsion into the lecture room to see how far the lecturer is advancing in his subject in order not to get ahead of him in their private reading. In considering, therefore, the statistics of attendances at the lectures, you will have to bear in mind that there is that sort of mild compulsion exercised on the students. The result of the examination last Trinity Term was this: The number examined was 92, and I am sorry to say that there were many failures. The number of those who passed was only 57, leaving a balance of 35 who were rejected. I daresay that was partly due to the fact that many students seeing a new system went in to see if they could get through by a piece of luck; but although we had made the examination easy, a great number of them were disappointed, and the proportion of those who were rejected was large.

12,887. These are the numbers of the students who went up whether they had attended the lectures or not?—These are the total candidates for examination.

12,888. Were there many outsiders went up?—That I cannot tell you.

12,889. (*Professor Ramsay.*) Did you have an examination in all the six subjects or was there any option?—Before I answer that question may I give you the result of the Honours examination? There were 11 candidates for honours; one studentship was awarded of 100 guineas tenable for three years; and one Certificate of Honour. So there were two decorated persons out of those 11 candidates. Now to answer Professor Ramsay as to whether there is any option of subjects, I should like to explain that there is a considerable option of subjects. The course of study is supposed to last for two years. The ideal student—I do not know whether we have got him—will attend an elementary course of lectures and classes for one year. Then he will devote a second year to the advanced course. By that means he will have prepared himself completely so far as regards the instruction given by the Inns. That is the idea, and accordingly all the prospectuses of the Council of Legal Education are framed with that view. In the course of those two years it is supposed that the salient departments of professional law at all events will be covered by the lecturers. Candidates for the Pass Examination at or after Easter 1893 are to be examined at their option in any three out of five named subjects in addition to Roman Law. Roman Law is a compulsory subject. Every student to be called to the Bar must pass a satisfactory examination in Roman Law. This amounts to knowing something about two or three books of the Institutes of Justinian, knowledge which I believe from the experience of the older Universities is pretty quickly acquired. That examination they may go up for at any time after their fourth term; and as they are naturally very anxious to get rid of this incubus upon their student life, they usually do go in for Roman Law at the end of their fourth term. When they have gone in I do not think it is too much to say that in nine cases out of ten they completely forget it before their student life is over.

12,890. (*Professor Sidgwick.*) Can you explain briefly what good the Roman Law is supposed to do by those who believe in it?—It is supposed that the principles of jurisprudence may be extracted from the Roman Law, and no doubt they may be if the subject is properly studied. I have the highest reverence for the Roman Law when so properly studied, but I do not know that any good is done by a student's merely acquainting himself with the fact that *servitus* is the Latin for an easement or something equivalent to an easement; that *patria potestas* in ancient Rome carried with it certain rights which certainly could not be lawfully exercised at the present day; or that there were several modes in which a slave could be manumitted, or a valid testament made. That this sort of book learning has any bearing upon the professional life of the student of to-day I am not myself able to see.

12,891. (*Chairman.*) Is that a fundamental rule?—That is a fundamental rule. That could be altered only by the four Inns of Court.

12,892. That could be repealed at any moment?—Yes, that could be repealed at any moment if the four Inns of Court could agree. With regard to the other subjects it is to be optional to the student which he will take up, provided he takes up three. These three he may choose out of the five that I have mentioned, viz.: Real and Personal Property; Contracts; and Torts (which is the same as which I have called Common Law); Equity, Trusts, and Easements (which is the same as what I have called generally Equity); Procedure and Evidence; Constitutional Law and Legal History. He may take any three of those five. He may leave out Constitutional Law and Legal History, and offer himself in Procedure, Equity, and Real and Personal Property; and he may make other combinations. Whatever combinations he makes he has also to be examined in one of the following groups of subjects which are of a special and professional character, such as Purchases, Leases, Mortgages, Settlements, Mercantile Contracts, and divers others. I will hand in a printed paper as a more complete answer to Professor Ramsay's question as to the option which is to be given to students at and after Easter 1893. (*For this paper see Appendix No.* 30.)

12,893. (*Lord Reay.*) Where does International Law come in?—It does not come in there at all. This is the examination for Pass. If a man goes in for Honours and aspires to be the best in the field, he must of course take up everything.

12,894. (*Professor Ramsay.*) Must a passman take those three subjects at one and the same examination?—Yes. I will hand in a detailed supplementary prospectus of the lectures and classes (*see Appendix No.* 31) which will show you the exact mode of proceedings which we adopt. I will also hand in the

Mr. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

rules for the examinations of candidates for pass certificates and pass in Roman Law (*See Appendix No. 23f*). Then with regard to prizes they are of two kinds. Three of the Inns give separate prizes, and all of them give joint prizes in the sense that they combine to give a prize. Those that are given jointly by the Inns are awarded by the Council of Legal Education. I should mention that there are two Honours examinations a year and four Pass. (*For Rules see Appendix No.* 32.) In each of the four statutory terms there is an examination for Pass. In two of those statutory terms there is an examination for Honours—Christmas and Midsummer. (*For notice as to this see Appendix No.* 33.) At the Honours Examination the Council of Legal Education may award two studentships, one at each examination, of 100 guineas *per annum* tenable for three years, and they may award any number of certificates of honour. Those certificates of honour are much sought for by the Colonial students and the Indian students to whom it is of great advantage to be able to carry something from the home country to show what they have done at the examination by the Inns. In addition to the studentships, each Inn has empowered the Council to award a sum not exceeding 50*l.* (*i.e.*, 200*l.* in all in prizes to be awarded at the Honours examinations, the subjects to be settled by the Council. At the Trinity examination a scholarship by the Council, called the Barstow Law Scholarship, is awarded to the student who has passed best in Jurisprudence (including International Law, public and private), and in Constitutional Law and Legal History. This is open to the students of any Inn. But the Inns also award prizes to their own students exclusively. The Middle Temple gives 50*l.* to each of its students who obtains a certificate of honour from the Council of Legal Education or a studentship awarded by the Council, besides a prize of 10 guineas for proficiency in Criminal Law which is called the Campbell Foster prize. Lincoln's Inn also gives a prize of 50*l.* on similar terms to the student of its Inn who obtains a certificate of honour from the Council of Legal Education or gets a studentship.

Gray's Inn has several scholarships. The Arden Scholarship worth 60*l.* a year, is awarded every year, and is tenable for three years from the scholar's call to the Bar by the Society of Gray's Inn on election thereto, provided he shall so long continue a member of the society, and shall not be engaged in any other occupation than that of a barrister. Independently of that, this Inn has two other scholarships called the Bacon, after Lord Bacon, who was a Bencher of Gray's Inn, and the Holt Scholarship, called after Lord Chief Justice Holt, who was also a Bencher of that Inn. One of those is worth 45*l.* and the other 40*l.*, and they are tenable for two years from the day on which the holder shall have been examined for the scholarship, provided he shall so long continue a member of the Inn. Gray's Inn also offers to its own students an annual prize of 25*l.*, known as the Lee prize. The Inner Temple gives no prize of its own, but I am informed on good authority that the subject is under consideration.

12,895. (*Chairman.*) That gives us the present state of things?—Yes.

12,896. I should like the number that passed the examination. You have only told us those who have attended the lectures?—I gave you the numbers of those who offered themselves for examination, 92, of whom there were 35 failures, but I cannot tell you how many of those attended the lectures. I presume I shall be able to afford you the information, because every man when he enters the room would have his name taken down to see whether he has paid his fee.

12,897. (*Professor Ramsay.*) Are there as many as that for examination four times a year?—It is four times a year for Pass. I have not got the statistics of the earlier examination.

12,898. (*Mr. Anstie.*) Trinity always used to be the fullest examination?—Probably the Summer Term would be the fullest term.

12,899. (*Chairman.*) That is the present state of things. Now you may wish to make some remarks about it?—I must say it appears to me that the system is not satisfactory; it is an attempt to do more than the Council can really well perform. Take the lecturers in what I may call the scientific departments of law, meaning by that those parts of law which are not strictly professional in character. Here is a subject, "Constitutional Law (English and Colonial) and Legal History." It is quite impossible, as it seems to me, for one man to discharge adequately the duties of so large an office. At all events it is impossible for a student attending that one man's lectures to get more than a very partial acquaintance with so large a subject. I have here the prospectus for the Michaelmas Term, which is about to open this week. Looking at that I find nothing about Legal History. The lecturer, Mr. Wallis, is a most able man, the most eminent in his subject, but he cannot approach Legal History, and he can only approach a small fraction of Constitutional Law. He is going to lecture on:—The Crown; Succession; Allegiance; Civil List and Pensions; Royal Family; The Prerogative; Historical Retrospect; Limitations and Manner of Exercises; The Councils of the Crown; The Crown and the Cabinet; The Prime Minister and the Cabinet; The Cabinet and Parliament; The Ministers of the Crown and their Departments; The First Lord of the Treasury; The Lord Chancellor; The Home Secretary; The Foreign Secretary and Prerogative with regard to Peace and War; Other Departments; The Permanent Civil Service; The Naval and Military Forces.

12,900. (*Mr. Rendall.*) What is the length of that course?—This is from October to Christmas.

12,901. And that will represent one-third of the year's work?—Very nearly.

12,902. How often does he lecture?—Once a week.

12,903. Is it once a week for two months?—This is the programme for a week. Mr. Wallis lectures on Thursday and holds classes on Tuesday, Thursday, and Friday, one lecture a week and three classes a week.

12,904. Have you a complete sessional syllabus?—This document (*See Appendix No.* 34) would supply it during Hilary, Easter, and Trinity educational terms, that is three out of the four. I cannot go nearer than that because we have only had three terms this year yet.

12,905. (*Lord Reay.*) Are those lectures attended by students reading for honours as well as Pass?—Yes.

12,906. (*Mr. Rendall.*) And these students for the most part give the whole of their time to study, I suppose?—No, many of them are attending in barristers' chambers at the time and learning the practice of the law. No doubt that interferes with their attending the lectures. In fact there has been a good deal of complaint by students that they are overdone with lectures. Some of them have already engaged themselves in barristers' chambers and paid one hundred guineas for the year's course; they would not like to lose any time by attending lectures, and no doubt upon that particular class of persons the new lecture system has pressed a little hard.

12,907. Can you give me an idea of the time a student would spend at lectures?—Supposing that a student determined that he would attend every lecture and every class.——

12,908. Only three out of five subjects?—On Monday he would attend Equity from 10 to 11; he would attend a class from 11 to 12 the same day; that is two hours. It would be about two hours a day.

12,909. (*Mr. Anstie.*) I am not sure whether you have told us whether the honours and pass are given on the same papers or not?—They are on separate papers.

12,910. Do you still retain the *viva voce* examination?—Yes, but that is very perfunctory.

19,911. (*Chairman.*) There is nothing asked in examination that is not taught in the lectures?—That is the theory.

12,912. So if a man has got a good memory he might be able to prepare by two hours a day, but I suppose he would have private reading also?—Yes, he might.

12,913. (*Professor Ramsay.*) Do you say that in Equity alone he would be attending two hours a day?—Not every day.

12,914. (*Mr. Rendall.*) You meant two hours a day altogether?—Yes. Supposing he attended Mr. Hopkinson, who lectures on Equity, on Monday, he would have to attend Mr. Hopkinson once for a class and once for lecture, that is twice on Monday. He would have nothing to do with Mr. Hopkinson on Tuesday, nor on Wednesday, nor on Thursday. On Friday he would have a lecture from Mr. Hopkinson, and on Saturday

he would have a class. Therefore he would have four hours in the week for Equity. That is what it comes to, and you may take it that is pretty much the same for every other Reader.

12,915. (*Professor Ramsay.*) Would he take that for all the four terms of the year?—All the four educational terms.

12,916. You were saying you had attempted too much and effected too little. Then you divide the law that is to be learnt into two classes, one professional and the other non-professional?—There is a great deal of law which is to be learnt, which concerns a great many people besides lawyers.

12,917. (*Chairman.*) I will just ask you with regard to non-professional law, do any, except men who intend to go to the Bar, attend any of those lectures?—No. Nobody can attend any of those lectures who is not a member of an Inn of Court, that is a *sine quâ non*. That leads me to make this observation. Jurisprudence is a department of liberal education. A certain amount of knowledge of international public law, as distinguished from what is called, or mis-called, international private law, is certainly a subject of liberal education. Every educated man would desire to know something about the law of war, and a great many would wish to know a good deal about the law of neutrals, as a matter of interesting investigation; and in diplomacy, of course, it is very important. To know something of jurisprudence appears to me to be part of the education of a man who professes to be cultured, to use a hackneyed phrase, or even fairly educated all round. If the Inns of Court are going to lecture on these subjects they ought not to confine their lectures to members of the Inns of Court, because there are a vast number of people in the metropolis who would be glad to learn something about these subjects without having the slightest intention at any time of being called to the Bar, and who would care nothing for the words "Barrister-at-Law" after their names. Therefore the work they are attempting is a sort of acknowledgment that it must be done. It appears to me that it would be very much better that that department of law—Jurisprudence—including the principles of legislation, which is the title of a treatise by a man who was certainly not a practising lawyer, Jeremy Bentham, and a great deal of public International Law, also a subject of common interest, should be dealt with by a person who is not identified with any professional body; and the only way to reconcile the demand for that with the existing state of things is that some legal Faculty should be created connected with a University which should deal with that scientific, non-professional, and, I may add, non-lucrative side of law. I believe that in the United States the distinction is practically recognised, and that though it would be difficult to say where scientific law ends and professional laws begins—for there is no line of demarcation between them—still, for practical purposes you can draw such a line, and I believe it has been drawn on the other side of the water. That being so, what I would suggest should be done is that a legal Faculty should be founded, and founded by the Inns of Court.

12,918. Is there no means of learning this non-professional law now? Do not different Universities teach it?—In a certain way they do. There are professors at Oxford who deal with it, but that is confined to persons who can afford the luxury of University education, either as collegiate or non-collegiate students. No doubt those subjects are taught there, but they are not taught in London. Take the case of a man like Mr. Grote. Supposing Mr. Grote when he was engaged in commerce desired to learn something about Jurisprudence or International Law for any purpose—perhaps for the purpose of a book he was writing—he would have no opportunity, as far as I know, in London of acquiring that information, because the classes at King's College are evening classes, I believe, and it is admitted, I think, as far as regards King's College, that their law classes have not been a success; that their staff requires a considerable amount of strengthening. As to University College I cannot speak, but I do not know that that instruction could be got there. At all events, I do not think it could be got in such full measure as men are entitled to have it, and they are certainly excluded absolutely from entering the lecture room of the Inns of Court, where we have an extremely competent man who is delivering lucid lectures on that subject.

12,919. At any rate in London, however, it may be in other places, there are no means of getting any education in non-professional law?—That is so. Then, if I open this programme again and take the next subject—Roman Law and Jurisprudence and International Law (public and private)—just observe the congeries of subjects which are put upon the shoulders of one Reader and one assistant Reader—Roman Law and Jurisprudence and International Law (public and private). What would a professor in the University of Berlin or in that of Paris, say to such a subject as that being lectured upon two or three hours a week by two persons? I think it really is not worthy of the metropolis, especially when those lectures are given by one man, and confined to students of the Inns of Court. Scientific and non-professional law is much better dealt with in my opinion through a University. The Readers are very able men, the Council of Legal Education took the greatest pains, wading through hundreds of testimonials, to get the best men, and I believe they have got them. There is no fault in the personnel of the staff, and there is no fault on the part of the Council of Legal Education, but the result is meagre and poor in the extreme as far as the work is concerned, owing to the exigency of the position, to the great quantities of subjects crowded upon one man, and to the exclusiveness of the audience by reason of the rule that nobody but a member of an Inn of Court can attend.

12,920. (*Professor Sidgwick.*) Might I ask whether the Readers are bound to give any minimum number of lectures?—Yes; the minimum is prescribed by resolutions of the Council, dated 26th June 1891. (*See Appendix No.* 35.) My complaint is that they have too much to do, too little time to do it in, and if they do it well, as no doubt they do, their class is too narrow to get the full benefit of the Readers.

12,921. (*Mr. Rendall.*) Do the Council ever receive requests for permission to attend from non-students?—I only know one case which happened to myself. A gentleman who was a solicitor and who was about to change over to the Bar, as he can now do very easily, asked me if he might attend the lectures, as he was shortly becoming a barrister. But he was referred to the rule showing that he could not come.

12,922. (*Chairman.*) I suppose we may infer from what you have said that the examinations are too discursive and too large; there are too many subjects, too much to acquire, and it rather tends to only acquiring a smattering of each?—The examinations are, according to this rule, confined to those parts of the subject which have been dealt with in the lectures. The subjects of the examination are, therefore, restricted more narrowly than the lectures themselves, since they are to be only on a portion of the lectures. And there is another thing that strikes me about it. Not only are the general public excluded, the solicitors are excluded also. Why? The solicitors themselves do not give any instruction in London, as far as I know, in Jurisprudence or International Law (public or private), why should they not have the opportunity of learning something on these subjects from the Inns of Court?

12,923. Are there no examinations in connexion with the Incorporated Law Society?—There are examinations, but there are now no lectures for a very remarkable thing happened this month. The Incorporated Law Society gave up its lecture system. The President of the Society was good enough to send me the other day an address that he delivered at Norwich on the 4th of this month. He there states that the lectures are to be given up because the number of subscribers to the lectures has been during the year ending 31st December 1891, 29 only, and to the lecturer's classes, 13 as against 42 and 20 for the previous year.

24,924-5. (*Professor Ramsay.*) You read the word "subscribers"?—Yes, that is entrants, the persons who enter for the lectures. They all have to pay a fee. We surely cannot have arrived at that point in the history of education when lectures are to be abandoned altogether, and yet the Incorporated Law Society has abandoned them. And what have they substituted for it? A system of tuition by correspondence. I am reading from a notice which appeared in the public prints a few weeks ago:—"The Council have "decided to adopt the scheme set forth below, with "the object of affording assistance to articled clerks, "before and after the Intermediate Examination, in "the prosecution of their studies, and to encourage "the habit of systematic reading." I will only read

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

two clauses:—"The instruction both for London and "country students will be given by means of monthly "letters containing suggestions as to the general "course of reading, with hints as to points to be "noted and general advice, and with questions to be "answered from memory and returned to the tutor "with answers within 10 days from receipt for correc- "tion and comment. This course of instruction to "cover the selected portions of Stephen's Commen- "taries within each 12 months. This course may "commence on or at any time after October 26, 1892. "In addition each student will have during the period "of this subscription opportunity of consulting the "tutor in personal interview on three afternoons of "each week, or at any time by letter, on such points "and questions as may present difficulties to him." Now it appears to me that that is not satisfactory. With great respect to the Incorporated Law Society, it seems as if, in order to checkmate the private crammer, they were resorting to a method to which it may be objected by those who are disposed to cavil that it tends in the same direction.

12,926. (*Chairman.*) Is it necessary for a solicitor to have a very full legal education? I suppose not nearly so much as it is for a barrister?—No, there is no department of law which a barrister may not be called upon—and sometimes rather suddenly—to expound to the judges; but a solicitor, if he is in difficulties, can always—and, if he is well advised, will—resort to a barrister for advice. No doubt they can relegate their own duties to the barrister, and get the work done vicariously.

12,927. In important cases they take the opinion of counsel?—Yes; it is always understood on our side of the profession that that is their duty, and the most important duty they have to discharge.

Now may I return for one moment to the exclusiveness of the Inns of Court? Surely there must be many articled clerks who would desire to attend the lectures. They cannot always desire to do this by correspondence. Why should not they have the benefit of this instruction? They cannot get it at the Inns of Court; why should they not get it through the University and through a Faculty of Law established in such a University?

If the Incorporated Law Society will contribute to such a Faculty of Law along with the Inns of Court, the Inns of Court could not possibly object to that. When we recollect that for many centuries articled clerks to solicitors and law students of the Bar were educated in the same seminaries of learning, Inns of Court and Inns of Chancery, and when we recollect that now it is very easy to change over from one side of the profession to the other, if you pass examinations, (without any sort of eating dinners or introduction in hall, but simply by giving notice,) it seems to me that the Inns of Court should be willing to open their lecture room doors to solicitor students, who are absolutely shut out now from any lectures of the Incorporated Law Society in consequence of the step that has been taken. If that is so, the conclusion to be drawn is that there ought to be a professorial system, which should deal with scientific law, and which should deal with it in favour of anybody who chooses to offer himself on paying a certain fee. But I do not see why the professional law should not be equally widely taught. There are many outsiders who would like to know something of professional law. A little law, of course, is a dangerous thing, but no law at all is very awkward. There are many cases in which a man would like to know, for instance, something about the land laws of this country, not only with a view to Parliament, public meetings, and so on, but with the view to the management of his own estates. One would like to know, for instance, how many limited owners in this country have the slightest idea what their powers are. How many tenants for life know how many cottages they can erect, or how much land they can safely drain, and yet get a charge upon the inheritance for what they do? That knowledge ought to be open to anybody. If a man said he was going to lecture for one session upon the Settled Land Act, which is the charter of every country gentleman who is a limited owner, such a lecture would be interesting to many persons who do not want to practise law. Therefore I would not shut the door of the professional lecture room in the face of anybody. To open it through the Inns of Court would certainly not be reasonable, *qua* Inns of Court; but to open it through a Faculty of Law endowed by the Inns of Court would be very reasonable. Therefore that seems to point to the conclusion in favour of the establishment of a Faculty of Law.

12,928. Then do you think a teaching University for London might undertake the teaching of law, both what you have called non-professional and professional?—I think both; but the Inns of Court would, I apprehend, in such a Faculty have a preponderating voice.

12,929. But supposing a satisfactory arrangement to be made for the University to undertake it, the present duty performed by the Inns of Court and by the Council of Legal Education might drop to the ground?—I think we should be rather resuscitated in a glorified form. My view is that the Council of Legal Education would practically become the Faculty. Of course with these scientific subjects the members of the Council or the judges and practising barristers cannot pretend to be thoroughly acquainted or anything but very partially acquainted, but with the addition of certain outsiders, experts in these subjects, who would supplement our short comings, I do not see why the Council of Legal Education should not become the assembly of the Faculty of Law in the University.

12,930. Then they would cease to teach and examine as they do now?—Their influence on the examination would be the same.

12,931. They would examine as part of the University not as they do now?—Yes, as part of the University.

12,932. Then you would be willing to give up your present duties to a University if it was conducted as you wish?—Yes. You must understand that I am speaking for myself alone. I probably should be condemned in any other chamber than this for speaking so boldly. All I say I say entirely for myself. I believe there are persons who would be willing to see that done provided there would be no loss of prestige or dignity to the Inns of Court. I do not think there need be any fear of that. There would be no interference with the right of call to the Bar. We might still impose any condition we liked about the call to the Bar. We might say to a candidate, "You must have a "Bachelor of Laws degree," or we might say, "We "will have nothing to do with your Bachelor of Laws "degree, we will not admit you." Or we might require systematic attendance at lectures. That power must be left entirely untouched. If that power is left entirely untouched, and if the Inns of Court are put into the way of doing the work that they are now doing better and in a more comprehensive and larger fashion, through the University, I do not think they ought to object, but of course whether they would object is another matter.

12,933. If the University undertook it, the way that it should do so, in your opinion, is by the Council of Legal Education constituting the legal Faculty?—Precisely, and then appointing a Board of Studies. It would be the same thing as the Board of Studies at present, plus the experts whom we should have to import from outside, to deal with what I may call the scientific part of law. Then I presume both bodies would be kept in touch with the Senate of the University by means of a member or members of the Faculty itself, or the Assembly of the Faculty (which perhaps is a more convenient expression) being put upon the Senate.

12,934. The Faculty of Law would consist exclusively of the Inns of Court?—It would practically.

12,935. At present they teach law in King's College and University College, and they have Professors. Would you admit those?—I think they would be entitled to representation. I personally should not object to their having a representation on the Faculty if they could make out a case for showing that they are substantially teachers of law. The Faculty of Law ought no doubt to embrace within its ambit the great teachers throughout the metropolis. But I understand that King's College does not pretend to be a teacher of law to any substantial extent, therefore the representation would be extremely small.

12,936. But supposing at any time any college were affiliated to a University which had professors of law you would not mind their becoming part of the Faculty?—Certainly not, but I should like to see the Inns of Court doing the bulk of the work and doing the bulk of the foundation.

12,937. They would always have a large majority, and would practically have the work?—Yes, they would practically have the work and conduct the teaching.

12,938. And the Board of Studies would be constituted very much as at present?—Yes, very much as at present. I regard the Board of Studies as nothing more than a Committee of the Council of Legal Education, and I should regard it in its new form as simply the Committee of the Assembly of the Faculty of Law.

12,939. The idea of the Gresham scheme is that the Boards of Studies should be exclusively elected by the Faculties, and that the Faculties should consist of teachers?—That I should object to, and that, I think, the Benchers would probably object to—that is to make a Board of Studies entirely consisting of teachers. It is not the constitution of our present Board of Studies, and I think the Benchers of the Inns would desire that to be preserved as nearly as possible.

12,940. I see you propose that the Board of Studies should be elected by the Inns of Court with the addition of experts, not necessarily members of any Inn?—That would be the innovation—the election of these experts.

12,941. That is what you suggest as to the part you would take in the University. You would form the Faculty of Law, and the Inns of Court, or the Council of Legal Education would appoint the Boards of Studies themselves?—Yes. That occurs to me as the best plan.

12,942. Then you propose that the lectures and classes should be open to all comers. Does that mean to all comers, outsiders and everybody?—Yes, open to anybody who chooses to pay the proper fee.

12,943. To come just as they like—to drop in for one lecture or more?—Yes, I think so, because the subjects are wide. A man feels himself weak in one particular point, and perhaps he would like to attend for a certain time and not attend again.

12,944. You think the existing distinction between the University degree of law and a license to practice should be maintained?—Yes. The license to practice or call to the Bar certainly ought not to be taken away from the Inns of Court. I do not think anybody ever proposed that it should.

12,945. You would not allow a degree to confer that?—No.

12,946. Even though the degree had been taken entirely under your management?—No, I do not think so. You see the Inns of Court ought to have the exclusive voice as to whom they would call to the Bar, and I think they would probably be tenacious of keeping that. No doubt they would accept a degree in law as quite a sufficient test of proficiency and learning, but it does not follow that because a man has a degree in law he is going to be called to the Bar. There may be many things against him, though he can write himself down Bachelor of Laws.

12,947. Then a man who wished to take a degree and wanted a license to practise would have to go through a double examination, would he not?—No, I do not think so. The examination for the degree of Bachelor of Laws would no doubt be accepted as a sufficient test of learning for a call to the Bar, but the degree would not, *ipso facto*, carry with it the right to a call to the Bar.

12,948. But without any further examination?—Certainly without any further examination. Indeed, under the Medical Acts that has been conceded with regard to medicine, I think. Under the Medical Act, 1886, there is a provision that the Royal Colleges may themselves accept, *pro tanto*, the examination as a testamur of any University in part satisfaction of their own requirements; and the same thing might, I apprehend, be done with regard to the Inns of Court.

12,949. But it would come to be merely a form as there was no extra examination required?—Yes.

12,950. Have you anything more to tell us as to the part you think you ought to have in the new University, or have you any suggestions to make about the new University, with regard to the teaching of law?—No, I think not; and with regard to the formation of the University, of course, I should not go into that at all. There have been several modes specified, but so far as we are concerned I do not think it will make any difference. We are not in the position of persons fighting for the University of London or taking sides on the scheme proposed by King's College and University College. I should desire entirely to keep clear of that. I am only speaking of the Faculty of Law, which was left out of the original Charter. I may remind you that the original Charter came to be considered last year before the Committee of the Privy Council, and the Incorporated Law Society and the Inns of Court were invited to attend. The Incorporated Law Society did attend, they attended through me. They were of opinion—and I was only their spokesman—that there should be founded a Faculty of Law in the University, provided they got representation. The Inns of Court took no notice of the invitation to attend, and they did not attend. The result of it was that the Privy Council came to the conclusion that there should be a Faculty of Law, and left its constitution open. The Commission is perfectly well aware of this—I think it is in the Charter itself—that if both the Incorporated Law Society and the Inns of Court desired to be represented on the Council they might come in, but in any case a Faculty of Law should be established. Therefore, as far as that high authority is concerned, I conceive that a Faculty of Law has been assented to. The only question is, how it should be formed.

12,951. Should you be opposed to the Incorporated Law Society being represented in the new University?—No, I see no reason why the Incorporated Law Society should not be represented in the new University on the Faculty of Law, and if we are going to educate their students they certainly should be. What I am desirous to say is that the Inns of Court through the Council of Legal Education should have a preponderating voice, and I think they necessarily must from their position, and from the funds which they would be able to contribute.

12,952. If they were admitted they would have a voice in the management, and the result would be that solicitors and barristers would be educated together in the new University?—They would.

12,953. Would there be the same objection to that on the part of certain persons which there was against the old scheme?—I cannot conceive any good ground for that objection. It is a matter of pure sentiment. There are in existence a great number of law students' debating societies in which barristers sit side by side with solicitors, and fight shoulder to shoulder in contending for or against certain academical propositions and propositions of law, and at this time of day it is absurd to say that you are going to draw a *cordon sanitaire* between the bar student and the solicitor student, when we are perfectly well aware that there is not the slightest barrier between them. When they are learning the same subjects, why they should not be taught by the same authority, I cannot imagine.

12,954. It is not only your own own opinion, but you think the prejudice there has been against it is dying out?—Yes, and I think so for this reason amongst others: In January 1890 the Inns of Court themselves passed a resolution to this effect, that any solicitor who has been for five years a solicitor and who is desirous of being called to the Bar can be so called if he passes the examination for the Bar and gives 12 months' notice to all the Inns of Court and the Incorporated Law Society, of his intention so to do. Therefore, if a man can be one day a solicitor, and the next day a barrister, I cannot conceive why, when they are both in the pupilage stage they should not be educated in the same room. However, the opinion of the Benchers of the four Inns after some wavering on the part of Gray's Inn and one of the Temples was adverse to this view and they vetoed the arrangement proposed on the ground that joint education was improper. I do not believe that the Inns of Court, if they had to reconsider the matter, would sustain the objection which was then urged.

12,955. (*Professor Ramsay.*) May I ask whether you have any reason to believe that your Council would accept such a proposition as you have put before the Commission to-day?—It is difficult to say. As far as the Council of Legal Education is concerned I have hopes that they might accept the proposition that the Inns of Court should through them do the larger work which has been indicated. The difficulty I think will not be with the Council, but the Council are only the servants of the Inns of Court in the sense that they are created by the Benchers of the four Inns, and no action on their part would bind the Benchers. Therefore it would have to come before the four Inns in their separate Councils. The answer to the question you put

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

depends upon the feelings of all the Inns. I am only speaking of course of my own Inn—Lincoln's Inn—but I am inclined to think that it would be possible that they would assent. It is a difficult thing to state publicly why, but I think they would.

12,956. Is the Council of Legal Education elected from time to time by the Benchers for a period?—They are elected for a term of years. The members remain in office for two years.

12,957. So of course they would not express any opinion on a matter of this kind without consulting the Inns?—I think they would form their own opinions and make recommendations to the Inns; because they would then be following the precedents of former joint Committees of the Inns; I think they consider themselves a standing committee of the four Inns with reference to education, and if any proposition was made to them with reference to a teaching University they would feel themselves competent to entertain it without referring it to their Inns. But when they came to act of course they could do no more than report to the four Inns what they thought ought to be done. The four Inns would then separately in council consider—each in its own council chamber—the proposition. What the feeling of the Benchers of the Inns would be it is extremely difficult to say. As far as Lincoln's Inn is concerned I see no reason to despair of their acceding to such a proposition. Of course what has been going on inside the Inn is entirely private, and I am not at liberty to say anything further than that with reference to the individual position of the Bench.

12,958. Your plan involves the giving up of the present system and having all the teaching done through the Faculty in the University, that is to say, the present teachers would become as part of the Faculty of the University, and all the teaching would be University teaching?—Yes; all the teaching would be University teaching, but the work would be done through the Inns of Court by the Inns of Court being the Faculty, or nine-tenths of the Faculty of Law.

12,959. But I suppose the Senate of the University would still hold supreme control over the teaching of law so far as it was of a University character?—I apprehend that that would be a nominal control, because the Faculties would be so separate that I do not imagine that the Senate, or whatever is the ultimate paramount authority of the University, would have much to say with regard to the Faculty of Law, apart from what the Faculty would themselves prescribe. There would be a nominal control under a common head, but it would be no more than the control that the Crown head of a Constitutional Government has over a freely elected Parliament.

12,960. But there would be one body of professorial teachers?—Yes; in order to harmonise the work of the University as one integer there must necessarily be points of contact between each Faculty and the supreme authority, but as each Faculty knows what is best for its own sphere it will probably be let alone.

12,961. Should the lectures be delivered in the same place as at present?—I apprehend that a new teaching University would be very glad to avail itself of the ancient halls of the four Inns of Court which furnish lecture rooms, and in addition to that the Inns have been at great expense in creating lecture rooms and class rooms which would be available for the University. The buildings of the University might be scattered, and part might be found in the Inns of Court. I think the Inns would desire to remain the same, and that if it was proposed that their lecture rooms should be changed they would probably be alarmed.

12,962. Therefore, under the University, you would have two distinct sets of students, one of them aiming at entrance to the profession, which would be exclusively in the hands of the Council and the Incorporated Law Society respectively, while the other would be studying with a wider aim, with a view to a University degree?—Yes.

12,963. So that the Inns of Court would be as the Colleges of Physicians and Surgeons are now, a licensing body, while the University would be confined to giving degrees?—Yes; but I am in great hopes that there would be many law students who would range themselves under both orders of students, and who would attend the scientific as well as the practical part.

12,964. One great object you have in promoting this change is that the education given in these various branches of the law should be less scrappy and more comprehensive than at present?—Yes.

12,965. You would found new Chairs and divide the subjects, so that a really competent course should be given in each subject?—Yes.

12,966. Is it not the case that the scrappiness of the present course has been caused by those instincts of the legal profession which seem to have stood in the way of educational reform so long, and prompted the desire to abridge the course as much as possible. What I mean is this: if constitutional law (English and Colonial) and Legal History, are in future to be divided subjects, it is obvious that each of them will be treated more minutely and at greater length; hence students who want only the minimum of those subjects with a view to professional qualification would have to embark on a much wider course of study than they do now?—Yes.

12,967. Will not that raise a practical difficulty? Will not the profession feel that you are making the practical qualification more difficult of attainment than it is at present?—No, because in my point of view it will not be necessary for professional purposes that the student should attend this wider range of teaching. He might content himself with the practical part of his profession. It would be then for the Inns of Court to say whether they would admit him to practise merely upon his satisfying them that he has attended the practical parts of his profession. I apprehend they would so admit him, because if they are in the same mind as they were this year when the Council of Legal Education gave an option to the student to choose three practical subjects out of the four practical ones, and one scientific; if that course were followed in the future no candidate for a call to the Bar would be required to do more work; attend more lectures, or learn more outside subjects than at present?

12,968. But if the whole course of teaching was arranged on a large scale, and if you kept up the rule that a student was expected to know what was contained in the course of lectures attended that implies either a wider and harder examination or else a double set of lectures?—No. The selection of subjects would remain as before, and, out of the group of five subjects a man might, if so minded, choose three which were purely professional. I should not propose to make the examination more severe, because there was a Faculty of Law, than it is now. I think that would be an unpopular and an unwise step, only I should like to see greater opportunity offered to a student who was so minded, of learning something of those other subjects, those non-professional and scientific subjects.

12,969. You would not then increase the difficulty of the professorial course?—Certainly not for the purpose of the call to the Bar. Only for the purpose of legal study outside the mere professional object of being called.

12,970. I wished to ask whether, if your plan were adopted there might not be a feeling in the profession that they were letting the professional education slip out of their own hands, and that they would not have the same control if they put the whole thing on a basis which could be accepted as satisfactory from a University point of view?—No, because it would be an essential part of the scheme that the Inns of Court should have the last word and the only word about what is necessary for call to the Bar. If a man produced a testamur that he had passed in three professional subjects, to the satisfaction of the examiners in the Faculty of Law, I apprehend that the Inns could call him hereafter as they are in the habit of doing now on the testamur of their own examiners. They would not require him to take up more subjects or produce more testamurs. They would not require him to amass more legal learning than he does at present, and the legal learning might be as purely professional learning as now. As I said before, I think it would be unwise to make the examination more severe.

12,971. And they would accept the University examinations *pro tanto* as equivalent to that required for the qualification?—I think they should. I think there should be perfect understanding between the Inns of Court *qua* Inns and with the University *qua* Legal Faculty. For instance, if a man has passed in some subject, say Jurisprudence and International Law, I

think a testamur from the University professor that he has so passed ought to be accepted by the Inns as an equivalent of a corresponding amount of professional learning. It seems to me that they might as well call a man who knew those subjects, and let him off other professional subjects. The system should be perfectly elastic in that respect. Supposing a learned professor himself comes to be called, it is monstrous to say that he should be examined about the Settled Land Act. If he wants to go to the Bar, whether he gets business or not is his own concern. The Inns would no doubt also require some knowledge of professional law, but still I think a portion of scientific law should be taken as part satisfaction of a portion of professional law.

12,972. You would retain of course the absolute appointment of all the professors in the hands of the Council of Legal Education?—Yes, I think the Council of Legal Education or the Faculty of Law, which I regard for this purpose as the same thing, should appoint the professors; I think they are the best people to do it. I do not think the Senate would care to appoint professors of law. Persons who specialise in law can do it so much better.

12,973. Nor would you give the University power to found professorships of its own?—Not by way of supersession of the professors of the legal Faculty.

12,974. But in addition?—I think that would be possible. Suppose the University were minded to found a professorship of Medical Jurisprudence. We have never taught Medical Jurisprudence. I believe a few lectures were given by the late Dr. Tidy on Poisons and Medical Jurisprudence in connexion with one of the Temples, but we have never had a professor of Medical Jurisprudence. If the University were minded to found one I do not see why the Faculty of Law or the Inns of Court should object.

12,975. With regard to the Boards of Studies, did you contemplate that they should have in their hands all the arrangements with regard to the degrees and degree examinations, as well as syllabuses and courses of study. Should the Boards of Studies appoint the examiners, for instance, and check examination papers as they do now?—Yes, I see no reason to depart from the present system in that respect. I think the members of the Boards of Studies are as competent to do that as anybody else; they are a small body. I do not think that is done very well by a large body.

12,976. (*Mr. Palmer.*) If the Council of Legal Education is to be practically the Faculty how do you bring in the Incorporated Law Society?—Only by giving them a representation upon the Council if they are so minded.

12,977. So that representation of the Society would act upon the solicitors' branch of the profession as representation of the Council of Legal Education would upon the other branch?—Yes, I think so.

12,978. When you represented the Incorporated Law Society before the Privy Council, it was objected to you that you had not got the other branch, the Council of Legal Education, alongside with you?—Yes.

12,979. But in spite of that it was insisted upon by the Committee that provision for a Legal Faculty should be made?—Yes.

12,980. Although it was only supposed to be permissive in the first instance?—Yes.

12,981. Along with that there was some evidence, with which you are familiar, both by Sir Henry James and Lord Herschell, in which they were asked positively as to the present state of legal education, and they both condemned it?—Yes. But remember that was in 1888 or 1889, and we had no Boards of Studies at that time, and no teachers associated with the Council.

12,982. I mentioned that to emphasise the facts that have occurred since. In connexion with that I should like again to recall your attention to what I interjected before, viz., the two objections which occurred to the Inns of Court to the proposal of 1872. The first, as you stated, was with regard to those who were pressing that solicitors as well as barristers should have equal access to all the classes. The other was that there might be a jealousy on the part of the University of London, to which the answer of Lord Justice Fry was:—"I think that jealousy would exist if "it were proposed to constitute a University to grant "legal degrees only, but not if they were brought in "as a part of the general scheme." May I ask if you hope that that would be the view still?—Yes, I should hope so.

12,983. I should like to ask you about the solicitors' branch for a moment. In your statement before the Privy Council I see you mentioned the fact that there are 5,700 solicitors practising in the metropolitan area. Have you any idea as to what the number of admissions to the Roll are year by year?—No, I do not know. I cannot answer that, I am sorry to say.

12,984. But, speaking generally, as a barrister, you would agree as to the immense importance it is in professional business to have to deal with solicitors not only of intelligence, but also of general culture?—Yes.

12,985. And I dare say you will not disagree with me when I say that having to deal with 1,500 family solicitors in a year, it is from a public point of view of immense value and importance to all those who are represented by those 1,500 solicitors that they should be men of culture as well as men of intelligence?—I think so, or else they are apt to develop a pettifogging spirit, which is very much to be deprecated.

12,986. You have been asked a question or two as to the distinction—if we may attempt to distinguish—between professional and non-professional law. I do not know if your attention has been directed to evidence which was given before us by Professor Emmott, of the Johns Hopkins' University?—Yes. Your Secretary was good enough to tell me about that.

12,987. In that he was specifically asked the question by Mr. Anstie whether, when he had to teach both what might be called the practical law as it existed, which was then set to be taught in the adjoining University of the State of Maryland, and the further scientific jurisprudence which was taught by the Johns Hopkins' University, which he would have taught first, and his answer was that he would teach the two simultaneously:—"You would not approve of the "method by which all the scientific branches were "gathered together and dealt with in the first instance, "and the student then abandoned that pursuit and "devoted himself solely to practical study? (*A.*) I "should very strongly disapprove of that.—(*Q.*) Then "if you succeeded in what you seem to desire—the "adding of the practical side, which is now taken "charge of at Maryland, to your University, that is "the course you would pursue, is it? You would "make the two sets of studies run concurrently? "(*A.*) I would make the two sets of studies run con-"currently."—Do you think that that would be practicable and workable through a University education on the Council of which the Incorporated Law Society and the Council of Legal Education were represented?—Yes. I do not understand what the learning of law is, except in connexion with the phenomena of human life. It is by observation of these phenomena, as I understand, that legal principles have been arrived at. To teach legal principles in the air, apart from phenomena which illustrate them, seems to me a most idle task, and I doubt whether anybody with the most abstract mind would be able to grasp them. It seems to me that a man should be able to go back from the complex phenomena to the principles, and from the principles to the phenomena, and that he should be passing to and fro during his student life.

12,988. The great object of the Johns Hopkins' University has been the prosecution of what we call research or post-graduate teaching and learning, and that would be a great thing for the University to develope. Would there not, in your opinion, be great room for the development of a legal Faculty in legal teaching both professional and non-professional?—Yes, I think there would be; and I may mention that the Select Committee of the House of Commons in 1846 pointed out that there was a singular dearth of what they termed *legists* or *jurists* in this country, and they dwelt on the contrast in this respect between England and the great continental countries. We know there are here and there men who devote themselves to the scientific parts of law, but there are very few compared with those to be found in France and Germany. We have a few brilliant examples. We had Sir Henry Maine, who was a light in his time, and who left a record behind him. I should think that scientific treatment of law might be kept up through a University to an extent to which cannot be kept up through any system existing in England now.

12,989. The Council of Legal Education are strictly speaking the Committee for the Inns of Court. Would

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

there be any practical difficulty in dealing with those of whom the Council are the representatives, I mean would you have the Council of Legal Education only represented on the Senate, or would you further have representatives from the Inns of Court?—I take it that the Council for Legal Education for the purpose of a teaching University would represent the Inns of Court. They do represent the Inns of Court now, and I take it there would not be any further representation for the purposes of the Faculty of Law.

12,990. (*Mr. Anstie.*) You have referred once or twice to the Report of 1846. No doubt you are familiar with the contents of that report?—Parts of it.

12,991. I should like to get it upon the notes that by that Committee of the House of Commons the whole of this question was very fully investigated. They called before them witnesses of the utmost eminence Lord Brougham, Mr. Bethell as he then was, Professor Amos, Professor Graves, and many others, and sifted the whole matter with very great care, and in that evidence the questions relating to the duties of the Inns of Court, their powers, the advantages and disadvantages of lectures, private tuition, examinations, and the relations of scientific and practical law were all considered and investigated?—Yes. It was a most valuable report in that respect.

12,992. And if I may refer to a question put by Mr. Palmer, that method which was sanctioned by the approval of Professor Emmott is very fully developed in the evidence of Professor Amos given before that Commission?—I was not aware of that, but I have no doubt that is so.

12,993. He described in detail to the Commission the mode in which he pursued the practice which you have indicated of passing backwards and forwards between theory and practice and keeping perpetual communication between them?—I was not aware of it. I have not read the evidence.

12,944. You will remember also that that report did recommend very much what you have recommended now—that there should be a common education, that the education of the Inns of Court should be open to the solicitors and to a certain extent to the public at large?—That is so.

12,995. There is another point. It was noticed by several of the witnesses there that those who were engaged in the pursuit of diplomacy might find very material advantage in attending certain courses of lectures. Is it your opinion that that is so?—I should think that must be. I am not a diplomat, but I cannot help thinking that it would be very desirable that a certain knowledge of the principles of Jurisprudence and public International Law should be familiar to anybody engaged in diplomacy.

12,996. So I may take it that this question is not one which relates solely to legal education considered in a professional aspect, but it is one which has a far wider bearing than that?—It seems to me to be a public question, and not merely a question as regards the law students.

12,997. It is one, therefore, in which the public might reasonably call upon the Inns of Court to do what their means enable them to do in that direction?—Yes, I think so.

12,998. I do not want to go with too much detail, into matters which will properly form matters of consideration for a future body, but still here is one subject I should like to refer to, viz., the study of Jurisprudence. The study of Jurisprudence has perhaps three parts, there is the analytical mode of viewing it, the historical mode, and the science of legislation, which is really the result of the other two. Those are subjects which are of interest, not only to lawyers in the practice of their profession, but to the public at large?—Quite so, and they are subjects which, as far as I can gather, are not attempted to be dealt with. I observe that the Roman Law and Jurisprudence lecturer proposes to deliver lectures through Hilary Term on: "The Law of Per-
"sons: Slavery, Patria Potestas, Marriage, Tutela,
"Cura. The Law of Property: Ownership, Possessio,
"Servitudes, Emphyteusis, and Mortgages. The Law
"of Contract. Then the subject of the Public Advanced
"Lectures are to be, 'The History of Roman Law, with
"'special reference to the work of Gaius.'" It is no blame to the learned gentleman who presides over this department that he cannot even touch the fringe of Jurisprudence, and no other lecturer has anything to say to it at all.

12,999. May I suggest that a different class of studies, and different kinds of minds would be required to fulfil the duties adequately?—I think so.

13,000. You gave us an instance of some great names—Maine and Bentham?—And Legal History must not be forgotten. The evolution of legal ideas through the Roman Law, or even earlier, is in itself a most interesting study which a man might devote a year to if he had leisure.

13,001. Coming to the practical question, may I suggest that what this Commission has to consider now is what is the best practical method of giving a right impulse and stimulus to legal education?—Yes.

13,002. With respect to the Senate's scheme, which has been before this Commission for some time, it was accepted, as we know, from the report of the proceedings before the Privy Council, by the Incorporated Law Society; it fell to the ground because it was rejected by Convocation, but it had been accepted by the Incorporated Law Society?—I was not aware of that.

13,003. I think I may say that as far as Lincoln's Inn was concerned it was accepted by the Benchers of that Inn?—I believe it was.

13,004. Further proceedings became fruitless in consequence of what happened. Now with the view of seeing how an organisation might be framed, might I venture to ask you whether it would be a correct view of the relations of the University and the Licensing Bodies to say that it would be very desirable with respect to professional studies to establish such relations between the Licensing Bodies and the University as would, as far as possible, harmonise the requirements of the University with the requirements of those bodies and avoid a needless repetition and multiplication of examinations?—I think so. It is a great grievance to the student to have to be examined from time to time in the same subject. It disgusts him with the whole business.

13,005. Would it be a desirable thing, if it could be attained, to conduct in union with the licensing bodies examinations on which the ordinary license and the ordinary degree might be obtained, leaving to the University the determination of the requirements for the degree, and to the licensing body the determination to the requirements for the license?—Certainly, that is my idea.

13,006. And that would be following the line which has been indicated with respect to medical education?—So I understand. I think the provisions in the Medical Act of 1886, recognise the equipollence of certain outside examinations.

13,007. I understand you to say that in your judgment the Inns of Court, and we will add to them the Incorporated Law Society, ought to be practically the Legal Faculty of the University?—I think so, and I think it is only possible in that way; it will be very difficult to persuade the Inns of Court to stir in the matter otherwise.

13,008. If that happy event should take place, and the Incorporated Law Society, should be disposed to retrace or to modify the steps you described this morning, would an arrangement of this kind be in your view be a practicable one. Suppose the Inns of Court and the Incorporated Law Society were to be taken as the persons whose teaching was to be recognised by the University, and suppose the teachers appointed by them to be adequately represented by a Board of Studies, then suppose that the Senate should be so constituted as to have an adequate and full representation of those important bodies, the Inns of Court and the Incorporated Law Society, and that practically the legal branch of University instruction should be placed in the hands of the Board of Studies so constituted, and the members of the Senate who were contributed by those institutions, would that, do you think be a practicable solution of the question?—Yes; but I should like to ask what part you propose that the Senate should play in the appointment of teachers, the prescribing of syllabuses, and so on. My own idea is that their part would be a prefunctory part only.

13,009. Yes; that is what I was going to venture to suggest, that the drawing up of the syllabuses, the prescription of curricula, and so on, should be left in the hands of the Boards of Studies representing the Faculties, and such committee, or such portion of the

Senate as contained the legal element?—Yes; but I must pause for a moment here. My notion of the Faculty is not to identify it with the teachers. I know it is one use of the word Faculty to define it as an assembly of teachers, but my notion of a Faculty is another notion and a rather different one. It is rather like the Council of Legal Education itself, which is not composed entirely of teachers. There is an equivoque in the word "Faculty." In the abstract it is a department of learning connected with a degree, and with a University. Concrete Faculty is an assembly of persons, and my concrete Faculty would be rather like the Council of Legal Education than a council merely of teachers. I only wanted to explain that.

13,010. There is no doubt that that equivoque has puzzled us all a good deal, but substantially what we have treated as a Faculty throughout this examination has been confined to the teachers?—Then that is a special definition of the word that I really was not employing.

13,011. (*Mr. Rendall.*) It is in the Gresham Charter?—Then I should like to revise what I have said about the Inns of Court creating the Faculty, because I meant by Faculty that the Council of Legal Education, with the addition of these experts, should become the Faculty. You would exclude all persons who were not teaching by using the word Faculty in a more limited sense.

13,012. (*Mr. Anstie.*) Let me put it in a way which will exclude all equivocal terms. The syllabus and curriculum should be, as I understand you to say they substantially are now, settled by the teachers?—They emanate from them. They are settled by the Council.

13,013. The settlement by the teachers is subject to review by another body, and that body represents what I may call the institutional element of the Inns of Court?—Yes.

13,014. Supposing that were taken up into the University, would that be a system which would meet with your approval?—Certainly. But, of course, it would be open to the Council or the Faculty to make suggestions to the teachers as to how they should prepare their syllabus. There should be complete harmony.

13,015. What I was suggesting implied, or was meant to imply, that there should be the completest freedom of intercourse between the two bodies?—Certainly. It exists at present.

13,016. And that, you think, would be a practical method of dealing with the subject?—Yes.

13,017. (*Mr. Rendall.*) Leaving out the weakness of the scheme as regards the University, you say you are content with things as they are, and you lay great stress upon the desirability of maintaining the Inns of Court acting in concert with their teachers, but still I do not understand what part you give to the University, where University jurisdiction comes in. Does not your scheme come to this: that practically they constitute the existing machinery as a Faculty, and that they endorse their results and will confer upon it the stamp of a University degree?—I think it does come to that.

13,018. You see that leaves to the University no final jurisdiction that I can perceive in the election of the teachers, and no control. Suppose the Inns of Court adopted low standards for a degree, or suppose the Inns of Court reverted to a stage of inertia where they did not supply training which recommended itself to the University at large, the University might have its position or dignity injured by that without any opportunity for redress?—One can hardly conceive such a state of things as a Faculty of Law fading away by inertia. If so, I should think it would be owing to some change of circumstances.

13,019. There have been so many ups and downs in legal education, as you have given it to us through the past century, and you have in the University, as far as I can see, no effective power of dealing with the Faculty, nothing but friendly conference; as to the determination of the standards, the appointment of teachers, and so on, everything is to rest with the Inns of Court?—I really do not know what advantage we should gain by the University control over a Faculty which is already governed by a Council and has under it a Board of Studies. If that cannot run alone I have difficulty in seeing how a University can help it. But if any quickening process can be got out of a University I should be glad to have it applied.

13,020. The advantage you have is the introduction of different intellectual interests. If you give the University no control over the Law Faculty, and if you do not bring the Law Faculty into relation with other Faculties, you almost relinquish the idea of a University?—What I meant was that the Council of Legal Education in its resuscitated and amplified form would be represented on the governing body of the University; so the Faculties of Law, Arts, and Medicine could meet in that University, but what the advantage of that meeting might be upon each Faculty I do not know. There might be a subtle influence.

13,021. What influence would that higher body have over the law Faculty, or any part of its proceedings? That is the critical question?—I do not quite see how you can establish a subordination of the Faculty. The Faculty must be supreme in its own department. If A., B., and C., who are the life and soul of the law, neglect their duties, it is difficult to see how D., E., and F. can bring them to book.

13,022. The direction of the curricula and the determination of studies, do in all Universities practically rest with the Faculties charged with them?—Yes.

13,023. But there arise such questions as periods of residence, length of course, and general questions such as, for instance, insuring attendance at lectures; ought not those broad principles of policy to be determined by the University as a whole?—Certainly, in a collegiate system, but I do not understand that the Faculty of Law has anything to say to a collegiate system. The Inns of Court are colleges for their own students, *qua* students of the Inns. I do not apprehend that the Inns of Court would become associated colleges of the new University on the Gresham scheme. If you have a University composed of colleges, you must have besides a system of instruction and attendance at lectures, discipline, and residence. None of those things would come into this Legal Faculty. It would be a teaching Faculty plus an Examining Faculty, without any collegiate system. We have abandoned the collegiate system in the Inns of Court. It formerly required residence; it now requires dinners, three dinners are enough, or six at most. Having abandoned it, I do not think we shall ever go back to it.

13,024. Would you leave to the Senate or governing body the power of conferring degrees?—They might confer the degree, that is to say, the degree might emanate from the University acting on recommendations from the Faculty.

10,025. Are the governing body bound to accept it or not?—The control would be like the control of the Crown over the two Houses of Parliament.

13,026. You cannot have that state of constitutional monarchy in a University. If you give the power nominally you will give the power practically?—I wish to follow you entirely, but I cannot see how the friction would come in in practice. If the Faculty of Law presents a particular person worthy of a dergee in law it is difficult for the University to say he is not to have it. The Faculty of Law is the University, *qua* that department.

13,027. I do not apprehend friction coming in, but I think the position of a University would almost require that the final court of appeal should be to the governing body of the University and not the Faculty of Law?—I do not think there would be any objection if any device can be found which will give a control over the Faculty of Law, which does not amount to any surrender of power.

13,028. It is almost the one power that the University cannot delegate, the conditions on which the degree is given?—Then they might introduce residence as a condition of the degree.

13,029. Of given length, of course?—Yes, of given length.

13,029*a*. For instance, the University might lay down as a principle that every degree ought to imply a three-years' course?—Or systematic attendance at lectures?

13,030. Yes. Those are things in which a divergence might arise?—I think there would be a great deal of opposition if we were to vote by Faculties, the Faculty of Law being one. If residence was enforced it is quite clear that the Inns of Court might find themselves in a different position from that which they are in now. Therefore, I think that they would be very shy of entering into that arrangement.

M. H. Crackanthorpe, Esq., Q.C., D.C.L.
21 Oct. 1892.

13,031. Have you considered the University from the wider basis of thought, whether a similar surrender should be made in the case of each Faculty—the Theological Faculty, the Science Faculty, and the Medical Faculty. If you once begin it in the Law Faculty why not go on throughout?—Medicine stands in a different position. Our position is unique. I do not think we ought to be assimilated to the other Faculties in that respect; recollect that the suggestion is that the Inns of Court should practically found this Faculty, and therefore they must not be treated as a new Faculty. They are an old body, giving their money, as I presume they would, and handing over their work which only requires a little supplementing to make it complete. Therefore, I do not think they would consent to be put on the same level as the other Faculties so as to be overridden in a vote of Faculties.

13,032. The Medical Faculty has been doing very largely the same?—Take into account the feeling on the part of the Inns of Court that they are making a great concession in even touching the question. In reference to what Professor Ramsay put to me about their being willing to accede, I think their not being overridden by other Faculties, or by a University composed of other Faculties, would be a great factor in the case.

13,033. Or by a governing body?—Yes.

13,033*a*. (*Professor Sidgwick.*) There is one point that I should like to get quite clear. Perhaps I might refer you to the Gresham Charter, which defines the powers of the Council. The Council has full power to regulate all matters concerning the University. In the last paragraph of clause 10 it is provided that "the "Council in determining the curriculum of each "Faculty, and making regulations respecting the ex- "aminations or degrees of the Faculty, shall proceed "on the recommendation of, or after submitting the "proposal for consideration and report to, the Board "or Boards of Study of the Faculty?"—I observe that it is in the alternative, "shall proceed on the recom- "mendation of, or after submitting." I think "pro- "ceed on the recommendation of" would be quite satisfactory.

13,034. I suppose the use of the alternative was to allow, at any rate, a possibility of overriding the Report of the Faculty and the Boards of Studies. What I wanted to know was whether you think that that is sufficient control to give to the Board of Studies?—Yes, I think that gets over the difficulty Mr. Rendall put to me. I do not think there is anything there which would frighten the Inns of Court at all.

13,035. The Inns of Court, according to the view you put forward, would always retain in their own hands as an independent body the power of admitting to the Bar?—Certainly. That must be left quite untouched.

13,036. Therefore, that would secure to them a very independent position?—It would.

13,037. And if there was any tendency shown by the Council to overrule, the conditions of admission to the Bar, the Faculty might diverge from those imposed by the University?—Yes, and I think no doubt each party would be acting on the other in that respect. There would be a *modus vivendi* established. If the University was pulling one way and the Inns of Court the other, I think that would resolve itself into a reasonable arrangement.

13,038. Have you read the evidence given before the former Commission?—I have read some of it.

13,039. There were one or two points in Sir Henry James's evidence?—I have read Sir Henry James's evidence.

13,040. There was one point which he mentioned which appears to me to be in favour of the view you are advocating. I should like to know whether you are in agreement with it. Besides the class of students to which you have referred an element of growing importance in Sir Henry James's view was that derived from the East, and he lays stress upon that. He says that it would be a great gain to those students if, instead of the scanty provision now made, they were drawn into a University system and had a more complete educational machinery?—I agree with that entirely. I may mention that of the students attending our lectures no less than one-third come from the East. In Jurisprudence and the abstract branches the number is even higher, and it is a growing number. I may mention also, I think Sir Henry James mentions it, that on one occasion nearly all the best things were carried off by Orientals. The Japanese in particular seem to assimilate not only the English language but the English law marvellously, and it is very hard upon these men to make them attend a lecture upon the feudal system which is of no use to them.

13,041. You think if the Inns of Court took up the work of a University the larger provision that could be made would be a real practical gain?—I think it would be a real practical gain, and doing good Imperial work in the metropolis of the Empire.

13,042. There is another point in Sir Henry James's view which perhaps to some extent bears on the question we have just now discussed. He seems to think that it is important that legal education should go on side by side with general education?—There I do not follow Sir Henry. His view, as I gather from his evidence, is that the Inns of Court should undertake something like general education, and he instanced that his own Inn had not only got Dr. Tidy to lecture, but also enlisted the services of other persons to lecture on some mechanical matters. It does not seem to me that in our days the Inns of Court could have anything to do with general education of that sort, or can ever undertake it.

13,043. It rather suggested to me that if the Inns of Court were in this way made the nucleus of a Faculty, the question of the extent of general education that should be required of the student would of course have to be determined by some body; and would not this be one of the questions upon which it would hardly be desirable that the Legal Faculty alone should have a decisive voice?—The way in which it is practically solved now is this, a man has to undergo a preliminary examination in the Latin language and the English History, and that is taken as a sufficient indication of a guarantee of general education. The Legal Faculty might say, we will adopt something similar with regard to attendance at the examination for the lower degrees, we require some qualification of general education, say, a testamur in arts. I should think they ought to determine what are the conditions for admission to their own lectures. If they think that it is not desirable that a man should begin to learn law until he has learnt something else it is for them to say so. I do not think at any rate that the Faculty of Arts should determine it. I think it is better left to the Faculty of Law.

13,044. May I remark that in dealing with the department of Medicine, the opposite view has been strongly entertained by some who have given evidence before us. It has been held that it would be a dangerous and undesirable thing to let medical men alone determine the amount and kind of scientific knowledge required as a condition of entering the profession of medicine?—I can quite understand that. Medicine, as is well-known, is becoming every day more and more a matter of science; therefore, to leave a medical man to determine what is and what is not science might be dangerous. I do not think they can say that of law. A man can hardly approach law without having some general kind of education, whereas a man might do infinite mischief as a doctor from want of knowledge of science.

13,045. (*Lord Reay.*) I do not quite understand from the evidence you have given what rôle you assign to the University?—I do not know that to the University as such I assign any rôle. I assign a rôle to the Faculty of Law, which is a limb and member of the University, and so far I assign a rôle to the University. I look upon the University as made up, in a mosaic fashion, of Faculties. These Faculties must be gathered up no doubt in one central knot, the Senate of the University, but their connexion with that Senate, and the influence of the Senate on the Faculties is simply by a free interchange of ideas between the centres which again filter down through the several Faculties. But it is an ideal connexion rather than a practical one. It depends upon what you mean by "University."

13,046. (*Mr. Rendall.*) Are you thinking of any University?—I am trying to think of two or three at once. I am thinking more particularly of Oxford, my own University.

13,047. (*Lord Reay.*) What I want to know is this. For what purposes do the Inns of Court wish to be joined to the new University under the conditions you have described. The conditions which you have

described are that you will appoint professors, and that you will have a board of studies, which will be elected by yourselves, and which will arrange for the syllabus. I understand that you also claim to lay down the method of examination, the examinations to be in close relation to the lectures, which will be given under your authority. Then may I ask what function you assign to the new University?—I do not assign any function to the University except that of giving a degree in law, which is its business, and about the only thing a University does, apart from the working of the machinery.

13,048. In that case you would undertake the preliminary examination in law, and you would allow the University to conduct the final examination for the degree?—I do not think we should undertake the preliminary examination. I think the preliminary examination would be handed over to the other Faculties. I think we should require some testamur from some other body. Ido not think we should institute any preliminary examination ourselves.

13,049. I was alluding to the preliminary law examinations?—There is no preliminary law examination.

13,050. There would be. I understand that you would have examinations which would test whether the students have attended your lectures with good results?—By "preliminary" there do you mean the examinations for the call to the Bar?

13,051. I mean the examinations which will result from the attendance at lectures preparatory to the final degree. Then you accept the University examination for the degree?—I should only accept the University examination for the legal degree on the assumption that the man who had taken that degree knew enough law to be called to the Bar.

13,052. I fully admit and accept, that for the call to the Bar your authority is binding. I am not going into that. I am taking the position of a law student in the University, who aspires to have the University law degree, and I ask you under what conditions will you accept the control of the University over that examination and the whole range of legal studies leading up to it?—I should leave that to the Faculty of Law. If you ask for any outside control over the Faculty of Law, I should think that a Faculty of Law, properly constituted, could look after itself. It has been pointed out to me by some of the Commissioners that they might fall away from their duties, then I think it would be very desirable that the University should be able to recall them to their duties. But I apprehend they would be able to perform their duties without control.

13,053. But are you not contending for a legal Faculty entirely under the control of the Inns of Court?—Yes, practically I am—for a legal University only as part of the larger University. My idea is that the Inns of Court, if they are to come into this scheme at all, must be brought in by the inducement that they will be taking part for the benefit of the metropolis, in the great work—contributing a great arch to one building. Put before them in that way—though it is dangerous to talk about inducements—I should say that they might be induced to come forward; and, if they constituted themselves the Faculty of Law, their dignity would be conciliated, their licensing power being left untouched, and I do not quite see what they would have to complain of. On the contrary, I see a great deal that they might gladly welcome. I am afraid I do not quite appreciate the advantage of this University control as distinguished from the work which the Faculties do for themselves. I am not assuming that each Faculty will not do its duty, or that they could be quickened to their duty by any University control. I am afraid I have a difficulty in realising that.

13,054. You attach the greatest importance to the preservation of the autonomy of each Faculty?—Yes, certainly.

13,055. So that each Faculty would not become an arch of one building, but a separate tenement?—Four or five separate Faculties, under one predominating head. I say nothing about Science, Theology, or Medicine; I deal only with Law. I say, as far as that Faculty of Law is concerned, I should like to see it in an autonomous position.

13,056. You claim an exceptional position for the Faculty of Law?—It is not that I claim it, but I think the Inns of Court would claim it.

13,057. (*Professor Sidgwick.*) You said just now that you thought the scheme in the Gresham Charter might be accepted?—Yes, but I do not regard that as interference. I would treat that as nominal superintendence rather.

13,058. But, still, it may be more than nominal?—Yes. I am speaking partly my own view and partly that which I think my colleagues would accept. My own view would go entirely with that clause, and, interpreted as a nominal control, I think it would do. If it were pointed out that residence might be imposed, and that the whole system of legal education might be turned upside down by the intervention of the Senate, I think the Inns of Court would probably shrink from giving in their adhesion.

13,059. (*Lord Reay.*) Then may we take it that you admit that if things remain as they are now, and the Inns of Court continue to deal only with the access to the profession, there would be scope in the new University for the Law Faculty to undertake the education for those classes which you have mentioned who are at present without it?—I quite think so. I think that would be the great advantage in the new scheme, and it would tell upon the Inns of Court.

13,060. And no opposition would be offered by the Inns of Court against such a Faculty being created?—That I could not say. I could not undertake to say so with regard to my own Inn.

13,061. If such a Law Faculty were instituted, would you contemplate that the students in that Faculty should read for a longer period of time than the two years you have mentioned?—I think they would for the purpose of their degree.

13,062. And with regard to those University students whose object it would be to become jurists, you would not contemplate for them that they should simultaneously go into barristers' chambers?—No, not unles they were so minded.

13,063. Are there at the present moment no lectures in the criminal law?—Only in procedure, Civil and Criminal, and Evidence. That is one of the Reader's subjects.

13,064. There are no lectures on the Philosophy of Criminal Law?—No.

13,065. And no lectures on Mercantile Law?—Yes; there are lectures on Mercantile Law, there are lectures on contracts; and there are lectures going on next week on Bills of Exchange, and Negotiable Instruments. Mercantile Law distinctly is largely lectured upon.

13,066. Is Mercantile Law treated exhaustively?—It cannot be in the time given. In two years, perhaps, the greater part of Mercantile Law could be exhaustively treated. The subject is so large.

13,067. (*Mr. Rendall.*) I was going to add one case of divergence between the Legal Faculty and the University, Supposing the Inns of Court adhered to their present policy of admitting only Bar students, and supposing the University thought it advisable to open the lectures to the students of the other branch of the profession, and non-professional students, with whom in your scheme would the determination of the question with regard to the admission of students rest?—I do not follow your question.

13,068. At present the Inns of Coust limit the admission to students training for the Bar?—Yes.

13,069. Supposing the other Faculties or the governing body of the University held that the law lectures should be open?—They could not interfere with their lectures

13,070. Whose lectures?—The Inns of Court lectures.

13,071. They could not interfere; then I want to know with whom the decision would rest?—I am not suggesting that the University could overrule the Inns of Court.

13,072. You would not give them power there?—No; I should not like to do that, and I think it would be very dangerous to say that I did.

13,073. (*Lord Reay.*) Would not the Inns of Court be satisfied with a representation on the Council of the University, their teachers being members of the Faculty of Law?—I do not think they would endow a Faculty merely upon that suggestion. You must recollect that we are looking now to an endowment coming from the Inns of Court. I do not think

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

they would be disposed to part with their funds and get nothing but representation on the council, which might be somewhat antagonistic to their own view.

13,074. I am only suggesting a *modus vivendi* which should establish a close connexion between the Inns of Court and the University?—That experiment has been tried, and by the attitude they took with regard to the Gresham Charter, they refused to accept mere representation. That which the Incorporated Law Society accepted, the Inns of Court did not accept, and they showed it by absenting themselves from the Privy Council on that occasion. I do not think they would change their minds. I think they would require some quickening from without.

13,075. (*Professor Ramsay.*) I must have misunderstood your answer in regard to one matter. I understood you in your scheme to draw a broad distinction between the amount of legal teaching which would be required for admission to the profession, and the amount of legal teaching and attendance which would be required for the degree?—Yes.

13,076. You mentioned the Royal Colleges of Physicians and Surgeons?—Yes.

13,077. Who intended under the London University scheme to join with the University for certain purposes?—Yes.

13,078. But they were to keep the giving of the qualification in their own hands at present?—Yes.

13,079. I understood you to say that in matters relating to admission to the profession you expected the Inns of Court to be paramount, but in matters exclusively relating to the University degree the University should be paramount over the Faculty of Law precisely as it would be paramount over the Faculty of Medicine or the Faculty of Theology?—I quite see the apparent discrepancy in my answers. If you are merely considering on what terms the degree should be given, I should leave that to the University. I was afraid from some questions asked by some of the Commissioners that I was asked to admit that the whole of the teaching might be subverted by a regulation coming from the University, as, for instance, requiring attendance at such and such a course of lectures, residence at such and such places, and so on.

13,080. Certainly; when I put the question, which I thought I put clearly, what I meant was this: that the University might impose conditions, let us say, of general examination, of attendance, of time of examinations, simply and solely with a view to the law degree to be founded by the University; and that the Faculty of Law should lay down its rules with a view to candidates entering the profession, the University to be paramount over one, and the Inns of Court to be paramount over the other?—In logic the distinction is perfect. Many of these professional men would desire to have a University degree. If they could only get that University degree by pursuing curriculum A., and could only get a professional status by pursuing curriculum B., they would be in a difficult position. I should like to see those curricula running on the same lines, and in order that they might run on the same lines, I should like them to be in the same hands.

13,081. The pursuing of curriculum B. would be an essential, because the student wants to get into the profession. What is to be added to curriculum B.?—I am looking at the inducements held out to the Inns of Court to come forward and establish this legal Faculty. It can only be put to them that they would be doing a benefit to their own students by enabling them to accumulate their advantages, to enable a student not only to be called to the Bar, but to say "I am not a mere professionalist, but I am not one "who has done something beyond obtaining my mere "professional qualification, and, therefore, I am "entitled to greater distinction." No doubt in some walks of life that would assist his advancement. But if the two curricula are to be laid down on different lines, so as to be incompatible, that advantage could not be held out to the Inns of Court. If they realise that condition of things I do not see much use in this University.

13,082. Could not that point be settled by mutual arrangement?—Certainly; I think it would be.

13,083. And all opposition made impossible?—I should have thought so. In practice I do not think the difficulty will occur. If you set up this nominal control I cannot conceive that there will be any difference between the two. If it is pushed so far that one curriculum is established for the law degree, and a totally different one far the professional qualification, so that they part company, I do not think the Inns of Court would come into the scheme.

13,084. That might be made matter of negotiation before the agreement of the Inns of Court was finally given?—I think a *modus vivendi* might be established by agreement probably, but pushed to extremes it would lead to the two systems parting, and students having to elect whether they would go for a degree or go in for a professional course.

13,085. (*Professor Sidgwick.*) The question seems to me to be really this. We are all agreed that if the Inns of Court come in in the way you propose the danger of any divergence like this would be small. My question is, do you think that the Inns of Court would be afraid of granting this formal control in all matters relating to the degree, having in view what we have in view, that is, the probability of their being interfered with?—It is just this. I think they would prefer to see their autonomy in black and white. If they could not see their autonomy in black and white they would wish to see a reasonable chance of so arranging matters that practically they would have their own way. That is the mind of the Inns of Court as far as I understand it. I may be wrong, but I think that is so.

13,086. You are acquainted with the working of the University of Oxford, I suppose; at any rate, you know that the consent of two bodies is required to every change that is made?—Yes. I should think a harmonious working with the two bodies could be brought about. I do not know that the Inns of Court would object to that, provided they saw that it would result in ultmate agreement.

13,087. (*Lord Reay.*) The Inns of Court would not object, for instance, to the University saying, "We "recognise your Readers as University Professors, "we recognise your lectures as qualifying for a Uni- "versity degree," the lectures given under the auspices of the Inns of Court, would also be the lectures attended by the professional students qualifying for the Bar. it would be a matter of internal arrangement whether identical lectures were given, whether there would be a curriculum A and B, or whether the position would be this: that students reading for a degree, and students reading for a professional qualification would meet in the same lecture room, and the student reading for the University degree would attend some other lectures in addition. Is such an arrangement as that one you would contemplate?—Yes, I think that might be done.

13,088. (*Mr. Anstie.*) In any scheme that has been before us with regard to any of the contributory bodies, their relation to the University has been solely, as far as I know, this: that they must in order to obtain the University privilege of graduation, comply with University terms. Having regard to the fact that in the proposal which you have under your consideration the Inns of Court and the Incorporated Law Society supply all the funds, endow all the Chairs, and provide the whole apparatus of learning, would you see any objection to the Senate, or the governing body of the University, on which they would be adequately represented, and their teachers adequately represented, having that sort of control which is desirable for University purposes, with a view to keeping in harmony the different branches of human learning?—Put in that way, I do not think there would be any objection. If that control had the result of pulling strings tight which the other body thought should hang loose, there might be trouble.

13,089. (*Mr. Rendall.*) With whom does the professional qualification rest?—With the Inns of Court. Each Inn is supreme as to calling its own students. The calling to the Bar has always been in the hands of the Inns themselves, each Inn. The Council of Legal Education has nothing to do with the call; the joint Inns have nothing to do with the call, each Inn call its own students.

13,090. And there, again, you think the Inns would be likely to accept the curriculum determined by the Conjoint Board?—I think there would be no doubt about that.

13,091. You think there is no fear of disintegration?—No. The call to the Bar was this originally. It was not done by the governing body, but by the Reader; he went into the hall or library, and called across a certain barrier those students who had satisfied him by attendance at his lectures that they were sufficiently proficient to be called; he invited them to come from one part of the hall into another and pass the barrier. It was a ceremony performed in the Inn itself, and generally in the library or hall of that Inn. There is no such ceremony now. The judges had nothing to do with it. It was a call by the Inn of each of its own students.

M. H. Crackanthorpe, Esq., Q.C., D.C.L.

21 Oct. 1892.

13,092. (*Lord Reay.*) And are the conditions of each Inn very different?—No; they are practically the same. Do you mean as to money payment?

13,093. And the qualifications?—If you look at the Consolidated Regulations, the Commission will see that the qualifications of admission are the same for all the Inns. With regard to the fees there may be a little difference. I am not sure about that.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Twenty-eighth Day.

Saturday, 22nd October, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

LORD REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

ROBERT SAMUEL HEATH, Esq., M.A. (Camb.), D.Sc. (Lond.), examined.

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

13,094. (*Chairman.*) You are Principal of Mason College, Birmingham?—Yes.

13,095. I think you have come prepared to state your objections to the Gresham University?—Yes.

13,096. I will begin by asking you about that. In the first place your objection is that it does not co-ordinate the teaching. Perhaps you will give us your views on that point?—I have some objections in principle to the scheme and one or two in detail. I will take first, with your permission, the objection to the principles. The first point is that I think a teaching University in London should co-ordinate all the best teaching agencies in the Metropolis, and I feel that the Gresham Charter does not fulfil this condition. The present scheme is largely a federation of two University colleges and 10 Medical Schools for the purpose of laying down syllabuses of instruction and examining students for degrees upon those syllabuses; but there would still be all the competition between different colleges that there was formerly. Each college would still be governed by a separate body, who would have, and probably might have, different aims and ideals. There would, therefore, be necessarily much waste of energy in multiplying classes of similar scope. Moreover, some of the best teaching and equipments in London, for example, those of the Royal School of Science, are not to be incorporated in the University at all. Lastly, there is a great deal of technical and semi-systematic instruction given in the evenings, chiefly to the working classes. This kind of instruction seems to me to be of the greatest importance, but it is left outside the organisation. Its importance, I take it, is chiefly as a stimulus to more systematic work. The University extension system, I think, to realise its full value, should be organised with a view to feeding more systematic University classes. It should be largely of the character of missionary enterprise to encourage and develop a taste for learning among all classes of society, and it should be undertaken with direct reference to the University. That is my first principal objection.

13,097. Taking the Charter as it stands, have you looked to see how alterations could be made in it which would meet your objection? The first question with regard to the competition between colleges would apply equally to any scheme in which the autonomy of the colleges was preserved, would it not?—Yes, if the autonomy of government as regards the teaching organisation was preserved. But I come here also as one of the committee who have developed a scheme known as the scheme for the promotion of a professorial University, and, as you are aware, that University scheme involves the absorption of these various colleges, as far as their teaching is concerned, under one central organisation. If the work of those colleges was regulated by a central committee the competition would cease.

13,098. But any scheme, for instance, like the scheme which was proposed by the Senate of the University of London, and rejected by Convocation, would be open to the same objections as the Gresham scheme with regard to the competition between the different colleges, would it not?—Certainly.

13,099. Nothing but the professorial scheme would obviate that?—No.

13,100. And your objections to the Gresham Scheme in respect to that would be applicable to any scheme excepting the professorial scheme?—Or some scheme which has the main ideas of the professorial scheme.

13,101. I will ask you some questions presently with regard to the professorial scheme, but at present we will consider your objections to the Gresham scheme, which you have put down on paper. One of your objections at present is that there are only these two colleges, and the Medical Schools. There is power to take in any other college or any other institution which may be self-governing, and which may appear to be doing sufficiently good work in a sufficiently prominent position to justify its being accepted?—Yes.

13,102. It might, therefore, be only at the beginning that it consisted of these colleges that you have mentioned; it might grow?—Yes; at the same time there would be no co-ordination of studies. There is no co-ordination of studies suggested or implied in the Charter, so far as I understand at present.

13,103. You mean that they overlap one another, and that there is a waste of power?—Yes. You would have several classes dealing exactly with the same subject.

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

13,104. The examinations would guide the teaching to a certain extent, and the examinations which the teachers of all colleges had a voice in fixing would, in a certain degree, regulate the teaching and keep the teaching of one college in harmony with that of another, would it not?—They would be both working up to the same examination. Would not that keep a certain unity, like it does at Oxford and Cambridge?—Not perfect unity, I think.

13,105. Not to the extent you would wish?—Not to the extent I should wish to see it.

13,106. Then with regard to the evening classes, I suppose any University, by appointing a committee of the Senate, might undertake to regulate and encourage evening classes whether it was the Gresham Scheme or any other?—Certainly.

13,107. I think that exhausts your objections to the Gresham Scheme?—On that particular ground.

13,108. Then after that?—I have an objection to the method of government suggested for the Gresham University.

13,109. The next head is University professors. You were going to tell us your own scheme for appointing University professors; in fact, establishing a professorial University. Would you like to take that now?—I should like to take next the point about the government. I think the government of a University should not be in the hands of representatives of institutions at all, but it should be in the hands of men specially chosen for their learning in some branch of knowledge. If institutions as constituent colleges send representatives to the governing body these representatives are usually chosen because they represent some line of policy, but not specially because of their scientific or literary qualifications. It is conceivable, for instance, that a large number of the Medical Schools would send specialists in anatomy or in any one subject, to the governing body. It is even conceivable that they would not send specialists at all, but persons more associated with the business side of the schools, who had made their reputation in administration rather than in teaching one subject. I think, therefore, a better plan would be that the governing body should consist largely of University professors elected for eminence in some branch of science or letters, but without distinct reference to a particular institution, and not depending at all upon what institution they happened in the first instance to be attached to.

13,110. Would you say University professors in contradistinction to college professors, or would you allow all professors to have a voice?—I would say University professors in contradistinction or in preference to college representatives, who might be merely business men.

13,111. But you would not object to the whole body of professors—college professors as well as University professors—having a voice and a strong voice?—Possibly through the medium of sub-committees, Boards of Studies, and such like, but not in the supreme governing body.

13,112. Then you would have to begin, of course, by appointing a large number of University professors, and this, I think, is inseparable from the notion of a professorial University?—Yes, and the Gresham Charter makes no real provision, it seems to me, for the appointment of University professors.

13,113. It makes provision for the appointment of lecturers and it might make provision for the appointment of professors?—Apparently it is contemplated to make the chief professors of University Colleges and Medical Schools University professors. But if that is so the University will have no real authority over these teachers. They will have no voice in their appointment; they will not be able to say whether a certain professor is competent or not; there is no power of dismissal.

13,114. It has power of recognising him or power of refusing to recognise him. It has an indirect veto, I think. Supposing you could not get your professorial University you think it would be an improvement to give to the Senate of the Gresham or any other Uni- a distinct power of veto?—Undoubtedly.

13,115. That would go some way towards meeting your objection?—At present I suppose a professor would be elected or a teacher would be elected by a constituent college, by their own council, without any direct reference to the central University. Then I imagine that the central University would be obliged practically to select its professors from these teachers. There is no power taken in the Charter—it is not competent for the University as far as I have seen it—to elect University professors independent of the Colleges.

13,116. There is a power in Clause 3:—"The University may appoint lecturers independently of a "College, to give instruction in any subject, whether "it be or be not included in a Faculty." If, instead of calling them lecturers, you call them professors, and if, instead of saying "may," you say "shall," it may go some way towards what you want, may it not?—Not quite. University professors would be more than teachers. They would be perhaps the most important element in the governing body, and I take it if the University appointed lecturers in subjects not represented at the Colleges, as stated in the Charter, they would be teachers chiefly, and probably would have no voice in the governing of the University.

13,117. You think the governing power ought to be among the University professors, but I think you would not object to giving the College professors some voice. What you object to is the representation of institutions?—Yes.

13,118. You would not object so much to the different Faculties as constituted appointing members of the Senate?—I think the different Faculties ought certainly to be consulted.

13,119. Not only to be consulted as Boards of Studies but ought to have a power of electing representatives on the Senate?—I think it ought to be a very limited number in that case.

13,120. The bulk you would have appointed by the University professors?—Yes. No doubt also there might be a few—possibly a considerable number—of Governors, appointed, say, by the Crown or other outside bodies.

13,121. You would object to members appointed by institutions?—As colleges.

13,122. The members should be partly appointed by the Crown, but the great bulk should be members appointed by the professors?—Yes.

13,123. What is your next point?—I have made part of my next point already. I have said I objected to the Gresham Charter, because it made no provision for the appointment of University professors and has no voice in the appointment of College teachers from among whom chiefly the University professors will have to be taken. I think it would be a great anomaly, for instance, in a University that there should be as many as ten professorships in anatomy in one city.

13,124. You mean altogether?—Yes, I take anatomy as one subject.

13,125. Do you think there is any chance of that?—If all professors in medical schools and constituent colleges are to be University professors there would, naturally be that number, there being 10 medical schools.

13,126. One for each college?—One for each college.

13,127. Why would it be objectionable to have so many if they had work for them all to do?—They could not all be heads. They would be pulling more or less in different ways.

13,128. They would be each teaching in their own college?—They would be college teachers, but in no sense University professors.

13,129. Not giving independent lectures to all comers. It would be mainly a question of title?—Not quite. I think there ought to be, above the teachers or college professors in one subject—I mentioned anatomy just now—one head professor to have the organising of the teaching in his hands, roughly speaking, to say what should be done in each medical school or college.

13,130. And the others should be bound to obey, to conform themselves to his view?—Yes.

13,131. We have had a great deal of evidence about the professorial University, but none of the other advocates of it proposed to extend that to the medical colleges. They all proposed to treat the colleges differently, and to allow them to keep their autonomy. Do you agree with that, or would you absorb them too?—I would allow them to keep their autonomy in

many respects, but at the same time I think there ought to be a supreme professor of all the medical subjects, such as anatomy and physiology, who should have general supervision over the whole working of the various colleges.

13,132. And the colleges should be obliged to conform to his dictates?—Of course he would only lay down general lines, and under those general lines the various college teachers might follow their own bent, but in the main they must conform to general regulations.

13,133. Would not that be interfering with a thing which is working well now—as I believe it does. It would look more complete in theory, but would it not be rather dangerous to interfere with the medical education in colleges which are doing good work now?—Yes, I suppose it would.

13,134. Of course I do not wish to argue. I only wish to get your views. I am asking these questions simply to see what your views are?—I think the teaching might be improved in character if there was more general sympathy with the teachers in different colleges, and if there was some person who had the general organisation of the teaching.

13,135. Then what is the next point?—There is one other point with regard to these University professors. Supposing that the central institution were practically bound to take the professors from among college teachers, then the denominational character of King's College becomes objectionable. It comes to this, that half the teachers in science, and half the teachers in arts in the new University would be appointed under a test.

13,136. That is if you took them away from their own college and made them into University professors in the sense of teaching classes from all colleges and all parts, is it not? As long as you keep them to their own college there would not be any harm done?—But if University professors are to take a large part in the governing and are not merely attached to the Colleges—if they are more than College teachers—it becomes objectionable. The field from which they would be drawn would necessarily be limited. There would not necessarily be the same choice of candidates. I do not say that the candidates would not in many instances be good, but it is a fact that they would appoint an official with wide reaching difficulties under a test.

13,137. Then your professorial scheme would go towards the absorption of and doing away with King's College altogether?—As a separate institution.

13,138. Keeping its autonomy, you would find it difficult to deal with that question of the influence exerted by it. In fact it goes to the root of the whole system. You must have the professorial system instead of the representation of institutions, and one of your reasons for preferring that, you say, is the denominational character of King's College?—Yes. The next point is that I think it is objectionable to have two independent Universities in London, and, therefore, I think the Gresham scheme would be improved if it absorbed the present Imperial University of London.

13,139. Would you have a professorial scheme connected with the Imperial University?—I think so. The old University has done a great work, and has considerable prestige, and it has, of course, Government support. It would be unfair to the new University, I think, to put it in competition with this, and if the competition ever became keen there is no reason why the old University should not start on its own account a teaching department to run in direct competition with the new University.

13,140. Do you think that the present University might be made into a teaching University for London without interfering with its Imperial functions?—I think it might with certain safeguards.

13,141. You would be very competent to speak upon that part of the matter, because you have a great deal to do with these Imperial functions in the way your students go up for a degree?—Yes.

13,142. Therefore it is important for you that the Imperial functions should be maintained?—Certainly.

13,143. You do not think they would suffer in any way if the University of London took up the duties of a teaching University for London?—I see no objection if the government of the new University is of sufficiently broad a type, and, roughly speaking, of the kind I have indicated already. We, as a matter of fact, send students up for other Universities. We have no representation there and have no wish for representation there. In the cases of Cambridge and Oxford, for instance, we are perfectly content to leave our fate in the hands of the University authorities because they in no sense represent competing institutions, but are men selected for their learning.

13,144. The wish to establish a teaching University for London comes from the desire that there should be a close connexion between the teaching and examination. It is proposed in almost every scheme that the professors, whether University professors or college professors, should have a great voice in settling the kind of examinations that there are to be and all connected with them, so as to bring the teaching and examining into harmony. Therefore the teaching of London would lead directly up to the examinations, and it has occurred to some people that this would put outsiders like yourself at a disadvantage. Is there any fear of that?—I do not think so. I think the University professors ought certainly to be intimately associated with examining duties. They should be, in fact, *ex officio* examiners. I do not mean by that that they should necessarily set many papers, but, at any rate, they should have the power to supervise the discussion on the papers set, and the answers sent in.

13,145. And this would not interfere with you or put you at a disadvantage?—I do not think it would if it is undertaken by University professors—men selected for their eminence in some subject, and not men attached to competing institutions.

13,146. You told us that, supposing the Senate of the University of London was reconstituted in order to make it into a teaching University you would not wish for any representation on it. You would not insist upon that or care about it?—I think at Birmingham we should not at the present time. We have insisted upon that in time past, but the situation has changed very considerably in the last few years. We hope that before many years are past we may have a chance of securing a University of our own, and it is this reason alone that tells us that we ought not to insist upon a representation in the new University.

13,147. Perhaps that might apply to other places too—Bristol and other places?—I think, probably, if a University for the Midlands were formed, University College, Bristol might come in.

13,148. (*Mr. Rendall.*) Would there be any others?—Possibly, Nottingham; but I should think Firth College, Sheffield, which is the other college in the Midlands, is more immediately in the circle of Victoria University than in that of the Midland University. I may say that in the last few months we have taken the first step towards making a University in the Midlands possible. In Birmingham, before, independently of the Mason College, which is a University College without a Medical Faculty—or was—there was a medical school of much older foundation governed by an entirely separate body. During the last few months an amalgamation between those two bodies has been effected and the Medical School is now a constituent part of the college; so that, being a body with more sides than we had before, we are in a much better position to ask for a Midland University than we were before. In fact, this amalgamation was a necessary preliminary before asking for any University powers.

13,149. (*Chairman.*) You have come before us to-day, giving us this very useful information merely from a general interest in the subject. You are not speaking in any way on behalf of Birmingham, which you look upon as outside the question?—Yes, rather. At the same time, there are certain details connected with this scheme, which we felt would press rather hardly upon provincial colleges, and Birmingham in particular. Some of them have special reference to the medical side, and those I propose to leave in the hands of Dr. Windle, the Dean of the Medical Faculty of Mason College.

13,150. Then with regard to final two years' residence in London, and the preponderance of the Medical Faculty?—The preponderance of the Medical Faculty, I suppose, has been dwelt upon considerably already. That could be dealt with by adjusting the number of representatives; but, as I have already said, I object to the representatives of colleges altogether. With respect to the final two years' residence, that has no immediate application to Birmingham at the present moment.

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

The conditions laid down in the Charter are—that students who are resident in other Universities in different parts of the kingdom shall be admitted after the final two years' residence; but Birmingham is not a University; and, therefore, under the strict wording of the Charter the students could not be admitted under the clause as to two years' residence.

13,151. Do you mean it could be altered so as to admit students resident at Birmingham and other places?—No doubt it could, if desirable, but I do not think it is desirable. I think this regulation as to the final two years' residence would have the effect, probably, of drawing failures from other Universities more than any other kind of person. A student who had been resident for some years, say at Cambridge or Oxford, and failed to take his degree would have the option of taking a London degree if he came for two years' residence.

13,152. That is, supposing London was easier?—Yes; supposing London was easier.

13,153. I see your next point is the tendency to lower degrees. You think the degree probably would be easier, do you?—I think so.

13,154. What is your reason for thinking that the degree would be easier than most Universities?—It is more a medical question than any other, I think; and Dr. Windle would speak with more authority on that point than I should. But, generally, from what we have heard from people in authority it is understood among medical circles that there is a desire to lower degrees.

13,155. Some deny that, and say it is more the way in which a degree is taken, the number of subjects which are to be got up at once, and partly also some of the subjects themselves, that they object to. But they deny that they wish the degree to be really lower, though they wish to have facilities for taking it, in the way of more time and other arrangements which at present, they say, interfere with their practical work. Most of them certainly deny that they wish to lower the degrees?—Probably they would reduce the preliminary training for one thing, and make the degree approximate more closely to the qualification conferred by the incorporated Colleges.

13,156. Then do you think the preponderance, as you call it, of the Medical Faculty would have a tendency to drag down the degree?—I do.

13,157. Do you think the medical men would wish it to be unduly easy? Why should they wish that?—If they are members of the Council as representing institutions, they might very well wish that, or at any rate, the temptation would be so to do. Lowering the degree would probably mean increasing the number of students attached to an institution.

13,158. That would apply to other Universities, would it not? What is it that keeps up the degree of any University? There must be some counteracting influence besides the mere wish to get the students, or why do not the degrees become easier?—If you lower the degree beyond a certain extent, you defeat your own ends by making it valueless.

13,159. That would apply to this case, would it not?—Yes, no doubt; but hitherto—I am speaking now of the medical question—a University degree has implied a liberal education in other subjects besides professional subjects, and we feel that to cut down the preliminary subjects of general education would be to lower the standard of medical degrees.

13,160. Have you any reason to think that this new University would not insist upon general culture in addition to mere medical knowledge. Medical men themselves will probably see the want of it as well as others?—Medical men have spoken considerably against the present medical degrees of the London University as being too hard in this particular, and the implication is that if they had the direction of a new University they would make them easier.

13,161. And practically there is a feeling in the profession with regard to the number of people who go to other Universities for their degrees?—Exactly; Glasgow, Edinburgh, Dublin, and Durham.

13,162. This we have heard a good deal about, both on one side and on the other. Is there any other point you wish to say anything about?—Those are the main points I intended to make. If you wish to question me further I shall be glad to do my best to answer the questions.

13,163. You have looked into the details of how to work out the professorial scheme?—Yes.

13,164. Do you agree that the medical colleges must be to a certain extent left out of it. It would not do to absorb them entirely?—Not entirely, because they are great charities, and necessarily some amount of autonomy will have to be left.

13,165. You would contemplate gradually absorbing King's College and University College, and any other institutions which might possess either money or grant, or anything else that it would be desirable to lay hands on?—Yes.

13,166. (*Lord Reay.*) Might I ask how your professors in Mason's College are appointed?—They are appointed by the governing body, which is largely—almost entirely—a body of laymen, so to speak; for though there are medical men and men representing other branches of learning on it, they are not elected necessarily in that capacity. The final selection is left in the hands of this Council, but the original nomination is in the hands of the Senate, or rather the Boards of Studies of the Senate for the particular science in which the professor is required. If, say in the Arts Faculty, a professorship is vacant, the post is advertised, and the applications are, in the first instance, laid before the Board of Studies for Arts and Science. They select a number of candidates; they are at liberty to select one or more (and presumably they would select more than one) in order of merit. These selections are carried by the Principal before the Council; then the Council interview the various candidates and make the final choice.

13,167. Have you ever found that the interference of the Council in this matter of appointing professors has been injurious to the interests of the college?—I have just been sketching the mode of election which has only recently been adopted. Up to six months ago the Council did the whole of the selecting—the whole of the interviewing—and the Senate had not any direct voice in the appointing except through the Principal, who is a member of the Senate, and attends the Council meetings as well. So that it has hardly been tried at the present moment.

13,168. Have you any objections to the system which previously prevailed?—I think, on the whole, the selections were good.

13,169. Are you aware when you urge the objections to the Gresham Charter that that mode of appointment on the nomination of the Senate to the Council is the mode of appointment which prevails at University College?—Yes, I believe it is.

13,170. Therefore, at University College the predominant power of appointing persons lies with the professors themselves?—Yes.

13,171. Does not that, to a certain extent, remove the objection which you urged?—Not quite. Still the University, as a University, has no direct voice in the election of these professors. It is true that a certain body of professors have a voice, but they are not the University, and possibly if more importance were attached ultimately to these professorships—if a professor, for instance, had the supreme organisation of the whole of the teaching of his subject in London—a higher type of professor even than the high type existing in University College might be obtained; and in that case the choice of a proper person to undertake these very responsible duties would be even more serious, and ought to be considered with, if possible, even greater care.

13,172. As I understand it, you contemplate in your professorial University in each Faculty a professor who would be the representative of a special subject, anatomy, chemistry, physiology, or any other subject?—Yes.

13,173. That is what you contemplate?—Yes.

13,174. Then if the work was too much for one professor you would give him assistant professors?—Certainly.

13,175. And would these assistant professors be under his control. Would they be his assistants only, or would they be appointed by the University, and would they have a University status?—I think that they might be appointed by the University certainly, and would have a certain University status, but a subordinate status to that of the primary professor.

13,176. Would you make them members of the Faculty?—I would make them members of the Faculty, but not members of the Senate.

13,177. How would you compose the Senate?—I would compose the Senate, as I said a short time ago, of head professors, with the Crown nominees and other representatives, possibly of outside institutions.

13,178. Is your college a fully equipped college in all Faculties at present?—Not quite. It is especially deficient in the Faculty of Arts. At present we have no separate Chair of History, and we have no separate Chair of Moral Philosophy or Political Economy, but in other respects I think it is fully equipped; the science side is very fully equipped, and the medical side also.

13,179. In the University which you hope for and which you contemplate for the Midlands would you be in favour of abolishing all control of the lay element. Would you make that a professorial University?—Not entirely. Some lay element, I imagine, would be retained in the Supreme Council of the University on the professorial scheme. A small lay element, I think, might be included in the Council of any new University, but it would be largely governed by University professors—heads of departments.

13,180. Do you think that a professorial University without control of lay element, or with a very subordinate control of a lay element would be likely to attract as many endowments from the public as a University in which the lay element, the element of those who have been founders of these colleges would be to a certain extent recognised and admitted?—Possibly not. But the funds that the University would want for its own purposes, apart from college administration, would not be large after an initial endowment was secured.

13,181. What is the per-centage of your students which you send up to the examinations of the London University?—I could not quite answer that off hand.

13,182. Could you give us a statement of the numbers?—I cannot. I have not the information with me.

13,183. But you could send it?—Yes, I will send it, as nearly as possible. We have no means of checking the numbers of those who actually enter for the London University examinations, and can only take those who at the beginning of a session enter for London courses of lectures. Of these, a considerable number fall away; others are so weak that they are recommended to put off the examination for a year. Many of the students, therefore, ostensibly preparing for the examinations, do not present themselves for examination at all.

13,184. What is the number of those students who succeed at these examinations?—That, again, I cannot answer.

13,185. Then will you also kindly give us that information? Will you send us the actual numbers, not a per-centage?—Yes. You mean, say, for the last three years? (*See Appendix No.* 36.)

13,186. Yes. Would you be prepared, if a professorial University were to be created in London, to send up your students to be subjected to the same examination to which the London students would be subjected?—I think it is advisable under certain conditions to have alternative papers. For instance, take my own subject, mathematics. Supposing a very eminent teacher like Professor Henrici were made University professor in the new University of London—and a more able man could not be found—I think it would then be unfair to outside students to be examined by Professor Henrici alone, because he belongs to an entirely different school of mathematical thought from that which radiates from the University of Cambridge. The mathematical thought that emanates from Cambridge prevails over nearly all parts of the country, but Professor Henrici's mathematics is of an entirely different type. It does not belong in any sense to the Cambridge School. The pupils would be taught by Cambridge teachers on Cambridge methods, and they would, therefore, be at a great disadvantage as compared with pupils taught by Professor Henrici himself. Therefore in any case I think the professor should not be sole examiner. In certain cases, that is one, it might be advisable to set alternative papers and to allow students, wherever they come from, to take their choice between them. That would preserve equality of standard, and at the same time it would not put students taught elsewhere at a disadvantage as compared with students taught in London.

13,187. Would you claim for your college the right of having a previous inspection of the papers which should be put to your students?—Certainly not.

13,188. The only guarantee which you require is that there should be another examiner and that the papers should not be put by the special professor of the London University?—Yes.

13,189. (*Professor Sidgwick.*) You said that you sent pupils to the examinations of Oxford and Cambridge?—I believe it is chiefly in medical subjects.

13,190. In what subjects?—Perhaps Dr. Windle can answer that question better than I can myself.

13,191. In arts and science the higher examinations are not open to outsiders in Cambridge nor in Oxford except in the case of women?—Is it not the case that a candidate for a degree of medicine at Cambridge has to take a tripos first, and afterwards take some special medical subject? My remark applied solely to medicine.

13,192. I understand you to feel that as regards Birmingham now, you contemplate the organisation of a teaching University for London from an outside position, having in view a Midland University?—Yes.

13,193. But at the same time I understood you to say that even if you did continue, or so long as you might continue, to send students to the University of London you would not be afraid of any want of impartiality in the external examinations resulting from the establishment of a teaching University with a preponderating influence over the examinations; provided that persons who had this preponderating influence were University professors, and not representatives of institutions?—Yes, we feel that we could leave our fate in the hands of such a governing body.

13,194. You think that there would be no danger that it would be supposed by students hesitating between Birmingham and London that they would be more likely to succeed in examination if they attended the lectures of professors having that preponderating influence?—No doubt there would be an attraction to London, but I do not think we should have any right to object to such a competition.

13,195. I think you went on to indicate that suppose, for instance, in the subject of mathematics, Professor Henrici had an influence on the examination, that influence would tell, not merely in examining his own students, but in determining the plan of the examination?—No doubt.

13,196. And, I suppose, you would agree that if the examination in mathematics which the Cambridge students had to attend was determined by the University of Oxford, however eminent the professors in whose hands it was, there would be a certain tendency for mathematical men to go to Oxford rather than Cambridge. Do you not think it would have that effect?—To Oxford?

13,197. Suppose that the professors of mathematics of the University of Oxford determined the mathematical examinations which Cambridge students had to attend, would not this, owing to the actual diversity between the two Universities, tend to make men desirous of learning mathematics go to Oxford more and to Cambridge less?—I do not think so, because the part taken by University teachers of mathematics at Oxford and Cambridge is so very small that I do not think it would affect it. Of course there are other considerations which might possibly draw students still to Cambridge in spite of the possibly easier degree at Oxford or a degree obtained under better conditions where the examinations more closely approximated to the teaching. At Cambridge, at the present time, the examiners are nearly all teachers, not University professors certainly, but college lecturers.

13,198. I was going on to that in connexion with your view as to the superiority of University professors over college teachers in organising examinations and regulating studies. Would you apply that to the University of Cambridge as you now know it? You are probably acquainted with the amount of influence reserved under the system now at work, to the professors and to the general body of academic teachers?—Yes.

13,199. Do you think that the balance that has there been instituted between the professorial element and the element that in the main represents the other non-professorial teachers—the college teachers—is a good

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

thing? Or would you like to, if I may use the term, professionalise Cambridge more?—I would, and in all the new subjects as far as I can see Cambridge is much more parallelised. Now in a subject like physiology the professor is really the head of the school of physiology and is brought into intimate relation with the students, but very few mathematicians are brought into intimate relation with the professors of mathematics, and I imagine it is the same in classics; but in all the newer Chairs the conditions are very different, and probably if you started a new University the relation between the professors and the students would be much more like the new Chairs at Cambridge than the old ones.

13,200. I had rather in view a different aspect of the system as at present worked even in the newer subject. I had in view the influence that is actually exercised and the place that is actually taken in the organisation of the work through membership of Boards of Studies by influential teachers whose appointment rests with the colleges. You are aware that that is an important place?—Yes.

13,201. And do you think that that system at Cambridge works badly?—I should not think it works badly. No doubt it works very well at Cambridge, but I do not think we could reproduce the conditions of Cambridge in London.

13,202. Do you not think in London also if the Faculty were interested and directly represented on the Board of Studies according to the plan of the Gresham Charter the tendency would be as at Cambridge to put on the Board of Studies the most distinguished men?—Of course the choice would be much more limited than it is at Cambridge. You would only have one or two professors.

13,203. I will refer, for example, to what you said of the desire in medical circles to lower degrees. I know most diverse views have been expressed on the point. May we not reasonably suppose that the effect of combining the teachers into one Faculty would be to bring the best repessentatives of the medical schools to the front—that there would be a sufficient general desire in the Faculty that the administration of the work should be in the hands of the best men?—I think so; undoubtedly it would, but this has direct reference to the Board of Studies, has it not?

13,204. I was thinking of the place that is secured for the influence of the Faculty through the Board of Studies in the Gresham scheme?—No doubt the best men would be represented, but what I said implied the appointment of a superior order of professors more corresponding to the professors in Oxford and Cambridge as distinguished from teachers in colleges, and such professors, I take it, ought to be elected by the Supreme Council of the University, and the fact that a person was a college teacher ought not in itself to make him a professor in the sense of having a considerable voice in the administration of the supreme business of the University.

13,205. (*Mr. Rendall.*) You have no doubt followed various schemes promulgated by the University of London. You are familar with the first scheme, an earlier scheme that was impugned by the provincial colleges very largely, as giving something like special recognition to the London colleges?—Yes.

13,206. Should we be right in saying that the objection of the provincial colleges was in the main, to the recognition of the London colleges as colleges by way of special exemption and privilege?—I think the objection was more against the fact that they had special representation on the supreme governing body, that they sent direct representatives to the governing body, and the whole of the University affairs would be mainly directed by persons more or less intimately connected with rival schools in London. Under those circumstances, as we still send a considerable number of students to the University of London, it was felt that we also, and other institutions having an interest in the older University, should have representatives.

13,207. Representation, you hold, was the crux?—It was the crux of the situation.

13,208. You remember there was another condition which allowed that the lower stages of examination, the matriculation and the intermediate stages, should practically be confided to the London colleges, and that their students should be subjected only to the final stages of the examination. How far did that form a factor of opposition?—That privilege was ultimately extended in a further scheme to constituent colleges in the provinces.

13,209. There you come to the later scheme, the scheme of 1891?—Yes.

13,210. Coming to that scheme, which resulted largely from the opposition of the provincial colleges, a very elaborate arrangement was devised, providing for provincial constituent colleges, providing for provincial Faculties with a special relation to the Senate, and providing for provincial Boards of Studies. Did you approve of that revised scheme?—We did not regard it with much enthusiasm, but we did not oppose it.

13,211. Would that be a correct account of the attitude of provincial colleges generally? Do you think it did much to soothe their fears?—No doubt it had its influence.

13,212. I gather from the evidence you have given to-day that you are disposed to insist less strongly on that apparatus?—Yes; I have been stating that the situation has changed very considerably during the last three years.

13,213. Do you think such elaborate machinery as that would have much practical effect?—I doubt it very much.

13,214. Do you think it would have secured anything like regular participation in these Boards of Studies and Faculties by representatives of provincial colleges?—The question with regard to representation has always struck me in this way. It was naturally impossible that any provincial college, or the whole group of provincial colleges combined, could have effective representation on the governing body. The primary object of this scheme was to create a University for London, and the London element would naturally be far the stronger. There would be some advantages, no doubt, in having a small representation, but I am not quite sure that the advantages would not be more apparent than real, and when you consider also the difficulty of attending meetings in London by representatives located in different provincial towns, I think the apparent advantage would almost disappear.

13,215. May we say that the interest of provincial colleges in the whole matter is really limited to examination and examination tests, and to securing safeguards for equivalent examining criteria for London students, as compared with other students?—Yes.

13,216. And if that could be secured by some equally effective safeguard, it would satisfy the provincial colleges?—I think so.

13,217. You suggested to meet that difficulty what you spoke of as a broad basis of University government, which meant a government which would be at once impartial, and have a large element of distinguished professors?—Yes.

13,218. Then you went on to suggest alternative papers as one method of meeting difficulties that would arise. What do you mean by alternative papers? You are assuming a board of examiners of some kind on which Professor Henrici—to use your illustration—was setting the paper? Is the alternative paper to be set by him or somebody else?—I presume by somebody else.

13,219. If we get to that what do you think of the relation of the University to the Board directing the examination? What I wish to get at is, whether alternative papers are really advisable, and whether the better plan is not to appoint a board *ad hoc* for examination with a different set of papers rather than attempt a system, which seems to me to be more elaborate, of alternative papers in particular subjects?—I think the of difference is one detail which might be safely left to be arranged afterwards. I am not strongly pledged to the method of alternative papers. If the scheme of having alternative examinations or different examinations is preferred by the large body of provincial schools, I am willing to agree.

13,220. And assuming some form of incorporation in the new University scheme, you think it might work, and you would be satisfied if the Imperial examinationi were conducted by the governing body on a different basis from the teaching University examination limited to London students?—I think it would work.

13,221. Then with regard to the medical point, you take exception to the provision in the Gresham Charter

insisting on two years' final residence. I did not understand quite whether you wish to destroy that power or extend it; whether you wished to make the reciprocity complete, that any two years should be accepted, or that no two years at any other school should be accepted?—I think, on the whole, the best plan would be to insist on the whole term of residence.

13,222. That the full term of residence should be spent in London?—Yes.

13,223. That is different from most existing Universities where practically reciprocity is allowed. Why would you make a difference in the case of London?—I was forgetting for the moment that that is the general practice.

13,224. It is the practice of Scotch Universities and in many respects of Oxford, Cambridge, London, and Victoria?—Yes.

13,225. (*Professor Ramsay.*) You are speaking there of medicine alone?—Yes.

(*Mr. Rendall.*) Perhaps you have not thought very fully of that detail?—Yes, but I do not like the final two years' residence at all.

13,226. Two years' residence is the rule in the Scotch Universities generally. For instance, Edinburgh University insists upon two years' residence?—We find that operates disadvantageously upon provincial medical schools. Those final two years are perhaps the most critical in the students whole career; and in the large towns like Birmingham and Liverpool the facilities for clinical instruction are great—they are not greater than those in London certainly—but they are greater than those in Edinburgh and elsewhere, and we suffer considerably by having our best students drawn away at the most interesting part of their career. If the same were extended to London it would simply mean that one more avenue would be open whereby our students would be drafted off for their final two years' residence.

13,227. And on the other hand another avenue would be open for your students staying with you for the first three years. Any student resident in Birmingham could stay the first three years with you and then go on and obtain his degree?—There are the old Universities and the conjoint board examination.

13,228. We had better leave out of account the conjoint board examination. That is for the licensing qualification not for a degree, so that really it does not come in. Are you able to express an opinion upon this point? Which alternative would you prefer—that there should be no reciprocity at all, with the danger of drawing your students throughout the whole of their course to London, or an equal reciprocity?—I think myself I should prefer what I said originally, that there should be no reciprocity, and that our students should not be admitted at all unless they reside completely. Then we compete with London institutions on exactly equal terms.

13,229. Except that you at present have no degree, which one would have thought would put you on extremely unequal terms?—That is so.

13,230. You practically, then, could only send your students to the conjoint board examination, and if the same principle were extended to other Universities, such as Edinburgh, no Birmingham student could get a degree unless you have a Midland University giving its own medical degree?—But the fact that Edinburgh, Durham, and Glasgow are open to us alters the situation considerably. If we had no University open to us we might be glad of a degree from the Gresham University.

13,231. But you are more afraid really of students being drawn off to London. They are at present drawn off to Edinburgh, Glasgow, and other places, which is what you are deprecating?—We are more afraid of the students being drawn off to London than Edinburgh certainly.

13,232. One verbal point remains that you called attention to in the Charter—that the privilege is limited to students who shall have pursued a regular course of study in a college of a University. Why do you object to that? It seems to provide for the very thing you want—that your students cannot go and take the London or Gresham degree?—I say that is the alternative I should prefer. My objection to that was rather a general one. We always preferred that we should be absolutely excluded.

13,233. You do not think any privilege of migration should be extended?—No.

13,234. (*Lord Reay.*) Might I ask whether you think that the institution should be responsible for the complete education of a graduate, and that he should, therefore, have been through all the subjects? Is that one of the grounds?—That is one of the grounds.

13,235. (*Mr. Anstie.*) Might I take that last point a little further?—Excepting the case of men who have a remarkably active and inquiring mind, and treating the matter with regard to the general class of students, is it desirable that in the course of their education men should be migrating from one institution to another?—It is very largely a matter of locality. As a rule we do not draw students in Birmingham from a radius of more than 30 miles, a distance that is which renders their attendance possible by coming in and out by train every day; also there are considerable advantages in the point of cheapness for one thing, in having your student residing at home.

13,236. The point I was putting was whether in an educational sense you think it desirable for the generality of students that they should be birds of passage from one centre of education to another?—On that subject different people express different opinions, but I think on the whole I should prefer them to stay at home.

13,237. You think the education would be more coherent if a man goes through the whole course of education in the place where he begins?—I think so. I know it is not the case in Germany, but on the whole I think our system is better.

13,238. You would not be in favour of giving to students who had University privileges in one place, University privileges also in a second place?—No, I should not care to see that extended very widely.

13,239. I understood you to say that this matter to you is not one now, practically speaking, of competition, and that we may assume as a fact in the case that at no very distant date there will be a Midlands University?—I wish we might assume it as fully as that. You may at least assume that we shall apply for University powers at no very distant date.

13,240. I think about 10 years ago it was stated that 10 years would be about the time in what it might be expected?—I am glad to hear that it is so.

13,241. And no doubt you are aware of the fact that a Welsh University is in immediate prospect?—Yes.

13,242. That would very considerably alter the position of provincial colleges in their relation to the London University?—No doubt.

13,243. And would more especially do so, having regard to your late answer to the effect that it was better educationally for students to stick to their own University?—Yes, at the same time the old imperial examinations of the University of London have such a prestige and such value that probably for a long time a considerable per-centage of students would still go up to London University. I believe that is the case in Victoria now.

13,244. We must not ask you whether Victoria University likes that or not, because you do not speak for them. You have referred to the test which was said to be imposed at one of the London Colleges, and you object to a college so situated having so large a share of influence?—That was not quite the force of my objection. My objection was this, that if considerable University powers and functions are to be assigned to a professoriate of the University in the general administration, then I think it is unfair that those professors should be appointed under a test. If a college wants to receive students under a test and conduct its own affairs under a test I am not sure that we have anything to say against that.

13,245. But at the same time admitting that that might be a difficulty, it is a difficulty which would diminish in proportion, as the weight of such an institution became less preponderant on the governing body although it might not be removed?—No doubt it would diminish in degree, but the objection in principle would still remain.

13,246. As a matter of fact, although, of course, that fact was well known, and although the Senate of the London University might be called an eminently undenominational body, the objection did not prevail with them?—I believe that is so.

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

13,247. In fact, I suppose it was assumed that in that scheme there would be sufficiently strong counterbalancing elements to prevent the college from having undue influence. Whether that was a right view or not, I suppose it would have been the view taken?—I am not able to say.

13,248. Now, to turn to rather more general considerations. I understand you to say that you think outside institutions may be admitted to nominate to some extent on the governing body. What sort of institutions had you in your mind when you said that?—In the first instance I think possibly councils of University Colleges might nominate a few members. I think they might in the first instance, if they ultimately delegated the organisation of the education to this central body.

13,249. Then you mean to say you would only give it them in the first instance as a transitory measure?—Yes.

13,250. As laid down in the professorial scheme?—I think so.

13,251. You would not be prepared to allow that to continue?—I think not. I object to the representations of institutions as institutions at all.

13,252. And I understand you at the same time to say that you desired that every competent branch of learning and science should be placed under one director—practically it comes to that, does it not?—Yes, one supreme director.

13,253. Would you not admit that there are dangers about both systems? There are, no doubt, as you have pointed out some dangers about the want of organisations, difference of systems, and waste of power. On the other hand is it not conceivable and would you not rather favour the view that to put the whole direction into the hands of one man might tend to the sterilisation of learning and research?—When I say the whole direction, of course I would imply that he takes advice from his colleagues in Boards of Studies, and what not.

13,254. He might. If he is to be the master of the situation he might take that advice or he might disregard it. If you give him these extensive powers you cannot reckon on the fact that he would not exercise them?—No, but I take it that he might be called into account by the general council, his colleagues on the governing body.

13,255. If you rely upon those means to control the action of this person who is put there absolutely to control other people, why may you not reckon similarly on the action of skilled and expert opinion to determine within its own domain the decisions of the governing body? You assume that they would have this power for the purpose of controlling a man who is set there to control them? Why allow them a power to determine the deliberations and the decisions of the council or the supreme body whatever it was, especially if you provided an adequate organisation for the purpose?—The machinery for the governing body does not provide for expert advice to the council in any systematic manner.

13,256. What machinery?—As laid down in this Charter.

13,257. We are here to propose what would be best. Would not the suggestion now made remove your objections?—Is not the suggestion I made one very efficient manner of getting an expert opinion?

13,258. No doubt it is an efficient way, but I am asking you whether there is not any other way possible; whether the way you have indicated is the only one you can conceive as a practical and beneficial method?—I certainly do not wish to imply that it is the only way, but to my mind it is the best way.

13,259. In substance does not what you say come to this—that what you demand is that there shall be in the educational work of the University a full and adequate representation of learned and skilled opinion?—Yes.

13,260. And if that is provided for, is not really the substance of what you ask for done?—I still think that the organisation of a branch of learning is better placed in the hands of one very eminent person than in the hands of a committee of teachers of very considerably lower eminence. I should hope that if sufficient importance is attached to these offices of University professors, men of much greater eminence would be attracted to London than are now attached to any college in London. I think there might be ultimately attracted men of that type who now remain at Oxford and Cambridge, and in that way I think they might get advice of a much higher kind—influence of a much more potent kind—than a committee of representatives who had distinctly lower rank in the world of learning.

13,261. It would not, of course, surprise you to discover that in any particular branch of work—I do not like to be more specific in what I am saying—two or three perhaps of the very highest authorities in England entertain different views. What would you do in that case?—I presume the General Council would then exercise a general amount of control and act as arbitrator between them.

13,262. Then it comes to this, that persons who are to exercise the ultimate control are not to be the most expert persons, but persons who are to form a judgment as best they may on what is the best course to take under the circumstances?—I imagine these cases which you are supposing, where the most eminent persons in England had a serious difference on a fundamental point would be few and far between.

13,263. That is so, but they occur. Suppose, for instance, competition arose between the schools of Oxford Mathematics and Cambridge Mathematics and Dublin Mathematics, might not the same sort of difficulty occur, and might not that require a solution? In favour of whom are you to decide? Are you to make one man master of the whole system with absolute control?—No, I think you must leave him subject to some kind of supervision by the General Council to provide for such outlooks as this. In that case there is a sufficient reason why the General Council should invite further expert evidence to settle this particular point.

13,264. But you cannot have a man more expert than the most expert?—There may be many experts that you would put in the very first class.

13,265. Do you really mean to say that that would tend to solve the difficulty at all? We will suppose that the two highest authorities are differing, and you call in a third man who differs from both, how do you think that helps towards a decision?—We might call in more than one man.

13,266. You must come to an end of this process. Does it not come to this that you must have a governing body who must act on the principles—if I may venture to use the crude term—of common sense?—No doubt.

13,267. And might not that be with advantage a body which contained elements a little removed from the acute controversy that divides men of science?—No doubt, but at the same time I do not see why men of science should not be also men of common sense in general questions which do not touch their own particular departments immediately.

13,268. But I am talking of controversies which do touch their own particular department?—It might, no doubt, touch the particular department of every professor on the staff, but it would probably only touch the particular department of one or two. The other professors, I think, could safely be left to decide the question on principles of common sense.

13,269. In that case there would be lay opinion, and there are certain advantages in business life of having a lay opinion?—I always understood that there would be some kind of lay representation — Crown nominees, for example—and I suggested the nomination in the first instance of members by the councils of absorbed institutions and by other outside bodies. But after a time there is no reason why these lay representatives should not be elected by co-optation.

13,270. You do not recognise the advantage of the element of lay representation?—Certainly, I do.

13,271. Then do you desire that the charter should provide that there should be a certain number of laymen?—Yes, certainly.

13,272. How would you define those laymen? How is it to be ascertained that they are laymen?—I should say that they should be laymen in the sense that they are not officially connected with the University in any other capacity; they need not necessarily be dissociated from the world of science. I would not disqualify a man because he was an expert in any branch of learning. But they would not be professors or other office bearers in the University.

13,273. May I ask whether you assume or do not assume that the financial resources of the University are placed in the hands of this body?—They are certain

financial trusts which possibly could not be placed in the hands of the central body, such, for instance, as the endowments of the charitable medical schools, but in the main, apart from these trusts, I think that the whole financial arrangements might be left in the hands of the governing body.

13,274. Do you anticipate that that would be done if they had an Act of Parliament?—It depends on the arrangement made. I think if the council of one important institution, say University College, could be prevailed upon to throw in their lot with the new University, the others would be practically obliged to go in, otherwise they would be crushed out by competition with the University.

13,275. Is not a *sine quâ non* of your scheme that we should find at last one important institution which would be willing to be absorbed as you say?—No doubt it could all be done by Act of Parliament.

13,276. You anticipate that as an alternative?—Yes.

13,277. A probable one?—I cannot say.

13,278. We are here on practical questions, and we want to know what you think likely to be done?—My knowledge of the *personel* of the Council of University College or of the council of any other college in London is too slight for me to give any opinion as to the probability of their coming in voluntarily or not.

13,279. May we take it that what you are advocating is rather an ideal system than one you have thought out in a practical sense?—I do not say that the practical view is impossible, and that other people might not have a very definite opinion upon this point. I say that my personal knowledge of these University Colleges is too slight to warrant my offering an opinion.

13,280. Your view is rather ideal?—No, it is not ideal, except in the sense that I think it is better than any other. It is not ideal as distinct from practical.

13,281. That is, if you had all the funds at your disposal and you could do exactly as you liked?—Yes, no doubt.

13,282. (*Mr. Palmer.*) The first reason for the representation of laymen on the Council, I presume, is that they represent endowments?—We have just had another view, that they represent the element of common sense, which is so important in deciding matters of controversy.

13,283. But, as a matter of fact, in the Charters which have been proposed, and in most of the educational institutions with which we are familiar, the fact that laymen appear on the governing body is generally in direct connexion with the endowments that they represent?—I think that is a fact.

13,284. I am not going further than that. I am only saying that that is probably the first ground for the laymen appearing on the governing body of most educational institutions?—Yes.

13,285. And if the governing body were either primarily or subsequently to be placed in the hands of the professors alone, they would have in addition to their teaching work, the work of administering and dealing with existing endowments as well as laying themselves out for attracting further subscriptions; for much of the endowment that may be looked forward to in the future, will be in the shape of donations rather than of investments?—I do not offer an opinion as to the relative numbers of laymen and professors on the council. I should never contemplate a council consisting solely of University professors.

13,286. What I am coming to is this. I am going to ask your opinion as to whether the principal objections which you have raised and which you have been discussing, are not met rather in a concrete form by the arrangements of one of our City institutions, the City and Guilds Institute, with which, no doubt, you are familiar? There is a case in which you have three separate colleges, branches of one institution, but entirely in the hands of professors, and each with its Dean at the head. That has worked for 10 years with admirable success. Professor Henrici, whom you have mentioned, is content to take the subordinate position of professor in one of these colleges. On the other hand, the administration is left entirely to laymen. The Council is composed of laymen, and the executive Committee is composed of laymen, all representing funds without which these institutions could not exist. Would that meet your view in any way?—Is it the fact that the educational side has no direct representation on the governing body?

13,287. Absolutely. On the other hand, the laymen have not during the years that this institution has been in existence had occasion to interfere with the administration by the separate Deans or Dignitaries who are the heads of these Colleges. The educational duty is left to one, and the administration is left to the other. Would that meet your view in any way?—No, I think not. The ultimate decision, even on questions relating to education, ought to be vested in the supreme Council as well.

13,288. No doubt the Council are the supreme body, and of course they appoint the Deans and the professors, and they leave the working to them?—I think a more ideal system is to combine the two in one governing body.

13,289. If the direction of each Faculty is to be under one man there arises the important question whether you will keep these Faculties separate and autonomous in the University, or whether you would blend them together in an assembly of the Faculties. Do I make my meaning clear?—Yes, I think so. That might depend upon the object under consideration. For instance, a general question might very well come before the Assembly of Faculties. It seems to me that a special question might be delegated by the general assembly of Faculties to a sub-committee of one Faculty to report.

13,290. Take the question of medical teaching, for instance, would that be left entirely under the direction of the Medical Faculty, with its head to deal with?—No, I think not.

13,291. You would submit that to the general Faculties if it was a sufficiently general question?—Yes.

13,292. The existing University of London is supreme over all its Faculties?—Yes.

13,293. Then your direct interest in this matter, as you have already stated, is that the avenues which your students from the Midlands have now of approaching a London University degree should be maintained in every form as they are now?—Not absolutely in the same form, but impartial as they are now.

13,294. That is, that you should not lose the advantages which you have now?—Certainly.

13,295. Indirectly you are only interested in any new University that may be formed, not being an inconvenient precedent for the future?—Yes, that is our immediate interest.

13,296. (*Sir George Humphry.*) I suppose in a large teaching University, in a great centre like London, we should have to consider two kinds of teaching; we should have to consider the teaching of the student who is preparing for degrees and a higher kind of teaching for those, we will say, who have taken the degrees and who desire a higher kind of education. I suppose that you will probably feel that to be the case?—Yes.

13,297. Then with regard to the higher kind of teaching, there would need to be a special professoriate, special laboratories, and special apparatus for teaching? Certainly.

13,298. That, of course, would require very considerable funds. The professors would have to be paid highly, and a large teaching establishment maintained, and, therefore, those funds would have to be obtained in some way or other. Do you think it probable that the country—Parliament—could be applied to provide funds for that work—for a great national work?—I think they could be applied to to supplement private subscriptions which ought to be collected within the area of London.

13,299. So that we should depend upon those two sources. Therefore we should have to reconcile the University plan of teaching with each of those two sources?—So far as to obtain the sympathy of both.

13,300. And the professors of this higher teaching would, I suppose, necessarily be appointed by the University?—Yes.

13,301. The funds would come through the University because they would be appointed by the University, and you would feel that their time should be devoted almost exclusively to that work of high teaching and high research?—Very largely, certainly.

R. S. Heath, Esq., M. A. Camb., D.Sc. Lond.

22 Oct. 1892.

13,302. Almost exclusively. They could scarcely be expected to take in hand any other large work?—I think they ought to have a general supervision over the administration of the department to which they belong.

13,303. You think they should be represented on the Senate of the University?—They should be members of the Senate of the University.

13,304. Then the other kind of teaching—that which is to prepare men for the various degrees—would have to be carried on by another class of persons?—Yes.

13,305. At present there are to hand a large number of teaching institutions in London. There would require to be a large number of teaching institutions to educate what we may suppose would be a considerable mass of students coming to this great centre and requiring education and degrees; and there are at the present time a considerable number of students in London, most of which—perhaps all of which—are at present doing good work?—Yes.

13,306. And some of which, at any rate—indeed, so far as we have known, all—would object to the kind of absorbtion which the professorial University would require. I do not think we have heard of any one institution which would willingly allow itself to be absorbed and its autonomy taken away?—Not even on the educational side?

13,307. Not even on any side. As far as we have heard I do not think there is one that would do so. That of course, would constitute a serious difficulty in the way of instituting such a University as you suggest?—Yes.

13,308. And, moreover, is it desirable altogether to absorb and break up and take the supremacy over a number of institutions which are now working well? Is not independence in institutions a very important element for their good work and their success?—It is a matter of opinion, I think.

13,309. You think that a very large number of persons would feel that, and especially institutions themselves, no doubt?—They would.

13,310. So there, of course, comes to be a very considerable difficulty?—Yes.

13,311. And, of course, as Mr. Anstie has said, this Commission have to provide for meeting various opinions and views, many of which are conflicting one with another. You do not think that is a serious point—the interfering, to a great extent, with the large number of institutions in London that are now working well?—I think to say they work well, implying that they could not be made to work better, is possibly the whole point.

13,312. But it is possible they might be made to work worse?—No doubt.

13,313. Their working better is problematical?—Yes.

13,314. So you would probably feel that supposing those institutions cannot be abrogated it would still be desirable that there should still be some kind of coordination effected among them?—Certainly.

13,315. By the University through the medium of examination or inspection, we will say, as to how they are working, and recognition of their teachers, and so exercising a control and influence over them?—Certainly.

13,316. That might be a possible thing even supposing a greater amount of influence could not be exerted on them?—Yes.

13,317. And if that were done, and if it were obvious that they could not be absorbed in the manner which you and others might feel to be the best, would not that, as a compromise, meet your views and the views of others?—If the other view is untenable, of course we cannot insist upon it, but if it is untenable as many of the essential features of the other scheme as possible, should, I think, be introduced in the way you suggest.

13,318. And it is highly desirable that there should be those two systems of teaching carried out somehow? Yes, certainly.

13,319. A higher teaching which should be under the influence of the University, and perhaps what we may call a lower and more general and perhaps less valuable teaching which would affect the mass of the students, and which would require to be carried out in a number of institutions?—Yes.

13,320. (*Professor Ramsay.*) I should like to ask you about the feeling which provincial teachers are likely to have towards a London University in the future, accordingly as it is constituted upon one of the proposed bases or another. I suppose you quite understand that it will be impossible for the University of London to give up its general functions as an Imperial University?—Certainly.

13,321. At present, I presume, in Birmingham, your college, prepares to a considerable extent for the London degrees?—Yes.

13,322. Therefore, you would be directly affected by any change in the system on which that Imperial side is conducted?—Certainly.

13,323. If you had a University in Birmingham you would have nothing to say on the matter, as your interests would be met by your own University. Therefore I wish you to discard from your mind in answering this question, the idea that you will have a University of your own. I wish you to consider the position in which Birmingham would be if it remained in its present relation towards the University of London. You have given generally an opinion in favour of having one University in London for all purposes rather than two?—Yes.

13,324. Was it your view that that one University should combine both functions?—It was.

13,325. The teaching function and the examining function?—Yes.

13,326. And it was in regard to that that you made the suggestion about alternative papers?—It was.

13,327. You are aware, of course, that teachers throughout the kingdom who have prepared for the London University degrees have always taken a strong objection to the fact that the teaching element is not represented in the University?—Yes.

13,328. And that teachers in Aberystwith, Bristol, and other centres have felt that they were cramped by a system which they had to work up to without having any kind of security that the examination papers would be set by men who appreciated the conditions under which they and other teachers taught, that in short, there was no relation between teaching and examining?—Yes.

13,329. Now I wish to ask you this question. I am speaking now entirely with regard to the teaching and examining functions of the London University. Suppose no change was made in the London University except this, that its Senate was re-constituted so as to contain a large element of the teaching profession, in a manner similar to that which you yourself suggested to-day. I do not mean in accordance with the ideas altogether of the professorial University, but rather in accordance with the scheme put forward by the Senate, especially in its last form. If the Senate was so re-constituted that all teachers, in whatever parts of the country could feel that the ideas and methods and experience of teachers were adequately represented upon the body that conducted the examinations would that, to your mind, go a considerable way towards meeting the objection they now feel towards the examinations of the London University?—I think so, undoubtedly.

13,330. Do you think that such a change would be enough to remove all their objections?—Would you imply that provincial teachers also should take part in the governing?

13,331. No. I am now supposing no further change than a change in the constitution of the Senate, so as to make it really and truly representative of teachers. Those University teachers would no doubt be in London, but they would be University teachers doing the same kind of work that the teachers are doing in the provinces. I wish to ask, with regard to the teachers in the provinces who feel themselves hampered by the present system, whether, by introducing into the Senate of the University of London a large teaching element, the objections they now feel would be, to a large extent, it not altogether removed?—To a large extent, certainly. I think some provincial teachers would probably prefer that some of the teaching element should be drawn from their own centres.

13,332. I am not of course speaking of the examining element, because I take it for granted that such a Senate might appoint examiners from any part of the kingdom. Provincial teachers would be as competent to be examiners as London teachers. But I want to know whether the objection they now feel would be removed

R. S. Heath, Esq., M.A. Camb., D.Sc. Lond.

22 Oct. 1892.

if they knew that the whole thing was in the hands of teachers, doing in London work like their own, even though they themselves were not directly represented?—Undoubtedly they would welcome that as an improvement on the present system.

13,333. Do you think that the present teachers all over the country desire more than that? Do you think that the present teachers all over the country desire that they should be directly represented on the Senate?—I think some schools which are not affiliated in any sense with the University do desire it. I am not sure that we ourselves in Birmingham, if we had not this idea of a Birmingham University in the distance, should desire not it.

13,334. You mean as institutions?—Yes.

13,335. I quite understand that institutions desire to be represented, institutions always do. But I am speaking now of individual teachers and the special difficulties under which teachers lie who have to prepare, as they call it, by cram work, for the examinations of the London University. Would not the objections of individual teachers who now educate classes with a view to the examinations of London University be to a large extent met if they knew that the London University was to a considerable extent under the control of men practically acquainted with teaching, and in sympathy with teachers?—The objections would be to a large extent met, but I think a good many would like the teachers to be drawn from a larger field than the metropolis.

13,336. You mean that the governing body of London University should take the opinions—through the medium of boards of studies or otherwise—of provincial as well as of London teachers?—Yes.

13,337. But you think the proposal sketched above would meet their views to a considerable extent?—It would.

13,338. But you would prefer, and you think the majority of teachers would prefer, some such system as that embodied in the revised scheme of the Senate?—This question is wholly mixed up in my mind as a question of policy with regard to our own position. It is rather difficult to lay that aside, as you ask, and speak on the other side entirely. In the general abstract it might be advisable that teachers from the provinces should have places on Boards of Studies; but on the other hand, if that should be in the least an impediment to our scheme, then we say we would have none of it.

13,339. Could you abstract yourself entirely from the Birmingham University?—I do not know that I can do that.

13,340. Would you consider that there would still be a real grievance to provincial teachers if the change went no further than I have indicated?—No; I do not think it would amount to a real grievance.

13,341. Now as to alternate papers. You spoke about mathematics. I suppose no subject could be named in which it would be less necessary to adapt examinations to the teachers than mathematics; if, then, you suggest having alternative sets of papers in mathematics, *à fortiori* in all other subjects there should be alternative papers?—If it was desirable to institute a separate examination, I would be prepared to accept that suggestion.

13,342. Would you see anything necessarily unfair in having a system of examination conducted by a teaching University with a view primarily to its own students, but which should also be open to all other students wheresoever educated?—No.

13,343. (*Professor Sidgwick.*) The last answer you gave to Professor Ramsay seemed to me not quite in harmony with the instance of alternative papers which you gave in the case of mathematics. I thought you said to Professor Ramsay that you did not see anything unfair in obliging them to go in for the same paper?—I am not quite sure that I saw the full significance of Professor Ramsay's question. I imagine that examinations would be still conducted partly by the professor and partly by external examiners or assessors of other kinds, and I think they ought to secure strict impartiality. They ought not to set their questions according to a single school. If after experience it was found that the papers were of a single school, I should say that there would be a grievance at once.

13,344. (*Sir George Humphry.*) May I be allowed to suggest that there would be a large number of schools in London who have been with regard to the particular professor you mentioned in the same position?—No doubt.

13,345. There would be a considerable number of schools with which he had no relation, so that really there is no particular difference between the different London schools in that respect, and the different provincial colleges?—Certainly.

13,346. (*Mr. Anstie.*) The necessity for alternative papers which, as Professor Ramsay has pointed out, exists in mathematics, would exist equally in regard to other subjects?—Yes.

13,347. For instance, take such a subject as Moral Philosophy. It would be absolutely necessary that any University which gave a sufficiently wide scope for its examinations should provide for its candidates being examined according to different methods and different views?—Yes.

13,348. It is essential in every fairly-conducted examination, is it not, that that should be provided for, whether by the system of alternative syllabuses laid down beforehand, or by the system of the choice of the candidate among the various papers?—Yes. Professor Ramsay has spoken of the grievance of University colleges with reference to examinations, but on the whole, the examinations have been very fairly conducted on the syllabuses that have been issued, and, I presume, that would still be the case even if it were put into the hands of a University body and a Senate such as he has sketched out.

13,349. It might be desirable, I suppose, that even the syllabuses themselves should be made more various and inclusive than they are?—Certainly.

13,350. Then if made more various and inclusive the examination, must, of course, follow?—Yes.

13,351. And widen their range accordingly?—Yes.

13,352. And that range, I suppose, it may be assumed ought to be as wide as the subject?—Yes.

The witness withdrew.

BERTRAM COGHILL ALAN WINDLE, M.A., M.D., D.Sc., Dublin, examined.

B. C. A. Windle, M.A., M.D. D.Sc. Dublin

13,353. (*Chairman.*) Is there anything you would wish to say that has not been said by Dr. Heath?—Yes. I think there are a few points that I should like to speak upon.

13,354. May we take it that you agree, upon the whole, with what has been said by Dr. Heath?—With certain limitations.

13,355. We should be glad to hear the limitations, and also anything extra which he has not touched upon which you would wish to lay before us?—With respect to the first point I would lay before your Lordship, it is that the creation of the Gresham University would mean the creation of a second University in London. I should like to point out that a certain confusion would arise from that which would undoubtedly be to the disadvantage of the older University. If I may take a case in point, in the case of my own University of Dublin, within the last few years a second University has also been established, having its centre in Dublin, and the confusion which has arisen between the two is not altogether a matter of satisfaction to the graduates of the older institution. I cannot help thinking that a confusion would arise in London notwithstanding the difference in name.

13,356. There is a difference between the population of four or five millions in London and the population of Dublin?—But the confusion, in my mind, is the confusion in the mind of the general public. The degrees of the old University would remain of much greater value for some time, and I think it would be a hardship.

13,357. It would apply much more if the name of London were introduced into the younger body, would it not?—I am afraid that would not make very much difference.

B. C. A. Windle, M.A., M.D., D.Sc. Dublin.

22 Oct. 1892.

13,358. Would you like to specify more particularly how it would make confusion, and what actual harm it would do to the existing University?—I am speaking now largely from the medical side. It undoubtedly is a great thing in favour of any medical man who is looking for an appointment in London or the provinces, that he is a graduate of the University of London. A great many of the men who have the giving of these appointments are laymen, and I think they would be of opinion that if a man had obtained the degree of the Gresham University it would imply that he was a person of the same standing as one who had obtained the degree of the London University; it would imply that he was a person of the same standing as one who had obtained the degree of the existing University, which he might not be. I think that would be a hardship to the graduates of the existing University of London, which many of them would feel deeply.

13,359. Is that your chief objection?—I think also it might give rise to a competition which might not be satisfactory. It might be a downward competition as well as an upward one. I think that is all I have to say with regard to the point of the two Universities. My second point, that it does not include all the best teaching agencies, has been covered by what Dr. Heath has said.

13,360. Bear in mind, of course, that it would be elastic, and there would be power to bring in other institutions?—Certainly.

13,361. You do not wish to add anything on this point?—I do not wish to add anything on that point. I should like to add something on the point of government. While I say that the government should be in the hands largely of the body of University professors, I think the position with regard to the councils of the existing colleges should be a little different from that which has been expressed. I would place in the hands of the professors plus laymen—probably Crown nominees—the power of directing the curricula, arrangement of examinations, the appointment of examiners, and the appointing of University professors, but I would leave the largest amount of autonomy to the colleges themselves both in the appointment of their own officials and in the arrangement of their own private affairs.

13,362. You would not look forward to their being absorbed?—I should not look forward to their being absorbed—wholly absorbed—in the University either from the point of view of finances or teaching.

13,363. But in addition to the college professors there should be University professors?—Certainly. I should wish that there should be University professors and college lecturers, if I may use different terms, and that University professors (I am now chiefly speaking of medicine) should teach at a higher standard, and at a separate institution possibly.

13,364. A good many of the advocates of the professorial system had told us that the first professors that they would appoint practically if they had their own way would be the existing college professors. I do not know whether you know enough of London to say that?—I think that would be highly probable, but they would only appoint one to represent each subject whereas under the Gresham Charter, if I read it correctly, there would be 12 professors in each subject in medicine.

13,365. (*Mr. Anstie.*) Might be?—I suppose there would be if each lecturer in a subject became a professor.

13,366. (*Chairman.*) And you could not obviate that without interfering with the present position of the colleges?—Speaking now of the medical side of the question which is somewhat different from the other, I do not think that the present system of medical education in London would stand much interference with, but I should like to see even on the medical side of the question one University professor of each subject occupying the highest rank in that subject.

13,367. And having power over the different medical colleges to prescribe the courses of instruction they were to have, so that he could stop anything he did not approve of?—No, I should not be disposed to give him that. I should be disposed to give him that as one member of the Council acting with others. But, to take the case of London, although you might select one professor of surgery who was pre-eminently the best man, it would leave probably four or five other college lecturers of surgery who yet were very eminent surgeons. I doubt whether it would be fair to place them under the jurisdiction of one of their own brethren.

13,368. And you might not get such good professors as you have now if they lost their position of independence?—That might possibly be the case. You must in medical subjects, I think, give a very large measure of independence to the teachers. I am not now speaking of the other subjects.

13,369. But with regard to medical subjects you would leave the colleges very much alone?—Yes, I would leave the colleges very much alone.

13,370. With regard to other colleges, even those you would not absorb, but you would strengthen the University element by appointing University professors, and by giving them a certain amount of power of veto over the college professors, would you do that?—Possibly.

13,371. You wish to have central University laboratories. Would that be in addition to the existing college laboratories or would you wish to appropriate them?—No, those would be in addition to the existing college laboratories. I should hope to see the University professors, as distinct from the college lecturers, engaged in the higher kind of teaching, either teaching for the honours parts of the ordinary degree examinations or the other examinations, or undertaking the higher teaching which Sir George Humphry mentioned in the course of the evidence of Dr. Heath. I should like to see them teaching in their own laboratories as University property apart from college property, which would not be located in any of the existing colleges.

13,372. I suppose the establishment of a professorial University such as has been mentioned, particularly if it did not appropriate the property of the existing institutions but left them, would require a large endowment?—Certainly.

13,373. But you would look to that from the State?—The State provided endowments for the Royal University of Ireland. It might do the same thing again.

13,374. Do you think private people would come as readily forward to endow the University as they would to endow particular colleges?—I think it is very possible that they might not, but if the University teaching in the central laboratories was put on a good footing anything which strengthened the colleges would also strengthen the University.

13,375. Dr. Heath once or twice referred to you on medical matters. He said it was on the medical question that you were most anxious to supplement what he had to say. You agree with him about the predominant influence of the medical profession in the proposed Gresham Charter?—I do, entirely.

13,376. Do you also agree about the disadvantage of institutions being represented?—I agree with him on that point also.

13,377. Then you agree with him as to the 10 members of the Senate who would be nominated by the 10 colleges?—It would probably amount to 12. There would be one each from King's College and University College.

13,378. (*Mr. Anstie.*) There would be three?—But one from each would probably be medical. Then I think one of the most serious points from the medical aspect is that the degree of the University confers no qualification to practise. That has very far-reaching consequences in regard to the medical profession. It means that a man unless the degree is registrable must at the same time pursue the courses at some other qualifying body. In the first place, I think that is a very undignified position for the University to be in, and I think, at the same time, it is one which must tend to the lowering of its degrees, because inevitably it would come to this, that some arrangement would be come to between the University and one of the qualifying corporations by which the University examinations counted *pro tanto* for one of the examinations, and the license carrying the power to practice would be conferred at the same time. Supposing, for instance, the University entered into a combination with the Apothecaries' Hall, which confers a qualification in medicine, surgery, and midwifery, the two examinations would be practically one. I think, in that case, there would certainly be a tendency to the lowering of the medical degree.

13,379. (*Chairman.*) With regard to general culture in other subjects not immediately connected with the profession the University would still keep that part in

its own hands, though it might be inclined to assimilate the purely professional part to what is required by the colleges?—It ought to be kept in its own hands, undoubtedly.

13,380. You think the degree should carry a qualification with it?—Undoubtedly.

13,381. Do you think that in any scheme—either the Gresham Scheme altered or any other scheme—it would be an advantage to give the Royal Colleges any power in assisting in the examinations for the medical degree, and in settling what the curricula should be?—No, I certainly would not give them the power of settling the curriculum.

13,382. Nor even joint power of doing so?—No.

13,383. Such as was suggested in the scheme of the Senate of the University of London?—No.

13,384. You do not approve of that?—No.

13,385. You would keep them out altogether?—I would keep them out altogether as examining bodies.

13,386. You would not attempt to bring them into any new University?—No.

13,387. I notice that you think the provision for the external candidates in the Gresham Charter is unusual, but there is no provision at all, as far as I can make out. The Gresham Charter only professes to give degrees to those who have pursued a regular course of study in a college in the University?—As a matter of fact the present Gresham Scheme absolutely excludes all students who study in the medical colleges of Birmingham, Bristol, or Sheffield.

13,388. You would allow them to take the degrees of the Gresham University as well as of the London University, which they do now?—I do not feel very strongly on the point one way or the other. I do not think it is a point which very much matters to us, and for this reason: the students who could afford to get one of the best degrees would necessarily go to Cambridge, at least for the Arts part of their education. They would necessarily return for the medical part of their education to the provincial school. Those who want to get a degree with the least possible expense, and who have sufficient capacity, would continue to take it at the existing Imperial University; those who do not care to go to the trouble of going to the London University, and who still want a degree, and want to spend as little as possible on it, would prefer to go to the University of Newcastle-on-Tyne and get the degree of the University of Durham.

13,389. I do not think the intention of the Gresham was to provide for anything but London people?—It did not provide for provincial people?—No.

13,390. But it would not take away your privileges. You would still have the University of London?—Certainly.

13,391. You have already told us that you approve of there being one University in London, which means that you would rather see the teaching University of London formed by remodelling the present London University than by establishing a new one?—That is so.

13,392. And in re-modelling the present London University, in order to meet your wishes do you feel that it would be necessary to have what are called two sides—to keep the London people entirely distinct from the Imperial examination which is conducted now?—I think the question of alternative papers might possibly be an advantage, but with a thoroughly strong and broadly constituted governing body I should not be afraid to entrust the fortunes of the medical students who go from us to them.

13,393. You agree with Dr. Heath in that view?—Yes.

13,394. And even supposing that you did not contemplate having a University at Birmingham, speaking as a member of a provincial college as it now is, and supposing it always to remain so, you would have no objection to the course of study of that being managed by an exclusively London body?—Given the broad constitution of the body, certainly not.

13,395. Is there any other point which has not been touched upon which you wish to enter into?—There is no other point that I can think of now.

13,396. (*Sir George Humphry.*) Do you feel that there should be easier access for medical men to obtain a University degree, than there now is—easier opportunities?—I am inclined to think that, considering the special nature of the medical profession, there should be.

13,397. And that would necessarily have to be provided for in the new University?—That would necessarily have to be provided for.

13,398. In what manner would you provide for that?—I should provide for it, not by lowering the standard of examinations, I think, but by some further subdivision of the examination. I am now speaking of the existing London University.

13,399. There is at present a Preliminary Scientific, a second and third M.B.?—There are only two examinations for the M.B.—the intermediate and the final—in the University of London.

13,400. That means four altogether?—Including the Matriculation.

13,401. Matriculation, Preliminary Scientific, Intermediate and M.B.?—Yes.

13,402. You would sub-divide those still further?—I would. I would sub-divide the intermediate examination.

13,403. Into what?—Into anatomy and physiology on the one hand, and *materia medica* and chemistry on the other. I have never been able to understand why it is that physiology is the one subject which may be deferred to a second examination and taken at a separate time.

13,404. Pathology?—Pathology is a part of the final.

13,405. And you would let it remain so?—I would let it remain so.

13,406. Then the only point would be sub-division. You would not make the examination any easier?—I think the examination is a fair one, but that there are too many subjects for the student to get up at one time to bring him up to the standard required. There are more subjects required than in any other University which I have had experience of.

13,407. Would you diminish the Matriculation or would you require them to go through the Matriculation?—I should require them to go through the Matriculation.

13,408. Perhaps that might be somewhat modified?—If every medical man is to have a degree the examination which admits them to the profession must be a better one than that which is required at present. I am not prepared to say that the Matriculation examination is too hard.

13,409. But they ought to have a somewhat higher general education, you think, than that which the examination of the Medical Council provides?—Undoubtedly.

13,410. The Gresham Charter provides that a certain part of medical study should be carried on in London?—The last two years.

13,411. Do you think that is desirable or that it should be carried on in one of the provincial schools?—The Gresham University requires the two final years.

13,412. Yes?—Are you asking whether it should be the two final years or a choice of years?

13,413. Do you think it desirable that it should be compulsory that any part of medical education should be carried on in London as compared with provincial schools?—If the University is to be connected with the old one, I think the provision for attendance in London ought not to be upheld.

13,414. It would exclude, of course, provincial students?—Yes, and I do not think any re-modelling of the Imperial University ought to do so.

13,415. Would it be in any way desirable that there should be a privilege, which is regarded as an important one, granted to London students which would be inaccessible to provincial students?—I think not.

13,416. I think you have already said that supposing the examination to be a good and fair one, such as you would expect it to be, there would be no particular reason why provincial students should not present themselves to it as well as London students?—Certainly.

13,417. There must be a large number of students from various schools who would be coming up to it, and there would be no reason why provincial students should not come up to it?—Certainly.

13,418. And it would be likely to be as fair to them as to London students?—Certainly.

B. C. A. Windle, M.A., M.D., D.Sc. Dublin.

22 Oct. 1892.

13,419. It has been proposed as one means of facilitating access to a degree and diminishing the number of examinations that students have to go through that the final part of the examinations for a degree should be conducted by the London Colleges in conjunction with the University. Do you think there is a real objection to that, that they should be under the direction of the London University according to the Senate's scheme. I do not know whether you happen to be familiar with that scheme?—Yes, I am familiar with that scheme. I should be sorry to see any joint scheme or examination.

13,440. What would be the objection?—I think that is a matter which should be conducted solely by the University, and on its own responsibility, and I do not think that any other examining body ought to be called in to assist or to have any share in it.

13,421. You would extend that all through the various examinations of the University, you think that it should entirely and absolutely conduct all the examinations which lead to its degree?—I think so, because the corporations accept *pro tanto* all examinations except the final, so that it would practically mean that the student would have to pass all the examinations of the University up to the final, and would have to pass a University final, and a corporation final if he required the additional license. It would really only mean a single set of examinations up to the final.

13,422. Then the proposal of the Senate was that the final should be conducted by examiners jointly appointed by the licensing body and the University under the direction and superintendence of the University, and that this should give the degree and the qualification of the colleges?—Yes.

13,423. You think that would be objectionable?—Yes; I think that would be objectionable.

13,424. And the reason of that is——?—I have mentioned one reason; that the University ought to be solely responsible for its own matters. There is another reason, which is this. One of the reasons why we have always regarded the University of London from a medical point of view as satisfactory, is that we believe in the absolute impartiality with which it selects its examiners from metropolitan teachers and provincial teachers. That has not been the policy by any means of the great London Corporations. I think one could count on the fingers of one's hand the number of examiners at the Royal College of Surgeons who have been selected outside London for the past 25 years. I should be sorry, therefore, to see them having any large share in the selection of examiners for the proposed University.

13,425. The proposal was that the colleges and the University of London should select in equal numbers for the final?—Yes; if the present policy was carried on it would necessitate the University of London selecting in most cases an outsider. I mean some one who did not teach in London.

13,426. It would be quite free to select whom it pleased?—Certainly.

13,427. (*Mr. Anstie.*) We had some evidence given at a very early stage by Dr. Stirling, of the Victoria University, and he pointed out as one of his objections to the Gresham scheme, that the degree did not confer a licence. He thought that objectionable on several grounds; one was that it withdrew the University schools from the supervision of the Medical Council, which, as you are now aware, is invested with the supreme authority over the licensing bodies, and another was that it would inevitably produce a conflict and repetition between the courses required for the licenses and the courses pursued in the colleges?—Undoubtedly.

13,428. In Victoria, he pointed out, as in other Universities, they did not experience that difficulty, because their degree carries the license, but since the Act of 1886, every other University will be subject to that difficulty. The Gresham will be. And let me point out this to you, that yours will be when it is constituted. I want to know whether you do not think it will be an advantage that there should be such a possibility of co-operation and common action between, say, your Midland University and a licensing body (which you will not be) as to prevent that repetition and that conflict, evils which were pointed out to us by Dr. Stirling?—It is perfectly true that the Act of 1886 prevented, and prevents at present, the formation of any further licensing bodies, but what one Act of Parliament has done another can undo, and I should have thought a special provision might be introduced that it become a licensing body.

13,429. That seems to me to be inconsistent with the proposal of the Gresham Charter?—The proposal of the Gresham Charter is that no qualification should be attached to a degree.

13,430. What you desire is that there should be an Act of Parliament founding the University and giving it special and new powers?—Supposing the Gresham University were to be founded as a separate institution. But the chief point of my evidence is that it should not be founded as a separate institution. It should be united with the present University which has the power.

13,431. I was thinking of what the consequence would be when the Midland University is founded. You cannot assume an Act of Parliament for everything. You cannot assume an alteration of the general law in each particular case. Then, if you were founded in that way would not that be a disadvantage?—It would be a disadvantage.

13,432. Would it not be a disadvantage even with respect to a body like the London University, the pupils of which take the college license as well as the University degree. Would it not be better that that conflict and repetition which was complained of by Dr. Stirling should be, if possible, avoided?—I think the better way out of that difficulty would be by conferring the license with the degree.

13,433. The London University has that power already, and yet there is still complaint of that conflict. And it would seem it must be so, if in the same schools of medicine instruction is to be given both to those who are going in for one qualification and those who are going in for another. You have to arrange your classes to meet both needs?—I am quite aware of that, but I do not know that that leads to any practical difficulty. I have a number of students whom I am teaching myself for both qualifications. I do not think it seriously hampers the work of the school.

13,434. We have some evidence that it absolutely injures the work of the school?—I know some teachers are of that opinion.

13,435. And, assuming that to be a correct view, you would see at least some advantage in providing against that conflict and repetition?—I would provide for it by conferring the right to give a qualification with the degree.

13,436. But that does not get rid of it at all. There are in the same school men who are going in for the license only, and men who go in for the degree. That is the difficulty, and you do not get rid of that in the least by saying you will make the University degree a qualification?—I do not see how you get rid of it in the other way.

13,437. The suggestion is for a co-operation between those two authorities—a common arrangement of the course of study and methods of examination?—That means that the two examinations are to be of the same standard also.

13,438. No, it does not. It may mean that they are to be of very different standards, but that they may not be so different in kind as to conflict. Have you read the clause in the Senate's scheme?—Yes.

13,439. It is distinctly provided, or, at any rate, contemplated, that the standard should be different and the whole determination of University requirements is left entirely in the hands of the Senate?—Yes.

13,440. Does not that avoid the objection you mentioned?—I do not see how that quite differs from the present system, because the arrangement and working of the medical curriculum is very much the same, though the standard is slightly different.

13,441. As a matter of fact, we have been informed by medical witnesses that it makes a very serious difference; that it would greatly facilitate medical education if such an arrangement be made. Assuming for a moment that that evidence is correct, is it not an object to be aimed at to avoid the conflict of courses and repetition of unnecessary examinations?—I do not think there is a conflict of courses and repetition of unnecessary examinations.

13,442. We have heard a great deal of evidence that there is. Assuming that to be correct, would you think

it an advantage to get rid of it?—I would, but I am not assuming that, because it is contrary to the fact. Take, for instance, the case of the London University and the Conjoint Board, which is the common combination. The student who has matriculated at the London University is, *ipso facto*, enabled to register as a student at the Conjoint Board; when he has passed his preliminary scientific examination the elementary biology and the chemistry, which he passes at that examination, counts at the same examination at the Conjoint Board. When he passes his intermediate examination all the subjects count there for the Conjoint Board. Therefore he has to pass only the final examination in each subject.

13,443. If your view is correct what could be the objection to that sort of co-operation being made the subject of a special arrangement, a fundamental arrangement?—The objection which I have is this: that in the present instance the entire direction of the thing is in the hands of the University.

13,444. But pardon me, it is not, if you mean by "the thing" the whole of medical education?—The whole direction of medical education is in the hands of the University.

13,445. No, excuse me. That is really in direct conflict with almost every word of evidence we have had?—If the first examination and second examination of the Conjoint Board can be, as they are and may be, passed by passing the University examinations surely that means that the medical education is directed by the University.

13,446. Witnesses experienced in London teaching have told us precisely the contrary of what you now allege, and therefore you must not ask me to assume that what you state is correct?—I am quite unable to see where the difference of opinion arises.

13,447. However, supposing the other witnesses to be correct and you not to be correct, it would be an advantage to avoid any such conflict as they have pointed out?—It is an advantage to avoid all conflict, certainly.

13,448. And repetition?—Certainly.

13,449. As to Regius professors I gather that you do not quite agree with Dr. Heath as to the extent of the powers. You think they ought to be more limited?—Yes.

13,450. If the appointment of a professor with those very ample powers might be of advantage if you got the right man; on the other hand, if you get hold of the wrong man it might be disastrous?—Yes.

13,451. And that is a peril which you would not desire to encounter?—I think it would be dangerous in medical matters in a University to give any man those powers.

13,452. (*Professor Sidgwick.*) You have spoken of the danger of lowering the standard for a degree, if a student of a new University had to obtain a license elsewhere, as a matter of fact, if the licensing body from which the University graduates obtained the license to practice was the Conjoint Board there would be a serious danger of the degree being obtained on easy terms?—I am afraid I do not follow the question.

13,453. You mentioned the Apothecaries' Society. Let us leave that out of consideration, and assume that the license is obtained from the Conjoint Board?—Under those circumstances I think it might lead to a lowering of the degree.

13,454. Have you had your attention drawn to evidence given before the last Commission?—I have read a large part of it.

13,455. Did you read the evidence of Sir Andrew Clark and Sir James Paget?—I have no doubt that I did, but it is sometime ago, and I cannot recall it.

13,456. They both seem to hold that the examinations upon which the College of Physicians grant their license are not less severe—probably more severe—than those upon which the University of Glasgow gives a degree. Sir Andrew Clark stated that, in so many words, and Sir James Paget in his evidence implied also that the standard of the diploma of the two colleges is either quite or nearly equal to the standard for the degree of M.D. of the better Scotch Universities. Do you disagree with those views?—I do not know what the standard of Glasgow University is. I have never either examined there or prepared students for it. I think, perhaps, the standard of the examination of the Conjoint Board is as high as that of Aberdeen, for example, with which I am acquainted. I doubt if the standard of the preliminary examination is as good.

13,457. Supposing the University was so constituted as to require the preliminary scientific examination to be discussed and reported on by the representatives of the Faculty of Science as well as of the Faculty of Medicine—that was one way suggested of preventing a lowering of that standard—supposing the standard of the preliminary scientific examination were in this way maintained in the new University, should you see a serious danger if the examination for purely medical subjects approximated to that of the Conjoint Board?—I think it would be a mistake to do so. There can be no doubt that the examination of the Conjoint Board is by no means so severe as the examination of the existing University of London or the examination of the University of Cambridge, and, therefore, the standard of the present University or the University degree in London would be reduced by bringing it down to the level of the Conjoint Board.

13,458. But we have had very strong evidence brought before us—I may mention again the names of Sir Andrew Clark and Sir James Paget, that it is widely felt by the medical profession that the degree of M.D. should be obtained on terms, speaking broadly, like those upon which it may be obtained in the better Scotch Universities. At the same time we had a good deal of evidence that, at any rate in the strictly medical subjects, the standard upon which diplomas are granted by the Conjoint Board is not lower than that of the better Scotch Universities?—The latter, perhaps, I think is quite true, but I had rather improve the constitution by levelling up the Scotch Universities than by levelling down the English ones.

13,459. But we have not any power to level up the Scotch Universities?—No, but the question is whether it would be quite fair to level down the English ones in medical education.

13,460. The whole question, of course, depends upon whether a standard of medical knowledge which might be attained by approximating to that maintained by the Conjoint Board is not an adequate standard considering the present state of University education, and the meaning attached to the M.D. degree owing to the prevalence of the Scottish degree?—Looking at the question from that point of view I think the approximation might be permitted. What I mean is this: seeing the present status of the degree of M.D. consequent upon the very large number of degrees which are obtained; and looking at the numbers who go to Brussels, for example, to get a degree the value of which is an unknown quantity to most of us here, I am doubtful whether the approximation would be so serious an injury, providing there was not too much levelling down.

13,461. One part of the objection appears to be directed against the scientific part of the examination, in which the witnesses who come before us appear to consider the examination of the Conjoint Board as less satisfactory than in the purely medical subjects?—Than the final?

13,462. Yes. If that is guarded against the objection would be reduced, would it not?—Certainly, it would be reduced.

13,463. You will see that it is rather difficult to frame a scheme on the assumption that we are to get an Act of Parliament reversing a policy that has been recently adopted. It may be done or it may not, but it would be difficult for the Commission to frame a recommendation on that basis. I suppose you would be prepared to accept a Midland University without obtaining a new Act of Parliament?—As an instalment.

13,464. But you would try to get the Act of Parliament?—Certainly.

13,465. (*Lord Reay.*) Assuming the degree of which Professor Sidgwick has just now spoken, only to be granted on evidence of considerable scientific knowledge and of research in medical subjects; supposing such a degree were to be obtained in the new teaching University, where the influence of the London teachers would be very considerable, and supposing the examinations of the existing University of London to be conducted as they are conducted now, and also supposing that the examinations in the teaching University were to be open to outside students, which of the two examinations would you recommend your students to enter

B. C. A. Windle, M.A., M.D., D.Sc. Dublin.

22 Oct. 1892.

their names for?—I should recommend them to enter their names for the examination of the examining University until I had an opportunity of seeing what the other was like. The assumption is rather a difficult one, because one's advice to students is based so much on the experience of the papers which they get.

13,466. But assuming, as I have said, that the new degree would satisfy you, and of course the impartiality of the examiners, though the examiners would naturally be the teachers at such a University, whereas the examiners of the existing London University would be partly outsiders, would you not give preference to the existing examinations?—Probably.

13,467. Then I did not quite gather from your answer to Sir George Humphry, whether you would think it desirable that the new University should examine medical students from other colleges, provincial colleges, or others, without any prescribed residence in London?—My opinion on that point would differ in accordance with, whether the new University was fashioned out of the old one, or whether it was a perfectly new creation. If it is fashioned out of the old University I think it should examine students from everywhere. If is was a perfectly new University, I question whether students from the provinces would have any right to ask to be examined by it.

13,468. But as far as the medical degree was concerned you would never give such a degree without having some knowledge of the institution where the students have been trained? I mean you think it is the duty of a University giving medical degrees to satisfy itself that the education has been received at an institution which the University could recognise?—Certainly, that is the case with all Universities.

13,469. You do not contemplate indiscriminate examination of outsiders?—Certainly not. They must have received their education at a recognised place of medical instruction.

13,470. But with regard to residence, I understand you do not hold that it is necessary to insist so much on the two last years?—No, I should not consider it necessary to insist upon that.

13,471. You think an institution might be satisfied with residence at any period of the curriculum?—All the other Universities are.

13,472. Where do your medical students chiefly graduate?—I may say up to perhaps eight or nine years ago they mostly graduated in the University of London. Now a much larger proportion go to the University of Durham.

13,473. To what do you attribute the change?—It is easier to get degrees in the University of Durham than it is in the University of London.

13,474. Do you also take the view which Dr. Heath takes, that it is desirable that students should remain continuously at one seat of learning, supposing that seat of learning to be such as you would consider excellent?—I think so during the student career. I think a student if he is to migrate gets more advantage by migrating after he has obtained his qualification.

13,475. For post-graduate instruction?—Yes; for post-graduate instruction.

13,476. But otherwise you think he is the better for continuity of teaching?—Yes, he is better for continuity of teaching.

13,477. And continuity of examinations by the institution in which the education is conducted?—Yes.

13,478. Continuity all round?—Yes.

13,479. Then with regard to higher teaching, although a University would provide for such higher teaching, I do not understand that you contemplate in any way to limit or fetter the higher teaching which the Colleges would be equipped to give?—No, I suppose they would teach to any extent of which they were capable and for which they were provided.

13,480. But you contemplate the higher teaching being given?—Yes.

13,481. And I may take it for granted, therefore, that supposing there were adequate guarantees for the medical education being sound, and for the preliminary scientific teaching also being more effective, that your medical school would in no way oppose such a reorganisation of medical education in London?—I should not like to commit the medical schools to that. I have no right to commit my colleagues on a question of that sort.

13,482. What is your personal opinion?—Personally speaking, if the University were on a broad basis and with adequate guarantees for preliminary scientific instruction I should see no reason to oppose any such institution. On the contrary I should be prepared to work. I believe there ought to be a teaching University of the first class in London.

13,483. You consider it to be a natural desideratum?—I do.

13,484. And that it can no longer be deferred?—I quite feel that.

13,485. Have you anything to add?—No, I have nothing to add.

13,486. (*Mr. Anstie.*) There was one answer you made which I do not quite understand with regard to the subjects of examination. I understand you to say that you would desire and think it reasonable to require that a University constituted in London, which had the power of giving degrees to external students, as I may call them, should have a sufficiently fair constitution of the examining staff. That you would desire?—Certainly.

13,487. And you would have no reason to believe that such a University, properly constituted, would fail to avail itself of the best talent that could be obtained, not only in London, but in the provinces?—No doubt.

13,488. In fact, the best check it would have on the too great predominance of the particular instruction in the London schools would be by calling in the best talent outside the London schools?—Yes.

13,489. So that you might reckon with some confidence on the University doing justice in that way to external students?—Yes.

13,490. Meaning by external students those who come from approved institutions outside London?—Yes.

The witness withdrew.

Adjourned to Thursday the 27th inst. at 12 o'clock.

Twenty-ninth Day.

Thursday, 27th October 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
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The Right Hon. THOMAS HENRY HUXLEY, D.C.L., LL.D., Ph.D., M.D., F.R.S.

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

13,491. (*Chairman.*) I think you are prepared with a statement which you are willing to make to us, and if I leave you to take your own course it will probably save a great deal of time, so I will do so?—I presume that the primary object of the Commission in summoning me here is to obtain my opinion respecting the adequacy of the scheme laid down in the Gresham Charter to meet the want of those persons who desire to see a University adapted to modern needs established in London. It would be impossible for me to give my opinion on that subject without prefacing my remarks by a very brief sketch of the views that I have formed with regard to the construction and function of such a University. It is a matter upon which I have been obliged to think at intervals a good deal during the last 25 years, and I have some very distinct conceptions upon the subject. I have also thought it possible, that, supposing the opinion which I have formed with respect to the Gresham Charter was not a favourable one, the Commission might wish to know whether I had any alternative proposition. I am, therefore, prepared to state in a general way and to a large extent tentatively, owing to the vast practical difficulties with which the question is surrounded, what suggestions I should be prepared to make. If your Lordship will allow me I will go, as briefly as I can, through the notes that I have here set down upon these several topics, and I would beg your Lordship and the other Commissioners to note, as I go along, such points as you or they may think questionable or upon which they desire any further explanation that I may be able to give. It appears to me, then, that our existing Universities are all, more or less, modified survivals of what may be called the mediæval type. So far as I have been able to obtain a knowledge of the subject, the mediæval University was really a sort of high school and training college for teachers, that is to say, it combined the two functions which are now allotted to those bodies. The subjects of instruction, in what they called the *studium generale* were Grammar, Logic, Rhetoric, constituting the *trivium;* Theology, Arithmetic, and Geometry, Astronomy, and Music, constituting the *quadrivium.* The totality of these subjects covered the field of science and art as then understood. The scheme was liberal and broad according to the lights of the age. At that time knowledge was regarded as substantially complete. It was the business of the student to learn what was already known, and his highest aim was to become capable of transmitting what he had learned as a *magister.* Out of this foundation of liberal arts technical schools, if I may so call them, for the three great practical callings, the Church, Law, and Medicine, became specialised and took the name of "Faculties," and, in course of time, the original *studium generale* arranged itself alongside them as a fourth Faculty—a Faculty of Art. That state of things was profoundly modified by the introduction in the latter half of the Middle Ages of the study of the Greek and Roman literatures for their own sakes. It changed by degrees the whole character of the Arts' Faculty. In some cases science became altogether eliminated and all descriptions of Art except literature. Not half a century ago Universities could be named in which even mathematics was practically ignored. In my judgment it is necessary in modern times to revert in some degree to the primitive mediæval type, modifying it in accordance with the vast difference between mediæval and modern knowledge and general instruction. Modern youths, with the advantages obtainable in a good Board School, come to the University with acquirements equivalent to those of the old *trivium;* that is to say, the elements of literary analysis and expression. Further, they possess some theology, much more arithmetic and geometry than was included in the old *quadrivium*, but little or nothing in Science and nothing in Art proper, unless it may be in literature. That which I conceive it to be necessary, that the modern University should set before him, in all its fullness, is the expanded modern analogue of the *quadrivium*—mathematics; natural science, which is what the Germans call by the broad name of *Naturlehre;* philosophy; history and archæology; philology; art, comprising literature, painting, sculpture, architecture; and, finally, music. In one or other of those, or in some combination of several, it would seem, should lie the curriculum. As to what I have called the technical professional schools, now termed Faculties, the demands of industrial life have added to the original three, engineering and others, which may be called schools for industrial professions. They seem to me to be secondary and not primary constituents of the University, which has to do merely with pure knowledge and pure art; with the advancement of culture, and not with the increase of wealth or commodities So far, the modern University, as I conceive it, is a natural development of the mediæval in correspondence with the changed conditions of society. But there is a new constituent of the University demanded by modern life—and I think imperatively demanded—which corresponds with the fundamental difference between the modern and the mediæval conceptions of the potentialities of the human mind. Leaving aside a few brilliant and isolated exceptions the mediæval master considered his function to be limited to those of the commentator, the expositor, and the developer by way of deduction from the body of already established truths. He looked to the past and not to the future. The modern, on the other hand, is convinced that the known is but an infinitely small fragment of the knowable: his attitude to the old is severely critical; to the new endlessly hopeful. He looks to the future, and his interest in the past becomes more of the historical and antiquarian kind. Consequently the supreme aim of the modern University is to promote the advancement of knowledge and the progress of art by putting within the reach of such persons as are naturally fitted to take part in that great work, the mental discipline and the material aids and appliances, which will enable them to make the best use of their natural endowments. More or less distinct apprehension of this seems to me to lie at the bottom of the present stir for "Teaching" Universities or "Professorial" Universities. But neither "Teaching" nor "Professorial" to my mind adequately expresses this—indeed falls far

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

short of it—and has the objection of rather suggesting one sidedness. I have studied with great care the copy of the Gresham Charter which has been submitted to me by your Secretary, by the light of these convictions, and I must confess that the impression made upon my mind is that it is completely inadequate to meet the requirements of the situation. As a solution of the problems which face us in endeavouring to constitute a worthy University for London, I cannot imagine that it has a chance of permanent acceptance. I observe that while the preamble refers to a demand for encouragement of learning and research; so far as I can discover, the provisions of the Charter do nothing whatever to meet that demand. It appears to me that Art is left out of sight altogether, and that in this matter the project is distinctly inferior to the scheme of the 13th century. I notice further that it appears to enforce a double examination on medical graduates. That means that it leaves where it is, their very just grievance, as I thought it, which was brought before me very strongly as one of the Medical Acts Commissioners some years ago. Nevertheless, the Charter gives what I should consider an excessive representation to medicine on the Senate. Further, it seems to me that the scheme makes a great mistake in failing to utilise the prestige —the very well-deserved prestige—and the material resources of the present University of London. Still more it appears to me to destroy the chance of creating a great intellectual centre everywhere known and respected in the midst of a society which is constantly being debased by engrossment in material interests. Further, I conceive that it interferes with the prospect, judging by American examples, and by some in our own country, of the making of gifts and bequests on a large scale from the owners of superfluous wealth, which is happily becoming more common, and which will be attracted in exact proportion to the dignity and reputation of the body to which they may flow. And, finally, it presents no advantage that I can discover, except the conciliation of certain interests. That, my Lord, is all I have to say about the exact object with which I am summoned here; but if it is your wish I will now proceed to speak as confidently as I can, or rather to offer some suggestions in case the Gresham Charter should not be sanctioned. All that I can venture to do is not to ask for what I should like, but for what, so far as I can judge, may be practicable, and which, if these propositions were carried out, would lend itself to the inevitable tendencies of the age. These suggestions, the tentative and modifiable character of which I am the first to acknowledge, stand as follows: Retain the title and prestige of the University of London, but reorganise it in such a manner as to secure general uniformity and efficiency of all University work with freedom and elasticity, in short, unify without fettering. Give the collections of institutions which undertake those technical branches of education to which I have referred, such as theology, law, medicine, engineering, and so on, some such status as that of Faculties of the University. Let them examine their own candidates for degrees under conditions determined jointly by them and the Senate of the University, and present such as they declare fit for admission by the University for graduation. Deal in the same way with collections of institutions giving adequate instruction in the other categories of University work to which I have referred, leaving quite open the question of how the examinations should be conducted. Or rather, I should say that I for the present leave that question open. Provide ample means for instruction in the modes of advancing natural knowledge and Art either in material connexion with the existing University, or by arrangement in particular colleges which may be willing to undertake special branches of that work. I should give the professoriate a large, but not a preponderant, representation on the Senate, and wide, but not exclusive, influence in regulating instruction and examination. In accordance with the general aim at unification, State and Municipal contributions, both of which, I distinctly contemplate on a larger scale than they are now given, private endowments of the University, fees for instruction and examination of all kinds to be paid unto a University chest. All the professorial and teaching staff, current expenses (save in cases that may be reserved and where there is no sufficient endowment of a college) and building and fitting expenses to be paid out of the chest. The payment of the professorial staff to be primarily regulated by the kind and amount of work done for the University, and not by the number of students. No bar to be placed in the way of anyone who wishes to profit by any description of University instruction. If after trial he does not profit then, it seems to me to be time enough to exclude him. I attach a very great value to this power of exclusion as a disciplinary measure.

I have the honour to be President of the Association which has been formed for promoting what I wish had a better name, a Professorial University, and I may say that I entirely concur in principle with the propositions which have been laid down on behalf of the Association; with the framing of which, however, I had nothing to do. And I am further able to say that after consultation with my colleagues on the executive Council, they give a general approval (of course, reserving, as I do in my own case, possible modifications of details) to the scheme which I have just sketched out.

13,492. You do not go into detail about how the professorial University should be started, or to what extent it should absorb existing institutions. Do you think existing institutions ought to be absorbed gradually?—I confess, I very much dislike that term "absorbed." It is extremely ambiguous. It may be applied, and is in Medicine, to taking an infinitesimal dose, and also to swallowing a great mass whole. If placing the general government and the administration of the finances, and exercising a general superintendence is what is meant by absorption, then undoubtedly this scheme may be said to advocate absorption. But if it means any state interference with private endowments I have nothing to do with it.

13,493. Then, it would amount to nothing more than control over the appointment of professors, and the direction of the studies?—The supreme control over the appointment of professors should, I think, in the long run, be vested in the Senate, but there are many ways of giving partial control to the individual bodies to which they belong. Take, for example, the case of my own college, the College of Science, our chief commanding officer, there is the Lord President. But in case of a vacancy, the Council of Professors is called upon to consider the whole list of candidates, to arrange them in such order of precedence as it thinks best, and to send that list on to the Lord President. The Lord President does not bind himself that he will accept the man who is at the head of the list, but practically it comes to either the first or the second man in the list being accepted. I think it is extremely useful that a man's future colleagues who are greatly interested in the matter, should have an opportunity of that kind of expressing their opinion. I think it is also even more useful that there should be over and above them a court of final decision which is perfectly free from all those little personal influences and fancies of various kinds which may warp the judgment of the best of us.

13,494. You would leave the present governing bodies of King's College and University College; you would not abolish them either immediately or gradually, as far as I make out?—I think, there would be possibly many functions in respect of the discipline of the college and various other matters which need not now be detailed which would still remain for them to do.

13,495. And the Medical Schools, they, I take it, by your plan would be affiliated to the University, is that the case?—The question of medical education in London is a large and difficult one. I do not know whether it is your Lordship's wish that I should say what I have to say upon the subject now. I will do so, if you please.

13,496. Yes, I think so?—The present state of affairs is absolutely chaotic and very bad. There are some, I think ten or eleven, Medical Schools attached to the hospitals. Each of these professes to prepare men for final examinations. Consequently each of them has to possess not only the teachers of purely medical subjects, but the teachers of those subjects which in Scotland are very conveniently summed up as the Institutes of Medicine, that is to say, physiology, chemistry, elementary physics, and so forth. Now the result of that is extremely unfortunate. I was obliged to familiarise myself with this subject a great many years ago: in the first place as a student of medicine, and in the second as, for something like twelve years, an examiner in physiology and comparative anatomy for the University of London; and, finally, as a member of the Senate of that University. So that I think the facts have come pretty fully under my

notice. It is of course, as everybody knows, a very important thing for a young professional man to connect himself himself in any way whatever with a hospital, and if not directly with a hospital at any rate with a hospital school, which is very often a way to the hospital. So that young men, meritorious and clever persons very likely, but who are seeking practice and whose hopes are all concentrated in practice, take these Chairs of the Institutes of Medicine, none of which under present circumstances can be competently filled by any person who does not give his whole time and attention to the subjects with which they are concerned. All these matters have of late years become so vast, that if a man is to have the sort of knowledge of them, the every-day knowledge, which is needed to make a successful teacher he must give his whole mind to it.

13,497. If he is a medical man he must give up his profession altogether and devote his whole time to teaching?—Except in the case of most unusually brilliant men, I should say that it is quite impossible to do the two things. The result of that is that, with the exception of one or, perhaps, two schools, the medical student in London is not taught these subjects properly; he is at a distinct disadvantage in comparison with such Universities as Edinburgh, where the teachers of these matters give their whole minds to them. I think it is 25 years since, in the course of an address delivered at University College, when I gave away the prizes to the students, I pointed out that which seems to me to be the only possible remedy for this state of things, which is a constant drag and drawback to the education of the London medical student: it is this, that the teaching of the Institutes of Medicine should be restricted to two or three centres where, in consequence of the number of students in each, it would be possible to pay men, who act as professors, for giving their whole time and attention to their subjects, making it worth their while to teach them thoroughly and properly, and with that large amount of practical instruction which is now required. Of course I am not now speaking of setting up new institutions; it would be quite possible to arrange all that, I believe, with the existing Collegiate Institutions. If that were done, then the Hospital Schools would become what they ought to be, that is to say, teaching apparatuses connected with what are really, in relation to medical education, laboratories, or institutions for the practical study of medicine, that is to say, hospitals. To the pathologist and the medical man the hospital stands in exactly the same relation (of course I am not regarding it in its other aspects), as the practical laboratory to the student of other branches of science. Then you would have connected with these practical laboratories, and holding the Chairs of Medicine, Surgery, Midwifery, and so forth, men who are daily occupied with that business, and eminently calculated to instruct in those particular matters. But until that is done, or something corresponding to it, something which would produce the same result, the problem how to raise the standard of medical education in London appears to me to be insoluble. What I have looked to, though, I by no means mean to say that it is the best plan, or the most desirable, but, I think it is that which has the most chance of success, is to put medical education into the hands of the Royal Colleges and of the Medical Schools, formed into a great Technical Institution for the study of medicine. The part for the University to play is to be regulative; that is to say, the scheme of study and of examination, which is already to some extent defined by the Medical Council, should be further settled and arranged between a University constituted in the way that I have just mentioned, and this (which would constitute the Faculty of Medicine of the University) institution technical itself. I think in that way you might have a chance of getting over the great difficulty, viz, that, while the University insensibly gravitates towards requiring a very high standard for its graduates, those who are acquainted with the practical interests of the profession of medicine perfectly well know that, under the circumstances of medical students, the amount of money they have to spend upon their education, and the very small reward which, on the average, they get for it, it is quite useless to attempt to press them too far. The State has serious interest in this, because the State very properly declares that it will not accept the certificates of medical men in cases of death, or in many other important cases, in which the evidence of a medical expert is called in, unless the person has a something to show that he is a properly and efficiently educated medical man. It is of the greatest importance that in every area of 10 square miles or so of the country there should be a person who can be depended upon by the State in these matters. Now the practical question is this: what the University of London has done for the raising of medical education in my mind is not to be over-estimated, but I have no doubt whatever, that, under the conditions of medical teaching, at present—possibly under all conditions of medical teaching—it requires for the doctorate a great deal more than it is wanted for State purposes and it requires a great deal more than it is likely to get so long as the rewards of average practice are so small as they are. It is that which weighs with me so very strongly in recommending some course of this kind.

Right Hon. T. H. Huxley, C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

13,498. I gather that you wish somehow or other to form two or three centres. I presume by grouping the present Medical Schools, and to form some great medical institution, which shall be connected with the new University, but which shall have a great deal of power in itself, and which shall be almost of co-ordinate authority with the University. Is that the case?—For teaching purposes I would hardly say "co-ordinate." I think it would have a very large voice in the matter. I think it is necessary at any given time that the men who know the wants of the country in medical matters, who are practically acquainted with them, should be able to say to the University what it is likely to get; but on the other hand that the University should be able to say to the men who practically know these wants: "we must get as much as we can." You are between two dangers; the University requiring too much, and the practical members of the profession demanding too little.

13,499. What part would the Royal College of Physicians and Surgeons take in this scheme? Would they take any part?—The Royal Colleges are now taking a certain part.

13,500. Would you maintain their position?—My own impression is that they ought to do what they have shown considerable inclination towards doing, and, indeed, to some extent have done already, that is to work together.

13,501. With this new institution?—Yes, with one another and with the University; that they should be, in short, the medical Faculty.

13,502. Would you leave the licensing power still in the hands of the Royal Colleges?—Certainly; that is to say, the licensing power in reality is determined by the Act of Parliament, and is watched over by the Medical Council. Unless certain conditions are complied with the Medical Council, I presume, would interfere. So that there are many guarantees.

13,503. Would you let the University degree carry a qualification for practice in the same way that the license does?—I should not have the least objection to that. On the contrary, if the present University degree were kept I should in every way encourage men to go in for the higher thing. It might be that a qualification to practice would not be required for it.

13,504. I think in the scheme of the Senate of the London University the examination for a degree was to be arranged jointly between the University and the Royal Colleges?—That is going very close to what I am proposing. It seems to me to be an eminently practical measure.

13,505. You know the scheme to which I refer—the scheme of the Senate of the University of London which was rejected by Convocation?—I am a member of the Senate. I am sorry to say of late a very neglectful one in consequence of a difficulty in hearing what goes on. But I took a very great interest in the inception of all that business; and I took some pains to lay some of the impressions I have just placed before you, before the Senate at the time. I confess that I did not augur well of the scheme which was prepared by the Senate eventually. I was very strongly under the impression that that which has happened would happen—that a variety of causes would upset it.

13,506. You thought that it would be rejected?—Yes.

13,507. Do you think that any plan drawn up on the lines that you have suggested to-day would be accepted by the Senate of the University of London?—I have not the least means of judging.

13,508. Or that Convocation would accept it?—I should be very sorry to predict what Convocation might do.

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

13,509. Would it be expedient, practically possible, or advisable, to over-ride Convocation and take away its power of objecting?—I do not wish to say anything disrespectful of Convocation, but I very sincerely wish it did not possess the power of vetoing the decisions of the Senate.

13,510. Do you think that if we could get a scheme founded on the suggestion that you have made that the University of London could be compelled, if necessary, to adopt it, and to re-model itself accordingly?—Of course, I beg your Lordship to understand that I speak entirely without authority, but my impression, from a very considerable experience of my colleagues on the Senate is that they are extremely reasonable men, and have no object in view except the welfare of knowledge, learning, and art. Of course, as I think these propositions are drawn up in a way to favour the objects they have in view, I may expect that they would consider them, at any rate, fairly and attentively. But I have no right to speak on the matter.

13,511. I think we have got your general views, which is all that we can ask of you. You mentioned art as distinct from literature, and you also mentioned several other matters, such as engineering, and a great number of different subjects which ought to be taught in a University. How many Faculties do you think there ought to be in the new University?—If I may speak of those things which I have mentioned as hopes and not things that I press for now I should altogether get rid of the term Faculty, as applied to a primary division of the studies of a University, and restrict it to the technical or professional schools. The studies of the University I think should be grouped in some such categories of subjects as those which I have detailed, that is to say, science, philosophy, and so forth, and the professors of each category would constitute a corresponding "school."

13,512. Both the Gresham scheme and the revised scheme of the Senate of the University of London are very much founded upon the idea of constituting Faculties, and enabling the members of each of those Faculties to appoint Boards of Studies who in their own different lines should advise the Senate with regard to examinations. If you did away with the division into Faculties this would rather fall to the ground?—No, my Lord; it is a question of names very much. I am not proposing for a moment to abolish institutions which would represent the interests of teaching for special professions, as, for example, we might perfectly call such a body as I have just referred to for medical teaching the Faculty of Medicine. It might retain the name for any objection I have to it, and it might perform the functions.

13,513. And law could be treated in the same way?—Yes, law again.

13,514. Science, I suppose, would be one by itself?—My own notion is this. I do not venture to speak of things which are not within my knowledge, but I should imagine that the Inns of Court and the other bodies which are concerned in legal education might be united in just the same way into what would be practically the Faculty of Law; so, again, all those institutions which are engaged in teaching the different branches of industrial professions—I have not a better name for them — I mean such things as ordinary engineering, electrical engineering, the theory of chemical manufactures, and so on, all of which are daily becoming more and more special disciplines. I should imagine that all those might unite in the same way, and have their voice in the same way if it were thought desirable.

13,515. Is that what is called applied science?—It is what is called by the very bad name of applied science.

13,516. You think that might be treated by itself in contradistinction to the more abstract sciences?—I think so. I will give a concrete case. Take, for example, the City and Guilds Institution, which has the making in it of a great industrial college. That, and institutions of a like kind, might in my judgment be grouped together in the same way as the medical institutions, and go into the same sort of relation with the University.

13,517. Grouped into a single institution?—That is to say for working purposes.

13,518. Which would be affiliated to a University in the same way that the proposed medical institutions would be?—Yes; and with the same mutual influence; the practical men instructing the University in what is practicable, and the University on the other hand doing its duty in constantly trying to raise the level of the practicable.

13,519. (*Lord Reay.*) Might I ask what the relation to the Faculty would be of a teacher appointed by the University, because I take for granted that the University itself would appoint professors and a teacher not appointed by the University. Let us take, for instance, law. Supposing the University appointed professors of law who would not be recognised by the Inns of Court, then would the Faculty (if you will allow me to use that word in the accepted sense) be composed of the professors appointed by the University, and of those professors who would be appointed for different objects by the professional corporations?—My theory of the way of working the thing is this: that the institutions in which law is taught would be grouped into the technical school or Faculty of Law; that when a vacancy occurred the persons, whoever they were, who formed the governing body of that Faculty, would present to the University persons for appointment as professors, and that in the final issue the Senate would appoint; that is to say, that in relation to these technical schools the Senate would stand as the Lord President does to my own college.

13,520. You draw a line between what you call the teaching for technical purposes and the teaching for higher scientific purposes?—Yes, for pure science, leaving the word "higher" out. Let me illustrate that. I should propose that in the University there would be no professors, let us say, of obstetrics or surgery, but there would be a professor of general pathology, which is pure science; also of the two things which are comprehended under Pharmacology and Therapeutics as pure science. You see there are two ways in which you can look at diseases. In one they are merely aberrations from the normal state; that is pure scientific study. You may study medicine without the smallest intention of relieving human suffering, with no other object than to find out the effects of various substances upon the economy. So you may study pathology in the same way, simply to ascertain the nature of the various kinds of morbid change. That, it seems to me, would be the proper subject of a University Chair. But the Chair of Pathology as taught for the purpose of practice, as part of the instruction of a medical school, would remain with the Faculties or with these special teaching institutions.

13,521. Then you contemplate two classes of students?—Yes.

13,522. The students who frequent the University merely for professional purposes, and the students who frequent the University for scientific purposes?—Quite so.

13,523. And you would lay down for those two categories of students entirely different curricula?—That is a matter for consideration. That is one of those things which has a great many practical difficulties about it. But in principle what is happening in the world is exactly what you are now speaking of. Formerly, when I was a youngster, for example, in this country almost the only way to pure science (I except possibly Cambridge), speaking broadly, the only way to all the biological sciences lay through medicine. A young man went to a medical college, and he there picked up the foundations of zoology, or whatever else it might be. Then he abandoned medicine and went on in his own line. I can speak very confidently about that, because it is exactly what I did myself. Well, the difference at this time is that there is a constantly increasing number of men who wish to obtain pure knowledge; they wish to become investigators and discoverers; they do not want their knowledge for any practical application; and those men, I think, would go to the special professors of the University who would teach simply and solely from that point of view, to put before a man the condition of science at the present time, to show him where the lines of advance lay, and to tell him how best to follow them up.

13,524. Then, I conclude, that you would have two kinds of degrees; the degree given to those who were merely content with the minimum knowledge which is required for professional and technical purposes—for what you have called State purposes—and the other degree which would be given to those who had attended the University for strictly scientific purposes?—To say the truth I am afraid I am a great heretic in that matter; but I do not attach the importance to degrees that the

great mass of the world do. I do attach infinite importance to knowledge and to ability to use it, but the degree was after all originally meant as a test of education. The purpose of a man who is following out either science or art in the highest sense is to be a capable person, not to have a degree. It may be thought by some to be an advantage to a man of science to have some kind of letters to his name, but I doubt it. I am afraid that in the modern University we have come to regard the degree giving as almost the end all of the whole process, but to my mind it is quite a subsidiary matter. It is very important in the scientific professions, as in medicine, where, as I said just now, either the State or commercial men or the general public may want to have some sort of guarantee that a person whom they employ is fairly fit to give an opinion, but that to my mind is almost the only use of a degree.

13,525. Then it would come to this, that we might have the men who attended the University for the technical and professional purpose of having degrees, and those who attended it for the purely scientific purposes taking no degree?—Quite so. In fact that is what happens now. I am not acquainted with any man who holds a leading position in science, or even a respectable position, who cares two straws whether he has a degree or not. It does not influence his reputation or his authority to the slightest extent.

13,526. You are, therefore, not prepared to adopt the German system, which, as you are well aware, is that students who attend for State purposes are subjected to a State examination and get no degrees, whereas those who attend for scientific purposes at the University are the only ones who attain the degree. You reverse the process?—That was a question very much discussed before the Medical Acts Commission. It would take a very long time to go into it, but the circumstances of this country are so very singular that I do not think it would be at all desirable to attempt that. I think from a number of considerations it would be an intolerable burden upon the students as things are, and as they are likely to be, to have to pass two examinations, because that is what it comes to.

13,527. And you would allow the Royal College of Music, which, as you know, has the power of giving degrees, to retain that power?—What I should do in that case if it were left to me, would be to put the Royal College of Music into exactly the same relation with the University, as I am supposing the Medical Institution would be; that is to say the college would prepare its men, and, under proper regulations, would examine them in concert with a scheme drawn up by the University, and the University would have a considerable voice in saying whether that scheme was efficient or not, and it would grant its degree *ad eundem* to the student; that is to say, if anybody had passed through in the College of Music a sufficiently distinguished student's career, he would be presented to the University, and the University on the testimony of the authorities of the college would give him a music degree.

13,528. And in the same way on the testimony of the Inns of Court the law degree would be given?—Quite so.

13,529. Therefore you make those bodies virtually degree-giving bodies?—Yes.

13,530. And you would make the same arrangement with the Royal Academy for Art?—Yes. The principle would go throughout. It is only in that way, so far as I can see, under the circumstances of the country that you can conciliate those two equally important considerations and strike a fair medium between the constant and very proper tendency of the University to go too high, and the constant and very improper tendency of ordinary institutions to go too low.

13,531. Then would you give the University any control over the appointment of the teachers at these various schools, the Inns of Court and the Medical Schools or not?—I am not making it a *sine quâ non*, but I should myself vest all appointments in just the same way eventually in the Senate, that is to say that the bodies concerned would present their men in the order of what they conceive to be their merit, and that the University should pick out of that number. Ninety nine times out of a hundred the University would take the men they sent up. In the hundredth case it might be very important that they should not take him.

13,532. But you would require recognition by the University?—Certainly.

13,533. (*Rev. Canon Browne.*) Most of the questions I wish to ask have been asked already. With regard to the last point how would your proposal tend to prevent an institution going too low?—Because the Senate if it had good reason to think they had gone too low would refuse to grant degrees.

13,534. That is the only remedy—to cashier the institution?—It is a remedy of enormous power.

13,535. It seems to me rather a drastic remedy to have as the one sole remedy?—I do not think it would be often exercised because, as you have justly observed, it is a very drastic remedy, and the fear of it would always, I should say, bring about a practical reconciliation of views between the body called in question and the Senate. I am supposing now that they are reasonable men on both sides.

15,536. Of course you feel that the Senate in that case must be a tremendously strong body?—Yes.

15,537. So strong a body that they can send down to the Inns of Court and say, "We refuse for the future to accept your students." Can you imagine such a body?—I have filled up to, say, half, the Senate with the professorial element, and the other half I should propose to occupy with men of the strength and weight that are to be found at the present time on the Senate of the University of London. I should make it as strong a body as I possibly could, and I think their decisions would be universally accepted.

13,538. With regard to your proposal about *ad eundem* degrees. The alternative is that the Senate should intervene in the final examination for the degrees, and the institution should examine as to the elementary parts. That, I suppose, would be the natural alternative?—No. In all these matters I do not speak speculatively. I may be in error, but I go upon facts in my own knowledge. In my own college—the Royal College of Science—ever since the college was established, that is to say, in 1851, now 40 years ago, our practice has been for the professors to examine their own students, and on the strength of that examination the student has attained, or not attained, as the case may be, that which is virtually a degree—the associateship of the school. I have watched that process for now 37 years, and of course I am perfectly well acquainted with all the objections to what is called people stamping their own goods, but I am bound to confess that I have never seen any shadow of injustice or false estimate of men made by examiners under those circumstances. But I do not think the system is quite prudent. It so happens that my colleagues have been very strong men. That cannot always be secured; it may be possible that errors and abuses should creep into that system, and I think it is desirable to guard against that chance. Quite recently we have adopted the system of adjoint or external examiners. I think, practically, that is a very important measure. I think it is a very desirable thing to do. But I am bound to say that, so far as the essence of the matter is concerned, supposing the relations between my school and the University, such as I have been speaking of, to be established, I am clearly convinced that the University might with perfect safety have conferred a distinction equivalent to our associateship upon our recommendation in every case in which it has been made.

13,539. Of course we may have our own views as to the value of degrees, but we have to consider the practical effect of the proposal in that way?—Of course.

13,540. Do you think the country is ripe for such a proposal as that, that degrees mean so little that the Universities may, as a matter of course, confer the degree upon persons recommended by the institutions?—Pardon me; it is not my impression that a degree means so little. Let me return to the case of my own school. Supposing the degree had been granted in the way I suggest, it would have meant exactly what it means now. It would have meant that the men would have undergone probably about as good and pure a scientific training as they could have in the country, and it would have meant that every precaution had been taken to secure that the man was worthy his degree; that he had the qualities which are testified to the public by it. The question which Lord Reay put to me just now was about the value of degrees in the highest sphere. I am not for a moment questioning the extreme importance of the testimonial of a qualification, where the practical professions are concerned.

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

13,541. Then you would have the new University itself granting those same degrees on its own examinations?—I should have not the slightest objection, and if no difficulties were raised, I should very willingly do it, but I do think examinations are like hypotheses, not to be multiplied beyond necessity. The burden of examinations in—well, I was going to use a very strong phrase—but really in corrupting the student's mind at the present time is exceedingly heavy. You cannot do without examiations; that is absolutely impossible, I grant that at once; but the effect of the increasing severity of examinations of late years, in my mind, and not only in my mind, but, as I happen to know, in that of other persons engaged in teaching, is distinctly to lower the aims of the student; that is to say, he works for the examination, and he does not work for the knowledge which it ought to indicate.

13,542. I am very largely with you there. Then this practically would have the effect of excepting from the degree of the new University all persons who had not gone through one or other of those institutions?—No, I think not; I should be perfectly prepared—of course details one need not enter into—for such mark or distinction being granted, if it were thought desirable, to the men who have attended the University courses on pure science or pure art. I should be prepared for that certainly if it were necessary, and I daresay it would be necessary. But those two things would not interfere with one another.

13,543. You would not have two degrees in the same terms meaning two entirely different courses of study, one the institutional course of study, and the other the University course of study?—That, I apprehend, is exactly what obtains now everywhere, that is to say, that the man who takes a poll degree, and a man who takes honours will have precisely the same letters after their names, and yet the men are, I cannot say, how far distant. Take the University of London itself for example. I can say, as an old examiner, that the difference between the man who, as we say, scraped through, and the man who took honours was incommensurable.

13,544. You mentioned the University chest. You said the fees, endowments, and so on, were to go in, and the payments were to come out?—Yes.

13,545. How do you propose to adjust the receipts and the expenditure?—I look to a distinct increase of the funds from public sources to the University. Not long ago I was in the Swiss town of Zurich. The teaching institutions there are mostly out of my way, so that I did not actually go over the laboratories; but in that little town which would not occupy the sixth rank in England, there was a teaching apparatus, and an expenditure which we can show nothing like with these five millions of people. When Englishmen shake themselves out of their old lethargy, and cease to think they are going to do everything off their own bat by rule of thumb, they will do as the Swiss have done and provide these things on a liberal scale.

13,546. You think the University chest will be plethorized from public funds?—I also look very largely to another source. In the United States there is one particular case in which one man gave 2,000,000*l.* sterling to the foundation of a University—the Johns Hopkins University. Constantly you hear of wealthy men who do not know what to do with their money; they give their money for public purposes, and the sums that are given are prodigious. I cannot doubt that in course of time such things will happen here. But to attract endowments you must have a body of University reputation and standing acknowledged by everybody. If you cut up your University into half a dozen fragments, a man will say, "I do not know anything about this." It does not stand before the eye of the world as a body that is perfectly safe.

13,547. (*Professor Sanderson.*) One of the most important results of a University constituted on strong lines, would be the bringing into existence of institutions for study in pure science, which would enable a man to carry on his studies to any point which he might wish to follow them out to. I am right, am I not, in thinking that that would be most important?—I look upon it as being the most important of the whole thing.

13,548. Such institutions as you have mentioned as existing in the University of Zurich?—Yes.

13,549. And I think you said that University College and King's College might provide the materials for some of these institutions?—Looking at the actual circumstances of the case, there is this possibility which presents itself to my mind. There are two alternatives as far as I see; one of them is to establish in connexion with the buildings in Burlington Gardens, and with the University—supposing that to be preserved—laboratories and appliances for the advancement of knowledge on the scale of those that are provided, we will say at Zurich, or at Berlin. I do not believe it is within range of probability that the House of Commons within the next generation will entertain any proposal to spend as much money as even Zurich does. Consequently that alternative is out of court. The other, and, as I think, possible and practical alternative, is this: so to speak to subdivide the institutions for the advancement of knowledge into portions—science is now becoming so enormous that there is no practical difficulty about that—and to allot particular portions to particular existing institutions. I put it only by way of illustration, but suppose (I do not know whether it is so or not) University College had laid the foundation of a good physical laboratory. I see no difficulty in building up upon that the sort of institution that we want for the advancement of physical knowledge, and making that a special department, so to speak, of University work. Suppose for a moment that King's College does the same thing for chemistry. Suppose some other institution had given itself specially to biological work. I think I see there a possibility of gradually increasing the resources of those institutions, provided they would accede to the proposition by which you may get all that you want piece meal. I do not think it is so good a plan as the other would be if we could carry it out, but, as I say, unless public opinion changes in the most marvellous way I do not see a possibility of it.

13,550. I suppose I am right in thinking that you would consider the existing institutions in London, even if brought together in the most advantageous way would still be very inadequate as compared for example with a University like the one of Zurich which I happen to know well?—I am sorry to say that I need not go so far afield as that for comparison. In my own college not many years ago we had appointed a new Professor of Chemistry, Dr. Thorpe, whom you have had before you, and I shall not easily forget Dr. Thorpe's face of disgust when he came first to examine our chemical laboratories, "Why," he said, "this is nothing like what I have had before." We are not up to the level of our own provincial towns. And when we compare what has been done here with what has been done in France, Germany, or Switzerland, we are nowhere.

13,551. I suppose that if we had efficient institutions for pure science, you would not exclude technical students, I mean medical students, from the use of them in so far as they could be made use of for the regular curricula of the medical schools?—Not in the least degree. I put in an extra caveat that nobody should be prevented from taking any advantage that could be derived from or lay open to him.

13,552. (*Mr. Rendall.*) Your proposal advocates that the University degree should practically be equivalent to the professional qualification?—I rather put it the other way, that the professional qualification being there, the degree should be given.

13,553. Should be accepted for the University degree?—Yes.

13,554. Would you give no higher University degree?—Certainly. I should put no restriction upon the University.

13,555. And by whom would the examinations for those higher degrees be organised, by the Institution or the University?—That is a matter of practical administration I should not undertake to decide until it was raised.

13,556. Take the case of medicine as a case where there are very highly organised institutional examinations, conducted by the Royal Colleges of Physicians and Surgeons for the Medical Schools. Would the University make a higher supervening examination test?—I really think that under the present complicated conditions of London life in intellectual things, all matters of that kind must be left to negotiation between the high contracting parties.

13,557. Could you now tell us how far you would carry this principle of accepting what is virtually a qualification. In medicine it is pretty clear. Let us try some other profession, for instance, that of barrister and of solicitor. Would you there recommend that the

University should accept the admission test to the profession of the Bar, or that of solicitors as qualifying for a degree?—I should like the University to carry out the same principle exactly. There is an institution for the education of solicitors, is there not?

13,558. There is a qualifying examination which involves I think, passing three examinations. Would you accept that as qualifying for a degree?—It should be left for the University to consider whether that examination puts a man upon the level of a person who has elsewhere obtained the qualification for a degree; and if the University was satisfied about that, I do not see any objection to applying the same principle.

13,559. Now I will go to another profession, because it seems to me to open up a number of conditions. I have not fully thought out your proposal to accept professorial tests. Suppose we take chartered accountants. In a way, their examination is a very high test for that particular profession?—It is a very exacting one.

13,560. Is that one that the University might accept in the same way?—I should leave it to the discretion of the Senate whether they would accept it or not. I am quite aware that a great number of extremely complicated questions do arise, but I do not think you can get answers to those questions until the persons who are practically concerned on the two sides have talked them over and threshed them out. But in principle I see no objection.

13,561. You took the instance which is most in favour of your own suggestion, that of the medical profession, but I was wishing to see how far one could apply it to other professions. I will mention another instance, the Associateship of the Institute of Chemistry. Would that be a kind of equivalent which the University might accept?—As I understand it the Institute of Chemistry is not in any sense an educational body.

13,562. It has examinations that constitute a high test for technical chemistry, first in its Associateship and then in its Fellowship?—I may be wrong, but in my impression the Institute of Chemistry is more like one of the learned societies with an examination. Am I not right in supposing that it is practically a society which limits the admission of its members by examination?

13,563. Yes?—That is on a totally different footing from an educational institution.

13,564. There is a difference between the Fellowship and the Associateship?—Yes.

13,565. The Associateship is taken by ordinary students at the end of a full and exacting chemical curriculum, and it is what most of them read for if they wish some external mark other than a degree?—I should say that the institute to which you are referring does not properly come under the head of an educational institution. It is simply a society which imposes a test, which is quite another thing.

13,566. Take another instance of a fairly well organised profession—the primary teachers trained in the Government training colleges. That is, no doubt, a highly exacting test for the particular profession. Do you think that is one that a University could think of accepting?—There, again, I should say that the thing must be left for consideration. If the training colleges fulfil such conditions that their certificate is of the intellectual value of the test of any kind of graduation, they have a claim for it.

13,567. Now let us come to the least well-organised part of the profession—the whole of secondary teaching, for which, of course, the Arts degree of the University has hitherto constituted the most available test. What would you think of the University doing there? Would you put the practical degree-giving power—that is to say, the curriculum and the examining power—in the hands of institutions such, I mean, as University College or King's College, or would you there think of instituting separate University examinations?—In all these cases I contemplate that the institution proposing to connect itself with the University and the Senate of the University will work together, and that anything that may be determined upon depends upon the satisfaction of the Senate that the work done in the institution is of a proper universorial and academic character.

13,568. And would the Senate deal direct with the individual institutions?—I should say so, and keep a very sharp watch on them.

13,569. Take University College and King's College, as the most obvious and ready illustrations. Would you say that each of them should be in a separate and distinct relation with the Senate, and that the Senate should accept or reject their proposals?—There would be two ways, I apprehend, in which these institutions would be represented on the Senate. In the first place, some of the professors of the larger institutions would be sure to be there. Whether it would be convenient to make them the channels of communication, or whether it would be better to do otherwise, is a matter of administrative detail which I should leave to be settled. I should extend the principle without hesitation everywhere, but as to how it is to be worked out I really would not presume to say.

13,570. My opinion at the first blush is that it would do what you wish to avoid, that is, cut the University into fragments. We have to think of a large number of institutions; not only King's College and University College, but Holloway College and Bedford College, and a large variety of institutions like the Birkbeck and others. Do you think it could possibly work for each of them to be in a distinct relation?—I suppose throughout the Senate would have absolute right to accept or reject any institution which proposed itself for the relation we are now discussing. I suppose a very heavy responsibility will rest upon the Senate to make sure that the instruction given in the institution is such as it ought to be to give it University rank, and unless it does that it would reject it, and leave to the students of that institution the ordinary course of passing through examination.

13,571. Where would you look for your preventive of the tendency to lower the standard. For instance, the Birkbeck Institution would necessarily aim at a lower range, and would recommend to its students a lower range than such an institution as University College. How would you check that at all? You see the Senate merely have to accept a minimum. What impulse would there be to raise the standard of any institution?—I am not intimately acquainted with the Birkbeck Institution, though I know something about it. My impression is that the natural connexion of the Birkbeck Institution is not with the University of of London, but with the Science and Art Department, and that it should look to the system of examinations carried on there for what it wants. But really I am not so well informed about what the Birkbeck Institution now does as to give any very decided opinion.

13,572. One rather broad question as to the relation of the University to the institutions is this:—are you going to give to the University representation on the governing bodies of the different institutions, or to the institution as representation on the central governing body of the University?—Certainly; I had not contemplated giving the University representation upon the governing bodies of the institutions. The institutions would be more or less and in turn represented upon the Senate by the professoriate. That, I think, is quite sufficient representation.

13,573. I suppose in any case there will be no University as distinct from institutional professors?—Yes. I imagine, as I said just now, in reply to one of the Commissioners that the University will have certain professors of its own. I mean attached locally to it or having a special relation to it. But, I presume, that the thing would work so that some or other of the professors in each of the great teaching institutions would come upon the Senate.

13,574. Would you illustrate if for me in medicine. Taking the two Royal Colleges and the University, could you just illustrate it for me in that instance which is one of the strongest, and one of the best organised professions. There would you make a central governing body on which the Royal Colleges were represented, or would you put the professors of theMedical Schools into a medical Faculty, or would you put certain representatives of the University as it were into the Royal Colleges for the purpose of determining examinations?—What I would imagine it to be is this, though, as I say, I speak tentatively, I imagine how the thing would work would be this: that the medical institutions would be represented partly by certain professors, and partly by certain of its leading members on the Senate.

13,575. That is on the governing body?—Yes.

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

13,576. I am thinking of the lower body, what we may call the Medical Faculty?—I am sorry to say there is a little ambiguity about the Faculties.

13,577. I am taking the Medical Faculty to mean the united body of the University teachers. What would be the relation, let as say, of the Royal Colleges of Physicians and Surgeons and the Medical Faculty?—I think in my sense of the meaning of Medical Faculty their representatives would form part of it.

13,578. Indirectly do you mean or directly?—Directly.

13,579. That the Royal Colleges would appoint so many representatives?—In what way I cannot say; but what I contemplate, rightly or wrongly, is the organisation of the whole teaching staff in medicine, and of the great corporations. I do no mean to say bodily but if necessary by representation, into a complete whole, which would be the great medical Faculty.

13,580. (*Mr. Anstie.*) May I take it as a fair expression of your views on the point that I am going to ask you upon, that you would divide the University instruction into schools or departments according to a proper distribution of the subject matter, and you would deal with institutions in their relation to the University only in respect of the school or department in which the teaching was recognised and controlled by the University?—Recognised and within a certain fair limit controlled. I do not agree with the word controlled in a despotic sense.

13,581. (*Sir William Savory.*) In your view of the medical department if there were a new University, would it involve considerable disturbance of the existing relations between the Royal Colleges and the Medical Schools?—I do not see that it should.

13,582. You think that upon the present plan the system might work very well in a University?—I think so. I always thought so, and I have advocated that view elsewhere.

13,583. I understand that you have expressed a very strong view with regard to the union of the different school for the teaching of scientific subjects at one place?—As may be convenient, perhaps two.

13,584. But out of that concentration would arise an immense advantage to the medical student?—I have no question about that.

13,585. You would, I presume, exclude what are called the clinical subjects from that — medicine, surgery, and obstetric medicine, or would you have systematic lectures on those subjects like the rest, at one or two places?—Here, again, questions of convenience come in, but if you ask me what I think theoretically proper I should say that the practical subjects, that is to say, medicine, obstetrics, and surgery, should all be taught in the hospitals, which are, as it were, illustrative laboratories for what they may teach.

13,586. Because the material is there?—Yes, because the material is there.

13,587. But with regard to the scientific subjects it is totally different?—Yes.

13,588. What would you include in the medical curriculum amongst the scientific subjects?—I should include in the first place elementary physics and mechanics, the importance of which is very great; but I mean really elementary; I do not mean systematic physical teaching, Then you must have the elements of chemistry. Then in my case one of the most important steps that could be taken in facilitating the course of the student in medical study is to send him to the proper medical school with some elementary notions of dissection of animal structure; the difference of one tissue from another; knowing how to use the miscroscope, and so on. I remember that the first session I spent at a medical school was practically lost, simply because the teacher of anatomy, who was an excellent person in many ways, began in a manner which was to me absolutely unintelligible. He gave me no notion of what he was driving at. I think there are a great many medical students who waste a good deal of time simply accustoming themselves to the entirely new world they are in; boys who come up without knowing anything about what a tissue means, or anything about animal structure, never having had a scalpel in their hands, or knowing one end of a microscope from another, all these things they have to learn by the use of the most elaborate and expensive materials that could be procured. It is for that reason that I have always so strongly advocated amongst the teachers of medicine the teaching of elementary biology by which a young man is instructed in the use of the hands and eyes in those directions in which he will eventually have to work in medicine. Then, in addition to that, there should be physiology which would form a very great part of the whole business. I am not sure that I should not be disposed to add, in connexion with physiology just the first elements of pure pathology and some indication of what influence drugs had in the economy—not much, but just sufficient to let a student understand in a broad way what his purely medical teachers are going to talk about.

13,589. Some of the facts of pathology are very useful for instruction in physiology?—Yes.

13,590. In that way they might be brought in?—Yes. I know nothing which would be more instructive to a medical student than if he were taken through the beautiful chapters that Reaumur and other people have written about oakgalls.

13,591. You are aware that in the new curriculum which has just been issued for the five years instead of the four elementary biology is put as one of the subjects?—Yes, I believe so.

13,592. Of course you thoroughly approve of that?—Surely. I should like to say that I think the efforts the colleges have been making of late years are quite in the right direction. They have my entire sympathy.

13,593. Supposing that this plan could be carried out in concentrating the teaching of scientific subjects at a particular place, do you think there would be any any difficulty about human anatomy and dissection? Would not the dissections still have to be carried on in the several schools?—That is possible, but that is contemplated by me. That is to say, I can undertake to say this from my own experience. If you can get a boy who knows nothing whatever to begin with—a fairly intelligent youngster of 17 or 18—and give him three months proper training by using rabbits, dogs, and animals of that kind, he will leave competent to do very fair dissection. He will have learnt the art. I could trust him in an examination to get me out the pneumogastric, for example.

13,594. My questions had rather relation to facilities of place, whether medical schools could offer more advantages than anything which could be described at a central institute?—I was going to add that supposing in a central institution you had just furnished a young man with the tools of his profession so to speak, and with the elementary notion of it then there would be no impropriety, and there would be a great deal of practical convenience in restricting human anatomy to the hospital schools.

13,595. In speaking of the advantages of teachers examining their own men, would you carry that into medical examinations for diplomas, or would you make a distinction between examinations for the purpose of instruction, and examinations for the purpose of giving qualifications?—Well, I must admit that it is a very difficult question, especially when you come to have to deal with a number of schools and when it is not possible that all the men who teach should be examiners. You must pick out some of them, you cannot help yourself. But in an ideal state of things I should say that on the score of justice to the student it is always desirable that the man who has taught him should have something to say to the examination. I think it is very desirable to have an outside control as well, and for this reason, every department of knowledge now has become so vast that it is quite impossible but that every man should have what at sea we used to call a list, somewhere. He knows some things better than others, he likes some topics better than others, and he expounds some topics better than others. It is elementary justice that where that goes a long way—and it is likely to go further as knowledge becomes more difficult—the student who has learnt from this man and from no other source should, at any rate, be fairly dealt with; that he should be questioned rather upon the things which he has been taught than upon the things which he has not been taught. That, to my mind, is the important point in giving the teacher a place in the examination, he can say to his colleagues: "These men have been taught so and so, and I have "insisted upon giving this more or less." There I should say his function ends.

13,596. The competition of the medical schools is very great?—Enormous.

13,597. Would it not be rather a dangerous thing if at each medical school the teacher examined his own men, and the diploma was issued upon that examination rather than upon such an independent examination as is at present carried on at the Royal Colleges?—Pardon me. If the organisation that I am speaking of can be carried out; if the Faculty of Medicine for the University of London consisted of the Royal Colleges and the representatives of the leading schools, then as a matter of course, I should regard the proper examining body to be the Royal Colleges. I think the present conjoint examination is one of the most important steps that has been made towards that consummation, and supposing things were carried out in a way that I can imagine the ultimate condition of affairs would be this: that the Senate of the University of London would be placed in relation with the Royal Colleges, and it may be with the representatives of the leading schools in just the same quasi-consultative position as I have supposed with regard to other technical schools, that is to say, of the two authorities, one would speak of the practical interest of the profession, and the other would speak of the thing which is desirable to be obtained as a matter of abstract science; and I think they would come to a fair agreement between them as to what the line of examination should be, and what the curriculum should be. But I contemplate the Royal Colleges, and it may be the representatives of the leading schools as being a sort of Senate of the Faculty.

13,598. But whatever arrangement might be adopted by the University the question would still come home whether students of different schools should be examined by the teachers in those schools or by independent teachers?—But as I was saying just now when you get 10 schools, and when you have only two examiners in each department it is physically and arithmetically impossible that the men should be examined by their own teachers.

13,599. Then whatever might be the ideal position practically, it could not be done?—Practically, it could not be done.

13,600. You are aware that at present at the conjoint examination arrangements are made by which the possibility of a man, as a general rule, being examined by his own teacher is shut out?—Yes, I myself think that is rather a mistake to tell the truth. I think from all I have practically known of the business of examination, though it may not have been so at one time, at the present any favouritism is quite shut out. I need not remind you that a very different state of things obtained half a century ago in many of the places we know of, a very undesirable state of things, but the whole condition of affairs has so altered now that I should say that, especially with a colleague looking on, the thing was impossible.

13,601. Do you think it is so much a question of favouritism as a question of different colleges. Different teachers of different schools would give a different amount of prominence to different subjects. One man would deal with surgery in a different way from another. It may be sometimes hard upon his pupil if he gets examined by an independent man, but it would be rather disastrous from a public point of view, would it not, if that student were only examined by the man who had taught him. There would be a risk of some important points being brought out, and other important points being excluded?—Yes. I am contemplating this, that between the Senate of the University and the authorities of the Faculty, much closer supervision would be exercised than is now exercised over the whole of teaching, and that sort of one-sided teaching would become gradually eliminated. I do not mean by authoritative process, but by the natural course of things. A man loses caste by doing that sort of thing.

13,602. But how would that improve the existing state of things with regard to the clinical or practical subjects of the schools as they are now taught. What influence would the University exercise in that direction upon the teaching of medicine, surgery, and obstetric medicine?—I think only the same indirect influence that I have been considering hitherto. I think it would raise the general level of the teaching, and I think as the men who have been educated in a higher plane of education take up practical subjects, they carry with them the notions they have gained elsewhere. You must give time for all these things.

13,603. You have expressed an opinion that men are over-examined at the present day?—It should say that it is an evil tendency and one which works evil in the way in which examinations are often conducted and too commonly conducted. I do not speak absolutely about it, but of course as in all human affairs, there is a tendency to make things mechanical, a tendency to get up examinations by rote answers. I have known of subjects taught, as it were, in brigades; men ranged round a table, a microscope sent round, and each told what he has to see and what he has to describe.

13,604. I take it from what you have said that your criticism would apply rather to the character than to the severity of the examination?—Certainly. There are two great evils in the system apart from those I have mentioned. The first is this: I believe it is less now than it used to be in my time. In my time there was too much book-learning, and too little practical learning in things outside anatomy, and then a system of teaching was pursued which was calculated to give a man intellectual dyspepsia, that is to say, he had in the course of a day, perhaps four or five different subjects drilled into him in as many hours, absolutely reversing the process that any man adopts if he wishes to study a subject seriously himself.

13,605. With the great majority of medical students, do you not think that the character of the examinations largely determines the extent of their work?—I should say so, most unfortunately so.

13,606. An excellent man may be comparatively independent of examination, but the average man really works up to the level of an examination and no higher?—There is a phrase which is unfortunately too familiar to persons who deal with these matters. A student says, "I will not learn that; it does not pay."

13,607. You would not help that by reducing the severity of the examination?—No. You help that, and you can only help it by the moral influence of good teachers. You can help it in no other way.

13,608. And good examiners?—Yes, and good examiners. And let me say that the business of an examiner is one which is not learnt in a day.

13,609. You would say that it is an art?—It is not only an art, but I take it it is one of the most difficult of arts, and one that requires probably more sympathy, self-control, and a stronger sense of duty than any other. The way that young men who who know nothing about teaching are turned on in the office of examining is lamentable.

13,610. Is not that really where the fault lies. The difficulty with regard to examinations lies not so much in the severity and extent as in the want of skill with which they are conducted?—Yes, I think so. I think one of the great faults is in goading a man to do what he cannot possibly do thoroughly in the time, and in counting volubility of repetition for intellectual character.

13,611. I need hardly ask you if you approve of extension of time for study?—Yes.

13,612. I think in this University you would make the Senate supreme in all matters?—Absolutely supreme.

13,613. With regard to appointments as well as other things?—Yes, of course I always suppose that there would be some remedy in case of abuse, an appeal to the Privy Council, for example.

13,614. Yes. There should be in every case an ultimate appeal to the Senate?—Yes.

13,615. (*Professor Ramsay.*) I wish to ask a question on what perhaps is the material point of our inquiry, that is the relation in which the new University is to stand to the existing colleges. You began the constructive part of your evidence by saying that you looked upon the Gresham scheme as embodied in the Gresham Charter as being totally inadequate?—Yes.

13,616. And you formulated eight different points of objection which come very much to this; that it is not founded upon a wide-enough basis; that it would not meet all the purposes of new teaching and new research which you think a new University in London ought to meet, and that it would be too much under the domination of existing interests?—That is approximately what I wish to say.

13,617. With regard to the last question you said the only advantage it really possessed was that it conciliated interests. Therefore, as far as the general

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

scheme of the University goes, what you would distinctly object to would be any system by which institutions, whether called colleges or by any other name, got the whip hand of the University?—Certainly.

13,618. It is not your desire that the colleges should control the University, but that the University, being perfectly free to extend itself, and having the supreme government in its hands, should avail itself of the higher teaching of the colleges so far as it (the University) desired and no more?—Yes.

13,619. That being your general ground of objection to the Charter, it struck me that afterwards you seemed to be to some extent raising up again, under the name of Faculties, defined as you define them, a set of bodies whose influence might run parallel to, and even overmaster that of the University itself?—That was not my intention.

13,620. We will see how it works. Your proposal was, I think, that different institutions might select separate branches of knowledge for which they happened to be fitted, and might become in your sense of the word Faculties, having the power, under the general control of the University, of conducting courses of study and of recommending those who had gone through those courses for the degrees of the University?—If I may be pardoned for introducing a remark, the Faculties, constituted in the fashion that I am speaking about, would not consist of single colleges, but of groups of institutions. That makes a very essential difference.

13,621. Now I go to the point which was put in a single question (I do not know whether you quite saw the full force of it) by Mr. Anstie, which is this. As you are aware, all these colleges, or nearly all these colleges, are under, as you call it, a dual government?—Yes.

13,622. First there are the professors, who, I understand, according to your scheme (which is in that respect the same as the professorial scheme) would naturally find their place in the group of studies to which they belong. They would all form one Faculty in your sense of the term?—No. So far as I have used the term "Faculty," I tried to restrict it to those institutions or groups of institutions which give themselves to the preparation of men for a particular profession, and which have therefore a practical aim in view. What in my apprehension would take the place of the old Faculties would be the different categories of teachers ranged in their natural classification, that is to say, I think the teachers of mathematics and natural science would form a group; I think the teachers of biology would form a group, and so on; and those in my apprehension would be the groups within the University itself which would answer by their position on the Senate and elsewhere, and relations with the Senate to what are now called the Faculties. What I have tried to point out is that historically the Faculty is a school for teaching a particular practical profession, and that it has remained in the University as a historical result, not a logical result.

13,623. Then the Faculty would be a collection of teachers?—Yes.

13,624. In the case of medicine, the eleven medical schools would form but one group?—Yes.

13,625. And that Faculty would not possess buildings; it would have no constitution; it would have no visible habitat; would consist merely of the teachers grouped together?—You mean *qua* Faculty?—Yes.—In all the cases I have in my mind at present there are abundant buildings and rooms that they could use if they were allowed to do it. For example, take the Medical Faculty, with which I am most familiar. I should imagine that the head-quarters of that would be provided in three or four places abundantly.

13,626. Take the case of University College and King's College. They contain various professorships, all of which would be included in one or other of the groups you have named, all of these individual groups would be included in the governing body of the University, but to which group would the material buildings and all the material interests of the colleges belong?—That is not my impression of the University work. The professors who were members of the Senate would meet in the University buildings as they do at present. I see no difficulty about that any more than that the present Senate of professors who were not members of the Senate would have their meeting place within the walls of the college for any purpose they wanted.

13,627. That does not quite meet the difficulty I feel. You said that one of the chief advantages, if not the only advantage, of the Gresham Charter was that it conciliated interests?—I do not think I used the word "advantages."

13,628. Yes. I put down the words just as you used them. May I ask what were the "interests" you referred to?—That is a difficult and delicate topic. I should not like to enlarge upon it too fully; but you see having been closely connected with what is at present the Royal College of Science for a great many years, I have some reason to know, without bringing any specific charge against anybody, that there are corporate jealousies of a very marked kind, and which in some cases have threatened to interfere very seriously with us.

13,629. I quite understand that, but it was not with that view that I asked the question. My point is this. Take King's College as an example. King's College is under two sets of authorities. There is first of all a large staff of professors. They of course would at once find their place in your scheme, or in the professorial scheme. I see no difficulty about that. But the professors are not the governing body of King's College; the governing body is the Council, and no professor, not even the Principal, who has a seat upon the Council. The Principal is practically the head of the college, and I daresay he is allowed to manage everything, or most things, but as far as the constitution goes, the powers of the Principal are *nil*. When, therefore, you spoke of conciliating interests, what I thought you meant was that it was necessary in any scheme proposed for a teaching London University (as I think it is necessary) to take along with us as far as we possibly can, the various governing bodies which have managed those educational agencies. In University College there is also a large number of persons who form the governing body?—I am one of them myself.

13,630. What then I want to know is, do you propose to wipe these governing bodies out of existence absolutely, or do you propose to recognise the fact that those colleges belong to their respective governing bodies?—Only under the specific circumstances I have mentioned; I do not want to meddle in the slightest degree with the colleges for anything that they desire to be or to do, except so far as it may concern the arrangements necessary for rendering the University itself, and the teaching in it and recognised by it unific and efficient; and, in addition, only so far (and this is perhaps the most important part of the business) as the finances and modes of payment are concerned. One of the crying evils with regard to the present system is this, I have watched the effect of it for a very long time, and I think members of either King's or University Colleges will tell you that it is a crying evil. That is the insufficient endowment of the Professorial Chairs; a man of great ability may be appointed to a particular Chair, and he may be a person whom the college would give anything to keep, but he simply cannot remain because the income is so miserable that the moment he gets a better offer of any description off he goes. Consequently University College, and King's College are, in too many cases, merely houses of passage in which a young man stops as long as he cannot help himself. That seems to me to be a crying evil of the first magnitude, and I do not see how it is to be met, unless you place the finances in the hands of a body which shall receive State and other aid, and rectify all those evils. For instance, take the case of a man who is Professor of Logic, or some subject in which the world does not take much interest, but which is of great importance. That man for the sake of five, ten, or twenty students may give all the energy there is in him as completely as a man who has five hundred students; but the one man gets a good income and the other next to nothing. That is a thing that obtains largely in the Scotch Universities at the present time, the professors whose courses happen to be on the curricula of medicine there are in the position that men are obliged to attend their lectures, so that whatever the importance of the course, or the small importance of it, the professor who holds that office is a rich man compared with the man beside him who has nothing, perhaps, but 200*l.* a year, and yet probably the man who is getting 200*l.* a year is exerting himself and adding to the credit of the University as much as the man who is getting the larger income.

13,631. Now we come back to the share of the present governing bodies in the government of the University. Would you be inclined to give to the governing bodies

of either King's College or University College, or of the Holloway and Birkbeck institutions, each of which has a lay governing body, and not a professorial governing body—are you prepared to conciliate those bodies by giving them permanently or for a short time a representation upon the Senate of the University?—If you ask me what I think is theoretically right, I can conceive nothing more improper than that persons who have no academic weight, and who have no great social or public weight, should hold any position of the kind; and I would not cumber the Senate of the University with any such persons or with any such representation. If you ask me, on the other hand, how the present frightful chaos is to be steered out of and got on the other side of, I should say conciliate everything and everybody, so long as you keep the main points in view. I will do my best to answer questions of this kind, but to my mind they are like asking the captain of a ship whether, when he comes to latitude so and so, he will do this or that. He will say, "I will do what the winds and waves will "allow me in order to get to the place I want to get "to." I think people who make conciliations as easily as possible are most likely to get the end of their journey.

13,632. Now there is one point with regard to the Matriculation Examination. When you were on the Commission of Inquiry appointed in 1876 to consider the Scotch Universities, you had a great deal of evidence upon the question of an entrance examination?—Yes.

13,633. And I believe you were one of those who took a strong view upon that matter? The view of the Commission was that the teaching of a University should be absolutely free and open to everyone?—Yes.

13,634. And you told us to-day that the proper time to eject a student is not when he comes to the University not knowing anything, but after he has stayed in it for a while and showed that he is not worth anything. Do you mean you would not have a Matriculation Examination in a course leading to degrees?—In my judgment next to the importance of a University for advancing knowledge the thing of greatest importance is that it should hold out a hand to ability wherever it is. What your Matriculation and entrance examinations do is to put a bar to many kinds of ability, especially in the lower walks of life where mental capacity is as great as in any other, and where it is most desirable to get hold of it. There is many a man in the Scotch Universities (which have done a great work, hardly to be over-estimated) who has been a poor boy of unusual capacity, and who has succeeded in getting a little bit of a bursarship to go to the University. There is no doubt that that man was at first wholly unfit, if you talk about abstract fitness, to profit by the instruction he would get; but very often by the time he has been four months there, he has been quite fit, and has probably had a brilliant career afterwards. Your Matriculation Examinations bar the way of the largest class of society, where there is as great a proportion of mental capacity as anywhere else, and where you have every chance of getting able men. You say, "No, we shall not give you a chance. You must "first of all do "this superficial school learning which has not the "slightest relevance to your future career."

13,635. How do you meet the objection that University teaching ought to begin at a particular point, and take cognisance of nothing below that point?—What I think will happen is this. If you leave everything free, nine-tenths of your pupils will be persons who as a matter of expediency, have reached that particular point having the opportunities to do it, but I say that very possibly the odd tenth may contain persons of defective education, but of a native vigour which makes them more worth having than all the other nine-tenths, and I would not lose them for any consideration. I do not speak from mere speculation or imagination, because the system of Science and Art Examination which is now spread all over the country, does exactly the very thing that I am speaking about. If there is a capable person in any of our large towns at the present time—I do not care if the boy is a shoe-black—if the lad has in him the stuff to make him a man of science, there is nothing at the present time to prevent him from getting as complete an education as any man in this country at our college, and if he is a man of ability, he will provide himself with all the accessories of culture. That is my great reason for insisting upon the removal of barriers.

13,636. (*Sir George Humphry.*) I think you contemplate, as far as I understand it, three classes of education associated with this University. First, you contemplate a high class education conducted by University professors, and entirely under the direction of the University. Those professors appointed by the University, and this teaching associated in the research work. That would be the first and highest class?—That would be the ultimate state of things in my mind.

13,637. That is what you do propose?—I should arrive at that eventually.

13,638. You think that this might partly be done by certain professors in the several colleges?—Yes.

13,639. But that, on the whole, there should be that kind of high class teaching which would be a great national object, and ought to be supported by national funds?—Yes.

13,640. Secondly, there would be, what we may temporarily call, collegiate teaching which would have reference more especially to obtaining some recognition by the University in the form of degrees, and that would be carried on by various colleges which would be under the cognizance and under the general superintendence of the University?—Yes.

13,641. The teaching and the examinations conducted in those colleges should enable men to obtain degrees in the University?—Quite so, if the University were completely satisfied.

13,642. So that there would be for them no additional University examination?—No.

13,643. Then, thirdly, that there would be a teaching connected with special departments of science and art, or rather, I should say, practical work?—Yes.

13,644. Would that also be a means of obtaining a degree in a University?—Yes. My theory is that the man should be trained in accordance with principles agreed upon by the University and the Faculty, as we may call it (to use the common term), and when the man had gone through the course, and had gone through the examinations agreed upon as sufficient by the University he should be presented with a degree.

13,645. He should be a bachelor of engineering or a bachelor of music, or a bachelor of this, that, and the other?—Yes, in principle I should extend it throughout.

13,646. So as to establish the University on the most broad and liberal basis?—Yes.

13,647. There would in addition, I suppose, be University examinations for men who had not gone through the teaching, and passed the examination in any particular college?—Yes, I should leave all that as free and flexible as possible.

13,648. You would not exclude men coming from the provinces who had shown sufficient knowledge?—No.

13,649. Would you feel that provincial men would be at any special disadvantage in comparison with those men who had gone through their education in London?—I do not see why they should. Of course when you come to deal with that all these things practically may present difficulties of a variety of kinds. I only speak of as far as I can see.

13,650. This you would leave to the general discretion of the University when formed?—Yes.

13,651. Then, in short, any Charter of the University should leave the University a very open hand to meet the requirements of the time?—Yes, because the time is changing with extraordinary rapidity; public opinion is changing; the aims of the people are changing; and by this time 30 years that change will have reached dimensions, of which we have now no conception.

13,652. We have had a good deal of interesting evidence laid before us by the University Extension Association showing the very great and good work they are doing through the medium of their evening classes, and they desire that the University should not only recognise their teaching, but that it should also *pro tanto* admit examinations conducted by them as contributing towards the degree?—I should think that might be. So far as I understand—I do not profess to be intimately acquainted with the University extension work—it appears to me to be a voluntary counterpart to a certain extent of the system of science and art instruction which is conducted by the Government, which has done a wonderful service to the country, and

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

I can perfectly understand that if the University extension movement is doing something corresponding to that it is doing great service. My difficulty would be this, whether it is possible for any body possessed of simply private resources—a private organisation—to go very successfully through the difficulties and labour and trouble which attend the working of the association? The difficulties are prodigious. I happen to have been familiar with them from the time the Science examinations were instituted. I have had nothing to do with them myself, but I have been very much interested. Now the thing is most like a State department. Well, if this private organisation can do anything corresponding I shall be only too glad for it. I think it might do for literature what the Science and Art Department does for science, and that would be a good thing. Whether it does work so successfully with its limited means so as to deserve the same sort of estimation I do not know. My answer would be contingent upon that.

13,653. What we understand is that a certain number—not a very large number—of those who have attended these University extension lectures, and those who have attended the Birkbeck Institution and other institutions of a like kind, do not only pass the Matriculation Examination of the University of London but do sometimes obtain a degree. What they ask is that in any new University there should be a recognition of their work which should be instead of a certain part of the University teaching and University examination; they do not desire that they should complete the teaching and examining work, but that it should be *pro tanto* as part?—My reply to that would be that if they, or anybody else, can satisfy the Senate of the University that they are doing as good work in preparation for the University degree as anybody else let them have precisely the same privileges.

13,654. Are you in favour of or against the attendance at certain lectures being compulsory?—I must confess that I dislike it very much. But there is something to be said for it as a practical method—that is that the general public (I do not presume to speak of Arts, I am speaking now of Science and Medicine) is so grossly ignorant of what is necessary for a career of that kind. They have to send young men to you, and if you give them a choice of the courses they will follow, they will make nonsensical blunders. Even in my own college it has been necessary to lay down a strict curriculum for the Associateship. Men must work this way or no other. If it were not for that the people who come would be quite at sea.

13,655. And if there be attendance at lectures required as compulsory, would you be disposed to associate with that certain attendance at class examinations—that they should not be simply lectured to—but that information showed be obtained as to how they have attended?—In that case if you make the attendance compulsory you must give the professor or teacher or whoever he is control over the students in order that the attendance should be genuine and real.

13,656. So that he should not only give a certificate of attendance but that he should give a certificate of certain knowledge obtained as the result of the attendance?—Yes, the other way is futile.

13,657. With regard to the knotty subject of medical degrees you feel that the practitioners of England should have a more ready access to a degree?—I think so. I think it is a great practical grievance.

13,658. And that you think may be obtained by the University recognising for its degree, the conjoint examination of the Royal Colleges of Physicians and Surgeons?—I think so.

13,659. The proposal of the Senate of the University was that that examination should be conducted partly by the Colleges of Physicians and Surgeons and partly by the examiners appointed by the University. Then there remains a further difficulty in connexion with that, and that is the effect of their being an additional licensing body in London—the Society of Apothecaries?—Yes, of course I had to consider that very carefully when I was on the Medical Acts Commission. But that is another part of the extraordinary English chaos. You must leave it to time. It is no use trying to get rid of it at present. You must let things slide for the present.

13,660. But what is to be done with it at present?—I had rather not say anything about it.

13,661. Would you require that the medical student who would obtain this degree of the University should show a somewhat greater amount of general culture and scientific culture than is now required by the Colleges of Physicians and Surgeons?—No, I should not at present. The practical point is that a man in London who has done exactly the same work as is required in Edinburgh for a Doctor of Medicine cannot take his doctor's degree. So long as that obvious and patent injustice remains you will have discontent. Therefore I should put upon the man in London nothing further than is required for his qualification. To my mind a University when it gives, or when anybody gives a man a license to practise it incurs a most serious amount of obligation which I think the licensing bodies do not often realise. They testify to the public "This man "is ready to do what is fairly recognised and known "as proper in the relief of any ailment that you may "suffer from." Therefore I conceive that the primary thing is to see that a man can do that. Whether he may know Greek or Sanscrit, as a doctor, is a matter of indifference.

13,662. But whether he has some higher knowledge of the preliminary scientific subjects is more important, is it not?—What you want in the preliminary subjects is not higher knowledge but a more thorough knowledge. What I do think is this—and I never cease to preach the doctrine—for every young man who is a practitioner, who may be called to a bedside on an emergency, the thing for him is to have all the essential elements of his knowledge as familiar and as common and as ready to his hand as an ordinary man of business has the facts of his business. That is what seems to me to be so much neglected in medical education. The commonest things are not ingrained enough in the man, and it is there that I should make the preliminary scientific education not larger but more thorough.

13,663. And that you would have adopted by the colleges, so that, in short, the University as a University would have nothing to do with the teaching or examining of the medical student for his degree save the general supervision of the colleges and schools?—Yes; but what I contemplate is that the University should exercise that general supervision is in a very real way—that it should know what is going on just as the Medical Council do now, and be ready to take take objection if it is not done properly.

13,664. And that could only be done by means of certain inspectors frequently being present both at the teaching and at the examination?—Yes, I think the thing would practically work easily enough. I do not think men as teachers, if they know what is really required of them, and if examinations are properly conducted, are disposed to shirk things; in fact I think one of the great uses of such a University as I have contemplated would be to raise the whole tone.

13,665. Do you think the present University of London, either through its Senate or its Convocation, would consent to grant the M.B. degree on such terms as that?—I am really not competent to answer. I am a member of the Senate of London University still, but I am sorry to say that, owing to my defect we hearing, I have found it so difficult to understand what is going on that I should not like to answer that question.

13,666. You have mentioned that the teaching of the scientific subjects of medicine had better be carried on in a certain institution or institutions?—Yes.

13,667. Where do you propose to locate those institutions, in connexion with one or two of the present Medical Schools?—My opinion when I spoke first in this matter 25 years ago was that possibly University College might be one such centre, possibly King's College another, and I was not clear where the third may be. You see the area of London from St. Mary's Hospital to the London Hospital is so vast, and the population is so great, that I presume you could not do without three?

13,668. Most of those schools have very considerably enlarged and improved their opportunities for the study of these particular preliminary subjects?—No doubt.

13,669. They have taken a great deal of pains lately in all of them?—Yes.

13,670. And the question is whether the disadvantages associated with their connexion with particular schools, and where at earlier periods they can go into the hospitals, and where they are to some extent under

the direction of the teachers, together with the fact of there not being any large numbers at any one school, may be equivalent to the advantage of collecting them at one school?—I do not think so, because there is the fundamental and far-reaching difficulty that, unless you can pay a man sufficient to give his whole time to such subjects as chemistry, physiology, physics, and so forth, he cannot in the present state of things be the sort of teacher you want. If you were to have 10 medical schools it is out of the question that the funds should supply 10 efficient teachers of physiology. The whole thing turns upon that. If you will reduce those 10 to 3, then you see the question becomes comparatively easy. But I see no other way out of it. I do not see that anything that can take place will thoroughly improve medical education in London until something of that kind is done.

13,671. It is a very difficult point, because it appears to me a lad goes and enters at a school in those preliminary subjects, and that is his future permanent school?—Quite so.

13,672. Whereas, if he were to enter one of three, all the other medical schools would be at a disadvantage in comparison with those three?—I am encouraged to think the thing is practicable, because of what happened in my own college. Some years ago three or four of the hospital medical schools formed a sort of association and came to ask us if we could not organise a system of preliminary science teaching for their students. This was at the Royal College of Science. We were most willing to do everything that we could, but there were objections of two kinds. In the first place it was not desirable that we should run any risk of exciting certain jealousies which might have been aroused. In the second place, it would have been awkward for us to modify our course. I do not think it could have been done well. I cite this simply to show that the medical schools themselves have seen the propriety of doing something of the kind.

13,673. It is very desirable and very difficult?—Yes, very difficult.

13,674. You used the words "*ad eundem* degree," but that would mean that it was the regular degree?—What I meant was that the person having passed this examination should have a claim to go up for his degree without being further examined. That, I think, is the common meaning of *ad eundem*.

13,675. (*Mr. Palmer.*) You mentioned the University degree as being of a double character; firstly, as being the aim of possible pass men; and, secondly, as being relatively of little importance to men who were to prosecute studies in research. In connexion with that your attention has, no doubt, been called to the Johns Hopkins University, which you referred to. There they have a single degree of Doctor of Philosophy only, and Professor Emmott, who appeared before us, rather with the idea of combining both sections in one degree, very much fought off any suggestion of a degree in the various Faculties of Science, Law, and so forth, in comparison with the degree of Doctor of Philosophy?—I had the honour of giving the inaugural address at the John Hopkins University, and, therefore, I know a good deal about it. It is a very original institution, and one which is doing a marvellously good work. As far as I am concerned, I should be quite content with that, were it the only degree, as in some future halcyon state of things it may be.

13,676. But, in your opinion, a University degree is also open to every road, not excluding the University Extension Society?—No. I want to make the University of London a body which shall gather to itself all the forms of universitarian culture throughout London in the same way that the Royal Society has gathered to itself every kind of scientific culture. Whenever that is done the London University will take a place in general estimation like that which the Royal Society has taken. It will be understood to be the representative of University culture in London.

13,677. And while such a society may be said to have no funds, no abiding place, and no necessary continuity of teaching, still there is no reason why the Senate of the University, or a special Committee *ad hoc* of the University, might not decide upon the merits of the Society, whether they should or should not be admitted to a final degree?—No, I should like to leave the University full power. I should like to leave the organisation as inflexible as possible.

13,678. And let it be a matter for adjustment?—Quite so.

13,679. You mentioned, I think, as your personal opinion, incidentally, that technical schools of science for industrial purposes, such as the City and Guilds Institute, might be differentiated from schools of pure science for the purpose of grouping?—Yes.

13,680. It would be for the University to decide whether any fresh departure, or any further school of science, or anything else, should be worthy of a separate differentiation in that way?—Yes.

13,681. And that one might expect in the future?—I think so.

13,682. I cannot help asking one more question upon that ground. Leaving the Councils of the existing institutions masters of their buildings, or whatever it might be, I think you said that not only the control of study, but the control of finances, should be placed at the disposal of the University?—The finances, apart from special endowments and specially determined bequests, and matters of that kind. How I think the arrangement would work is this. Let us take a case I know a little about—University College. As you are aware, there are two Chairs there, founded by Mr. Jodrell. I do not know what the income is. Let us suppose it is 400*l.* a year. Under the new organisation I should say, pay in all the fees received from University College to the University chest. Supposing it was determined that a professor who gave his whole time was to have 800*l.* a year, then I should consider that the University owed 400*l.* a year to the Jodrell Professor. So that I should not touch the endowment, but I should count it. I should not say, "Hand over your endowment to us, or hand over your buildings to us." I should not dream of such a thing. But I should say, "I must count your endowment against what you receive." I really do not see any difficulty in the working of it.

13,683. But would not crediting the endowment be the same thing as declaring that the college should credit to the University or pay to it the trustees the income of that estate?—Mr. Jodrell gave them the bequest on the express understanding that they should found this Chair.

13,684. May I dictate my own instance, the City and Guilds Institute as it is called now? There you have a body of donors which have, no doubt, very great interest in science. They pay 27,000*l.* a year towards it, but they also in their worldly wisdom are under the impression that they give other people thereby a considerable interest in their existence. They are certainly not inclined to capitalise any funds. Would you declare those donors to be trustees or committees, and bound to pay over to the University their funds?—I was once extremely familiar with the working of the City and Guilds Institute. When I was President of the Royal Society, I was a member of the Council. No doubt it is a very curious and a very difficult case. The misfortune of the whole thing was that the City and Guilds Institute was built where it is. If it had not been for that, there would have been no difficulty at all, but things being as they are, I think that particular case would require the most careful attention.

13,685. (*Mr. Anstie.*) I think I understood you to say that you would not desire any Matriculation examination for entry on that course which would lead to the medical degree?—No.

13,686. You are aware that the London University at present requires Matriculation to be passed for all its degrees?—Yes.

13,687. We have been told by one witness that the question of Matriculation is now under the consideration of the Senate, but has been postponed during the sittings of this Commission, and pending its report, I may assume perhaps from your answer to Sir George Humphry, that if you had to handle that subject you would be in favour of re-adjustment of the question of Matriculation?—Yes, I have always been opposed to Matriculation Examinations of every description. I think the catching of a capable man is of so much more importance than anything else, that I would make any sort of sacrifice to get rid of a Matriculation Examination. It ought not to serve the purpose of a leaving examination for the schools. What the University is now doing is to save the schools the trouble of setting up the leaving examination which they ought to have. I think a large school ought for its own honour to have a leaving examination. I think

Right Hon. T. H. Huxley, D.C.L., LL.D., Ph.D., M.D., F.R.S.

27 Oct. 1892.

they ought to take all the cost and trouble of it. Instead of that they get the University of London to do it for them.

13,688. I suppose you would desire to see the leaving examination under the control of the Universities, not merely London, but Oxford and Cambridge?—I think the head-master has a good deal more to do with it than anybody else, and I must confess I should be very sorry indeed in the present transitional state of things to have any kind of system that now exists stereotyped.

13,689. You would not like to see the University taking charge of that part of it?—No, because the hands of the University would be fettered by the schoolmasters. The University would be bound to take the education, and the schoolmasters of Eton and Harrow are a good deal too strong to be meddled with by the University.

13,690. Eton and Harrow are examined by the Joint Board?—Yes. Let me say that I am speaking about things which I do not know exactly, but in my apprehension the Joint Board is governed by the tradition of the schools as much as the schools are governed by the Joint Board. I was at one time a governor of Eton, and I know it is not an easy matter even for the governors to get any alteration made.

13,691. Then you do not suggest any method by which these head-masters should be controlled or guided in their course of studies?—There is something behind all that, and that is the British public. Pray, remember, that whatever the governing body may want to do, or whatever the head-master may want to do, there is behind him the British public. They do not care in the slightest degree, as a rule, for their children to acquire knowledge; they wish them to be nice gentlemanly lads who will form good connections, and when you are talking of altering the system of a place like Eton, I am sure you will credit me with some zeal in educational matters, but there is an institution which has lasted some centuries, and if I were given *carte blanche* to-morrow, I do not know what I should do with it. It does a great deal for the children of the richer classes, and in the present state of public opinion, and in the present state of the Universities you might spoil the whole thing.

13,692. I should not like to suggest that the very great schools which have important traditions should be too much meddled with by the University, but there remain after those are deducted a great number of schools where the bulk of school education is carried on. Would not the University be strong enough to deal with those?—I desire to speak with the greatest respect of the Universities, but, if you press me, I am by no means impressed with the idea of education that exists there, and in the present transitional state of opinion, I would myself repose no power in the Universities by which they could stereotype what goes on in the school.

13,693. You would not feel disposed to entrust your University of the future with any such power?—Recollect that the great element, not only of stability, but of utter conservatism, in the Universities of Oxford and Cambridge is the colleges. Those are the great weights which have kept everything pretty much where it is. In the London University of the future there will be nothing of the kind; there will be nothing in the scheme to prevent the broad current of opinion exercising the largest influence on the organisation.

13,694. Then to such a University as you contemplate you would not be unwilling to entrust the duty of directing the secondary education of the country?—I am extremely interested in settling, firstly, the primary education of the country, and, secondly, the highest. Those two things are enough. I leave secondary education to take care of itself.

13,695. (*Lord Reay.*) Then might we venture to sum up your evidence in this way, that your first aim is to create a strong regulative body?—Just so.

13,696. Which will reform those institutions which care to be reformed, and if they do not accept the reform which that regulative body proposes they will be left out of the University altogether?—Yes.

13,697. Your next aim is that the deficiencies which you have pointed out, which show that we have not even got in London what you saw in Zurich, and still less what is to be seen in Strasbourg, should be filled up as soon and as rapidly as funds would allow?—Yes.

The witness withdrew.

F. Max Müller, Esq., M.A., examined.

F. Max Müller, Esq., M.A.

13,698. (*Chairman.*) I think you rather agree with Professor Huxley as to the general principles of the University?—Yes, my Lord, I have had the great advantage of listening to Professor Huxley's statements and I only regret, that I was not aware that I might have brought a written statement. I must, like him, therefore, appeal to you to examine me on any point you like.

13,699. You have been good enough to put some things down on paper. I will take them in the order in which you put them. First of all as to the nucleus of the new University?—As I said just now, I agree with Professor Huxley entirely as far as the objects of this new University are concerned. I venture to differ slightly from him with regard to the way in which our ideal is to be realised, and, therefore, I put down first of all the question of the nucleus of the new University. It seems to me that a University can only exist and prosper if the entrance to it and the exit from it are entirely in the hands of its own Senate, not of its constituent colleges. The colleges which are to form part of this new University need not be extinguished or absorbed. The new University should be willing to receive them all, but always on its own terms. Nobody should come into a University without the University seeing that he is fit to be a member of the University, and nobody should go out of it without satisfying the University that he is fit to call himself a graduate of that body.

13,700. That would entail leaving the Matriculation in the hands of the University?—Entirely. It has been a great misfortune on the part of some of the mediæval Universities that they lost the power of admission. As soon as you hand over the power of admission to independent bodies, new interests come in; independent colleges want to fill their rooms, and they, therefore, admit students on easier terms. Who suffers? The teaching of the University. You must teach to the whole University, and you must try to reach the lowest rank, or you have to aim at two or three different targets, and in trying to aim at different targets, sometimes you miss them all. That is the great difficulty of a University which recognises entrance otherwise than through one gate.

13,701. Then to what extent besides maintaining the Matriculation in its own hands, would you put the University over different institutions?—I should say to everybody who wishes to come in, to every Royal College, to every society, or to every museum, "You are "welcome, but you must submit to our terms, you "must become part of our University."

13,702. Would that entail the appointment by the University authorities of the teachers in the different institutions?—Entirely, after a time. Of course one has to consider what is feasible and what is not. I think Professor Huxley's judgment on that point is far superior to my own. We must try and understand what is possible. I should solve that difficulty by saying we are now in a period of transition, and during that period we are willing to make any concession that can be made, but only for one life. Any professor, therefore, who is a professor in these colleges is welcome for a time, but the principle of the supremacy of the University must be maintained. After a time, nobody is to be a professor, except by the authority of the University.

13,703. You think it would not be enough to give the University a veto, but the University must have the power of appointment?—Yes. Human nature is the same everywhere, and you must appeal to self-interests. Whose interests is it that the professors should be the best that can be found? It is the interest of the professors themselves. If one professor suffers the whole body suffers. In Germany if there is a question of appointing a Professor of Biology, the whole Senate wishes to get the best professor they can get, because it not only adds to the prestige of the University, but it indirectly increases the income of every individual professor. There would be a number of men who would come to

hear this Professor of Biology, but at the same time they would come to the Professors of Botany, and the other professors at the University. The individual interests of the professors are identical with the general interests of the University. So, on the whole, they get the very best men that they can get. You may say it is a low motive, but still it is a motive that works.

13,704. Besides appointing teachers in the different institutions would you have a staff of University professors in addition?—I should say to all the teachers in the different institutions, "You are welcome for the "time being. During your life-time we will make "the best of you, but it is not to happen again."

13,705. And with regard to the new professors that you appoint, would they be attached to different institutions, or would they be merely attached to the new University?—To the new University. The names of the incorporated institutions might remain. In Germany also there are certain institutions, museums, and laboratories retaining their old names, but it is nothing but a name.

13,706. You would also have complete power over the buildings and laboratories, and everything else that now are in the hands of the different bodies?—Yes. If there is a laboratory on an old foundation the trustees should be told that their laboratory may retain its name, but must submit to the organisation of the whole University. The University comes first, and must exist first. Then it may utilise whatever exists, but on its own terms.

13,707. Would the University take over the endowment of the different institutions ever?—*Ipso facto.*

13,708. And be able to do what it liked with them?—Yes, because these institutions would really become the University. They would no longer be independent institutions, they could not give degrees or certificates as independent institutions, but only in the name of the University.

13,709. And the same of the Medical Schools?—In the presence of Professor Huxley, I do not venture to speak of Medical Schools. I only think of my own subject.

13,710. Then the next point is recognition of vested rights. That will be merely what you told us about life interests?—I wish to say sometime about locality. This new University ought to be localised. It ought to be started as the London University. I never could find out by what right London University calls itself a University. It is an examining body and not a University. It is a mere abuse of language to call it a University; and if "University" has its own historical meaning, it be applied to the London Examination Board. But at the same time I should not touch London University. I should say, "By all means, go "on. If you like to come to us, we will give and "endorse your degrees, but if you like to give your "own degrees, go on, and the fittest will survive."

13,711. You would start a new University?—Yes, and, if possible, a new building. It would be difficult to find a locality. The only locality I can think of is a building which, though it is not exactly empty, is very roomy, and that I should say is the Imperial Institute. We want an Imperial University, and we have an Imperial building. It seems to me that the proper or the central habitat of that University would be the Imperial Institute.

13,712. But our idea is to start a University for London, and not to start an Imperial University?—Whether it is Imperial or for Imperial London does not matter.

13,713. You wish it to be Imperial?—Yes; it is meant to be Imperial; it is not to be provincial.

13,714. The idea of a great many people is that London does want a University all to itself. Of course, there may be differences of opinion about that?—But London besides being provincial is also Imperial.

13,715. You think this new University ought to be Imperial?—Yes, in every sense of the word.

13,716. Have you loooked at the Charter of the Gresham University?—Yes, but that would only hamper a new University.

13,717. You do not think it could be knocked into shape?—I think it might be. In fact, it shall be received with open arms, but on our own conditions. What we are aiming at is a real English or Imperial University, and what I think ought to be the greatest University in the world, considering all the appliances, and all the old foundations which would not be absorbed by it, but really raised to a higher station and to a more vigorous life.

13,718. And taken possession of?—By being incorporated in this new University they would receive new life.

13,719. What institutions would you take in this way and appropriate, can you tell us?—I should neither call it taking possession of nor appropriating. I should say we are ready to receive anybody who likes to come and show them what an advantage it would be if they gave their degrees, not in the name of a small body, but in the name of the University of England.

13,720. And leave it to themselves to come and offer to join?—Yes, if they do not offer to join, it is a question which lives longest, whether this new University or these old corporations.

13,721. Where would you look for the money endowments, from the State, or where?—Partly from the State, partly from elsewhere. I should hope that the different museums, societies, and corporate bodies who join the new University, would see that it was their interest to be merged and brought back to life in this new University, and that, therefore, their funds would follow the representatives of the institutions.

13,722. You might hope for individual endowments, too?—Certainly; and to return to the Imperial Institute. I ought to say that one branch of the new University is actually located now in the Imperial Institute, viz., the school of Oriental languages under the patronage of the Prince of Wales. That is actually located in the Imperial Institute, and there are rooms enough. But, even if lectures are given in different localities in the West End or in the City, the buildings should all belong to the University. That is the same in other University towns, Berlin, Leipzig, and so on. The buildings are scattered in different parts of the town, there is the academic quarter; nobody begins a lecture until 15 minutes after the time in order to give the students time to go from one place to another, and I always think that a lecture of three-quarters of an hour is far superior to one of an hour.

13,723. Almost the whole education would be carried on by lectures?—Lectures, museums, and laboratories, and particularly seminaries also.

13,724. You would not be able to encourage anything like close personal acquaintance and intimacy between the teachers and pupils, which is very useful?—That is a very important point, and that is a weak point in the German Universities. There is very little intercourse between the professors and students, except the cleverest students; a clever student is sure to come near to the professor, and get his advice, but the greater majority of students go to the German Universities, and get no guidance whatever. That is a great misfortune, and it causes much waste of time and energy. A young man goes and hears a number of lectures, and often misses those he ought to hear. The result is that he wastes a year or two, simply because he has not the advice of a professor. In the American Universities every professor is supposed to see a number of young men and give them advice, and that I think is very useful.

13,725. That would be more easy in connexion with particular colleges, would it not, than if these colleges were all absorbed?—Absorption does not mean destruction. These different colleges and their buildings would exist just the same, only their whole spirit would come from the University, not from their separate centres of interest.

13,726. I understand you would start entirely afresh, and try to make a new University. Have you thought at all of what its constitution would be? I suppose its governing body would be a Senate?—The governing body would be a Senate, because here again the Senate, consisting of professors, is the only body whose own individual interests are identical with those of the University.

13,727. And the professors would be largely represented on the Senate, would they?—The Senate should, I think, consist entirely of professors, of all the professores ordinarii.

13,728. Like in the case of the German Universities?—Yes.

13,729. You would have nobody nominated by the Crown?—Every professor is in the end nominated by the Crown.

F. Max Müller, Esq., M.A.

27 Oct. 1892.

13,730. But not like some of the present Crown nominees of the London University. You would have nobody elected by the Crown. You would have them all elected by the professors?—They should all be selected by the professors, except certain officials. Much of the administrative work might be done by Government officials. The fees for lectures, for instance, are collected in German Universities by a Government official, the Quæster of the University.

13,731. Would you bring the Government in in this new University?—Something like the Government. I think public opinion ought to be represented.

13,732. How would that be done?—By a President of the Council, I suppose, or some educational department of the Ministry.

13,733. Somebody nominated by the Crown?—Yes, but sanctioned by Parliament.

13,734. Do you agree with Boards of Studies elected by the different Faculties?—I think they answer very well.

13,735. And that these Boards of Studies should be consulted as to the curricula and syllabuses of the examination?—Yes I do not see who else could be consulted.

13,736. And do you think that the University ought to be divided into different Faculties—different groups of teachers?—Yes. And those Faculties, of course, can be subdivided. There should be sub-Faculties of course. The old tradition is that there is one Medical Faculty, but that Medical Faculty should be sub-divided into three or four different Faculties. There is physical science, independent of practical medicine. There are preliminary subjects, such as botany, chemistry, and even a certain amount of Greek and Latin, required for a man who wants to pass his final examination in medicine.

13,737. Would you have to have a Board of Studies for each sub-division, or one Board of Studies for each Faculty?—There is one for each sub-Faculty, and one for the whole Faculty.

13,738. A Board of Studies?—Yes.

13,739. And this Board of Studies for each subdivision has a voice, has it? The chief thing that a Board of Studies has to do in a school is to arrange the scheme of examinations?—Yes. Well, the examination, of course, is the chief difficulty. One growing difficulty is that the number of students is so large that it becomes physically impossible to examine each as he ought to be examined. Anyhow the time of the professors is too valuable to be spent in the examination of thousands of young men; still I agree that it is most desirable that the teachers should be the examiners. I feel that very strongly.

13,740. You do not think that there would be an objection, that they would be partial or anything of that sort, to favourite pupils?—I do not think that danger exists. The real danger, I think, is that an examiner is apt to be not quite fair to his own pupils. That is my own experience. If I open the papers, and see one or two pages taken from a book of my own I say: "What shall I do with this man. He has learnt it, and "ought to have the benefit of it, but still he got it all "out of my own teaching." I think, on the whole, the examiner is a man of honour, and his great object ought to be, not to find out what a man does not know, but to find out what a man knows, and that his own teacher can do best. Of course you must have certain safeguards. In a German University, for instance, the whole of the Senate is present at an examination, or may be. Any member of the Senate may ask a question.

13,741. The teacher is always the examiner?—He is always there.

13,742. I suppose the difficulty would be where some of those he examines were some of his own pupils, and some were not. Then he would either be partial to his own pupils or the other way?—That is a difficulty which cannot be avoided. If people are to be examined who do not belong to the University they must take their chance. Those who belong to the University ought to have the right to be examined by their teachers in the presence of independent judges.

13,743. Or perhaps their teachers join with an independent examiner?—Yes. Mistrust will always exist in the minds of the public, but anybody who has been an examiner knows that downright dishonesty among examiners does not exist in reality.

13,744. The difference between your plan and that of most of the others is that you would have almost the whole of the Senate to consist of men elected by the professors, perhaps somebody appointed by the Crown to superintend them, but the bulk would be professors?—Yes.

13,745. Then with regard to the payment of professors, would you have them paid partly by fees?—The fees should go towards a common University chest, because the difficulty is that certain subjects are such that you cannot expect a large number of students, therefore the professors who teach those subjects ought to receive a certain share only of the fees which belong to the University, and which are raised on account of the University. There are some professors in German Universities who make too large an income. In a very well known case, that of Professor Savigory who was Professor of Law at Berlin, the King wished him to be Minister of Justice, but he said: "I cannot afford "it. My income as professor is larger than it would "be as Minister of Justice." And it stands to reason: if he has two courses of lectures, one of four hours a week; another, of two hours; he charges two louis d'or, say two guineas, for one course, and one guinea for the other. He gives those two courses twice a year. If he has 400 pupils, this would show an income of 2,400*l.*, which in Germany is a very large sum.

13,746. In Germany it is not the system to have a common fund?—No.

13,747. (*Professor Ramsay.*) What subject was that salary in?—In law. But it is just the same in theology. I attended Professor Neander's lectures on Church history. There were 400 pupils there, and he received his two guineas from each. Of course, he did not receive it himself. The University collects it, but he gets the whole sum, excep what he remits to poor students.

13,748. (*Chairman.*) And you do not think that is right?—Well, I think it is unfair to professors who teach but popular subjects.

13,749. Have you anything to say about the subject of degrees?—A degree should certainly be given by the professors of the University, but a degree should be nothing more than a certificate that a man has done his duty during his stay at the University. It should be an indication of an academic status, and nothing else.

13,750. You said you did not care to say anything about the Medical Schools. There is also the question of law. Have you made out how that would be brought in at all?—I do not wish to express an opinion that the old examining bodies which now exist, whether in law or in medicine, should be done away with—far from it—only they should in future teach, examine, and grant degrees in the name of the University. During a period of transition they should be interfered with very little indeed, but still the highest authority should always be the University.

13,751. With regard to law, you would have to act in harmony with the only existing body which really teaches practical law, which is the Council of Legal Education?—Yes, only teaching should be given within the University, if it is to be given at all.

13,752. By the same people who give it now?—If they are willing to give it.

13,753. The University being supreme?—Yes, and they themselves representing in future the supremacy of the University. It is a question of name simply.

13,754. I think I see the general scope. I do not know whether there are any more particulars you would wish to give?—I regret that I was not aware that I might have given written evidence, and if you will allow me I should like to be allowed to write what I should wish to say in order to give to England the best University in the world.

(*Chairman.*) We shall be very glad to receive it and will put it in our Appendix.

13,755. (*Lord Reay.*) With regard to the selection of professors, in Germany there is a system which we might call a system of promotion of professors from the lower ranks—assistant privat-docent, professor extraordinarius, and professor ordinarius. Would you consider the new University well advised in following that system?—It seems to me to answer extremely well. Of course the danger is for the old professors to become indolent. In the German University they are kept alive by the professor extraordinarius, and the

professor extraordinarius is kept alive by the Privat-docent. The real advantage is that the University offers a well-established career. The great difficulty in a country like England is that almost every career is more or less of a lottery, particularly the academic career. In Germany if you once take the first step, and do your duty, you are sure to rise to the top of the tree. The privat-docent becomes in time professor extraordinarius, and the professor extraordinarius becomes professor ordinarius.

13,756. You would like to create for the students an incentive to scientific labour by promotion from privat-docent, professor extraordinarius, to professor ordinarius, and if he prosecuted his scientific career he would thereby secure for himself finally a Chair?—Yes.

13,757. So that the Chair would not be the result of the exercise of patronage or of any fortuitous circumstances, but would distinctly be the result of his own scientific exertions?—It is so.

13,758. You would create a career for professors?—Yes, it should be an open career and a safe career.

13,759. I understood that you would distinctly make in the new University the Faculty its most powerful unit. You would give to the Faculty the supervision of studies and examinations?—Yes, in each Faculty. And then there should be a meeting of all the Faculties the Senatus academicus, where general questions may be discussed.

13,760. And you would compose that Faculty only of the professors recognised by the University, who would be the equivalents of what are called in Germany the Ordinary Professors?—Yes.

13,761. The lower class of teachers would not be members of the Faculty, but they might be called upon by the regular members of the Faculty to deliberate with them?—Yes, but without a vote.

13,762. Then with regard to the appointment of professors, you would let the Faculty consider the subject in the first instance, but the proposal reaches all the other Faculties, before the governing body, the whole Senate of professors would be consulted and would give their opinion?—Of course in practice if the special Faculty nominate one professor, the other Faculties accept him, unless they know that there is some scandalous proceeding going on. There are drawbacks in all systems of nomination, in the German system and in the English system, but I should try to get the interest of the electors to be the same as the interest of the University. That seems to me to be the only way out of the difficulty. You say to each Faculty, "Give us your best men."—Of course there are friendships, and cliques everywhere—but in any glaring case, the other Faculties can interfere or warn the Ministers of Education.

13,763. You would have a double corrective, in the first place, all the Faculties, and in the next place the final control of the governing body?—Yes, whatever that governing body may be in England or in Germany.

13,764. The Faculties would be composed of professors only, but in the governing body you would see no objection to admit outsiders?—You must have in England representatives of public opinion, public opinion will be heard, and should have a recognised channel for making itself heard and felt.

13,765. The chief guarantee against the lowering of degrees, you do not seek in the examinations, but in the excellence of the teaching, and in the careful selection of the professors?—That is the secret of success in every University, to get the very best professors you can. Then comes the question, is a good professor a good teacher? There, again, you cannot lay down a general law, but I say, as a rule, the man most devoted to his own subject is in the long run the best teacher. He is not the best coach perhaps, but he is the one who will excite love of knowledge, and who will be able to help a man to acquire what is really valuable for life. A clever student will become first of all an assistant, then a friend of the professor, and he will go into the workshop; whereas we simply keep him at the show window.

13,766. And to save the time of the ordinary professor, you would allow the examinations to be conducted by the assistant professors who would be well acquainted with the teaching which had been imparted to the student by his professors?—I think that must be so. It seems to me impossible for a professor to examine the candidates every month, and the whole year through. A great deal might be done by assistant examiners. There might be a kind of preliminary examination which would eliminate a good many men not fit for a degree. Then if you got a report from a certain number of assistant examiners, the chief examiners, or those who give the degree, might still satisfy themselves that the work of the assistant examiners was well done. That is extremely easy when you have to deal with classical scholarships. If the assistant examiners will simply write down proper notes the head examiner will form his opinion accordingly.

13,767. You attach importance to the Matriculation, not only because it would prevent the classes being encumbered by students not fit to attend the lectures, but you also attach importance to it, because thereby you hope to improve the average of the boys from the secondary schools?—Yes; first of all it seems to me to be a *sine quâ non* that there should be a certain level below which you need not suppose that the members of your audience will fall. The practical consequence will be that a University which has hitherto admitted men which are not fit to follow University courses would for a time find some of its colleges empty; but what would be the result? Our public schools would exert themselves and in time fill those colleges with men who are fit to be members of the University. That painful transitional stage when certain colleges will be empty will be a terrible time. But the first consideration should be the University, not the colleges. The University should raise the colleges, instead of allowing itself to be strangled by them.

13,768. Coming to your own branch of science, how would you organise the teaching of Oriental studies in the new University?—I have given my opinion upon that subject with regard to the new school of Oriental languages which has been opened at the Imperial Institute. Our chief object at present is to get the best professors, but we have not got the money yet for paying them properly. They receive nothing. We are trying very hard to get some help from some of the City Companies. The first thing is that you must have professors, and you cannot expect professors to work for nothing. As soon as we have the professors we shall make it known that they are there at the service of the public, ready to teach Hindostanee, Turkish, Persian, Arabic, and other modern Oriental languages. I know from my own experience that there are mercantile houses most anxious to get young men as travellers, who will be able to converse with people in the East, and open new markets in the East. If it became known that there is a demand for that class of men, I think young commercial men would come and attend our lectures, particularly in the evenings. I know a large calico printer, who prints for India, Africa, and China. He came to me and said, "I must know what patterns to use for each country in the East, or my business will suffer," "For instance," he said, "if I print a god in blue who ought to be in green, that stuff will not sell." This shows that a combination of commercial knowledge with foreign languages is important, and how important it is I think we may best see from the enormous expenditure which foreign governments are incurring at the present moment in order to produce a staff of young men possessed of those qualifications. They have doubled their seminaries for Oriental languages, and there are hundreds of lectures, attended by missionaries and diplomatists and chiefly by commercial people. They get the best men possible to teach, and the whole expense is borne by the Government, that is to say by taxation of the country. This is not done for nothing.

13,769. Then you consider that both for linguistic and philological purposes and professional purposes an Oriental school in London attached to the Faculty of Arts would have a good future before it?—Yes, as soon as it was known. We have the rooms, we have the library at the Imperial Institute, and we have the professors, but their lectures are hardly known. We have scholarships, but as yet no candidates. And our professors receive nothing!

13,770. When you spoke of the University being Imperial, you meant thereby that a University such as London ought to have, would attract students from the Colonies, from India, and also from the continent of Europe?—Yes, and in that sense I should say a National University located in London would be an Imperial University.

13,771. (*Professor Sanderson.*) You have referred to a seminary as a constituent of a German University,

F. Max Müller, Esq., M.A.

27 Oct. 1892.

would you explain what you mean by that?—It is to remedy a defect inherent in the system of German Universities. The weak point in a German University is that an undergraduate has no right to call upon a professor unless he has a letter of introduction. That is remedied to a certain extent by each professor having either a seminary or a society. If that is known, an undergraduate tries to get admitted. He has to write an essay, if he wants to be admitted. If the professor approves of his essay, he becomes a member of the seminary or society. Then he comes into contact with the professor, and the professor will tell him what to do and what not to do. I speak from my own experience. I soon became a member of the Classical Seminary under Gottfried Hermann, of the Latin Society under Hacept, and of the Philosophical Society under Lotyz. The first thing that Hermann did was to warn me against the study of Sanscrit, "a most dangerous innovation," he called it. Still I found it useful. Soon afterwards the professor would say: "I wish you would read this book for me, and tell me what you think of it." That is an enormous help. The next thing would be that he would give to one of his pupils a manuscript and say, "Collate this for me, and give me your collation." By that means a student makes himself useful to the professor, and the professor repays him by guiding his studies and thinking of him when there is an opening.

13,772. Is a society the same thing as a seminary?—The seminary is a society which derives a certain support from Government. You receive a small sum every year if you are a member of the seminary. If you are a member of the society you have simply the honour of it, but no emolument.

13,773. It is really a school under the professor?—Yes, you meet once a week, read a paper which is discussed in the presence of the professor, then you get the advantage of seeing the professor, and whenever you like, of consulting him.

The witness withdrew.

Adjourned to to-morrow morning at 12 o'clock.

Thirtieth Day.

Friday, 28th October 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

P. H. PYE-SMITH, Esq., M.D., F.R.S., examined.

13,774. (*Chairman.*) You contributed a letter to the last Commission, which is to be found in the Appendix?—Yes.

13,775. That gave your views at the time with regard to the subject, which is before us?—Yes.

13,776. I think at that time you were strongly in favour of the present University of London taking part in any new arrangement that was to take place? Are you still of that opinion?—Yes, strongly.

13,777. Do you think that in spite of their failure during the last two years to come forward and accept the position which was offered to them, we may still hope that they will do something in that way?—Yes, certainly. That failure was due to causes which need no longer operate.

13,778. Do you think that the Convocation of London University would be more willing to accept a scheme like that which was offered to them by the Senate?—I think probably they would, but I hope that the scheme itself would be much better. The scheme was a forced one, and I do not think expressed the real opinions of the majority even of the Senate.

13,779. Do you think that if we were to elaborate a scheme the Senate would be inclined to adopt it?—It is very difficult to speak for one's colleagues, but I should think so. I think the majority both of Senate and Convocation would. I think this Commission would speak with an authority very different from anything which has preceded it.

13,780. And supposing Convocation not to agree, do you think there would be any means of over-riding it, and compelling it by an Act of Parliament, or anything of that kind?—That is a question for a statesman. I suppose an Act of Parliament can do anything. I do not know an academical means. I should hope it would not be needed. I think Convocation would be reasonable.

13,781. You are very strong against there being two Universities for London, are you?—Yes, I think that would be fatal to ever making a real strong University.

13,782. You would be against, not only the Gresham Charter, but whatever University we might construct, if it did not embrace London University, and if the London University still went on, you think it would be objectionable?—I think they would ruin each other.

13,783. In what way do you think they would injure each other?—Chiefly in two ways; first, to make a real University fit for and worthy of London considerable funds are necessary, and, whether or not help were obtained from the Treasury at first, there can be no doubt that in a country like England and in a city like London there are large sums available for public purposes of this kind, and they would, I think there can no doubt, be freely given to the University of London. But to divide that into two things, a University so called, which would not be a London University really, and the

Gresham University, which would have to be explained, which people would not know of, and which would be continually confounded sometimes with University College and sometimes with the University of London, would just spoil any chance of adequate recognition and endowment.

13,784. Has the present University of London received much in the way of private endowment?—Not much.

13,785. I suppose if it is to be merely an examining body it would not want much, would it?—Perhaps more than would appear. We now want fresh laboratories. We have been dunning the Treasury for two or three years, and have not got them yet. But, apart from that, the existing University is already something more than an examining body. We have had the Brown Bequest, which has been used for the advancement of science in the erection of the Brown Institution which does extremely good work.

13,786. That is your principal objection, that it was interference with endowments. Is there any other? The second one touches examinations. At present the examinations of the University of London rank as they deserve to rank very high, those of medicine, those of science, and I believe those of law, and even those of arts, though not so high as the others. But they all rank high, and the examinations are probably more severe than, or as severe as, those of any other British University. That reputation is the strong point of the existing University of London. If another University side by side were founded, it appears to me that it would have to bring the standard of its degrees very decidedly below the standard of the existing University, or it would get no students. No ambitious young man would go there when he found he could pass the examination of the University of London.

13,787. You take it that the present University of London degree would always be thought more of than the new one?—It would certainly start much better, and it would only have to keep up its standard to keep the advantage. All the clever and ambitious young men would go there, and the new University would always be a poor thing.

13,788. You seem to take for granted that if the University of London took the work they would maintain their present degrees exactly as they are?—I hope they would, but in any case there would be no occasion to bring them down, whereas the proposed Gresham University would be bound to bring their degrees down in order to get custom.

13,789. You would not contemplate the idea of the University of London, supposing it to undertake the task, having a separate side, and having separate degrees for those who come from the constituent colleges, from those that they give to the whole world now?—I am not opposed to that now.

13,790. Then they would be giving two different sorts of degrees, one to meet the wishes of the medical students, and the other of the same description as those that they give now?—I beg your pardon, I do not make myself clear perhaps. I should be sorry indeed if the degrees were to be lowered to meet the wants of anybody. I think they should be kept as high as possible, but I do not see any objection to there being two sides to the University in this sense, that it would be open to outsiders as well as to collegiate students. But the standard should be, I think, still the same.

13,791. The same papers?—Yes; as far as I am concerned I would say the same papers.

13,792. Practically the same examination?—Practically the same examination.

13,793. Admitting the students of the affiliated colleges and outsiders as well?—Quite so.

13,794. The idea of a teaching University is that there should be some close connexion between the teaching and the examination, and that this should be secured by the teachers having a voice in deciding the curricula of the examinations. This, therefore, would seem to put those who have been brought up in the colleges affiliated to the University, and represented on the Boards of Studies at an advantage as compared with outsiders. Do you think there would be an objection to that?—I think that is very much exaggerated. As a matter of fact, if the Commission were to look through the Calendar of the University of London, they would find that a very large proportion of the examiners have always been teachers in University College, King's College, and the London Medical Schools. They are so at the present time, and they do examine their own pupils.

13,795. You think that this does not put outsiders, who come from the country at a disadvantage?—I think not.

13,796. Particularly if there were outside examiners?—I think not. If you look at Oxford, Cambridge, and Edinburgh there is always a number of outside examiners coming in.

13,797. But not to such an enormous extent as in the case of the London University, whose candidates come generally from the United Kingdom and the Colonies?—I was not speaking of candidates, but of outside examiners. I mean that these Universities combine the examinations by the local teachers with the independent influence of an outside examiner. Practically, you will find that it is very much the same at the University of London. Almost always you will find a teacher examiner along with one that is not. I am not sure that in some Faculties you would not find more teachers examining in the University of London than at Cambridge.

13,798. London University at the present moment does fulfil very much the office of a teaching University if what you say is the case?—In so far as the teachers have a fair share of examination, certainly; but, as a teacher myself, I think it is very desirable that the teachers should have more share in framing regulations, and that it should not be, if I may say so, a haphazard or occasional thing, but should be done in a definite and regular way; and the Senate of the University have, I think, shown their sense of that want by again and again, in the various schemes that they have brought forward for reforming the University, providing for Boards of Studies of teachers, and generally examiners with them, who should regularly, as a matter of duty, advise the Senate. That seems to me a very desirable improvement. It gives the teachers a position which is only just to them, and which would greatly improve the University.

13,799. You are in favour of the Faculties electing Boards of Studies and of Boards of Studies having a voice?—Yes.

13,800. And you are also in favour of re-modelling the Senate of the University of London so as to represent the teachers more than they represent them now?—Yes.

13,801. You told me, I think, that you did not quite approve of the last scheme of the Senate, which was rejected by Convocation. Will you tell me the chief points that you object to in it?—Chiefly, I think, it gave a great deal too much to University College and King's College. The Senate were threatened with this Gresham Charter, and, practically, we yielded almost everything that was asked. I think we gave too much.

13,802. Do you think they gave too many representatives on the Senate?—Yes, though I do not think that was the most important thing.

13,803. What was the most important concession?—I think the most important was allowing some of the examinations to take place at the two colleges. It seems to me that the teachers ought to have an influence in advising the curricula, and a due proportion of teachers ought to be on the Governing Body; but it does seem to me that the old principle which has been so often recognised is a good one; that the examining part of a University should be distinct from the teaching; that it is not wise either for teachers or for pupils that the teachers should directly and immediately examine their own pupils, and give them degrees.

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

13,804. Not even for the preliminary examination?—I think not.

13,805. But you do not object to the teacher examining in conjunction with an external examiner?—No, especially when he will have others besides his own pupils. That seems to me to make a difference.

13,806. That seems to me to introduce difficulties of another sort; because he might favour his own pupils, and disfavour outsiders?—I do not think that is found in practice, either at the University or, at what is called the Conjoint (Medical) Examination in London, which is conducted just on that principle. I have examined there for a long time, and I have never heard any complaint on the ground of partiality.

13,807. (*Sir George Humphry.*) The teacher there never examines his own pupils?—He never examines his owns pupils individually; but they are all teachers, and they all examine their pupils collectively.

13,808. But the pupil is always referred to the teacher who is not his own teacher?—Yes, and so it is at the University of London. When Professor Burdon Sanderson and myself were examining together when a man came from Guy's, Professor Sanderson always took him.

13,809. (*Chairman.*) Do you think it is necessary to have provincial colleges represented in any way in this new University? Supposing the London University is reconstituted to meet the demands that are now made upon it, do you think it would be necessary for the provincial colleges to be represented as they are in this draft scheme?—That I regard as a political question. It may be necessary, but on academical grounds I would much rather not have them. I would have a University for London allowing outsiders, and anybody outside London would be an outsider.

13,810. Then with regard to the medical side of the question, you have a note about the academical character of the London Medical Schools. Is it that you think them too academical, or not sufficiently academical?—I think it is not sufficiently recognised that they are academical institutions. The old plan of medical students being apprenticed in the country to the art and trade of an apothecary, and then coming up to walk the hospitals for a year or a year and a half or possibly two years, applied to medicine 50 years ago; but the course has been entirely altered since, and at the present time the great schools are thoroughly academical institutions quite as much as, and in some respects more, than University and King's Colleges, almost as much as Oxford and Cambridge.

13,811. Is the scientific teaching equal to the practical teaching?—I think it is as good, but one would like to see it both better still.

13,812. You would not wish to interfere too much with the present Medical Schools. Are they doing good work, or would you wish to give medical instruction in a different way?—I should be sorry to injure them in any way. I belong myself to one, and I am much attached to it. But I think we should be better for forming part of a University. I think our students would be better for having access to other teachers besides those of their own school. Already we do a great deal for them and they do a great deal for themselves. I think they are a more homogeneous body of men; they have more *esprit de corps;* they have more interest in their studies, and work harder than any set of men at any college I ever met with in this country or in Europe.

13,813. How would you include them, and bring them more into harmony with the University? Would you give the University more power to superintend the course of study?—One thing would be to have University Lectures to which every student should have access, especially the senior students. That would be one thing. There are some subjects, comparative pathology, the history of medicine, and several others, which cannot be taught at one school, but if there were University Chairs provided for those subjects there would be plenty among the vast number of men in London to support it.

13,814. For the higher part of medical education, and the less practical part, the more scientific part, would you give the University power to interfere in the internal arrangements of those schools, to appoint the teachers or anything of that kind?—That would be a very doubtful thing. I think on the whole they are well appointed, and I think it would create a great deal of jealousy. In time the University would get an influence which would be very desirable, but direct interference would do more harm than good.

13,815. Would you contemplate their being affiliated to the University when it is reconstructed?—Yes.

13,816. Something in the same way as they are in the Gresham Charter, and in this draft scheme of the Senate?—Quite so.

13,817. By being represented on the Senate, and by the teachers forming a Faculty selecting Boards of Studies?—Quite so.

13,818. I think that is common to the two schemes?—Yes.

13,819. Then with regard to the possibility of a collegiate or non-attached side to the University of London?—That I think has been often brought forward before this Commission, and before the former Commission, that it is quite possible to have a collegiate and unattached, or non-collegiate side to the University. At Oxford and Cambridge since non-collegiate students have been recognised, the principle that collegiate education is not necessary has been admitted, and has worked, and at the University of Dublin, I believe it is the case that they have a still wider system by which men need not be in residence at all, but by certain regulations as to examinations they can take their degree without having been in Dublin, or by having been there at all events a much shorter time.

13,820. Are you practically acquainted with the arrangements of the Dublin University?—No, I am not.

13,821. Those seem to be the main points which you wish to be examined upon. Is there anything which I have omitted which you would like to go into?—No, I have indicated those points upon which I thought I might be of most service.

13,822. Supposing there to be insuperable difficulties in the way of the London University undertaking the task, either from their unwillingness, or from any other cause, do you think it would then be possible to establish an efficient and effective University without their help?—Only if they were cleared out of their way. I think if that were the case the University of London ought to be dissolved.

13,823. Would it be possible in any way, do you think, to make a scheme which could be offered to them, and which if they refused to conform to, could be started independently of them?—Yes, no doubt.

13,824. But you have hopes that they might change their minds, and might agree to co-operate?—I do not think they need change their minds. Reform began with the University; it is 15 years ago since Mr. Thiselton Dyer, Mr. Carey Foster, Mr. Anstie, myself, and three or four more, began to move for reforms in the University. We sent up resolutions again and again to the Senate asking for more power for teachers, and for more care in the laboratories, and research in the University.

13,825. And you carried them?—Yes, in Convocation.

13,826. The Convocation is a very fluctuating body, and when they come and get excited together in large numbers they take a perfectly different view?—Yes, that is so.

13,827. (*Professor Ramsay.*) You are a member of the Committee of Convocation?—I was for many years.

13,828. Do you represent the views of your colleagues who have taken a leading part in this movement?—I think we should be in general agreement, that is to say, that we all agree still as to the necessity of there being one University; the importance of having greater influence of teachers in the

present University; the importance of combining all the higher institutions in London together, to give strength and influence, and to avoid the evil of having divided forces.

13,829. Do you consider it essential that Convocation should have a considerable representation on the Senate?—No, they must have some; but what is most important is that in any election by Convocation each Faculty should elect separately. It is the great mass of Convocation dealing with men they do not know—that makes its action often unsatisfactory.

13,830. Do you not think it an unfortunate thing with a view to the future as well as the past, that Convocation should have a veto upon any proposed change in the constitution of the University?—Yes.

13,831. Is not a veto the very worst form in which the views of such a body could be expressed?—It is a very bad one. I do not know whether it is the worst.

13,832. It might be advisable to give Convocation, perhaps, an initiation in moving questions and discussing them, but to enable them to give an absolute veto without assigning a reason is a sure way of bringing the University system to a deadlock?—Yes.

13,833. (*Sir George Humphry.*) You have mentioned that you think Convocation would assent to the scheme, which this Commission might propose, but I suppose that would depend on the nature of the scheme?—It can only be a hope; but Convocation after all consists of reasonable men.

13,834. The point is what sort of scheme you think Convocation would assent to. You have mentioned the proposal to admit teachers more largely upon the governing body, and the teachers also should have a greater power in the method, plan, and scope of the examinations, but there are other points to be considered beyond that. It has been suggested that the examinations of other bodies—such, we will say, as University College, King's College, and others, should be accepted to a certain extent, indeed it has been suggested wholly—in lieu of the examinations of the University *pro tanto*. That is to say, for instance, to take one example, we have had very interesting evidence respecting the University Extension Association which operates over a very large number of the inhabitants of London. Some of the students there have shown themselves able to pass the examinations of the University of London, and it has been thought that it would give very great impetus and increase the force of that University extension system very much if the teaching and the examinations conducted there under the supervision of the University altogether should be accepted *pro tanto* towards the degree of the University. What do you think of that? That is a very large question, is it not?—I am afraid that the majority of Convocation have, owing to recent events, got a strong prejudice against teachers of University College, and King's College in particular, which I for one very much regret. Probably there would be the same feeling with regard to the University extension pupils.

13,835. There would be difficulties of course in applying any plan of that sort to any one class of teachers or to any one system. If it is to be done at all it must be done rather widely you think? The cases in which it would be adopted must be regulated by the University itself, as it finds certain teaching good and certain examinations good. That is a large and very important principle. Do you think that principle would be accepted by Convocation?—I am afraid I have not sufficient knowledge with regard to Convocation to say. They would be much more likely to accept it from the University extension stand point than from the collegiate stand point, as far as I can judge.

13,836. Of course if we admitted them from the University extension it would seem rather severe upon the colleges which profess to give, even if they do not give, a more complete education, that they should be left out?—Yes. I think Convocation would see that, and it would facilitate the passing of a measure of that kind.

13,837. We have had a very important person before us who is remarkably well acquainted with these subjects, viz., Professor Huxley, and his feeling was that the University should be open very largely in that way. Do you think it would be desirable, irrespective of Convocation, that it should operate largely over the education of London?—I am a little afraid of extension at present. I think the great object is to get the highest education organised in London—education to which men could give their whole time—working all day along.

13,838. That the University should have the power of operating largely over the general education of London?—Certainly the power, and I hope the influence will come in time.

13,839. You do not judge that it could claim to direct the education going on under any particular system, unless it gave some privileges to those who were so educated. That would be its force—its lever of action?—No doubt.

13,840. Therefore that is a very important question, but you would hardly give an opinion upon that?—I am not sufficiently acquainted with the University extension scheme to give an opinion upon that.

13,841. I do not mean the University extension scheme only—I only give that as an illustration—because there are a number of institutions doing similar things. There are a number of institutions giving night lectures, the Birkbeck Institution, the City of London College, and a variety of others, which are instructing the people and doing very large and important work?—No doubt.

13,842. But you would hardly give your own opinion about it?—I do not know enough about it.

13,843. Does the University make any contribution to the State? Do any of the moneys which come into the treasury of the University pass on to the Treasurer of the State?—At present the arrangement is, we all feel, a very unsatisfactory one. The whole finances of the present University are a mere department of the State. Formerly the State used to be loser by it. At present I believe it gains a little.

13,844. We cannot build much upon that?—No, it just about pays the last few years.

13,845. You said you would not like to see the standard of the examinations lowered. I apprehend that that is a question which must be determined entirely by the University itself from time to time, and which should not be at all depending upon the Charter, or anything especially which this Commission might recommend. That must depend upon themselves?—I think you may be quite certain that the University of London will keep its degrees high. But if you have two Universities competing with each other it cannot be done.

13,846. Then coming to the medical profession, you see it is a very great demand from the profession, one, which is urged upon the Government, that there should be facilities for obtaining degrees comparable to those existing in Scotland. How do you think that is to be accomplished?—Personally, I long ago brought forward a proposition, which I am afraid will be thought impracticable; it was that every registered man should have a right to call himself "Dr.," and have done with it. I think the competition among medical men for the title of Dr., which means nothing, is an unworthy thing in our profession. I should like to stop the whole thing and call everybody Dr. Then I hope that we should all gradually drop it as a title, and only use a University degree in medicine like one in arts.

13,847. (*Mr. Rendall.*) You refer to the title of "Dr." You would not mind putting M.D. after the name?—That has little value compared with the title of Doctor.

13,848. To those who understand it it means a great deal?—A great deal that is creditable or discreditable, according to the source of the degree. The M.D. seems to me to be hopelessly "degraded."

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

It does not mean education, it does not mean scholarship, it means nothing but an attempt to make out that a man is better than his neighbours.

13,849. (*Sir George Humphry.*) Still, at the present time it is an incident in education and it does operate as a stimulant to men to go to Universities?—To go to Universities and elsewhere.

13,850. They can obtain it only at a University at present, and therefore it is a stimulus to men to go to Universities?—If it takes them to Cambridge and Edinburgh it is a good thing, but there are other places which are only by courtesy called Universities.

13,851. A degree can be given only by a University, and therefore it does operate as a stimulus for men to go to Universities?—But you see what I mean: if it drives men to Edinburgh or Cambridge, I am very glad that they should go, but if it means that they are not to go to study at all, but only to go to pay a fee, I do not call that a University degree.

13,852. But in creating a University or enlarging the present University, there would be the anxiety that a larger number of students should profit not only by the advantages of the education which it offered, but by the advantage of the degree, and at present the title of "Dr." does induce at any rate a certain number to go through a higher standard of examination, and that stimulus would be lost if you took away the degree?—I do not think as a matter of fact it does make them go through a higher education or a higher standard of examination. At many of the Universities the examination is inferior to that of the conjoint examination of the two Royal Colleges in London.

13,853. The title of "Dr." is a stimulus?—The letters M.D., London; that is a legitimate thing; that is like a man getting honours at Cambridge. At St. Bartholomew's or at Guy's they have, I believe, the best education in the world. They work harder, they have the stimulus, and that is a good thing.

13,854. The desire to get the title of "Dr." now does act as a stimulus to education, does it not?—I should say not the title of "Dr.," but the fact that a man can say that he has taken honours in medicine at a University like London or Edinburgh.

13,855. I mean simply the title of "Dr."?—No, I do not think that does any good at all.

13,856. Now with regard to the facilities for obtaining degrees; supposing that is a thing that has to be provided for, which seems to be the case. The Senate of the University of London proposed a combination between the University of London and the Royal Colleges of Physicians and Surgeons, and that the result of the examination should be taken as qualifying for an M.B. degree?—I think that would be a wise step. It seems to me that it is a great pity to multiply examinations, and it would be quite easy for the examiners to give all men who come up to a certain standard a certificate that they were fit for the University. They might give that to the University and be excused further pass examination in that particular subject.

13,857. Would you allow that to include all the subjects of examination; for instance, would you allow that to enable them to escape the preliminary examinations, the first examination?—No, because that is such a very low standard of preliminary education for the bulk of the profession.

13,858. I mean the preliminary examination for the University of London, would you allow that to be excused?—No, I would not, because there is nothing equivalent to it in the conjoint curriculum.

13,859. That is regarded as a very considerable bar. They have to pass that at the beginning of their study, and when they have advanced two or three years in their study it is a hard thing to go back again?—To chemistry, physics and botany?

13,860. No, that is the Preliminary Scientific.—I beg pardon: I thought that was what you were referring to.

13,861. No.—Do you mean the Matriculation?

13,862. Yes. You would require them to pass that?—Certainly I would. I think the Matriculation might be improved, and made more accessible to boys leaving good schools, but I do not think anybody should enter our profession, certainly they should not enter our University, without having the sort of education which the Matriculation implies.

13,863. Would you think the Matriculation now required of all medical students by the Medical Council would be sufficient?—Not for proceeding to the University degree.

13,864. In short you think that obtaining the degree should be an indication of some higher standard of general knowledge?—Yes; it is one of the evils of bringing a degree low that you let in people who do not know how to spell, still less knowing the rudiments of English or Latin.

13,865. You assent, however, to the proposal for the combination between the University and the Colleges of Physicians and Surgeons?—I think it would be most useful.

13,866. What about the Society of Apothecaries?—I had rather not say anything about that. That is a great crux, I know.

13,867. It is a serious question, but it has to be met somehow?—I am afraid I cannot contribute anything to its solution.

13,868. Do you think the Society of Apothecaries should be admitted into that combination?—I expect that would be best.

13,869. But there is the fact of their existence?—I should think they must be included. They will do more harm outside.

13,870. And included with equal powers with the other two, would you say, or such as might be adjusted?—The latter.

13,871. With regard to the teaching of the Medical Schools it is suggested that what you may call the Preliminary Scientific teaching is in some schools not quite up to the mark; that there may not be sufficient laboratories, apparatus, and teachers to carry that work on well. Can you suggest any alteration with regard to that?—I think that for merely educational purposes the plan followed in the great schools is as good as can be wished, St. Bartholomew's, St. Thomas's, Guy's, and University College.

13,872. And the laboratories, apparatus, and appliances are good?—Yes, as good as they can be.

13,873. Are you acquainted with it in other schools. I do not want to be inviduous?—I would rather say that the other schools do not get credit for being as good as they are. The teachers at Charing Cross and at St. Mary's are very good. Dr. Waller, at St. Mary's, and Dr. Mott, at Charing Cross, are both men of the highest scientific reputation.

13,874. You feel that the greater number of Medical Schools are really very well organised for that purpose?—I think they are, but I should like to see them still better organised.

13,875. Do you not think it would be a better plan if the teachers and laboratories were congregated into two or three institutions?—Yes, I should think more probably half a dozen. The largest medical schools have as many students as they can manage I think.

13,876. Then supposing them to be organised in a smaller number, those organisations, I suppose, will have to be carried out in the existing school?—I suppose so.

13,877. There you come at once on a considerable difficulty. Suppose the students are required in considerable numbers to go to St. Bartholomew's, Guy's, and two or three others, then those particular institutions will have an increasing attraction for medical students?—Yes. I do not think that would be fair. I should have thought that the fairer way would be for some of the smaller schools voluntarily to club together, and they might have as good scientific instruction as the largest.

13,878. Even then it would have to be carried out at one of the smaller schools?—Conceivably they might have a common place.

13,879. There are difficulties attending that?—Yes; still I think they might be overcome.

13,880. It has been suggested to us, especially by Mr. Erichsen, that a University might carry out a high kind of teaching, even in the terminal medical subjects such as medicine, surgery, and midwifery; that there might be appointed University professors who would carry out that work in various hospitals; who would have the opportunity of going to this hospital and that hospital as occasion might require; and that that would be a very advantageous addition to the present plan of medical teaching; but that that should not apply to the bachelor of medicine but rather to those who are passing onwards to the doctorate. It has been suggested that teaching of that kind might probably be instituted by the University?—That is what I have always looked forward to, and it was one of the propositions of that committee in Convocation a long time ago of which I spoke.

13,881. University professors of medicine, University professors or surgery, and University professors of midwifery?—Yes, for instance, if it had been done 30 years ago De Morgan might have been University professor of mathematics, and Addison University professor of medicine, and so on. You would have had the greatest men in the kingdom.

13,882. And do you think that such a professor might probably be admitted to the various hospitals, and use the clinical material which might exist in abundance at any particular one?—Probably; but I should have thought that would hardly be necessary. Let the students come from every hospital to him. That would help to get them together.

13,883. The remaining point is that a University should not only conduct, regulate, and supervise education for its medical degrees, but that it should also take a higher standard and institute teaching which would be above that sort of level?—Which would not be remunerative.

13,884. If there be a higher class of professors of men who are devoting themselves to higher subjects and to research work, and so on. They would have to be paid independently of any fees resulting from the attendance of students?—That is what I meant.

13,885. And it would require very considerable funds to promote and carry on an institution of that kind worthy of London and worthy of this country?—Yes.

13,886. I think you rather intimated that you thought if there were one University such sum to a certain extent at any rate, might be provided from private sources?—I think so.

13,887. And do you think that the State would be likely to aid in that matter, or would you rather not give an opinion on that matter?—That is for statesmen to decide.

13,888. But it would be a very desirable thing from a national point of view?—Yes. I confess to a jealousy of the State interfering in University matters.

13,889. It would be very desirable that this should form one of the functions of the new University?—Yes.

13,890. (*Mr. Anstie.*) Although you have a jealousy of the State, from one of your previous answers I may conclude that you do not think the University should be constituted on self-supporting principles?—It must be independent.

13,891. It must be dependent upon State resources to some extent?—Until it has resources of its own.

13,892. You would admit Crown nominees?—Certainly.

13,893. You would not think that a bad element?—No, a good element.

13,894. If I may pursue the question Sir George Humphry was putting a little further, it appears from the report of the proceedings before the Privy Council that in their negotiations with the Senate in connexion with the recent scheme, the Medical Schools were content to have no institutional representation, the teachers in them being represented upon the Faculties and Boards of Studies; I daresay that is within your knowledge?—I regret it, but I am afraid the Medical Schools would be very much disappointed at not being separately represented. I do not think it is necessary. I hope they might be induced to give it up. The present feeling is that they would do so. It is somewhat a question between the large and the small schools. The smaller schools are afraid of not being represented. They say that the large schools would in any case be represented, and they fear that they would not be. As a member of a large school, I have always said I would be willing that they should be on a level with us—that Charing Cross, St. Mary's, and Middlesex, should have their representatives just as much as St. Bartholomew's or Guy's, but that would be only in order to allay reasonable apprehensions.

13,895. You opinion is that they might well do that?—I do not think there would be any real danger. But it is important not to let the smaller hospital schools think that they would suffer.

13,896. But any jealousies or difficulties of that kind would, I suppose, be to some extent removed by the method you were suggesting lately of such a union among them as would increase their staff, and give them a higher rank?—I think so.

13,897. Do you think that in an arrangement of that kind it would be desirable to include the whole of the Medical Schools of London?—An arrangement of which kind?

13,898. An arrangement for representation institutionally through the Royal Colleges, and for representation of their teachers in a University medical school. Would that be more advantageous, do you think, if it could be made to include the other two Medical Schools — University College and King's College?—Yes, very much.

13,899. The great Medical Schools in London have very great resources and very great power?—Yes.

13,900. A unification which would leave the internal administration of each particular body in the hands of those who now govern it?—Yes; we should have to be very careful not to meddle with the internal affairs of each body. There was a very wide clause in the Gresham Charter to that effect.

13,901. At the same time I suppose you would go a little beyond the Gresham Charter in allowing the University to recognise or refuse to recognise as competent or efficient any school or any particular professor?—Yes, and I suppose the University would have a right to object to the results altogether. But there is all the difference between interfering with the results and with the methods.

13,902. Would it not be a right thing that the University should have the power of witholding its sanction or giving its sanction to teaching the results of which it was required to approve?—Yes, I suppose so.

13,903. Might I extend that a little further. I do not know whether you have considered the question of whether it might be possible to constitute under the new state of things great University schools in the various subjects or departments with which a University has to deal, so as to gather into a University school, as distinct from mere collegiate schools, the teaching of the various institutions in London in its University relation?—That would be much what Sir George Humphry was proposing, was it not?

13,904. (*Sir George Humphry.*) I think that was, perhaps, the point which was with regard to Medical Schools, whether it would be advisable to congregate all the students into two or three larger centres which is what you mean, I suppose?

(*Mr. Anstie.*) I do not quite mean that. You have told me that in the case of the Medical Schools, you would leave the management of the finances and the resources in the hands of the existing administrators. I do not ask you to qualify that at all, but at the same time leaving that in the hands of the administrators you say that you think, on its University side, all the medical instruction might be treated as a unit?—Yes.

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

13,905. Might not that with advantage be applied to other branches of learning, so as to make each great department of learning and research in its University relation one thing?—I daresay that would be a very good thing theoretically, and an object that one might look torward to, but I confess that it does seem to me that if we are to unite all the existing higher bodies in London it is very important not to alarm them, and I should depend very much upon the influence that a well-appointed and wise Senate would gradually exert upon places like King's College, University College, and the Medical Schools. I think it is important that they should not have any cause for alarm with regard to losing their corporate existence.

13,906. I am not saying anything about their corporate existence. It has been pointed out by a good many important witnesses that nothing is more deprecated by those interested in the University education of the future than the creation of a body in which the conflicting interests should have their hands upon the throat of the University and control its action. Allowing all internal administrative powers to remain with the bodies, would it not be a reasonable thing that the University should, in the relations of the institutions to the University, treat them all as one. The institutions giving instruction in each particular department should be treated as one?—Yes.

13,907. You observe that is what is done in the case of the Faculties. In the case of the Faculties it does not matter where a man comes from; if a man is in the Medical Faculty he is in the Medical Faculty, whatever institution he may hold his Chair in. Would it not be possible to apply a similar method in dealing with institutional representation?—I think it might. I think all these matters will have to be negotiated with a special reference to the susceptibilities, not so much of the Medical Schools, but of University College and King's College. If we lose University College we should lose everything. We must have University College. The work it has done and its seniority entitle it to a position in the new University, and if they were to separate the Arts and Science Faculty from their Faculty of Medicine, it seems to me they would have an overwhelming voice in the two former departments of the University.

13,908. It seems to me that this would be no disadvantage to University College, and therefore it would not alarm their susceptibilities, and we may put aside that question. Perhaps you have not considered the matter, but if you have, I should like to know whether that system might not be an advantage to University work in the future?—I think so, but even then I should like to see them gather round a place like University College. It has evening classes.

13,909. No, no evening classes?—It used to have. At all events, it might be the centre I should have thought for that kind or education.

13,910. Still we cannot regard University College alone. We have to consider other institutions—King's College, Bedford College, and others who have been represented before us. We have to consider them all?—I do not know nearly so much of King's College as of University College.

13,911. Putting aside the question of susceptibilities would it be your opinion that, in a University sense, the whole of the cognate schools should be so far as possible grouped into one?—I think a little rivalry is healthy just as among the colleges at Oxford and Cambridge.

13,912. As institutions they would still be able to carry on the utmost rivalry that could be desired?—I think the more they can be induced to work together and agree in forming their Faculty, whether of Arts, Medicine, or Science, the better for the University.

13,913. In itself it would be advantageous?—No doubt.

13,914. (*Professor Sanderson.*) I think you were some time ago connected with the Association for promoting a Professorial University?—Yes.

13,915. Would you mind stating how far you differ from it in view?—To some extent I agree with it. I was at the preliminary conferences, and I agree with a great deal of it. Their first proposition that there should be one University in London I thoroughly agree with; but that was one reason why I could not continue with them, for some of the members did not think that point an essential one. They say the object of the University is to organise and improve higher education, and promote the advance of science, and that the Senate should consist of the professors and a certain number of Crown nominees. That is reasonable enough, but I should have thought that "professors" does not quite carry all desirable members. Some elected by Faculties need not be professors. They might be past examiners or other men of eminence, whom it would be very desirable to have, although not professors.

13,916. Do you approve of the report of the Commission of 1889, as to the way of dealing with the University of London?—I thought it was a very able report, and the compromise if it could have been enforced would really have been very good.

13,917. I suppose you think that the University of London would be incorporated into and absorbed by a real University. By a real University I mean a University having for its aim the affording to the student the means of carrying out the study of any subject to any extent?—Certainly.

13,918. You said just now that you thought there ought to be separate University Chairs, and you spoke about the subjects which might be taught by special University professors. In most subjects would any particular advantage be gained by mere lectures. Is it not the case that you require not only lectures, but institutions on a very large scale for the purpose of affording to students opportunities for study which do not at present exist?—No doubt that is necessary, laboratories and libraries.

13,919. So that having merely provided professors who would lecture you would accomplish very little?—You would accomplish something. There are very good laboratories already. If a University professor was appointed at University College they have a very excellent laboratory there.

13,920. Do you think that even if all the teaching institutions that exist in London were brought together and systematised, they would be in the slightest degree adequate as provision for higher teaching for a great University, such as the University of London ought to be?—No; but you must look at that from two points of view. If you compare it with the provisions in other parts of the United Kingdom I should say that it would be respectable. If you compare it with the provisions of the best Universities on the continent or in America, it is not a tenth of what it ought to be.

13,921. If that is so, ought we not to aim at making it what it ought to be?—Yes.

13,922. And is there any reason why we should not ask for money from the State for it?—None, if we can get it.

13,923. Is it conceivable that we can do it *without*?—I should have thought that if the State were to make an annual contribution enough to maintain the standard of the examinations, and just to keep the machinery or the University running, in a very few years money would be coming in. For instance, the Royal Colleges of Physicians and Surgeons have we think done a good deal. They have built a laboratory on the embankment at an expenditure of a very large sum of money, and this costs a good sum of money every year. It is used entirely for research and unremunerative work. By all means let us get what we can from the State, but I am sure we should not get adequate help from the State at present.

13,924. You recognise that large amounts are required to carry out the thing at all in a satisfactory way?—No doubt.

13,925. Now I should like to ask you something about the examinations of the University of London. The question has been before the Commission a good deal as to whether the standard of the University of London for medicine is really very much higher than the standard of other Universities. Probably that is not a question you would like to answer. But you are quite conversant with examinations at Cambridge; you have examined there, have you not?—Yes, but not in the Medical School, only in Natural Science.

13,926. You know very well, however, what the standard of attainment is?—I have a great many pupils who take their degree at Cambridge.

13,927. You know also the standard at the University of Edinburgh?—Yes.

13,928. Can we assume that either of these Universities might preserve the present standard as a suitable standard to be attained by the best men in medicine?—I should have thought it ought to be higher.

13,929. Higher than either?—Yes, higher than either.

13,930. Therefore you would not approve of any diminution of the standard of the University of London?—No, not at all.

13,931. Either in practical subjects or scientific?—No, I think the preliminary ought to be made if possible still more thorough. I would raise the education and not bring down the standard.

13,932. Do you think the present preliminary scientific examination is satisfactory as a test of real attainment?—I think so. It is not perfect, but it is the best of the kind.

13,933. You think it obliges men to thoroughly work at the several subjects?—Yes.

13,934. And you distinctly tell us that you do not feel that there is anything to be done to improve the teaching which is necessary for preliminary education in London. We may consider that satisfactory?—Satisfactory again, I say, compared with other places. I think it must always be improving. As a teacher I should never be satisfied with the standard we have attained.

13,935. (*Mr. Rendall.*) I should like to understand the exact limits of University authority and jurisdiction to which you would submit the Medical Schools. I gather so far that the examinations, medical curriculum, and attendance regulations would rest entirely with the University?—Yes.

13,936. But endowments in your view would rest entirely with the present administrators of the Medical Schools and the property of the schools would continue to be administered by those institutions and not be transferred to the University?—That is so.

13,937. Do you think it would be bad in itself to transfer them or is it that you think it would be difficult to secure the thing being done?—I think it would be impossible to secure it being done.

13,938. Do you think they could be administered as advantageously by the present trusts?—I think so. It would be possible to have contributions from time to time.

13,939. Allocated for special purposes and handed over to the University to administer for a term of years or a permanence?—For a permanence if necessary.

13,940. There is one point I did not quite understand with regard to the appointment of teachers. You think of the schools continuing to appoint their own teachers, do you not?—Yes, I think it would be impossible to interfere with that.

13,941. But you would give the University some power of recognition or non-recognition of the teachers appointed?—Probably, if that could be done.

13,942. I am thinking of a large number of minor Chairs—say a lectureship of diseases of the brain, or dental surgery and mechanics, or medical jurisprudence. These are subjects in many cases, I suppose, which are rather weakly represented at the smaller schools. It would not be suitable to give the smaller schools the power of thrusting nominees without check on the governing body?—I do not think I should say that.

13,943. Would you not reserve the University any power of recognising or declining to recognise?—Possibly a veto. We have some very good men in these minor subjects. Dr. Stevenson, for instance.

13,944. What I am thinking of is not the University stopping their teaching in the school, but declining to recognise them as members of the Faculty, as having, that is to say, a University status?—I should have thought that not necessary. It might be advisable to give them the power, but I do not think that would be exercised.

13,945. You would let every lecturer nominated by every institution in the University have his full status in the Faculty and other privileges?—Yes.

13,946. Another point you have given evidence upon is representation. You have once or twice spoken of representation of institutions and representation of Faculties. You incline, on the whole, in your personal view to the principle of representation of Faculties rather than the representation of institutions?—Certainly.

13,947. You mean on the governing body, of course?—Yes.

13,948. Representation of institutions, one feels, would tend to swamp the governing body, considering the very large number of institutions that would have to be dealt with?—Quite so.

13,949. Representation of Faculties, I suppose, would practically secure that the best men, the most active men, the best spokesmen and interpreters of the Faculty would be placed on the governing body of the University?—One would hope so.

13,950. Would there be a chance of the Medical Schools adhering to their previous position, or reverting to their previous position on that point?—I can only hope. I do not know.

13,951. Has there been any definite change in that. I did not quite understand why you thought they had withdrawn from a position that they were previously prepared to accept?—Because I know that quite lately resolutions have been passed by some, at all events, of the Medical Schools saying that they would wish each one of them to be represented on the governing body of the reconstituted University. If I might say so, I think it possible they would be satisfied if they were represented on any intermediate body which may be formed under the direction of this Commission to settle a number of details. Their great fear is of not being quite fairly treated, and I think if they could have a voice in the settlement of the details they would be satisfied to be represented by the fact.

13,952. Now, with regard to the point as to Convocation. Do you feel able to single out the principal causes that determined the adverse vote of Convocation to the last scheme of the Senate. You spoke as though you were intimate with all that had passed, and I did not know whether you could lay your hands on some of the immediate causes?—I was on the Senate's side. I regret very much the action of Convocation, and I think I might not do them justice. I might say that the provincial schools were opposed to it. They thought they had not got all that they wanted.

13,953. To some extent it would turn on the difference of opinion between what we may call non-metropolitan members of Convocation and metropolitan members of Convocation?—To a considerable extent, and I think there was a good deal of jealousy of King's College and University College on the part of the unattached men.

13,954. You think there was no other principal cause? You would select that as perhaps the main cause that occurs to you now?—Yes, and I am afraid I must say that the Senate's scheme had been altered and changed as it went on for the worse. I think the

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

original scheme as Lord Justice Fry brought it forward was very much better.

13,955. (*Professor Sidgwick.*) You expressed a strong hope that the present standard of degrees should not be lowered whatever else might be done. Have you had your attention drawn to the view which has been laid before us with regard to the points upon which the London Medical Schools are agreed. Has that been brought to your knowledge?—No, I have not seen that.

13,956. Perhaps I may draw your attention to it. The first point upon which the London Medical Schools are agreed is the provision of degrees for the London students of medicine—that is degrees not beyond the reach of the majority of these students. That was interpreted to us to mean degrees of a standard below that of the existing University of London though, speaking broadly, I suppose it was equivalent to the standard of the University of Edinburgh. They go on to say: "The Medical Schools "believe that the mechanism suggested with a view to "this end in the Gresham Charter is suitable," that is, "a constitution which would allow of the curri- "culum, syllabuses, and arrangements for exami- "nations in medical subjects being brought into "closer relation with the teaching of the London "schools," and they are unanimous in the opinion that no modification of the University of London would be satisfactory which did not provide for the granting of degrees restricted to London students, and the substantial control of London teachers. Do you feel that you agree with what I read, or does your view diverge?—It certainly diverges. I think it is very desirable that men should take the London degree, but I do not think there is any need for it being brought down. One reason why more men do not take it is that they do not prepare for it.

13,957. The statement also says that the London Medical Schools have no desire to depress the standard of the existing degrees of the University of London; what is therefore recommended is two different degrees. As you are probably aware that view received support in the evidence given before the last Commission. You are opposed to that, are you?—I think that would be undesirable. It would be possible to have an ordinary degree, a poll degree, and an honours degree. I do not think that would be "ruinous," but I should be sorry for it. I do not think it is necessary.

13,958. You are opposed to the view that there should be this degree given under the substantial control of the London teachers, restricted to London students, and arranged by a constitution allowing the curriculum and arrangements for examination to be brought into close relation with the school; speaking broadly the plan would give the teachers in the London schools the kind of control over the graduating examinations, which, as you are probably aware, the teachers in the overwhelming majority of the University in the civilised world now possess. You are opposed to that, I understand?—I think it is too much. They ought to have an influence undoubtedly, but not an exclusive influence.

13,959. Are you familiar with the German Universities?—Not very.

13,960. It has been brought strongly before us that the normal type of University is one in which the teachers have either an entire or a predominant control over the examinations?—Undoubtedly.

13,961. You would not dispute that?—No. One must, however, remember that there is Government interference, which is very strong in the German Universities.

13,962. Still, the University degree the Universities of Germany leave completely to the teachers?—Yes, but there it is so much less important. There are not the "honours" nor the competition that we have.

13,963. In the Scottish Universities the teachers have a predominant control over the examinations?—Yes, I suppose so.

13,964. And I think we may say that in the Universities of Oxford and Cambridge it is also the same, though in a less formal way. Practically the teaching body, including not only the University professors but the collegiate teachers, have a predominant control both over the plan of study and over the examinations. Do you object to this?—It is very much a question of degree. I strongly hold that the teachers should have a very large share, much more than they have in the present London University. I am a teacher myself, and I speak from a teacher's point of view. But, the plan I favour is for the teachers in each faculty to choose Boards of Studies, and have their representations put before a Senate who are not altogether professors. I think in the first place they will consider questions better; they will discuss them and be ready to answer any objections. Then I think a reasoned report giving all the facts would far more represent the best opinion of the teachers than if they merely discussed questions amongst themselves, and then voted and settled them.

13,965. I understand that you would decidedly object to the teachers having a sole influence?—I do not think they ought to have a sole influence.

13,966. But you would not object to their having a predominating influence?—No.

13,967. As in the case of Oxford and Cambridge they are certainly not independent, but it is equally certain that in practice they have a predominating influence?—I think in practice it should predominate. If I were on the Senate I should as a rule vote for whatever came up from the Board of Studies of Professors, but I think it would be better for the University that they should come before people who are not merely professors.

13,968. According to the evidence that has been put before us, there appears to be a difference in this respect between the subjects of science and arts, and that of medicine. In medicine, we are told in the statement to which I refer, that the great majority of London teachers are in favour of the system of examination in which the candidate is not examined by his own teacher. At the same time we have had strong evidence from the representatives of science and arts that a satisfactory examination requires that the students should be examined by his own teacher. Do you not think we may infer from this that whatever is done considerable freedom should be left to the University to adopt either system?—Yes.

13,969. Perhaps we may say that if a system is so widely adopted as that of examination by teachers is in the normal type of University, it would be a mistake to exclude it in organising a new University?—Is there not sometimes a confusion between "examination by teachers," meaning men who are teachers in a given University or school, and "examination by teachers" meaning that A., B., and C. will examine A., B., and C.'s pupils respectively? It seems to me that A., B., and C. should be teachers, but I do not think it is desirable that each should examine his own pupils. For instance, in the Conjoint examination of the Royal Colleges we were all teachers of the London Medical Schools, but nevertheless I never examined my own pupils.

13,970. But according to the evidence that has been laid before us it is very largely done in other Universities. It is done in the Scottish Universities and in the German Universities?—No doubt.

13,971. Therefore it would be well that it should be in the power of the Universities to adopt it in any department?—One plan might be suitable for one Faculty, and another for another Faculty, possibly.

13,972. Now with regard to the claim of the London Schools for institutional representation. When their representatives came before us I think we were told that they were not agreed: that some were disposed to claim it, but others were not. We were told that the clause in the statement which implied this claim was introduced rather hastily at the end of the debate, and hardly represented the view of the meeting. You do not know anything inconsistent with

that view, do you?—No; you are now giving me evidence with which I am unacquainted.

13,973. If I may explain myself, I thought that perhaps as it is now some months since the statement was laid before us, you might be acquainted with some change in the opinions of the schools with ragard to this claim?—No. One school about a month ago had a meeting on the subject. It was on the 4th October. They thought that every medical school ought to be represented on the governing body.

13,974. Which school was that?—My own school, Guy's.

13,975. Have you heard a suggestion which was made to us, I think by Mr. Norman Moore, that the Schools of Medicine might be represented by the Royal Colleges?—Yes.

13,976. Do you know how far that would be in harmony with the prevailing sentiments of the schools?—I think the sentiments of the schools would be a good deal divided.

13,977. You spoke of having a collegiate and a non-collegiate side in the examinational work of the University?—In the constitution of the University, rather.

13,978. How would you organise the two elements?—It would probably be necessary to have a Board of Studies for the non-collegiate side, to be nominated by the governing body, and this board would give them advice with regard to that side.

13,979. I suppose if the University of London should retain its existing system of open examinations the non-collegiate class would include non-residents?—Yes, no doubt.

13,980. And, therefore, it would be desirable that there should be a division in the organisation of the University?—That would be necessary.

13,981. There would be a board for taking care of the examination of non-residents?—Yes.

13,982. And, I suppose, a separate board for examining the collegiate students?—Yes.

13,983. I think in answering Mr. Rendall you expressed the view that you would not give the University the power of refusing to admit any teacher appointed by any school or college as a member of the Faculty?—I should have thought that if the governing body took care in admitting any fature institution only to admit those which were worthy, it would be unnecessary. It might be desirable, if thought necessary, to have a veto as a guarantee.

13,984. Then, if your view were adopted and the colleges were to have an unchecked power of nominating teachers as members of the Faculty, it would involve a very careful restriction in the collegiate elements of the University. It would be very fundamental in importance not to admit any college or school that was not up to an academic standard in all its departments?—Certainly.

13,985. You think there ought to be that?—I should have thought so, certainly.

13,986. In the report of the former Commission a distinction was suggested between "constituent" and "associated"?—I should regard that as a matter of policy. One wishes to get the best constituent colleges, and it might be wise to give some status to others as associated colleges.

13,987. (*Lord Reay.*) You were one of the original members of the Teaching Association?—Yes; I was present at the early meetings in Your Lordship's house many years ago.

13,988. You will agree with me that the main aim of that was not only to give the London teachers engaged in the higher education in London considerable control of examinations, but also considerable control of teaching?—Yes.

13,989. To set their hands more free with regard to teaching?—No doubt.

13,990. They felt that they were more or less cramped and cribbed by the syllabuses of the London University?—That was the feeling, no doubt.

13,991. And as you have stated this morning, one of the aims of the new University should be to set the teachers more free, not in order that the examinations might be lowered, but in order, that by the higher teaching at University College and elsewhere, the examinations themselves might be made more searching with respect to the teaching given?—Quite so.

13,992. Therefore, you would agree with the evidence we have had from University College professors, that the object is not in any way to lower the degree, but that an examination should be a test of what the student has been taught or inquired into himself?—Entirely.

13,993. That was made clear to us, especially with regard to scientific examination, that where a certain line of research had been followed by a student in the more advanced stages the case might happen that the student might know what the examiner very naturally might happen not to know?—Yes.

13,994. I see that in your letter to Professor Stokes you say this:—"University College, having for many "years done excellent work under discouragement "and rebuke, will, as the senior college of a real "University, occupy in every way a more useful and "more dignified position than that of a small Scotch "or German University in London, without the "national character and venerable associations which "distinguish Marburg or Aberdeen." I suppose you still hold to the opinion that University College, in the new University would have a very leading position?—I am sure it should have it, and I hope it would.

13,995. You know also, as a matter of fact, that University College passes a good many students through the existing University of London?—Yes.

13,996. Therefore, in the new examinations in which the teachers of University College would have a considerable amount of influence there would be no tendency to lower the degree?—I do not think there would at all.

13,997. Then with regard to the two sides of the University, do you contemplate that it would be fair that the outside students should undergo the same examination as the regular London student — the inside student?—That is a difficult question; but I think that on the whole the fairest plan would be to give the same papers.

13,998. You do not see any disadvantage accruing on either side?—It seems to me that the only advantage that would be gained by the collegiate students would be that which is claimed for colleges of regular education. If they could not send up their men better qualified to deal with an independent standard put before them so much the worse for the teaching. On the other hand, if it is said that men can employ their time better than by going to colleges—that it is waste of time going to lectures and that a man can get up his work in his own way—let him be subject to the same test of examination.

13,999. And the main influence of the standard of this examination would be given to the London teachers?—Yes.

14,000. The main purpose would be in the first place to test the knowledge acquired by the London student in a London institution?—That would be the primary object of the whole. The Commissioners are no doubt aware that there has been a great change since the University of London was founded with respect to what may be called outside students. Other Universities have been founded. The University of Calcutta for instance. The secession of Owens College made a great difference. There is really a diminishing number of candidates who come from outside places—the Mauritius and a few from Jamaica. My own personal feeling is that in the multiplication of good local colleges lies the solving of the question for those who cannot go to Oxford or Cambridge. I would far rather encourage a boy to go to Aberdeen or Dundee than work up for himself and waste his time in a vain attempt to obtain University degrees. I would give every one a chance, but the object should

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

be to encourage them to go into cheap, efficient, and good colleges.

14,001. You still hold to what you have stated at the end of your letter to Professor Stokes—that the new University should find its chief sphere of usefulness in guiding the higher education in London?—Yes.

14,002. That is the main object of the new University?—That should be the main object of the new University.

14,003. And that must be the chief consideration in any organisation which this Commission may reccommend?—That is the view I take.

14,004. (*Professor Ramsay.*) One question with regard to the last answer you gave to Professor Sidgwick on the subject of the proportion of teachers in the Government of the new University. By that answer I understand you to mean not that you would give the teachers a predominence in the government of the University, but that you would give them such a voice that the Senate would have to consider their recommendations?—Yes.

14,005. The Senate would be the supreme governing body, but you would not make the teachers preponderant there?—No.

14,006. The reports of the various Boards of Studies would come up to the Senate, and if the Senate was properly constituted the teachers would have a large, but not a preponderating influence on its decisions?—That is so.

14,007. (*Mr. Anstie.*) With reference to the rather burning subject of the M.D. degree, may I direct your attention to the report of the last Royal Commission:—"As to medical degrees we think that a standard "of attainment appropriate for honours ought no "longer to be required by the University for an "ordinary or 'pass' degree." Then it goes on to say in paragraph 35:—"To prevent confusion between "the present graduates of the University of London, "whose degrees (though not so designated) may be "equivalent to what would for the future be recog- "nised as honour degrees (in the lowest class of "honours) and those who may hereafter pass without "honours in the same Faculty, some honourable mark "of distinction might properly be conferred upon the "present graduates; we would suggest, by raising "them into an honour class ranking next to the "honours already recognised." You are aware, I daresay, that in the first scheme prepared by the Senate after the issuing of that report, and communicated to the Royal Colleges and other persons that recommendation was acted upon?—Yes, I remember.

14,008. This appears from a document which was put in at an early part of these proceedings by Mr. Busk. It is a document which accompanied the finally settled scheme:—"in the course of the com- "munications which took place between the Senate "and the representatives of the Royal Colleges and "of the Medical Schools, the opinion was unanimously "expressed by those representatives, and was, indeed, "strongly urged upon the Senate, that nothing should "be done which should lower the standard or lessen "the value of the medical degrees of the University, "or impair their scientific character; and in parti- "cular, the necessity was pressed upon the Senate "of retaining the entire control of the preliminary "scientific examination." The scheme was accordingly altered, and as finally issued by the Senate did not propose to deal with the degree of M.D. at all. It would appear from the passage quoted by Professor Sidgwick that the Medical Schools now are disposed to take a different position upon that point and to desire that the M.D. degree should be made more easy of access?—Yes.

14,009. May not one rather infer from these various transactions that there has been a degree of vacillation in the opinions of teachers and professors upon this point?—I do not think it is very difficult to explain that. When the teachers come together and talk about possibilities, and the students complain to them, and men who go into practice complain to them, that they cannot get the title of "Dr.", they think it is a grievance; and it is a grievance in a way. They think that the great object is to remove that grievance. When the chosen men of the profession come together and appear before a body like the Senate of the University of London, and they are asked, "Would "you lower the standard, would you demand less "previous education, would you demand less know- "ledge of pathology," there is too much sense of what is valuable and useful for them to assent, and they say at once, "No, we will not have it brought down at all." The President of the Royal College of Physicians, whose previous evidence it will be seen was rather against the University of London and in favour of a kind of lowering the degree said once, I remember—I think it was in a conference with the Senate—that so far from lowering the requirements he would make the requirements higher still.

14,010. The vacillation I pointed out was you say not so much a vacillation of opinion as a difference between the opinion of different persons?—The same mind might take a different view.

14,011. (*Professor Sidgwick.*) In the statement to what I drew attention it is not said that the London School of Medicine have a desire to lower the degree, it is only said that they are in favour of having a degree not beyond the reach of the majority of students, and that the syllabus and the curriculum should have a closer relation to their teaching—they do not wish to lower the existing degrees?—I think they would always say they do not desire to lower the degree.

14,012. It was only a matter of inference that it would lead to another degree, and if you compare the evidence of the witnesses there is a considerable difference of opinion as to whether a degree easier of access would be a lower degree. You are probably aware that a good many of those who wish to have a degree practically obtainable by a majority of the students at the same time maintain that they would not be lowering the standard?—I think there is little to be said about that.

14,013. Now, there is a question I should like to ask you with regard to Convocation. I thought you said that you thought that Convocation ought not to have a veto?—I should have thought a veto was a very dangerous power.

14,014. Are you acquainted with the constitution of Oxford and Cambridge?—Not intimately.

14,015. Are you aware that the final decision on all proposals within the limits of the Charter is left to the whole body of the graduates?—Yes, I am, but I thought that was deprecated by the teachers.

14,016. Of course if any proposal was made to deprive the body of graduates of London University of the power which is left to the older Universities it is obvious that it would be resisted strongly, and there ought to be good ground for it. Suppose it to be suggested could you give any reason why the graduates of the University of London should not have the power which at the same time it was desirable to leave to the graduates of Oxford and Cambridge?—I do not suppose one could.

14,017. You could not distinguish the two cases?—I think not. I think it would be impossible almost to withdraw the power of veto. We must make the best of it we can.

14,018. (*Mr. Anstie.*) The word "desirable has been used." May I take it as expressing your opinion? It was assumed in the question that it was desirable that Convocation should have that power?—I do not myself see why a number of people because they passed an examination many years ago should be able to stop the wishes of the teaching body, whether at Oxford, Cambridge, or London.

14,019. I daresay you are aware that a large majority of the Convocation of Oxford opposed the Royal Commission under which Oxford has been reformed during the last 50 years?—No, I did not know that.

14,020. (*Lord Reay.*) In order to meet the difficulty you have felt, that the Faculty of Medicine, for instance, might be too numerous if all the teachers were made members of the Faculty, could no system be

devised by which the teachers might be graded as they are in Germany — ordinary professors, extraordinary professors, and assistant professors or demonstrators?—At my own school, for instance, we have about 30 of what would be equivalent to professors at University College or a German University. Then there would be, perhaps, 25 demonstrators or assistants. Still I believe it would be better to let them all in as members of the Faculty.

14,021. The difficulty might be solved by adopting the German system, where they discuss, but they do not vote. Do you think that would lead to any difficulty?—I confess I do not quite see what the difficulty is.

14,022. But it is a real one that the Medical Faculty would be too numerous for any purpose, and that it would have too great a preponderance?—The Faculty only proposes to elect Boards of Studies.

14,023. And to elect members of the governing body?—Yes. I should be sorry to lose the vote of the clever young men who would come in as demonstrators, and who would often know more of the actual needs of students than the full professors.

14,024. It would be in suspense; probably they would exercise it after their promotion?—I confess that I greatly value the votes and the help in conference of men under 30.

P. H. Pye-Smith, Esq., M.D., F.R.S.

28 Oct. 1892.

The witness withdrew.

Sir William Henry Flower, K.C.B., examined.

Sir W. H. Flower, K.C.B.

14,025. (*Chairman.*) I think you are connected with the British Museum?—I am Director of the Natural History Branch of the British Museum, which is now situated at South Kensington.

14,026. And, like a great many other people, I suppose you have thought a good deal about the difficult subject of creating and providing a new University for London?—I have been more or less interested in the subject a great many years. I was a student at University College, and an undergraduate in medicine at the University of London; I was a teacher at a London Medical School, and after that connected for 22 years with the Royal College of Surgeons, as a Professor and Conservator of the Museum. So I have seen a good deal in the course of my life of medical and scientific education in various ways. I should like before going further to explain to the Commissioners my position here. I have not volunteered to give evidence in fact, for many reasons I had rather not, especially, because I do not like to waste the time of such a Commission as this. About eight years ago, when Sir George Young was taking up the question of a teaching University for London, he wrote to me and asked me to become a member of the committee. I replied then, and I have replied several times since to similar applications, that the problem seemed to me now so complicated that the solution of it, as far as I am concerned, seemed to me almost a hopeless one. If other people have sufficient time, energy, and interest in it to take the subject up and bring it to a satisfactory conclusion, I shall be glad to see it done; but as I have special work to do, and have many other occupations in which I see that I can perhaps do some good, and bring some of the subjects I have in hand to a practical conclusion, I did not think it would be right for me to divert my time, thought, and attention from those subjects to one which seemed to me so difficult, and, so far as I could see, so hopeless as this is. I have therefore never gone thoroughly into the subject, and have never written any thing about it or taken any active part in the discussions, except in one point. I signed a protest, which was brought before my notice some months ago, against the proposed Charter of the Gresham University. Having gone as far as to sign that protest, it occurs to me that you might wish to ask me some of my reasons for doing so. It seemed to me that the Charter of the Gresham University, which was proposed by, among others, many friends of my own, was no solution of the difficulty or rather, that it was one which would put off indefinitely what I hope may ultimately be found to be a better solution of the difficulty. That is the present position I have taken up upon the subject. I can give you very little indeed in the way of construction, but I can give you plenty of criticism of the present state of things, and of most of the proposed remedies.

14,027. Will you give us a little criticism on the Charter of the Gresham University. What is your main objection?—My first objection is that it altogether ignores the University of London, an institution which has existed a great many years, and which has done a very great deal of good.

14,028. You think it would be very important to bring that into this new scheme?—I think any scheme for founding a University in London, which ignores the present University of London, would be rather a misfortune than otherwise. I think the multiplication of Universities is not a thing to be altogether approved of as a good thing in the way of education, because a degree ought to have in public estimation, more or less of a uniform meaning. When a person is labelled M.D., B.A., or M.A., it ought to confer some sort of definite meaning. The more you multiply the bodies, the more diverse you make the meaning of those terms. In a city like London I think having two Universities should be, if possible, avoided. The second one would be superfluous, though I should much like to see one really good one.

14,029. Supposing the University of London would not come into the scheme, and it was necessary to proceed independently of it, have you any further objection?—Yes, it seems to me that it leaves the present state of things almost exactly as it is. It leaves University College, King's College, and all the Medical Schools, very much on the same lines as at present, and simply adds an examining body to those bodies. I think one of the great misfortunes of London scientific education is the multiplication of institutions for teaching, especially Medical Schools.

14,030. You would like to group them all, to concentrate the Medical Schools?—Very much indeed. The whole of this question would have been very easily solved 70 years ago. When University College was founded there was the material of a teaching body; when the University of London was founded there was the material of an examining body. If the two institutions had been combined we should have had now what so many of us want. When King's College was founded a complication was introduced; when the various Medical Schools grew up one by one there were further complications; now when we have the Royal College of Science founded by Government, in South Kensington, there is a still further complication; and with the vested interests which have grown up in and around each of these institutions I do not see how they are to be combined together into one institution which can be called a University for teaching purposes.

14,031. Supposing they were to be united rather loosely, leaving to each one its autonomy, making them combine in the first instance as an examining body, with the hope that when it was once formed the University element would gradually get stronger, and would be more able to hold its own and exercise more influence over the institutions, do you not think that is a good plan?—I expect it will do very little good indeed. It possibly might.

Sir W. H. Flower, K.C.B.

28 Oct. 1892.

14,032. Do you approve of that which the Charter has in common with the revised scheme of the University of London, the forming of the different teachers into Faculties; the giving of teachers in the different Faculties representation on the Senate, elected by the Faculty; and enabling the Faculties to form Board of Studies to give advice in regard to the curricula of the examinations?—All those are points which both these schemes have, and which are adopted in other schemes. Do you approve of that part?—Those are questions of detail. I do not know whether they really do much good or not. But what I think one ought to try and avoid, if possible, is the multiplication of small institutions teaching the same scientific subjects, which is the cause of our having in London no first-rate teaching. Owing to the frittering away of means and appliances in a dozen different institutions, we cannot get such high class teaching in London, such as they have, for instance, in Edinburgh, because it is not worth a man's while when he gets such a small emolument and such feeble means, laboratories, and so forth, to remain in London. I do not say that the teaching of scientific subjects in London has not very much improved of late, but when I knew it best it was extremely poor. The teachers of the scientific subjects in most of the Medical Schools in London were not scientific men, but men who were physicians and surgeons at the hospitals, or hoping to come on the staff of the hospitals, who took up these subjects, and taught them more or less with a view to getting the men through the examinations. We have scarcely a single position in London now which a first-rate scientific man will occupy, unless he is an amateur who will work without pay. I am frequently asked by foreigners, "Who is the Professor of Anatomy in London," or "Who is the Professor of Physiology." First of all I say, "There is no Professor of Anatomy," or "There is no Professor of Physiology," and then I have to correct myself and say, "There are 12." I had much rather see two or three first-rate chairs, which would be an attraction to good men who would work up their subjects with a view to holding these positions than 12 inferior places competing together.

14,033. Would three places be enough to do the whole anatomical instruction in London?—At Edinburgh one does the whole. I think London might have more. You might have three, or even four. I could not now say the exact number. At all events they would be more concentrated. I should prefer to separate the purely scientific part of medical education from the hospitals; to have it entirely apart, and let the men take out their practical instruction at the hospital. Every hospital has now its own complete Medical School, with lectures on every subject, which has always struck me as something radically wrong; and I think that anything in the way of a University which perpetuates that system will not do very much good. But I do not believe you can get rid of it: the interests are so strong. It has the support of the greater number of the medical men in London, and as I said before, has in many ways so much improved of late years that it would be extremely difficult to abolish or materially change it.

14,034. Have you heard of, or been interested in, what they call the professorial scheme, and do you approve of it?—If it could be carried out, but I have not yet seen any solution of the difficulties, because I do not see how it can be reconciled with the interests of the existing institutions.

14,035. The idea was to adapt the London University, or construct a new one with a large number of University professors who would do the real work of the teaching, and that the different institutions should be invited or compelled—I think, invited—to join themselves to this scheme, with the understanding that they were eventually to be absorbed more or less?—Yes. If we could induce them to be absorbed it would be a very good thing, but I think people are not sufficiently self-denying to do it. I felt this so much when I was a student that, with a friend, I tried practically to carry it out. I entered myself as a student for lectures at University College, and went for hospital work to the Middlesex Hospital. Others did something of the kind in those days, and I think it was a practical advantage. University College had a small hospital and an admirable staff of lecturers. Middlesex had a poor school and indifferent lecturers, but an excellent hospital for practical work. The whole of my medical education was carried out on that system of selection. The Medical Schools now compel students to enter for everything, instead of allowing a man to choose, and go wherever he gets a good lecturer.

14,036. This could not be done by arrangement between the different schools themselves—but it would require some outside authority?—To do it, it would require a strong hand which we have not in this country. I am speaking especially with reference to scientific subjects, anatomy, physiology, chemistry, botany, &c., which are taught at every one of these different schools.

14,037. All that wants organising under some strong University?—Yes.

14,038. If some strong University could have these medical colleges joined to them, with power to reconstruct them and group them, and collect their resources so as to enable each of the students to attend the lectures most useful to them, that would be a good thing?—In all these scientific subjects, even the best Chairs that we have in London, are not good enough to keep men like Professor Burdon Sanderson, Professor Ray-Lankester and others. They go off to other places because the emoluments are not sufficient, being divided among 12 instead of being divided among a few.

14,039. How would you pay the professors?—The students' fees would do that. Look at the Professorship of Anatomy at Edinburgh, for instance?—I believe the payment of the professor is about 3,000*l.* a year. At Glasgow it is something more than half that. Those are Chairs which attract men who really are great anatomists. Of course, they do not do all the teaching themselves, but they are at the head of a large staff of demonstrators and assistants, and they can impress their character and scientific minds upon their subordinate teachers, and upon the pupils—upon the whole school. But in London it is impossible to do anything of the kind, on account of the difficulty of providing adequate payment for any man unless he is an enthusiast and a volunteer. I cannot say how much the Anatomical Chairs in London are worth, but not many hundreds.

14,040. If once started there would be no difficulty about the money you think. You are of opinion that the fees would support it?—Yes, there are fees enough from medical students to support splendid Chairs in London.

14,041. (*Lord Reay.*) We have heard a great deal about want of proper apparatus and laboratories for teaching purposes, I suppose there is also another side to that question. Do you think that the institution over which you so ably preside, might be made more useful than it is, if a University were established in London which would direct and concentrate the efforts of the various institutions?—Of course we should provide material to which I hope the students would come, especially the advanced students, but London being such an enormous place, we are a long way off most of the centres of teaching at present. The material that is in the museum would help, there is no doubt.

14,042. Did I understand from what you said in your answers to the Chairman that you despaired of anything like co-ordination and proper division of labour being introduced to increase the usefulness of the various institutions which now are the teaching institutions of London?—That is a mere personal opinion of course, and others are more hopeful. But, with reference to the amalgamation of medical schools, within my knowledge attempts have been made frequently with those two schools I have mentioned,

University College, and Middlesex Hospital, situated half a mile apart from each other. They have tried to arrange a compromise by which one should have the clinical teaching and the other the scientific, and they have never succeeded owing to the jealousies and pecuniary loss which would be incurred by one or the other in giving up their present position. They have nearly succeeded once or twice, but the negotiations have always fallen through. If those two institutions could not amalgamate, I do not know how the rest would come to a satisfactory compromise, unless some power was introduced from the outside which we do not know in our constitution.

14,043. Of course you do not propose absolute centralisation because the classes in a University for five million inhabitants would naturally be too numerous, for one professor of anatomy, for instance, or for one professor of physiology; you would never contemplate that?—I do not think the whole number of medical students at the present time in London, taken together, is very much more than the number at Edinburgh. What are they? I believe about two thousand.

14,044. I suppose you have heard that there are complaints about classes being rather too large?—That is why I thought London might possibly support four Medical Schools. Then there is also the Royal College of Science which is now a growing institution, supported by Government, which is coming in competition with the older ones, University College and King's College. I do not know how that could be excluded from any University scheme.

14,045. (*Professor Sanderson.*) I feel with you the extreme difficulty of the question we have to determine. What you have already said as to the necessity of improving the means of study in London is of great importance to us. It is important to us that we should know what is really required, however great the difficulties may be in accomplishing it. Probably you agree in general with the recommendation of the old Commission as regards a combination of the University of London with the other means of examination which exist in London?—Yes.

14,046. But, in addition to that, we have an entirely different question, namely the question of what ought to be done, or whether anything ought to be attempted, to provide for students of all kinds, especially every scientific student, the best possible means of working at his subject, so that he may not, as at present, have to go elsewhere for the purpose of completing studies. With reference to that it is obvious that nothing can be done without a powerful central body?—Yes, no doubt.

14,047. If we could bring such a body into existence we might leave to that body very much the way in which it can be best accomplished, especially if that body were provided with funds?—Yes, but I think you would have to give the new body, whatever it is, some indications of the way in which its work was to be carried out. I do not see the lines on which you are to start this new University in the present state of things. It could have been started 70 years ago. As I think the teaching part is far more important than the examining part, you will have to start a new teaching institution, which would only be a rival to those already existing, if you cannot effect a combination of the others.

14,048. What we hope is that in some cases we should be able to co-operate with existing institutions, and in others we should have to start new facilities which at present do not exist. Supposing you had a body which on the one hand represented public interests, and on the other hand, largely consisted of persons representing science and literature, would it not be possible for such a body to indicate the lines, and follow the lines, which would lead to the establishment of the means of study which we require?—I hope it may be so; but still you would have something comparable with what does not exist anywhere else. Take the Scotch or the German Universities; there you have a single professoriate in each University. You have in them nothing at all comparable to these different institutions scattered over various parts of London. It is difficult to say how the scheme would work, for you cannot compare these existing colleges of London with the colleges of Oxford and Cambridge, because each has its own distinct and complete professoriate. I suppose at the new University you would create a fresh professoriate, independently of the colleges?

14,049. A fresh professoriate in all subjects in which the teaching can be shown to be defective, which would, in so far, involve fresh institutions for study and teaching?—It would be a very anomalous institution.

14,050. It would not be like a German University, because our conditions are different from those which exist in Germany, but it ought to accomplish all that a University in Germany does in providing sufficient means for complete study. If we could bring into existence a central body of the kind that I have mentioned, with sufficient means, may we not hope that this would be in itself sufficient to secure the two ends which we have in view. First of all, the co-ordination of the bodies which at present do first-rate work in the way of scientific teaching, I am speaking of science especially, and, on the other hand, the establishment of new lines of work?—Take your own subject, as the subject we know most about. How would you get that improved by such a plan as you propose? I mean the teaching of Physiology. We all want the teaching of Physiology in London to be improved. I do not say that the teaching is not good enough for medical students, but it is exceptional in London if we get the highest class teacher. It may be better at University College than elsewhere, because there is an endowment to the Chair there.

14,051. You think that in that particular subject the means of teaching are so inadequate that it would be desirable to start a new institution?—A new institution altogether.

14,052. That is taking that particular subject?—That is a good example of the rest.

14,053. As regards Comparative Anatomy, the same thing would be very likely required?—There is now a small endowment at University College, which makes it better than it used to be in my time, but still it is far from being an adequate endowment.

14,054. You would hold that a very much better use might be made of museums and other similar institutions if we had an organised teaching of the subject?—There is no question about it.

14,055. It would give a much greater value to the means which already exist in the way of museums?—That is a great argument for having a teaching University of London. The libraries and museums that we have in London do not exist elsewhere, and to have them brought in connexion with the teaching body would be a very great advantage. Some persons maintain that Universities ought not to be in London; that they ought to be altogether away from the crowding, noise and turmoil of a great city; but, in that case, they would lose these great advantages which you are speaking of now.

14,056. So that if you could bring into existence an organisation of that kind of sufficient strength you have no doubt that the question, as regards scientific teaching, at all events, would be solved?—I entirely agree with the idea as to what we want, but I have not seen a scheme yet which would get over the practical difficulties, which I have indicated before.

14,057. Putting aside the preparation of candidates for degrees, regarding only the higher scientific education, the difficulty that you suggest does not exist. I mean that difficulty relates entirely to the co-ordination of the different teaching bodies into a system for preparing them for degrees. That is the difficult point, is it not?—Yes.

14,058. That difficulty would not apply to the other requirement, viz., that of providing for the higher teaching for this would not interfere with the interests of any existing institution?—You think the

Sir W. H. Flower, K.C.B.

28 Oct. 1892.

proposed University would control the teaching of all the other subjects—co-ordinate them?

14,059. Yes?—There would be an advantage in that.

14,060. Its special function would be the higher teaching. Its co-ordinating function would be separate from that, and would relate mainly to the teaching for degrees?—I must say that the existing Colleges of Physicians and Surgeons by their examinations have much improved the general level of the medical teaching of London in the last few years.

14,061. And you quite agree with the opinion that it is desirable to bring together the system of examinations of the Conjoint Board, with the examinations of the London University?—The existence of the Colleges of Physicians and Surgeons is a great practical difficulty in the way of any new University scheme, because they are important institutions and cannot be ignored.

14,062. (*Mr. Palmer.*) May I ask whether you have considered what might be the position of agriculture as a branch of teaching and examinations in the new London University?—I have never considered the subject.

14,063. I thought that possibly might have been within your purview?—I should have thought it desirable for some branches of agriculture to be taught on some scientific principle, but whether they could be taught as well in London as at some colleges in the country, is doubtful.

14,064. We had from Professor Huxley yesterday the distinction between science taught for industrial purposes—which might be described as applied science—as against pure science, and it occurred to me to ask you whether the great industries in this country might not find some representation in the University?—I suppose that subjects which form to a large extent the scientific basis of agriculture, such as Geology, Chemistry, and also Entomology, Zoology, and Botany would naturally be taught, and ought to be taught well, if possible.

14,065. We have situate in London the Royal Agricultural Society which represents all the great landowners and tenant farmers in the kingdom. It is the most representative body of what we call agriculture in the kingdom, and when we are looking to funds, seeing what the Society does already by way of scholarships for those who attend their examinations which are of very high quality, it appears to me we might ask a witness such as yourself whether you think agriculture, as a branch of Applied Science, might be considered as a subject of knowledge in relation to a new University?—Yes; but I think as a matter of detail that should come later on when the whole principle is settled. It would be extremely easy to add any branch or any subject whatever when you have a central body which is to regulate it all. Of course, no doubt the better agriculture is taught the more advantageous it will be to the country.

14,066. (*Mr. Anstie.*) I understand you to take rather a despairing view of the situation?—Yes.

14,067. You have pointed out that there are in London now a number of institutions which are doing very good work, though of various quality, and the interests of which have to be considered?—Yes, I suppose so.

14,068. But, I suppose, I may judge from your answers that you would be of opinion that, if possible, it would be a very desirable thing that there should be some central influence controlling and directing the action of those bodies?—Yes.

14,069. Without using the word "controlling" in too despotic a sense, still I will use the words controlling and directing the action of those bodies. You have pointed out that the London University has done a great deal in the way of improving and directing education?—True.

14,070. But having regard to what we have heard already, I suppose it may be stated as a matter which is pretty well agreed that the London University has not been able to do so much as it would have done in the way of controlling and directing the education of the metropolis in consequence of its not standing in sufficiently close relation with the teaching bodies of the metropolis?—Quite so. But I remember the time when I was an undergraduate of the University of London, the colleges were then affiliated to the University. There was a list published, and students only came from the colleges. That was swept away. I was sorry that it was. I liked the connexion between the London University and the colleges at that time.

14,071. That list was not one of which you would have approved as it stood?—Perhaps not. However, that is entirely gone now.

14,072. Although you give the secondary position to examination, and a primary position to teaching, you would admit that the course of examination has an important effect, and in London has had an important effect upon teaching?—It has doubtless raised the standard of teaching.

14,073. What you would desire therefore, I suppose, would be to see that system of examination, and that system of teaching brought, so far as practicable, into harmony?—Yes, more into harmony.

14,074. Might it not be assumed that the end would be furthered by, to some extent, restoring in a modified form and in an improved form, the old relation between the London University and the teaching institutions of the metropolis?—It would be a great advantage, I should think.

14,075. Would not such a union have, amongst other things, the advantage of allowing the teaching authorities in London, I mean those who are responsible for giving the teaching, to express their views upon the governing body of the University?—That would be an advantage, no doubt.

14,076. But, on the other hand, I suppose you would also agree that it would not be wise to allow the particular teaching institutions individually to have too great a control over that body which was to direct, in a wide sense, the education of the metropolis?—No. Of course the relative influence of one upon the other must be carefully adjusted.

14,077. That is in fact one of the practical problems that we are here to consider?—It must be very carefully adjusted. I think it is one of the misfortunes of the London University that it is so entirely divorced from the teaching, and that the examiners are so far separated as they are from the teaching.

14,078. And you would desire that the influence of the teachers should be felt not only in the settlement of the syllabus and the curricula of the University, but also in the examinations of the University?—I am sure there ought to be a certain relation between teachers and examiners. I have several times acted as Examiner in the Natural Science Tripos at Cambridge, and have found that an outside examiner who knows nothing about the methods of teaching in the University is at a very great disadvantage. A mixed board, combining outside examiners with actual teachers, would be the nearest approach to a perfect system.

14,079. May I take it that what you have just now stated are broad lines on which, if the University is to be refounded or reconstituted, that operation should take place?—I hope it would be on some such lines, certainly.

14,080. There is one other point which I should like to put to you. Your attention has been mainly directed, naturally, to the scientific side, and in that you have chiefly had regard to those who take up the subject of learning which they pursue in a professional way, either in the practice of some special profession, or as teachers of some particular branch?—Yes.

14,081. There is another side of University influence, which you have not taken any notice of, but which, perhaps, you will let me call your attention to. A University not only has a function to perform for what I may call the scientific world, whether in

literature or in what is more specifically denominated science, but it has also to exercise an influence upon the education of the nation. You would not think that that was a matter which was to be left out of account, would you?—No, I hope not.

14,082. Would you desire that a University of the future, or of the present, should have an influence in disseminating knowledge of all kinds, of the best sort?—Yes, certainly.

14,083. Among those persons who are not in the course of their life called upon to become teachers, or special practitioners in the subject?—Undoubtedly.

14,084. In consideration of that you would, perhaps, be disposed to think that a little more latitude might have to be conceded to educational institutions than might on stricter principles be given to them?—I do not quite follow that. Do you mean that more should be conceded than they have in their present position?

14,085. Take University College. Of course, a great many eminent members of that college have followed professions which have not dealt specifically with those matters in which they were educated there, but in the exercise of which, no doubt, their previous training has been of value. You would not deny the advantage of having such men, for instance as the late Sir George Jessel, educated at a place like University College?—On the contrary. I thought you meant conceding something to smaller and inferior institutions. I attach considerable importance to University College, and I should like to see in every way such an institution as that strengthened and its influence extended.

14,086. And you would admit as a legitimate object of University enterprise general educational benefit?—Yes. I think it is an advantage to students to go to such an institution as University College in preference to a hospital school, because at the former they are associated with men pursuing altogether different studies; they get their ideas generally widened, and even if they do not get actual teaching in other subjects they see these other subjects always being taught around them—Art, Literature, Science, and so forth—and I think a medical student is more likely to obtain a wider view of life, of knowledge, and altogether to get into a higher level by being educated at a place like University College or King's College, where all the other subjects are taught together, than if he is at a hospital where he only associates with the medical students throughout the whole of his student career.

14,087. Now there is another point of view. Not limiting oneself to institutions like King's College or University College, but referring to other, perhaps minor educational institutions, you would admit that in their administration a very considerable liberty should be given to them—that they should not be too much constrained in their action, or hampered by University requirements from trying new experiments in the manner which seemed best to them. You would admit that, would you not?—Yes, if it could be carried out.

14,088. Then, allowing for that ample freedom in the conduct of their affairs, would you also be prepared to say that in their relation to the University they should be prepared to surrender some portion of their freedom in the interests of higher education?—I suppose they must do so if they are to be united to the University, otherwise they would be just as they are now.

14,089. Is it not inevitable that in so far as they enter into a University system they must subject themselves to University authority?—Yes, otherwise they would be just as they are now.

14,090. And would not their incorporation in any University system under those conditions, be likely to exercise a stimulating effect upon the whole temper and conduct of the institution?—I hope that it would do so.

14,091. Now assume for a moment that the region of human learning and research can be satisfactorily if not accurately divided into certain departments roughly. Might I put this point to you; assuming a University constituted which would take up into itself all the best elements of teaching in London, would it or would it not in your judgment, be a desirable thing that there should be constituted what I may call a University school in each one of those departments, so that all the various institutions in the Metropolis should in their relation to the University, be considered as portions of that school. Let me illustrate to you what has been proposed in nearly all the schemes in respect of Faculties. In every scheme, so far as I know, that has been put before us, it has been contemplated that the professors of the particular departments in all associated institutions should form one Faculty?—Yes, I am quite aware of that.

14,092. I want to put to you whether you would agree to the method that has been proposed in all schemes of uniting in one common Faculty the teachers in each department in all institutions connected with the University, in Science, Arts, Medicine, and Law?—That is carrying out the system that Universities are generally divided into different Faculties, but extending it over all these loosely united bodies which exist in London.

14,093. Yes, so as to bring them into University relation under the control of that discipline. Do you see any objection to that course?—No, none at all.

14,094. That is a course which seems to have been adopted in all the schemes hitherto proposed. Now, if that is a proper course to adopt with respect to the teachers I do not know whether you have considered the propriety of adopting a similar course with reference to the institutions. We have, for instance, King's College and University College, which have teachers in several departments. I do not say in all, but several. We have others, again, with teaching in one or two departments, as the case may be. Would it, in your judgment, be a rational and proper thing, or a useful thing, to look upon those institutions so far as they are incorporated with the University body only in their aspect as schools, or rather as portions of the University schools, and I would suggest that the advantage of that would be, that it might tend under the influence of a common body to a greater organisation of teaching, and it might tend also to the establishment of a higher standard of attainment. Has it occurred to you that that might be an advantage?—For instance, take such a subject as chemistry, you would associate all the teachers of that subject into a Faculty?

14,095. That will serve as an illustration; yes?—I have not thought how it would work.

14,096. One of the great difficulties is one which you pointed out to us in the early part of your evidence. You say there are a great many institutions and a great many interests which have grown up. Those interests and those institutions may be of very various degrees of merit?—Yes.

14,097. Would it not tend to the improvement of all those institutions, if, considered as institutions, they were brought into what I may call a general University school?—I see there is a germ in that idea which, if worked out, might considerably facilitate the amalgamation of these institutions. I see the idea. I think it might very much facilitate the whole scheme.

14,098. You would not at any rate express any opinion adverse to such a method?—No.

14,099. By which, leaving the autonomy of the institutions unimpaired, they should in their University relation be treated as parts of one or other of the University Schools?—No, because it would help to break up that autonomy.

14,100. On the educational side?—Yes.

14,101. Without affecting the management of their finances, or the responsibility of their governing bodies to their constituents?—The evil of the present system is that a student may have one subject badly taught at his own school, and he cannot free himself from it by going for that subject to another school.

Sir W. H. Flower, K.C.B.

28 Oct. 1892.

Greater freedom might be brought about by some such method as you are indicating now.

14,102. Is it not desirable, as far as possible, that in the University the educational interest should take precedence of everything else?—Yes, it ought.

14,103. That may be accepted as the object to be aimed at?—Yes.

14,104. And would it not tend to attaining that object and at the same time leave their proper sphere and scope to the other interests, to arrange the institutions educationally in the manner I have indicated?—Yes, I think it would be a good idea to work upon—a good basis to work upon certainly.

14,105. Might not that have the effect also of disarming in a good many quarters jealousies which exist between various institutions and which oppose anything like a satisfactory solution of this question?—Yes, I think that would be a very good line to work upon, and it gives me more hopes than I had before.

14,106. (*Sir George Humphry.*) There is a practical consideration which we must not forget in all these matters, that there are a large number of teaching institutions in London on the whole doing a great deal of good work?—Yes.

14,107. Doing it in virtue of their own independence of action, without any control from any other superior body?—Yes.

14,108. That must be taken for granted, and one object might be through the medium of University superintendence to improve them to a certain extent, and especially to improve those bodies which are weakest. That would be the idea?—Yes.

14,109. By supervision, direction, and so on. If those bodies concede to the University the power of doing that, we would suppose that the University must concede something to them in return?—Yes.

14,110. They would not consent unless they got something?—No, they would not give up their present position unless they got something.

14,111. And the only way in which a University could exercise influence over such bodies would be by offering them some return?—You mean in the shape of a degree?

14,112. In the shape of recognition in that way?—Yes.

14,113. And it becomes a very important point in what way the University should concede certain privileges to those various bodies—whether by allowing the education which takes place in them, and the examinations which takes place in them, when duly supervised, to contribute towards the cost for degrees?—That must enter into any scheme for the amalgamation of these bodies.

14,114. It is not quite amalgamation. That is a different thing. It is not amalgamation—improvement?—In exactly the same way as the Royal College of Physicians and Surgeons exercise influence over them now by refusing to recognise any lectures they may consider inadequate.

14,115. And give them in return a license?—Yes.

14,116. Something of that kind would have to be carried out by any University which expects to exercise anything like a potent influence over those various bodies?—Yes.

14,117. Something of that kind?—That of course must be understood.

14,118. You have spoken of Medical Schools in London and there have also been allusions to the German Universities. Do you think that, on the whole, the education of medical students is better conducted at any German University than it now is done at the various schools in London?—I am not quite prepared to say. My present knowledge of the Medical Schools is not what it was some years ago, and I do not know very much of the German Universities practically.

14,119. I do not know much about the German Universities practically, but from making inquiries I learn that on the whole they are not very good places for the general student; that they are admirable places for higher research, and persons who go there from England having obtained a good basis of education do valuable work there, but the ordinary student is not well attended to?—That I cannot tell you at all.

14,120. I hear that they are not so well prepared as they are in the various Medical Schools in London. You do not want to go into the question of medical degrees, and so on, perhaps?—No, you know much more about that subject than I do.

14,121. (*Professor Ramsay.*) I think what you stated in your main evidence was this: that the first thing needed for improving teaching in London was not so much co-ordination as subordination; that you do not want to increase and perpetuate the working side by side of a great number of teachers, and a great number of institutions but you rather want to create an actual academic hierarchy?—Yes, I really do.

14,122. Instead of having 11 or 12 professors of anatomy, you would rather see two or three with assistants?—Yes, and something was said just now about the number of students being too great. It would not be in many cases. Take a subject like comparative anatomy. It is taught in two or three places in London, but not to large classes.

14,123. There would be no danger of over-crowding?—In some few subjects, perhaps, but not in all.

14,124. Therefore one of your objections to the Gresham scheme is that it would perpetuate this condition of equality between a large number of, we will not say second rate teachers, but a large number of not first rate teachers?—Yes, exactly.

14,125. There have been various suggestions made before the Commission. Can you see your way to any definite suggestion by which certain University Chairs should be attached to certain hospitals or schools so that out of the whole body of professors, in whatever school there should be a certain number of professors and professorships of University position, carrying some form or other of University privileges, either in the shape of superior emolument, or in the privilege of being allowed to teach in such central buildings as it is hoped the University will possess? Do you see your way to any practical scheme of that kind?—I have never thought out any practical scheme of that kind. The scheme Mr. Anstie was indicating just now suggests some kind of possibility, if it can be worked in such a way as to lead to suppression of some of the inferior portions of the Faculties and encouragement of the better ones.

14,126. There is a plan at Oxford by which it has been attempted to engraft the professorial system on to the college system. Certain colleges were made to endow professorships in certain subjects, and so you have a Corpus Professor of Latin, and so on, that professor being a member of the college and sharing in its privileges and government, and also having a duty to the University; while all students of the University at large are entitled to go and profit by his teaching if they choose. Would you establish something like that? Would not the knowledge that a teacher at some particular school was the best man in his subject have the tendency of enabling the students to flock from one school to another?—If the schools would allow it.

14,127. You were speaking of the kind of authority which the Senate might have; you desire that the Senate should have an authority which would be superior to that of the individual schools or colleges; and that it should also suggest and provide for amalgamated arrangements of that sort?—If you could give your Senate sufficient powers to do that it would be a good thing.

14,128. And it would all tend in that direction?—Yes, it would be all tending in that direction.

14,129. Going in as you do for a greater concentration of teaching, you are thinking mostly medicine?—And more of the scientific subjects connected with medicine which I know most about.

14,130. You know that what has led to this movement is a desire on the part of various institutions

to be gathered up into a big University system, that the University may go to some extent into the highways and byways of the city, and gather up what it can. Do you think that is a movement which is to be registed and deprecated?—Not if it is all one under a really good controlling body.

14,131. You would not like to see such a system of concentration adopted as should prevent the University from spreading knowledge throughout London, or recognising such good teaching as there exists anywhere?—That is a subject I really have not thought about, but it seems to me that it would be doing away with anything like a University life and all those advantages which Universities are supposed to give in bringing earnest students and great teachers to associate together.

14,132. Then you think that so far as this Commission yielded to a desire of that kind it would be going in a direction opposite to what you think is the right one?—I hardly like to say that.

14,133. Take what Professor Stuart recommended the other day—that although single Extension courses cannot go for very much in themselves, yet a series of continuous courses extending over two or three years may represent a large amount of valuable education even from a University point of view. His suggestion is that a certain number of continuous courses might be recognised by the University as educationally equivalent to a certain amount of attendance—if attendance be what is required—or should stand in lieu of one or other of the preliminary examinations of the University the fundamental idea being that the highest authority of the University should declare that the *quid* should be held to be the intellectual equivalent of the *quo*. Do you see any objection to that?—I never could quite understand myself the meaning of the University Extension lectures as they are adopted now by Oxford and Cambridge. I do not know to what extent they are controlled by the University itself; and merely giving lectures in various places, which might be given without having anything to do with the University, does away very much with the old idea of a University education. It seems to me to be rather a misnomer.

14,134. You do not think the University has any relation to the gutter?—It is a new duty.

14,135. Now I should like to ask a question with regard to what Mr. Anstie said. Mr. Anstie's point was this. What was desirable to be encouraged in the existence of separate local institutions might, he thought, be best utilised by the University associating in Faculties teachers of particular subjects, so that the competition should be between different persons scattered over various schools, rather than a competition between various institutions. Now, supposing that scheme carried out as he described it, is notone of the objections you have to the present system that it encourages institutional jealousy which is contrary to the interests of education?—Or, perhaps, you might call it rivalry as well as jealously, and rivalry is not altogether contrary to the interest of education.

14,136. Did you not instance the difficulty of getting two hospitals or schools to agree together as one of those cases in which different institutions find it difficult to act in common?—Yes; there is that jealousy.

14,137. And there is a difficulty in getting two institutions to walk along the same road?—Yes.

14,138. Would not there be a great danger, under the scheme that Mr. Anstie suggested, of substituting a jealousy of persons for a jealousy of institutions?—You see I have not seen the scheme in detail. I only say that it seems to me to be the germ of an idea. I do not say anything further than that at present.

14,139. Supposing it were put in this way: that all the classical institutions should form a Faculty for the prosecution of classical study, and the chemistry institutions should form a Faculty for the prosecution of chemical study. Do you think that the result of including in one body a number of men doing exactly the same work in different institutions and keenly competing with one another in that work would be to make these personal interests disappear, and to make these persons think only of the advancement of their subject, and not at all of individuals?—The frailty of human nature always comes in. I do not think you could ever get men altogether to subordinate their own interests in these matters.

14,140. At all events, there is jealousy, is there not?—There probably would be, but I have not thought about it sufficiently.

14,141. (*Lord Reay.*) In justice to University College, I should like to ask you this. You said that in your younger days the teaching there was as good as it could be in the Medical Faculty. Has not the standard been fully kept up, but has not the difficulty of University College been that the professors are distinguished men, but when the public discover this they are given higher or more lucrative appointments?—They take them away. Yes; exactly.

14,142. As I understand it, your main point is that in a new University you wish the teaching to be of such a standard that the necessity for raising it by any outside examination ceases. You want to see the excellence of the new University absolutely in first class teaching?—Yes.

14,143. Is it not rather a misnomer to speak of raising the standard of University teaching by outside examination?—Of course; in my idea of what a University should be, the standard of teaching should be above the examination considerably. The standard of the examination would be to raise up all the lower ones, but you must have something to go above it as well. The standard of examination cannot be for the best, otherwise you would have very few people passing. You must have the examination for a middle level, as it were.

14,144. The teaching must be beyond the examination?—Far beyond the examination. That was the case at University College, and I hope it is so still.

14,145. It is the aim of University College?—That is distinctly my opinion.

The witness withdrew.

Adjourned to Wednesday, 9th November, at 12 o'clock.

Thirty-first Day.

Wednesday, 9th November 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

THE LORD REAY, G.C.S.I., LL.D.
SIR GEORGE M. HUMPHRY, M.D., F.R.S.
THE REV. CANON BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

Rev. H. Wace, D.D., and J. Gault, Esq.
9 Nov. 1892.

The Rev. H. WACE, D.D., and J. GAULT, Esq., examined.

14,146. (*Chairman to Dr. Wace.*) I think you wish to give evidence to-day with regard to the evening classes at King's College?—Yes.

14,147. Will you give us any information on the subject that you are prepared to give?—These classes were founded in the year 1855. In the Annual Report of King's College for April 1856, there is this statement:—"The Principal and the Secretary had long "been of opinion that it would be feasible to extend the "resources and influence of the college by establishing a Department for Evening Classes. The present "seemed a favourable opportunity for trying the experiment in a complete form. Accordingly, after "consulting the Professors and obtaining from many "of them the promise of their co-operation, and all "the necessary arrangements being completed for "lighting up the libraries as well as a sufficient number of Lecture rooms, several courses of Lectures, at "comparatively low fees for each subject, were opened "and continued between 7 o'clock and 9 in the "evening during five months, from October to Easter, "comprising the following subjects:—the Old Testament, the New Testament, Greek, Latin, French, "German, English, History, Geography, Mathematics, Arithmetic, Commerce, Drawing, and "Chemistry. The result of the measure was at once "so successful as to justify the hope that similar "courses may be permanently established, to the great "advantage of the college, as well as the classes of "society which have thus, for the first time, been "brought within the range of collegiate influence. "The total number of entrances was 212, many of "the applicants already holding clerkships in Government offices, or intending to be candidates for such "appointments in future. The number of distinct "classes to which these 212 gentlemen entered was "401." Your Lordship will observe it is there stated that these evening classes, it was believed, were a great advantage to the College as well as to the classes of society which had thus, for the first time, been brought within the range of collegiate influence. I believe that was substantially true. It was the first time that instruction of that character was given to evening students in London. There has always been this difference between King's College classes and others. A large number of the King's College classes have given University instruction to these young men and to young men of all kinds.

14,148. You say you have given University instruction?—Yes, from the first.

14,149. That is the difference between you and the others?—Yes. Then in the Report for 1858, given in the Calendar for 1858–59, two years afterwards, I find this account:—"The Council have "much satisfaction in reporting the continued "success of the Evening Classes. At the commencement of the last long vacation, the Professors "and Lecturers connected with that Department of the "college drew up a syllabus stating fully the subjects of instruction, the order in which they were to "be treated and the corresponding arrangements of "the classes. Professors Brewer and Pearson being "prevented by other engagements from continuing "their valuable services in the evening, the Council "have to thank the Principal for procuring the aid of "Mr. Henry Morley and Mr. W. Stebbing, formerly "students of the Department of General Literature "and Science, and well fitted by their ability and "reputation to fill the position which were thus left "vacant. The result of these judicious measures was "a marked increase in the number of Matriculated "Students in this Department. The growing importance of the Evening Classes induced the Council "to take a further step towards increasing their value; "and insuring their permanence; and they accordingly, in the short winter recess, came to the resolution of placing these classes on the same footing as "other Departments of the college, giving Prizes, "Certificates of honour, and Certificates of approval to "the most deserving Students in each subject, and "admitting Matriculated Students under conditions "analagous to those which have been long since recognised in other Departments, especially in reference "to the study of Divinity, to the rank of Associate, "and permitting them to compete for all such Scholarships and Prizes as are not confined to particular "Departments.

"In furtherance of this plan, an Evening Meeting "was held on April 14th for the Distribution of "Prizes and Certificates to those to whom they had "been awarded. On this occasion the Bishop of "London, as Chairman of the Council, presided; and "after listening with much surprise and interest to "the clear and able statement of the Chaplain, who "acted as Dean of the new Department, his Lordship "was pleased to express his cordial approbation of "the whole plan of education, and to address to the "assembled students words of wisdom, which must "add a new stimulus to their spontaneous exertions. "And thus was inaugurated a new Department, the "importance and capabilities of which can be scarcely "exaggerated. Indeed, when it is considered that "this scheme opens the avenue of sound and religious "learning to a vast and indefinite number of valuable "men hitherto almost entirely neglected; that the "conduct of these students is in every respect exemplary" that the favourite studies selected by these "voluntary students—this is an interesting point "at that time—are Divinity, the English Language, "Classics, Mathematics, and Foreign Languages, "(thus showing that they have emancipated themselves from the narrow prejudices of ignorance, and

" are alive to the value of real education as contra-
" distinguished from what is popularly termed useful
" knowledge); and considering also that this new
" part of the institution not only does not interfere
" with the older portions, but harmonises with them
" and furthers their special objects, it will be ac-
" knowledged that this Department furnishes another
" instance of the elasticity of King's College, London;
" that it offers a practical, natural, and easy solution
" of the problem which the ancient Universities are
" very laudably attempting to solve, and that, by
" God's blessing, it may be made another link between
" the people at large and the Church."

Your Lordship will see that it at once answered a very considerable demand. Then I would quote one other extract from the Annual Report in the Calendar of 1860–61. It says:—"The progress of " the Evening Class Department of this College dur-
" ing the past year has more than equalled the
" Council's expectations. At the termination of the
" winter session of 1858–59, the number of the
" Matriculated Students (*i.e.*, students entering for
" four subjects, exclusive of Divinity, and coming
" under the general discipline and system of the col-
" lege), stood at 55. It has now reached 104." That, it will be seen, is not the total number of students, but only of matriculated students. "This increase
" is doubtless in part due to the regulations which
" were announced in December 1859, throwing open
" the Associateship, and other privileges connected
" with the College, to those who fulfilled the above
" conditions; and there is much reason to rejoice
" that they have had the effect of closely attaching
" to the college so large a body of earnest and well-
" conducted students. In the class of Non Matricu-
" lated students, taking one or more subjects, there
" has been a large, though not a proportionate,
" increase; the numbers being respectively—for the
" winter session 1858–59, 323; and for that of
" 1859–60, 445. It is noticeable that with this
" large addition to the total number of students, the
" average of subjects taken by each student (Divinity
" not included) has exhibited but a very small frac-
" tional variation; each student entering as nearly as
" possible for two distinct subjects. The average
" attendance at the Divinity lectures has increased
" from 80 to 148. It may be interesting to indicate
" the subjects which have drawn the larger number of
" students. It is satisfactory to notice that for the
" most part they are those which involve most work
" on the part of the student, and to best serve the
" purposes of mental discipline. During the last
" two years the numbers have increased af follows:—
" In French, from 161 to 218; in Mathematics,
" from 124 to 152; in Latin, from 105 to 147;
" in Greek, from 74 to 104; in English Language
" and Literature, from 83 to 93; in German, from
" 47 to 81; in Italian, from 10 to 22; in History
" and Geography, from 30 to 56; in Arithmetic,
" from 35 to 49; in Natural Philosophy, from none
" to 55; in Commercial Law, from 23 to 25; in
" Political Economy, from none to 34; in Drawing,
" from 15 to 28; and in Chemistry, from 20 to 29."
These are the facts of the foundation of the Department. Then I have here an account of the number of students who have attended in every year since evening classes were founded. They began, as I mentioned, in 1856, when there were five matriculated students, and 207 non-matriculated. The matriculated students are those, first of all, who are subjected to the full discipline of the college, and, in the next place, those who desire to obtain their Associateship, and who for that purpose study Divinity as well as other subjects, because, with certain exceptions, we do not give the Associateship to any students who do not study Divinity as well as other subjects.

14,150. They become Associates and they are matriculated students?—Yes. Any student may come and attend a single class, and he is under no obligation to attend that class, but for a man to be a Matriculated Student he must attend those classes which we consider requisite. When the Associateship was thrown open to them, the number of matriculated students rose to 104 in 1860, and the non-matriculated students to 455. That is the highest number of matriculated students. From 1860 down to 1886 they vary sometimes to 90, 80, 70, and 60; and the number of non-matriculated students which, as I mentioned, was 445 in 1860, rose to 608 in 1864, and that appears to have been their highest number. Then they varied between 400 and 500 until the date that I mentioned just now, 1886. Since that time there has been a decline in the number of matriculated and non-matriculated students, which I have no doubt is due to the opportunities afforded to young men by other institutions which have since been opened. The Exeter Hall classes opened in 1882 and took away a large number of the students who study the lower subjects. Then the University Extension Society began to be active about that time, and no doubt attracted a number of students, non-matriculated students in particular, who merely wanted a little mental improvement in the evenings.

14,151. Do the matriculated students who attend your college work in the day-time?—No, not in this Department. In all other Departments they do.

14,152. They do not overlap at all. The same students do not attend both, do they?—No. The only way in which they overlap is this, though it can hardly be called overlapping. We have theological classes for students who wish to take Holy Orders, and they are required always to attend a full year in the morning. But they may attend two years in the evening and then a full year in the morning. Otherwise, the students who attend our evening classes do not often go to the morning classes. Then I should mention that the number of entries for this present winter session up to the present time is 364, and the number of classes taken 529. There will no doubt be, as is usual, considerable entries after Christmas for the other part of the winter session, so the numbers will be likely to rise to about 800.

14,153. (*Rev. Canon Browne.*) Are these 364 matriculated or non-matriculated, or both?—That is the gross number. The number of matriculated students last year was 30, and there were 406 non-matriculated. Then I should mention also, though it is not strictly a part of the Evening Classes Department, still it is an important thing in itself, that we have lectures called the Gilbart Lectures, which were founded by the late Mr. Gilbart for the purpose of providing an endowment for an annual course of lectures on banking. You will find that at page 138 of this year's Calendar. Those lectures are given free. They have been given by two lecturers; first, Mr. Leone Levi, and now by Mr. Paget, a barrister-at-law. Those lectures were attended last year by as many as 900 students. Those are simply on the subject of banking, but more especially on the law affecting bankers. Then we have also a very large Civil Service Department. Last year the numbers who attended that were 1,123. We prepare for all branches of the Civil Service. A good deal of that work is elementary work, but some of it is work for which no doubt students would have attended the evening classes in former days, because many of the students were trying for the higher appointments in the Civil Service.

14,154. (*Chairman.*) The highest certificate you give is the Certificate of the Associated Student?—Yes.

14,155. Does that depend partly upon the regularity of attendance?—I was going on to give your Lordship the conditions under which that is granted. You will find them at page 509 of the Calendar. First of all no candidate is admitted, of course, without a certificate or a testimonial in the first instance. Then he has to select a certain class of subjects which he will study. Particular courses are recommended to him, such as the Associateship in Commercial subjects, the Associateship in Science, and the Associateship in Law, and a course of study is marked out under each

Rev. H. Wace, D.D., and J. Gault, Esq.

9 Nov. 1892.

of those subjects, as you will see on pages 512 to 514. Then, "There must be regular and proper attendance "(*see* Section XVII.) on 12 courses of lectures, in "not less than two subjects, in addition to three "Winter Courses of Divinity."

14,156. How much is a course?—That means October to Easter, six months. Then "the attendance "must extend over a period embracing at least three "winter sessions, except in the case of students enter- "ing after Christmas, who may reckon their time "from the beginning of the Winter Session; and of "students passing the London Matriculation through "the King's College Course, who can take their "Associateship in two years after Matriculation, by "attending eight Courses of Lectures and two Win- "ter Sessions." Divinity must in all cases be attended by candidates for the Associateship. Then a student must obtain a certain number of Prizes or Certificates of merit or distinction for his work in his classes. The number is fixed. He must attend them. He cannot become an Associate merely by virtue of having attended classes and done his work satisfactorily; he must distinguish himself. That has to be borne in mind. Some persons have seen the number of our Associates, and say that is a comparatively small number, although practically, I think it is at least as large a number as take degrees in the whole of the Victoria University, certainly much more than those who take degrees from University College, Liverpool, or any single institution. Our Associateship is an honour which is only given to students who have distinguished themselves.

14,157. What would be the value of the Associate studentship compared to the degree of the London University?—The Associateship in the morning Department would be, I should say, quite equivalent to a degree, more than equivalent to some degrees. In the Engineering Department I should think our Associateship, and I believe any of our professors would tell you the same, is equivalent to a high degree.

14,158. And they are very much prized and carry much weight in after life?—Yes. I cannot consider that the Associateship of the evening classes is equivalent to a degree. At least it is equivalent to some degrees, but I do not myself believe that for the purpose of a teaching University degrees ought to be given to any evening students at all. I should not think of asking it for our own evening students on such work as has been described, commendable as that is. The very purpose that we have in view in promoting this teaching University is to establish a degree which means not only a certain amount of knowledge, but a certain amount of systematic training day by day for at least three years.

14,159. And you would be against their attendance at evening classes counting as an equivalent to a certain period of residence?—No, I think that might be. I think the principle which the University of Cambridge has adopted with reference to the University Extension Society might be adopted here. The University of Cambridge allows a certain amount of attendance at University extension classes to excuse a man one year, and I think attendance at our evening classes ought far more to be taken into account in excusing a man from part of his day course. With regard to what part of his day course it would excuse him from, that would be a matter for the University when constituted, but we should claim the privilege for some of it.

14,160. And also form part of the examination for the "Little Go"?—Yes, precisely. But it is a fixed principle with us that degrees in the University we are striving for should on no account be given for evening work alone. The degrees of the London University are a proper reward for mere knowledge, and should be reserved in my judgment for that purpose. With respect to the continuity of work, as your Lordship has referred to it, and as the question of the University extension classes arises, I feel it is only due to ourselves and the subject to call your attention to the contrast between the sort of systematic work that is done in the evening classes at King's College, and the sort of work that is done in the University Extension courses. I do not know whether your Lordship and the Commissioners have had brought before them a memorandum by Professor Adams about the University extension lectures.

14,161. I do not think we have?—If it has not been put in I will venture to put it in now (*for this document see Appendix No.* 37). Professor Adams is one of the Universities Joint Board of the London Society for the Extension of University Teaching. He is nominated to represent the University of London on that joint board. Therefore he is writing as one of authorities of the University extension movement itself. He drew up and published last year, when this controversy was going on in February, this memorandum which I venture to put in. It shows your Lordship what is the sort of work for which the University Extension Society are claiming degrees. It says:—"This society supplements teaching "by lectures by the addition of a conversational class "after the lecture, and encourages the students to do "weekly papers on the subject of the lecture. To "encourage this work various certificates have been "offered:—(1) certificates of study for success in one "course of lectures in one term; (2) sessional certi- "ficates for a complete session's work; (3) certifi- "cates of continuous study, each equivalent to *four* "sessional certificates." Then it says:—"Of these sessional certificates," that is for a complete session's work, "only three were granted in 1889; neither of "the candidates who gained them proceeding any "further. In 1890, 26 sessional certificates were "granted in botany, and 20 sessional certificates in "all the other subjects of study. Of the 26 certificate "holders in botany, not one has proceeded any "further in that or in any other subject. Of the 20 "other certificate holders only 10 obtained certificates "of study during the next Michaelmas term, and of "these only *one* completed the course so as to get his "second sessional certificate in the summer of 1891. "In 1891 the number of sessional certificates granted "has been 78, one half of which were awarded to "women. The above facts show that the certificate "of continuous study, which is to take the place of "four sessional certificates, is not yet required, seeing "that at present there is only one student who has "obtained sessional certificates of two years' study. "If it be asked what amount of study this sessional "certificate represents, it appears that certificates of "study are awarded in connexion with a course of "10 lectures and classes. Sessional certificates are "given for two such courses, with a supplementary "summer course. Thus, a sessional certificate is "granted for work in connexion with 30 lectures "and classes once a week; a certificate of continuous "study is to be granted for attending 120 lectures "and classes once a week in four several sessions or "years. What is this, compared with a course of "lectures in a University or College, or any single "important subject of study? Take, for instance, "English literature, or modern history, or chemistry, "&c. In each there would be a course of at least 60 "lectures a year, and in Mathematics, or Latin and "Greek, and other important subjects at least 120 "lectures in each year, in any college which puts "forwards study in those subjects as qualifying "for a University degree." I need not read the rest. That is the statement of one of their own governing body.

14,162. It is only a certificate of a four years' course that the University of Cambridge allow the course to be equal to a year?—Canon Browne will know that better than I do.

(*Rev. Canon Browne.*) It is three years' study.

14,163. (*Chairman.*) Then it does not fit in with the scheme of University extension?—At all events your Lordship will see that that sort of study is a very small matter compared with the systematic study required for our Associateship.

14,164. How many lectures are there in each course?—Some subjects would represent at least 40 lectures on the average in the winter months; some 20 or more.

14,165. How many of those courses are there in a year?—There is only one winter course, but there are numerous subjects. A man must attend at least two subjects a session.

14,166. Then he would have to attend 80 lectures?—Between 40 and 80 is the minimum, according to the subjects; they do practically attend more.

14,167. Then they have to go through 12 courses?—Yes.

14,168. That would be 40 times 12, making 480?—Yes, that is practically so.

14,169. They have to attend 480 lectures before they can become Associate students?—Something like that, including Divinity lectures, which are one a week.

14,170. Then I understand that in the University extension system there are not only lectures but classes alternately with the lectures?—Combined with them.

14,171. And they have to do paper work outside?—Yes, I suppose so. They have to do weekly papers on the subject of the lecture.

14,172. (*Rev. Canon Browne.*) Is that stated in Professor Adams's paper?—Yes.

14,173. But you do not put in this as a correct statement, do you,—"encourages these students to do "weekly papers"?—I put it in as a statement of Professor Adams, who knows about it, and who is responsible for it.

14,174. I do not understand "attend regularly." The paper work is necessary for a certificate; that does not suit the word "encourage"?—That was Professor Adams' statement, and it was not contradicted when it was published.

14,175. I am a member of this joint board, and it is the first time I am aware of having seen this memorandum. "A certificate of continuous study is "to be granted for attending 120 lectures and "classes." Does that mean 120 lectures and 120 classes?—Yes, I suppose so. It means the two together,—I mean to say the lectures and the classes—the lectures and classes being taken for the same thing. The class follows after the lecture, does it not?

14,176. Yes, or precedes it. But does it mean 240 things or 120?—They are two separate classes, but the class is only on the work of the lecture, it is 120 attendances.

14,177. Two hours?—If that is the time. I do not know what the time is.

(*Rev. Canon Browne.*) I think Professor Adams has not put it as succinctly as he might have done.

14,178. (*Chairman.*) Do you have 120 classes in connection with your lectures?—Our lectures are lectures and classes together; you cannot make the University extension lecture into a class as well as a lecture, because you have a number of people who are coming to attend and not do the work—who will come with the legitimate reason of acquiring a little more knowledge without examining more particularly into the subject—but every lecture of ours is a class at the same time; the student is examined at the end of every term as to the work he has done.

14,179. Are they allowed to ask explanations and things of that kind?—Yes.

14,180. (*Rev. Canon Browne.*) How long does that last?—An hour.

14,181. As compared with the two hours of the University extension?—If it is two hours; but our lectures are often given twice a week, so that it is the same in point of time.

14,182. (*Chairman.*) Then you maintain, in the first place, that your course is a much stricter and better one than the University extension; and even in the case of yours you do not think a degree could or ought to be given for mere evening work independent of day work?—Quite so.

14,183. And what we may call residence, which, I suppose, means continuous attendance?—Yes. I do not put this in in any way to disparage the usefulness of the work the University Extension Society does, but only to say that certainly if our work does not deserve to have degrees given to it as evening work only, the other does not. To put such work as that of the Extension Society forward as University work, is, in my opinion, a misnomer altogether.

14,184. Do you think University extension work has done a great deal of good, and has taught people who would not have time to attend your lectures?—Yes, no doubt. I have done everything that I could to assist it, but they would not receive the assistance I wished to give them. We are at the present time assisting the University extension work in these evening classes. If you look at page 481 of the Calendar you will see this:—"Students who bring a "certificate from the University Extension Society of "their membership of that society, and of their "having attended a course of lectures in the subject "for which they are recommended, are allowed to "attend any of the practical classes on payment of "half fees." We have done that at a sacrifice of about 100*l.* a year.

14,185. That refers to the evening classes, does it?—Yes. We did that because after a while, in the study of any natural science, laboratory study is absolutely essential, and so we were glad to put our laboratories at the service of the society for that purpose. I hope your Lordship will not think that I have anything but sympathy with the University extension movement. I wish to promote it, but I do not consider that it is University work in the sense of training people for degrees, except to the very limited extent to which Cambridge has acknowedged it.

14,186. You think a certificate something of the same kind that you give would be quite sufficient reward for the work that is done?—Certainly.

14,187. And you would not object to the Cambridge plan of a continuous course counting for a certain amount of residence?—Certainly not; and that in my belief is provided for in the Gresham Charter.

14,188. I was coming to that. I was going to say that I did not see any provision for it in the Gresham Charter. Where is it that you find it?—It is in paragraph 1 of clause 3:—"The University shall "have power to confer degrees in the Faculties of "Arts, Science, Law, and Medicine, and in such other "Faculties corresponding to the provinces of study "and educational work occupied by the University "as shall from time to time be determined by the "Council of the University, on all persons, male or "female, who shall have pursued a regular course of "study in a college in the University, and shall sub-"mit themselves for examination." I maintain that that places absolute power in the hands of the Council of the University as to what it shall prescribe as a regular course of study. The Charter was expressly drawn with wide powers for that purpose, and it would have been quite as competent, or more competent, in fact, for the Council of the Gresham University to have said:—"We will accept two years' study in a "college in the University, after a certain amount of "University extension study" as for Cambridge. Cambridge had to go to Parliament for it, but under that Clause the Gresham University could have done it without the least difficulty.

14,189. It would be rather straining it, would it not, to make "who shall have pursued a regular course of study in a college in the University," apply to these evening classes?—No, it was drawn up with that intention. When a man has passed some Oxford or Cambridge local examination I rather think he is excused his "Little Go," and under precisely the same principle we could have said if a man has studied in the King's College evening classes, or at the lectures of the University Extension Society a certain time, he may be excused his "Little Go" there.

14,190. This would give you power to give degrees at once for evening class courses?—It would give

Rev. H. Wace, D.D., and J. Gault, Esq.

9 Nov. 1892.

power certainly, but I do not suppose for a moment the Council would have done it.

14,191. (*Rev. Canon Browne.*) In what way would the University extension, say at Hackney or West Ham, be "in a college in the University?"—What I maintain is that in the case of certain students they should only be required to go to a college for two years.

14,192. Would you kindly read the words again?—"Who shall have pursued a regular course of study "in a college in the University."

14,193. How does that let in what is not a college in the University?—It does not let in what is not a college in the University.

14,194. Then it does not let in University extension?—Yes, it does, for this reason. The Council would require in the case of anyone some years study, but it must be as competent for them to say that they would require two years' study in the case of certain students as it would be competent for them to require three years' study in the case of other students. At all events I do not think it is worth arguing that point. That clause in the Gresham Charter was most sincerely intended for that purpose. If it does not carry out that intention I shall be glad that all doubt on the subject should be removed.

14,195. (*Chairman.*) That would be still maintaining the safeguard that you must have a certain amount of residence in the University to complete his course?—And a considerable amount of residence, certainly not less than two years.

14,196. (*Rev. Canon Browne.*) Is that the only place in the Charter where University extension is let in, because that is what my Lord asked?—No. If you look at the end of clause No. 3, the last three paragraphs really refer to work which might be that of the University Extension Society:—"The Uni- "versity shall also have power to grant to students "of any college in the University, or who have "attended University lectures, after such examina- "tions, in such mode and on such conditions as to the "University from time to time shall seem fit, certifi- "cates of proficiency in any branches of knowledge." It would have been possible therefore to have given certificates to University extension students.

14,197. You say that they are University lectures? Certainly:—"The University shall also have power, if "satisfied as to the efficiency of any schools or aca- "demic institutions," under which, I suppose, the University Extension Society would consider themselves included; "to grant certificates of proficiency "to scholars and members thereof." This clause was still more explicitly introduced with a view to University extension work: "The University may appoint "lecturers independently of a college, to give instruc- "tion in any subject, whether it be or be not included in a Faculty."

14,198. (*Chairman.*) And having appointed those lecturers, they may give certificates of efficiency to those who have attended the lectures?—Precisely so.

14,199. (*Rev. Canon Browne.*) How does your Charter show that there is the slightest connexion between those last three paragraphs, and what may be done under paragraph 3?—I do not know that it shows it, but the two things are there side by side. Powers are given, and I suppose the powers can be used. We wanted to leave the Council as free as we could.

14,200. The third is the only one which I, as a matter of interpretation, could have conceived to refer to the University extension. I cannot see that the final paragraphs have anything to do with the important paragraph 3. There is no indication of any connexion?—The Charter does not contain the rules of the University. The Charter only gives power to the Council. Power is given to the Council in order that the Council may afterwards draw up its rules.

14,201. I, looking at the Charter with every desire to understand it, had not a conception that what you now say, was intended. I had not an idea that paragraph 3 was intended to let in University extension?—It was explained again and again, but I think it was very uncourteously denied again and again.

14,202. (*Chairman.*) It is quite clear that if the University undertake the work itself as the advocates of University extension suggest, they would then have power to give certificates?—Precisely so.

14,203. But they would have to undertake the work themselves. They could not work through the University Extension Society, could they?—The idea in my mind and in the minds of all of us about this matter, was that when the Council was formed there would be a committee of that Council appointed for University extension work.

14,204. To superintend it?—Yes, to superintend it.

14,205. And give certificates of proficiency?—Yes, precisely so.

14,206. To undertake the work themselves?—Yes, and we should only have been too glad to take the machinery which is already provided by the University Extension Society, and give it what we hope would be the assistance of University authority and sanction.

14,207. Then the chief thing that you differ from them in is this: some of them think that evening classes alone would be sufficient to prepare a man for a degree, but you are strongly of opinion that it must be supplemented by what we call residence in a college?—Precisely so. I think that for those who do not submit to residence, the degrees of the London University are the proper distinctions for them to obtain. They are certificates of knowledge, and for that reason it is that it is to my mind an absolutely essential thing that the degrees of the London University should be entirely distinct from the degrees of any teaching University, and there should be no connexion between them.

(*Rev. Canon Browne.*) As we are on the Gresham Charter I may mention this. I did not know that this question would be raised at all. It is perfectly clear that under the Gresham Charter what we call University extension lectures can be given; but what was never clear is that the certificates given under those circumstances would be of the slightest value towards obtaining a degree. There is absolutely no indication of any such connexion whatever between the two systems. That is the difficulty that the friends of University extension felt.

14,208. (*Chairman.*) You maintain that by the same clause they would have power to shorten the amount of residence with regard to whomsoever they chose?—Yes.

14,209 You say with regard to a certain number of people two years would be enough instead of three?—Yes.

14,210. That is your interpretation of it?—Yes, that is my interpretation of it, and I expect to be believed when I say that that was the intention of the founders.

14,211. (*Rev. Canon Browne.*) No one would hesitate to believe it. The only difficulty is that it is not stated in the Charter, and if a Charter is passed a belief or an intention is not the slightest use if the words are not there. People would claim their rights under the Charter as it was?—They could appeal.

14,212. Where is the three years mentioned?—It is not mentioned.

14,213. (*Chairman.*) I was taking for granted that three years was the usual thing, and I asked whether you would be able to make it two years if you liked. But the whole number of years is entirely arbitrary, nothing is mentioned about that?—Except that if you look at the third paragraph you will see that there is sufficient indication of what was deemed to be reasonable, because the clause which gives power to admit students from other Universities says, "Provided that the Council shall not allow a "degree to be conferred on any such student unless "such student shall have pursued a course of study "in a college in the University during such final "portion, being not less than two years.

14,214. (*Rev. Canon Browne.*) "In a college in the University"?—Yes.

14,215. (*Chairman.*) That makes the two years' limit?—Two years is the minimum. That obviously implies that the full course would be three.

14,216. (*Rev. Canon Browne.*) Why not four?—It would be four if you pleased.

14,217. Why not five?—It may be what you please.

14,218. (*Chairman.*) It is left to the discretion of the Council?—Yes, it is left to the discretion of the Council, and I think the Council of a University, if it is fit to be a University at all, ought to have great discretion.

14,219. There is nothing in the Charter to prevent the University from shortening the term with regard to some people compared with others?—Precisely.

14,220. If there is any vagueness or any doubt whatever you would have no objection to make it perfectly clear that that might be done?—No.

14,221. And you think the other promoters of the Gresham Charter would do the same thing?—I am quite sure of it. I should object to a clause which was compulsory, but I should like an enabling clause, because I think the Council's discretion ought to be very great in the matter. I do not see how you could put a compulsory clause about the University Extension Society, because the University Extension Society might change its character from time to time, and to put a permanent compulsory clause might be dangerous. But, as the doubt has been raised, I may say that I should like to see the Council given the power that Cambridge has taken.

14,222. (*Rev. Canon Browne.*) It was so simple to put that in that I have never been able to conceive why it was not done. It only wanted two lines and the friends of the University Extension Society would not have had a word to say then?—I am afraid they would.

14,223. They might have found a word but they would not have had a word?—Yes.

14,224. (*Chairman.*) You have not seen the evidence of the advocates of the University Extension Society that has been given here, have you?—No. I saw their evidence before the former Commission.

14,225. Is there anything they said then that you would wish to rebut?—No, I have nothing to rebut in the matter. I only wish to say that we wish to promote their objects in what we conceive to be the best way.

14,226. They say they would only like to be absorbed by a University in whom they have confidence, and they would not have confidence in the Gresham. That would be a matter of opinion?—Yes.

14,227. And you think they are wrong?—Yes.

14,228. You will probably appear again. I think to-day you wanted to confine your evidence to the question of evening classes?—Yes.

14,229. Is there anything more you wish to say?—I thought it might possibly be of interest to the Commission to tell them what are the subjects which have been most largely attended in our evening classes from the beginning. In 1858 the order of subjects was French, Mathematics, Latin, English, Greek, German, Arithmetic, History, Commercial Law, Chemistry, Drawing, and Italian. Then going on 10 years we still find French at the head of the list with 231; Divinity, 135; Mathematics, 133; Latin, English, Greek, German, History, Commercial law, and then more scientific subjects and some technical ones. At the present time the scientific subjects are more to the front. French is still at the head; then come Chemistry, Mathematics, German and Architecture. I should have put higher still, Electrical Engineering. We have a large number of students for Electrical Engineering. Then come Mathematics, Geography, Greek, Arithmetic. So that without going into details you will see that the change is this: while the subjects of general education maintain a high place, there has been a considerable advance in the number of students studying scientific subjects; and that appears to be a growing tendency with them at the present time. For example, at the present time we have 12 students studying bacteriology, 70 architecture, 51 electrical engineering, and some mechanical engineering. If I may, I should like here to put in a Report which there has recently been presented to our Council on the Bacteriological Department of our college, which was established a few years ago; it shows the important scientific work, which has been done in that branch of study. I will hand that document in. You will see from it that the Department has rendered some important services to the Government. It has received the thanks of the Privy Council, and I believe that it is the only thorough Bacteriological laboratory existing which is open to general study.

14,230. This exemplifies the research of your medical professors?—Yes, and for general public health study. It only bears on the question of the value of our scientific instruction and the value of our laboratories.

14,231. That has nothing to do with the evening classes, has it?—No, I only asked leave to put it in as a sort of supplement. It has nothing to do with evening classes, only so far as I have just mentioned, that some evening class students do study bacteriology.

14,232. Your certificate of Associateship is a good deal sought after you say. Is it useful to men who have taken it?—It varies. It is useful, for instance, to men in the engineering profession.

14,233. Do they put any letters after their name?—A.K.C., Associate of King's College.

14,234. Is that very frequently made use of?—Yes.

14,234*a*. (*Lord Reay.*) If the new University were to organise evening courses of lectures given by its own professors, imparting the same amount of knowledge which the day student would receive, only spreading the evening course over a longer number of years, then would you be prepared to accept the knowledge of evening student A, at the end of eight years, exactly the equivalent of the knowledge acquired by student B, a morning student, say in three years?—No, because I do not consider that the mental training of the one would be equivalent to the mental training of the other. Everything depends upon a man's mind being concentrated over a given number of years on the subject that he has been taught.

14,235. It is an educational problem simply?—Yes.

14,236. Your contention is that the character of the knowledge acquired by concentrated effort in three years cannot be compared with the character of the knowledge acquired in a course of eight years, and that there is a difference?—As a mere matter of language I would invert the proposition, and say that knowledge acquired by long study in the evening is not the equivalent of knowledge gained by concentrated study in three years. Your Lordship will see that I do not mean merely the knowledge. I mean the whole mental training.

14,237. That is the point. It is a question of educational methods?—Yes.

14,238. Do your staff undertake all this work of the Civil Service Department of the evening classes and at the same time do the work of the Morning Department. Is it the same staff, or have you additions?—The Civil Service Department is quite distinct from the evening classes. It is an entirely separate staff for Civil Service work.

14,239. Therefore that work is outside the proper college Department?—Yes, entirely outside it, quite as much as the school is.

14,240. But the evening classes are conducted by the same professors as the professors who conduct the work in the morning?—To some extent. As far as I can I will tell you at once. Running down the list I see there are nearly twenty of the evening class staff who also work in the morning. Necessarily we have some younger teachers, viz., for the more elementary part of the work for our evening class students. Take for

Rev. H. Wace, D.D., and J. Gault, Esq.

9 Nov. 1892.

example, Geology; two of our best professors, Seeley and Wiltshire, give instruction in that; Professor Buchheim gives instruction in German and Professor Capper in Engineering.

14,241. Is the education in French, Latin, and Greek elementary?—Both.

14,242. Is previous knowledge required for admission?—No, no previous knowledge is required for admission. The classes are divided into two—junior and senior.

14,243. Do you admit any women?—No. We have a very large number of women taught by King's College, but they are nearly all taught at Kensington. We have a Department for women at Kensington in which we have between 400 or 500 women in attendance.

14,244. That is entirely separate?—Yes, it is a separate Department. I should not say that we do not as a rule admit women in the College itself. A few women come into the Fine Art Department, and now and then we make an exception in chemistry, the higher branches of which cannot be taught at Kensington, but we do not admit them generally in the Strand.

14,245. At page 512 of the Calendar I read this:—"Groups of subjects which may be attended for the "purpose of obtaining the 'Associateship' in addition "to the general Associateship." Might I ask the meaning of the words "in addition"?—(*Professor Gault.*) The general Associateship means the Associateship which is not included in the subjects here specified. (*Dr. Wace.*) If you look at page 510, at the top, you will see "the candidate can then select one of "the following groups of subjects (see Section XVI.), "which are adapted for special professions, or if "none of these fall in with the requirements of the "candidate, he may, subject to the approval of the "Dean, take those subjects which suit him, with the "under-mentioned exceptions." These are for these particular subjects—commercial subjects and others. A man with the approval of the Dean and myself might pick his own subjects. That is what is meant by the general Associateship there.

14,246. It does not mean that he must be a general Associate before he becomes an Associate in the more limited sense?—No. It is a little awkwardly expressed.

14,247. It simply means that besides the general Associateship there is another Associateship?—If he had once obtained the general Associateship he would have a right to attend any of the classes at reduced charges, and some free of cost, so he would not need anything else.

14,248. Is the general Associateship only acquired by your morning students, is it?—No. It should be really the Associateship in general subjects. That clause must be altered in the next Calendar. There are four classes of Associateship there—Commercial, Law, Science, and so on; but a man might choose his own subjects, provided they were satisfactory to us. That is all that is meant.

14,249. Therefore you have the Associateship in general subjects and the Associateship in special subjects mentioned here?—Yes.

14,250. And both classes are different from the class who only get the Associateship after having specially distinguished themselves and who only attend the morning classes?—Yes, that is so. These must have distinguished themselves of course.

14,251. Can you explain the meaning of the last words in this paper of Professor Adams's:—"or the time "of getting it must be spread over such a lengthened "period that the candidate might have been spending "his years more profitably than in striving after a "degree"?—I think perhaps he means that the work took up so much time that a man might probably turn his time to better account in some practical way. That is all.

14,252. But from that I conclude that Professor Adams does contemplate the possibility of striving after a degree and of obtaining a degree?—He knows that that idea was conceived by some of the members of the University Extension Society. I undertsand him to mean that he thinks it would not be a wise thing to grant it.

14,253. (*Rev. Canon Browne.*) Just to continue that question. Has the University Extension Society ever suggested that on its own work candidates should be admitted by the University to a degree?—I do not know.

14,254. Then when you said just now that some of the members had conceived the idea you did not mean that there had been any statement?—No official statement, certainly.

14,255. Then is it fair to ask how you can say that some of the members had conceived the idea?—It is a matter of common knowledge.

14,256. I have never even heard it suggested. The utmost said here was that preliminary examinations for degrees might be got out of the way, but that of course these students should pass the final examination for a degree like other students?—Yes, that was always intended. Nobody can ever imagine anything other than that; but the idea was that they should get the degree simply by the attendance at University extension lectures and an examination at the end.

14,257. That would be the present degree, plus the advantage of all these years of lectures?—Yes.

14,258. And that is such a very bad thing you think?—I think the years of lectures are a good thing. I do not think it is a bad thing for them to get the London degree, but I think it is a bad thing for then to get the degree of a teaching University.

14,259. Do you think that the ordinary degree in Oxford or Cambridge gives a man a better mental training than you can conceive to be given in evening lectures?—Certainly. Far better.

14,260. The ordinary degree?—Yes, certainly.

14,261. You know of course, very well, the way in which young men get the ordinary degree at Oxford and Cambridge many of them?—Yes.

14,262. And that is a better mental training you think than you can conceive being obtained from evening lectures?—Yes, certainly, better general culture.

14,263. I do not on this Commission hold a brief for the University Extension Society at all. But still I do know about these things, and as these remarks have been made about the University extension I should like to ask a question or two. Have you ever been present at a class of University extension teaching?—No.

14,264. Have you ever read any of the paper work that has been done by University extension students?—No.

14,265. But yet you are certain that your evening classes at King's College are very much better training than those of the University extension?—Simply because they are systematic. Simply because they go on regularly. If you look at that paper you will see that University extension students do not go on. They take a subject and then leave off, whereas with us students are required to go on systematically. Let me say that I do not intend to disparage the work that is done by University extension lectures for its own sake; but by the very nature of the case University extension work is broken work.

14,266. Will you kindly just concentrate your attention upon a certain 12 weeks' training in a certain subject. If you have not been present at a class, and if you have not seen the paper work that has been done by the students, how do you know that your training is infinitely better than these?—I do not say it is for those 12 weeks, but I say if a student goes on for two or three years at one and the same subject, there is really no comparison between the amount of mental work he must get at one course and the amount he must get at the other.

14,267. Do your men never drop off?—Not those who want to get the associateship certificates.

14,268. And those who want to get the full certificates of the University extension do not. Why should not a man go on as well at the University extension as at King's College?—Because the University extension never does give any systematic course. By the nature of the case they give lectures one term, and the next term they deal with another subject. Whatever may be the case at exceptional places, you cannot always have the same lecturer giving the same systematic course term after term.

14,269. So that your statement really meant not that for 12 weeks or 24 weeks the teaching could not be as good as the other, but that with you they go on for three years?—That is so.

14,270. Then I quite misunderstood your point, and I think the other Commissioners, perhaps, did so also. I took your point to be that the training given say at a certain hour in the University Extension system could not be compared with that given say for an hour at King's College?—I have no doubt it is quite as good for that hour.

14,271. I was wanting to ask you what regular training you have which the University extension has not?—Mainly the continuity of study, that is the point.

14,272. Then your answer is, that instead of being 24 weeks it is three times 24?—Yes, and the same teacher goes on leading the students on term by term and year by year further in his subject.

14,273. Take, for instance, botany. It was thrown in the teeth of the University Extension Society that a man could go on for three years reading in botany, and get three sessional certificates. You say the advantage of your system is that they go on for three years?—Yes.

14,274. Taking, for instance, botany?—Yes.

14,275. I should like to have played you off against them. Do your students do paper work?—Yes.

14,276. Compulsorily?—It depends upon the professor. (*Professor Gault.*) In languages and such subjects as science and mathematics.

14,277. (*To Dr. Wace.*) History?—They all have to do the examinations.

14,278. That is quite a different thing. I want weekly paper work. What evidence have you that your students work at home at all?—They have to be examined.

14,279. That is a different matter. What evidence have you that they are doing work weekly?—The same as at Oxford and Cambridge.

14,280. That is really not the question. What I ask is what evidence you have that they are doing work weekly?—The examination at the end of the term.

14,281. And they may never have opened a book and never have given their mind a single moment's run?—It is certain that if they have never given their minds a single moment's run they would have a very bad examination at the end of the term.

14,282. They might be plucked, but that has nothing to do with it. The question I ask is what evidence you have that they are doing work weekly, and your answer is that you have none?—No.

14,283. Whereas the University extension will not allow a student to be examined unless week by week he has done a large amount of paper work?—In your system it is necessary to take precautions, but it is not necessary where students are given a systematic discipline.

14,284. You will admit that it is an advantage that the University Extension Society does require a certain amount of work week by week as evidence that the pupils are working?—It is an advantage, certainly.

14,285. You put it as a necessary precaution, because our students are inferior?—Not because they are inferior, but because you have no guarantee of their doing work.

14,286. What guarantee have you?—We have matriculated students, and our professors know exactly the work the students are doing.

14,287. I am endeavouring to concentrate your attention on a particular course of lectures. You have no evidence that those who have passed have done more than attend carefully to the work done during the hour?—It is not likely that our professors would think that the student would get enough knowledge by simply attending at the lectures, and I should be surprised to find that anybody could conceive that the professors at King's College do their work in such a perfunctory manner.

14,288. I asked what your rule was?—We trust our men.

14,289. I do not say I am suggesting anything. I asked you in a perfectly courteous manner what evidence you have that the students are doing this work, and then you turn round and say you cannot conceive that the professors are doing such a thing?—Then why did you ask the question? I cannot conceive how anybody can imagine that professors, in any college that deserves the name, would not point out to the student that there are certain things that they must read.

14,290. We have all done that even at Cambridge, but we never knew that they read them?—Then all I can say is, that we are in the same position as Cambridge.

14,291. I am comparing you with the University extension. It is not in the same position as Cambridge. Nobody is admitted to the examination unless the paper work is produced and satisfies the examiners. You have nothing to correspond with that?—No. I should be sorry to introduce it at King's College, or at any University institution. I think it would hamper the students.

14,292. (*Mr. Anstie.*) I gather as the general result of your statement that you would think it right that the University should recognise as a portion of its course the work done at evening lectures?—Yes.

14,293. But you desire that in that they should have regard both to the nature of the work done and to the continuity of the study?—Yes.

14,294. And those are the two things which you think are important matters to recognise?—Yes.

14,295. Whatever evening work they deal with, whether at King's College or elsewhere?—Yes.

14,296. Did I take it rightly that there were 1,123 students in the Law of Banking?—No. 900 students in the Law of Banking; 1,123 Civil Service students.

14,297. That is in one year, 900 students in the Law of Banking?—Yes.

14,298. That is the commercial part of it, is it?—Yes, the general Law of Banking.

14,299. The Law of Banking treated on its commercial side?—The Law of Banking on its commercial side. These lectures are distinct from the lectures on Commerce and Commercial Law, these are really for bankers—Banking Law—they are free, and we send notices of them round to the bankers, and most of the bankers send their young clerks to attend them.

(*Professor Gault.*) I should like to say in answer to Canon Browne that we have paper work in the case of Languages, Mathematics, and other subjects, where the classes are held twice a week. The work is set at each lecture and produced in examinations in the lecture room.

14,300. (*Rev. Canon Browne to Professor Gault.*) Do we find that in the Calendar?—It does not say that particularly.

14,301. It rests with each professor to do it or not?—But you cannot do otherwise in the case of languages or mathematics. There are certain subjects where possibly lectures only are given—in the case of Dr. Wace, Divinity Lectures, and so on—where the lecturer does not examine every week, but, as a general rule, work is set at each lecture and is produced on the next occasion.

14,302. That is in the evening classes?—Yes.

14,303. As you are explaining, would you tell me whether the professor keeps a record of those who do this paper work? What happens to the student who

Rev. H. Wace, D.D., and J. Gault, Esq.

9 Nov. 1892.

does not do the paper work?—I do not know that the professor keeps an actual record in his register, but he keeps a mental note of the character of the work, and at the end of the term when a man has to produce a schedule of attendance he is governed by that work in signing the schedule. If the student does not attend regularly he does not get his schedule signed.

14,304. Can he go into the examination?—He can go into the examination, but he does not get his schedule signed. It is no use his passing the examination, he must get the schedule signed.

14,305. If he has not such a schedule they do not exclude him, do they?—The examination is no use whatever for the Associateship without.

14,306. Is the list published?—You will find those past examinations recorded in the Calendar.

14,307. He may appear there?—Yes, he may appear there, but that is no advantage with regard to the other distinction we offer to him, that is getting the Associateship of the college. No, I think as a matter of fact it states specifically in the Calendar that the student will not be allowed to pass the examination unless he actually does attend regularly.

14,308. It will be very important to have the wording of that, but of course, as your Principal has said, he would object to the requiring the production of paper work?—(*Dr. Wace.*) I should object to fettering the professors' method of teaching in any way.

14,309. (*To Professor Gault.*) What I wanted to arrive at, as you kindly gave the explanation, was whether it does appear?—At page 508 in the Calendar there is this:—"No prize or certificate can be "awarded unless earned by (1) Regular and punctual "attendance in the particular class for which the "reward is given; (2) good conduct; (3) absolute "merit in the examination."

14,310. That is perfectly simple. But there is not a word about anything except attendance and getting marks in the examination paper. So there is no requirement of paper work?—(*Dr. Wace.*) Our work is precisely the same in evening classes as in every University in morning classes.

14,311. (*To Professor Gault.*) So he can pass the examination if he has done nothing but sit still in the room and shut his ears?—If he gets the required number of marks.

14,312. (*Lord Reay.*) Is the paper work to which you have alluded taken into account at the final examination?—No, I do not suppose it is taken into any actual account at the examination. The examination is on the merits of the paper set.

14,313. He gets it on the merits of the marks obtained at the examination?—Yes, that is so.

14,314. And who examines him?—The lecturer or the professor, as the case may be, who sets the paper.

14,315. The teacher?—Yes, he examines him on the work done.

14,316. Perhaps you can explain what Dr. Wace did not make quite clear with regard to this difference between the general Associateship and the special Associateship, because it is not explained by paragraph 2 on page 510? There you have simply the special Associateship of Section XVI., and another special Associateship for those who cannot take any of these groups of subjects?—The last is the general Associateship. The one who does not take the special course of subjects goes in for the general Associateship.

14,317. Paragraph 2 is:—"The candidate can then "select one of the following groups of subjects (*see* "Section XVI.) which are adopted for special provi- "sions, or if none of these fall in with the require- "ments of the candidate he may, subject to the "approval of the Dean, take those subjects which suit "him, with the under-mentioned exceptions." You surely do not call this optional Associateship a general Associateship falling under a general rule?—"The "candidate can then select one of the following groups "of subjects"; those are the groups referred to on pages 512, 513, and 514.

14,318. Those are special Associateships?—Yes "or if none of these fall in with the requirements of "the candidate he may, subject to the approval of the "Dean, take those subjects which suit him, with the "under-mentioned exceptions." That is the general Associateship.

14,319. Do you mean, therefore, to say that the general Associateship is that which he takes subject to the approval of the Dean and not subject to a general rule?—(*Dr. Wace.*) It is an Associateship on general terms.

14,320. (*To Professor Gault.*) If the professor or teacher examines, do you consider that an independent examiner should be associated with him?—I do not know that we would not admit an independent examiner if we were asked to do so, but we consider that the teacher has a better knowledge of the education given to the student, and therefore examines better than an outsider could do.

14,321. Supposing you had the command of a number of examiners, would it be desirable to admit an outside examiner on the ground occasionally alleged that sometimes a teacher requires to be examined as much as the students?—Possibly so. (*Dr. Wace.*) I should say quite certainly that the examination by the teacher himself is far better than by any outsider. As a concession to prejudice we are willing to allow external examiners to be associated with our teachers, but I am sure it is much better that the students should be examined by their teachers or by those who have taught under the same system, as at Cambridge or Oxford. At Cambridge in the Mathematical Tripos a man is not examined by the man who has taught him, but any man who examines him has taught over the same ground as the student has been taught. The great mischief of London is that students are examined by those who do not know anything about how they have been taught, and the consequence is that students are driven away.

14,322. Is your Associateship conferred without any examination, except by the teacher?—Yes.

14,323. (*Mr. Anstie to Professor Gault.*) I think you are in charge of the Commercial Law Classes?—Yes.

14,324. At page 441 of the Calendar I see the classes in Commerce occupy from October to Christmas, and then Commercial Law is from January to Easter?—Yes.

14,325. Those two subjects show the teaching in law?—They form one course. One is introductory to the other.

14,326. They are parts of the same thing?—Yes. I lecture on both of them.

14,327. I suppose Commercial Law, which lasts from January to Easter, would have regard to the subject-matter of the previous course?—Yes; one is intended to lead up to the other. In the case of shipping I produce all the documents used in the shipping trade, bills of lading, charter parties, and so on. I treat of those in the lecture on law as well. In the Commerce Lectures I treat of the actual fact, and in law of the legal side.

14,328. Does January to Easter cover the whole course?—No; we have a summer course as well. Last year I lectured on the Law of Banking. The lectures which are given by Mr. Paget are on some particular branch of banking only, like bills of exchange, or the more recent cases as they affect bankers at the present day. When I lecture on Banking I lecture on the general Law of Banking. We have the summer course as well as the winter course. You will find that on page 488.

14,329. Are those summer courses?—Yes; that particular subject which I give in the summer is governed entirely by the requirements of the students who have entered.

14,330. Taking together pages 441 and 488, that includes the whole law work?—No, not the whole law work of the College; that is the Commercial Law work only.

14,331. What is the other?—We have, in addition, a new Faculty which we are trying to open up. At page 458 you will find all the subjects required for the Bar examination are taken up, and also all those required for the degree of the University as well, and for the Incorporated Law Society.

14,332. How long has that been done?—This is the first year; we have only just begun; we have hardly got into working order yet.

14,333. Then you cannot give me any account of your experience?—No; we have only just started them. (*Dr. Wace.*) I have omitted one thing which I think the Dean would like me to mention, that is, that we have special classes for the London degrees, and the Matriculation of London University, and the Arts and Science degrees. (*Professor Gault.*) We have a course of classes arranged to fit in with the Matriculation work of the University, and the first B.A. and the first B.Sc. as well.

14,334. (*Lord Reay to Professor Gault.*) May I ask with what object do the students attend your law classes?—We have hardly got into working order yet. So far we have had men preparing in the Commercial Law class for the Bar generally, and also solicitors' clerks, but we can hardly say what men will come for our Law Faculty.

14,335–6. Are there any merchants?—These come to my Commercial Law classes. I have all kinds of men coming, men preparing for the Institute of Bankers, chartered accountants, notaries public, bar students, and solicitors' clerks as well, but more particularly commercial men, who come for commercial law. (*Dr. Wace.*) I understand that the Commission will do me the favour of letting me appear again to reply upon the evidence?

(*Chairman.*) Yes.

The witnesses withdrew.

T. Hudson Beare, Esq., B.Sc., examined.

14,337. (*Lord Reay.*) You are Professor of Engineering and Mechanical Technology at University College?—Yes.

14,338. You wish to give us some information with reference to the Applied Science and the degrees conferred in applied science in existing Universities in the first place?—Yes, I thought it might be of some assistance to the Commission in coming to a conclusion if they knew the position at present occupied in existing Universities by Applied Science. With regard to Oxford and Cambridge I have very little to say. At Oxford there is the Millard laboratory which deals with many of the problems in Applied Mechanics, and there is a small workshop. At Cambridge there is a complete Department of Engineering under a professor and demonstrators, the present professor being Professor Ewen. There are very large workshops and some laboratory accommodation which, I believe, Professor Ewen is now extending. Hitherto there has been no special engineering tripos, but I understand that a grace has recently been passed for the establishment of an engineering tripos. That will be recognising there that branch of Applied Science known as engineering. Then at London University I might say at once that practically there has been no recognition of Applied Science at all. The intermediate examination in Science is of a character which forbids practically all those who are going to study Applied Science taking it up. The biological subjects have been a stumbling block to students. When the intermediate is passed there is a possibility of differentiating in the final and also in the D.Sc. examination, but my own experience is that the intermediate examination in the biological subjects has been such a stumbling block that practically few Applied Science students have gone for the B.Sc. degree. I believe the D.Sc. degree in the Applied Mechanics division has never been taken by anybody yet. I may be wrong but I believe it has never been taken by anybody.

14,339. (*Mr. Anstie.*) The B.Sc. is in different branches, is it not?—It may be taken in different groups of subjects; that is, there is a B.Sc. in Chemistry and B.Sc. in Physics groups, and so on.

14,340. (*Lord Reay.*) And you are in favour of such a division?—Yes. There are so many subjects that it would be impossible for anyone to show proficiency in all of them. In Glasgow and Edinburgh there have been for a great many years Schools of Engineering. In Glasgow the Engineering School comes under the Faculty of Arts, and it is divided into three branches, Civil Engineering, Mechanical Engineering and Naval Architecture. The lectures in Civil Engineering and Mechanical Engineering are given between 8 and 10 in the morning so as to reach men who are engaged in offices or works. There is an entrance examination covering general studies and then final degree given is the degree of B.Sc. The examination is largely in Applied Science. It is distinct from the ordinary examination of B.Sc. The subjects are, I believe, largely those of the pure Science degree with the necessary engineering subjects. It can be taken in any one of four groups of subjects, Civil Engineering, Chemical and Mining Engineering, Electrical and Mechanical Engineering, and Naval Architecture and Marine work. The course covers two years in the University class-room, but it is very often a longer course than that, because a student spends part of the term in the University and part in practical work. The D.Sc. is also given for much higher proficiency, and a certain amount of original work is required in the branches of Applied Science to which a student has been devoting himself. They also give certificates of general proficiency to students who are unable to pass degree examinations; moreover certain students find it impossible to attend all the classes necessary for degree examinations, and they find that a certificate of general proficiency in the subjects they have taken up is of advantage to them.

14,341. That is not evening students?—No, day students.

14,342. What is your opinion of such a procedure?—I think it is a distinct advantage that a student should have something to show for his attendance at classes, and very often it is impossible for a student to take a complete course so as to acquire the necessary proficiency for a degree. A certificate of proficiency is given in Glasgow on the results of the examination. It is not often given in that way. There are a great many colleges which give certificates of Engineering not always on the results of examination but on the results of the student's work, that is to say it is given on the results of the work that he has done at the college. I think, myself, that such a certificate is of considerable value to the student. Of course an examination on such a subject as engineering does not amount to as much as an examination in pure Science, but it is a rough and ready test of the capacity of the student, and, so far as I can see at present, it is the only one we have, and I believe it is recognised by engineers to whom the students may afterwards apply for employment as a guarantee that the student has been spending his time to useful purpose inside the college. At Edinburgh the Faculty of Arts also includes Engineering. There, again, there is a preliminary examination which must be passed by all students on entering. There are two examinations for the degree. The degree is called Bachelor of Science in Engineering, and it can only be taken in one group. There is only one group of subjects for the B.Sc. of Engineering in Edinburgh.

14,343. Is that under the new Ordinances?—I do not know about that. I do not know whether the new

T. H. Beare, Esq.

9 Nov. 1892.

Ordinances have come into force yet. I saw the new Ordinances when they were first issued but I understood they were to be opposed in some way.

14,344. But you are speaking of an antecedent state of things?—Yes.

14,345. (*Mr. Anstie.*) You say there is a Bachelor of Science group and within that group the engineering group?—Yes.

14,346. And that forms a portion of the Bachelor of Science group?—Yes.

14,347. That, again, is not sub-divided?—No it is not. At Glasgow the engineering group is sub-divided into four sub-groups. In both Universities it is merely called Bachelor of Science.

14,348. Therefore it has nothing to do with the Faculty of Arts?—No, it has nothing to do with the Faculty of Arts though they are placed under the Faculty of Arts.

14,349. Because there is no Faculty of Science?—Because there is no Faculty of Science. Then there is one point of considerable importance with regard to the Edinburgh degree. They give a D.Sc. degree also in engineering, but before it is given or before the examination takes place the candidate must produce evidence of having spent two years in practical work between the time he took the B.Sc. degree and the time at which he presents himself for the D.Sc. degree.

14,350. Do you approve of that?—I should like to delay the answer to that for a short time. Then with regard to the Dublin University there is a School of Engineering there which has been in existence for a considerable number of years. There an entrance examination is required but only in pure mathematics. If a student can pass in pure mathematics he is allowed to attend in the Engineering School. The course covers three years. At the end of the third year he receives a license in engineering; but there is an additional advantage to be gained by students who attend prior to the engineering course an arts course. If a student has obtained the Bachelor of Arts and then goes to the Engineering School, after passing through the Engineering School he does not receive a license in engineering but he becomes a Bachelor of Engineering, "B.E." Then also after three years he can obtain a higher degree called Master of Engineering, by having spent three years in practical work.

14,351. (*Rev. Canon Browne.*) There the same question comes in?—Yes. Practically those are all the Universities which have at all taken up the subject of Applied Science.

14,352. (*Mr. Anstie.*) When you say they have spent so many years in practical work, is that all the condition?—No, there is an examination as well before the degree is given.

14,353. But there is no condition that he should have done original work?—No; simply that he should either have been in an engineer's office or employed in engineering work of some kind.

14,354. Professional work simply?—Yes. I think it is quite clear from these facts that almost every University in Great Britain does recognise Applied Science as distinct from Pure Science, and as requiring distinct and separate examinations. Then I thought I would like also to say a few words with regard to the colleges of Great Britain which are of a University standard but have not the power of conferring degrees. In every one of those colleges throughout the Kingdom there are Departments of Applied Science. In London, leaving out of account at present the more purely Government establishments, there are three colleges of University rank which give instruction in Applied Science. The City and Guilds Central Institution is one, King's College is another, and University College is another. All three of them require a three years' course, and at the end of the three years' course they all grant diplomas, or something equivalent to a diploma. I have here the diploma which is given at University College which certifies to students having attended their classes with credit. At the foot of it all the classes in the various courses are filled in, and opposite to them are put the honours obtained in them by the student. In every subject the examination is carried out by the teacher, not by an outside examiner. That statement applies equally to the City and Guilds, and to University College. That diploma is not given unless a student has conducted himself satisfactorily and passed satisfactory examinations; but it is given even although the student has not passed satisfactory examinations in all the subjects of his course; that is to say, at University College a student might fail to obtain a satisfactory certificate in some one subject of his course, but still, he would be given the diploma. King's College, instead of giving a diploma give their Associateship. Then dealing practically with the same work in London, there are, of course, the School of Mines, and the Royal Naval College, and in the neighbourhood of London the Indian Engineering College at Coopers Hill. They all have courses of engineering leading to a definite purpose. Of course, the Royal Naval College is open only for their joining the Navy, though I believe private students are admitted on restrictions. The Royal Indian Engineering College is of some interest from their course. They formerly only prepared men for India, but now they take in any man on an entrance examination. The entrance examination covers English and elementary mathematics. The course lasts for three years, and after that time examinations are held for the Indian appointments. At the close of that examination those who obtain Indian appointments are sent by the Government to offices of engineers or into workshops. The premium required is paid by the Government, and the student receives a salary as well. That brings out two points. One is the college work and the other is the practical workshop.

14,355. Are you going to say something about the questions of practical training?—Yes, a little later. I do not think I need say anything further about the provincial colleges except that they are working on the model of the London Colleges. They all have a three years' course; they all issue or give diplomas at the end of the three years' course; and the diploma is given as the result of steady work and proficiency. One college is slightly different from the rest with regard to the diploma, that is Birmingham. At Birmingham the diploma is only given after a student has produced a thesis, or some piece of original work, in addition to passing his ordinary class examination. I think the others simply have their ordinary class examination for the granting of the certificate.

14,356. (*Lord Reay.*) Is the Birmingham diploma more valuable than the others?—I do not think so. I do not think it is known really that is a condition.

14,357. Then you would not make original research a condition?—Not for the granting of a diploma.

14,358. You do not consider it essential for the profession of an engineer?—It is a very good thing, but I do not think it is so absolutely important that it should be made a *sine quâ non;* that is, that you should prevent a student from receiving a diploma because he cannot produce original work. Then, in India and the Colonies, there is exactly the same recognition in all the Universities of Applied Science as distinguished from Pure Science. In Toronto, and in the McGill College, the Degree of Engineering is given. The degree is "C.E." in the case of Toronto, and "B.E." in the case of the McGill College. In Sydney and Melbourne degrees are taken in Applied Science subjects. I think that is all I have to bring before the Commission with regard to the question of recognition.

14,359. This engineering diploma is recent?—Yes, within the last few years.

13,360. Which University took the initiative?—I think the diplomas of the Scottish Universities are the oldest. Certainly in London it is altogether recent, and the provincial colleges have only come into existence during the last few years.

14,361. (*Rev. Canon Browne.*) Do you remember when we founded our Professorship of Mechanism at Cambridge?—No.

14,362. There has been a Jacksonian Professor of Mechanism founded many years ago, getting on for 20 years?—I did not know that. At University College there has been a Professorship of Engineering for many years, but until a few years ago it was purely a lecture Chair. It has been held by several distinguished engineers, but it was only a lecture Chair. I believe the same things apply to King's College.

14,363. Are the classes well attended?—At a very large number of those colleges they are, I think, crowded. I should be sorry to say what the number at those Colleges is at present, but it amounts to a very large total, over 1,000.

14,364. It is intended to fit them for their work in life?—Yes.

14,365. (*Lord Reay.*) You wish to call the attention of the Commission to your claim that this should be made a separate Faculty, and distinctly recognised as such in the Charter?—Yes.

14,366. You do not want to leave it to the future University to settle the point?—No. I have the draft Charter before me, and there is a provision in that for the establishment of Faculties in the future, but that can only be done (apparently, from reading the Charter) by the general consent, or practically the general consent of all the existing Faculties. It is clause 12 of the draft Charter, which says:—"Before establishing any new Faculty the Council shall refer the matter "to all the Boards of Studies of all the Faculties for "consideration and report." My view is that the Faculty of Applied Science is such an important one that it should receive its recognition at the hands of the Commission, and not at the hands of the sister Faculties, because I do not consider that some of these Faculties are likely to take such a broad view of the question as the Commission is. It has been considered by a great many authorities that Applied Science should be outside the walls of a University altogether. That is not my opinion at all, and I believe it is not the opinion of most of those engaged in the teaching of Applied Science of a high character and I think, therefore, it should rest with the Commission to decide such a very important point rather than with the sister Faculties. The following are some of the reasons why I think the Faculty of Applied Science should be separate from the Faculty of Pure Science. Of course I do not know how far the new Charter is likely to follow the old. First of all, according to clause 9 representation on the Council is granted to the Faculties:—"Four members elected by each of the assemblies of the Faculties of "Arts, Science, Law, and Medicine to represent that "Faculty." Applied Science, therefore, would have to take its share on the Council in the Faculty of Pure Science, and it is unlikely to have proper representation upon the Council. Then, secondly, there is also a provision for the representation upon the Council of such bodies as the Council of Legal Education, and the Incorporated Law Society. I think it would be advisable if under that paragraph some representation were given to such professional bodies as the Institution of Civil Engineers, or the Institution of Mechanical Engineers, upon the Council. That, I take it, can only be given if there is a distinct recognition of Applied Science by making it a Faculty.

14,367. (*Rev. Canon Browne.*) Beforehand?—Yes.

14,368. There is this in the ninth clause:—"The "assembly of any new Faculty established by the "University, shall elect to the Council such number "of members, not exceeding four, as shall on the "establishment of the Faculty be determined by the "Council"?—Yes, but that would leave it in the same condition as I referred to just now, that the establishment of a new Faculty would depend practically upon the sister Faculties; upon their goodwill.

14,369. I thought you said that when it was established it would only take its share in the representation of four?—I might have said so, not intending it in the way in which you put it. What I meant was, as a branch of the Pure Science Faculty. That is, that the professors who teach Applied Science subjects would be merely members of the Faculty of Science.

14,370. (*Mr. Anstie.*) In substance it would have to take what it could get under those conditions?—Yes. Then there is another point which I think of considerable importance with regard to making it a separate Faculty. I think, myself, that for Applied Science students Pure Science should be taught with a view to its future application, that is to say, that the method of the teaching should have in view the particular profession a man is going to adopt in his after life. I will only take one subject as an illustration, Mathematics. At the present time in most of the existing colleges and Universities Mathematics is taught by the same professor and in the same classes for the Applied Science students as for the Pure Science students. I think there is a considerable amount of Mathematics thus taught which may be a very excellent mental training, and which may be very valuable for men who are taking it merely for degree purposes, but which is not of great value to men who are looking forward to a future profession. Again there are several branches of Mathematics which it is very desirable to arrive at early in the career of the applied science student. I refer to the calculus. I, therefore, think it would be better if there were professors of Applied Mathematics teaching Mathematics with a view to its application to the problems which come before those students in their future professional career.

14,371. Do you think you must have preliminary scientific training in the same way as there is separate preliminary training for medical students?—Yes; preliminary education in Pure Science. Then, after that Science should be taught with a view to its application.

14,372. Would you leave that preliminary Science training to be settled by the Faculty of Science or by your own Faculty?—I take it that in the Faculty of Applied Science there would be a considerable sprinkling of members of the Faculty of Pure Science. I do not want to put forward a plea that there is to be a special Professor of Chemistry or a special Professor of Physics.

14,373. There are lectures that your students would attend concurrently with the students of Pure Science?—Yes.

14,374. (*Rev. Canon Browne.*) Just to be sure about terms, let me ask you this. Among the subjects of Pure Science do you include Mathematics?—Yes.

14,375. (*Lord Reay.*) Could you indicate those branches of Pure Science which should be taught to your students in separate lectures from those which the Pure Science students attend?—I take it that Mathematics is, perhaps, the most important, and after that Chemistry.

14,376. And there you would have special courses?—I would have special courses.

14,377. You would differentiate them?—Yes.

14,378. (*Rev. Canon Browne.*) Chemistry, for instance, especially as bearing upon metals, and so on? Yes.

14,379. Leaving out a great deal that would be of value to the men, but of no value with regard to the direct interest to their profession?—Yes.

14,380. (*Mr. Anstie.*) Excluding Organic Chemistry?—Yes, and certain parts of Inorganic Chemistry.

14,381. (*Rev. Canon Browne.*) With regard to Mathematics, would you make a distinction? For instance, Geometry you would teach perhaps rather differently?—Yes, on slightly different lines from the ordinary teaching of Geometry.

14,382. In what way?—I think the point is this, that very often the pure mathematician looks upon a

T. H. Beare, Esq.

9 Nov. 1892.

problem solely from the point of view of Mathematics. Of course this is an excellent mental training for the student, but it has no direct practical application. At the same time exactly the same branch of Mathematics can be taught with a very large amount of practical application.

14,383. You would want to get to the business?—Yes.

14,384. (*Mr. Anstie.*) Does not that run rather deep in Mathematics. Professor Henrici's method is different, is it not, from that of ordinary mathematicians?—I think all the preliminary ground is very much the same as ordinary mathematical teaching. I think he only differentiates when he gets to a higher stage, and I think it is the same with regard to the teaching at Finsbury of Professor Perry. He is at the present time giving a course of lectures on Mathematics for engineers, and he is practically treating the subject from the point of view of its application to problems.

14,385. (*Rev. Canon Browne.*) To problems of real existence?—Yes.

14,386. Not mere abstract problems?—Not mere abstract problems. Then, again, I think if the Faculty were established at once (I do not know what the views of these bodies are) it would simplify considerably the entry within the University of such technical institutions as the City and Guilds Institute, and the Royal School of Mines.

14,387. (*Lord Reay.*) You are in favour of bringing them in?—Yes.

14,388. Their teaching is distinctly University teaching?—Yes, it is distinctly University teaching, and I think they should be recognised in a University. But I cannot see how they are to be recognised in the University if Applied Science is to be treated as a mere branch of Pure Science.

14,389. (*Rev. Canon Browne.*) And it would tend to make the teaching even higher?—Yes. And it would have another important result. Necessarily from the constitution of the colleges there is a certain amount of antagonism between them at the present time. I do not think it is necessary that there should be such an antagonism, but if they are all independently working on the same lines the antagonism is more or less a certainty. If they were united there would be no doubt that the teaching of the professors would follow different lines. There would be no doubt that a student could follow lectures by different men teaching the same subject from different standpoints. At the present time the students of University College would not think of going to the City and Guilds Institute or *vice versâ*.

14,390. (*Lord Reay.*) And a better use could be made of the funds which these colleges have at their disposal; if the institutions were co-ordinated?—Yes.

14,391. You would not require a great amount of additional funds if that could be done under the auspices of such a Faculty as you wish to organise?—That is so, and I think that is perhaps as important a point as anything I have mentioned. That bears very strongly upon the subject of Applied Science as taught on the Continent. On the continent Applied Science is dealt with in large colleges, where there is not merely one professor of engineering but half a dozen professors of engineering. In the same way there might be half a dozen professors dealing with different branches of Chemistry.

14,392. (*Rev. Canon Browne.*) In what definite place are there half a dozen professors?—At Berlin. I believe to a large extent.

14,393. Do the French people do that?—I do not know whether it is done to the same extent in France.

14,394. (*Lord Reay.*) When you alluded to Berlin were you alluding to the University or to what the Germans call the Applied Science University?—The Applied Science University. I understand that in Germany it is treated as a distinct institution from the German University proper.

14,395. Everywhere in Germany it is so treated as distinct from the University?—Yes, and I think myself that that is not at all a good course to adopt. In my own view the Applied Science teaching should be kept within the walls of a University and should be part of the University work.

14,396. In Belgium, we have been told, it is part of the University?—Yes, I prefer that. In just the same way I should be sorry to see the teaching of medicine entirely divorced from the University. I consider engineering to be a profession just as much as medicine, and it benefits by being studied within the walls of the University to a certain extent as well as medicine does.

14,397. (*Mr. Palmer.*) Is there not a very great difference between the application of the different branches of your Applied Sciences which would make it very difficult to bring them under one Faculty. Take the greatest of our commercial and industrial Applied Sciences—that of agriculture—that surely would want to fight for its own hand so as to be dealt with in a totally separate way from engineering, for instance, although mechanics would be common to both?—It would be a little difficult, I admit, to bring in all the Applied Sciences in the course of one Faculty.

14,398. I was struck with your taking Mathematics as Pure Science as well as Applied. Physics, too, in all its various sub-divisions would have to be considered. It occurred to me to ask you whether you would take these sub-divisions as branches of Pure and of Applied Science, or whether you would think them deserving of further separation—Botany, Biology, Zoology, and so forth?—Those are subjects which I think should be kept within the Pure Science Faculty—Botany and Zoology.

14,399. Why cannot the other?—Because in my view the practical application of such a subject as Botany is small as compared with the practical application of such a subject as electricity.

14,400. Pure Mathematics would be common to every branch of Applied Science, would it not?—It is common to every branch of Applied Science in its applications. I think that is why Applied Mathematics should be a separate subject. A certain amount of Pure Mathematics, without any idea as to its future development, is necessary to all students. But as soon as they have arrived at that minimum knowledge I think Mathematics should be taught with a view to their actual work, and I think there are very few branches of Applied Science for which their Mathematics would not be the same. Teachers might take applications from all the Applied Science. It would be equally good mental training.

14,401. And you would not be afraid that the various branches of Applied Science would require separate Faculties for themselves in the future?—I do not think so.

14,402. (*Rev. Canon Browne.*) Are you not really rather speaking of engineering?—Yes, I am speaking rather of engineering in its various branches; and such a subject as Architecture, I think, comes within the same ground, and also probably Applied Chemistry—the application of chemistry to manufacturing purposes.

14,403. You were not thinking of agriculture at all?—No, that has not occurred to me at all in connection with the question.

14,404. (*Lord Reay.*) You would have no objection to incorporate agriculture?—Not the least. I quite realise agriculture as one of our most important national industries.

14,405. (*Rev. Canon Browne.*) But should you not have thought that that came more in connexion with our chemistry branches?—There is so much machinery used in agriculture now that it almost comes in in engineering.

14,406. That is machinery—not agriculture?—A farmer ought to have some knowledge of the machinery he is going to use.

14,407. (*Lord Reay.*) Have you anything to add to the advantage of having a Faculty which is distinct from the Faculty of Pure Science?—I do not think so. Except this. If there were a distinct Faculty it might fulfil a very great function in supervising the education and examinations of the technical institutions which have been recently established throughout London and its neighbourhood. That is a point of very great importance, and which in the future will be of more importance than it is at the present time. These technical institutions which are being founded throughout London are devoted mainly to the teaching of artisans and others who are employed during the daytime, and who, therefore, attend the evening classes, and who have no other possible means of obtaining instruction in the sciences which tend towards their particular branch of work. If we are to have a number of technical institutions throughout London all separated from one another it occurs to me that the whole system of technical education will be in a perfect chaos; but if we had a Faculty of Applied Science in the University, it might very well come with in the function of that Faculty to supervise in some way the system of education and the way in which their examination is conducted, and then, as a rule, the granting of a diploma by these colleges—I do not say a degree, but a diploma—would have to the student the same value practically as the degree has.

With that might be conjoined some power of granting scholarships and bursarships to the successful students of the evening classes to take a year or two, or whatever might be thought proper, in one of the day institutions, so that the best men of the evening students might have an opportunity of devoting themselves to work of higher kind for a year or so. That can only be done by bringing these technical institutions into a line with the University.

14,408. Do you think that there is a great danger that this outburst of enthusiasm which we have had in favour of technical education, unless it is led into certain definite channels, may do more harm than good?—Yes.

14,409. And you think there is great necessity for some directing power, and that the proper directing power would be the Faculty of Applied Science?—Yes. There is no doubt that there is an immense amount of enthusiasm over technical education, not merely in London, but throughout the whole country, and unless kept within the true limits of such education, I think it is likely to do more harm than good.

14,410. (*Rev. Canon Browne.*) Before you leave that point would you tell me this. Would you consider that this Faculty should have the same representation on the Senate as all the other Faculties, say, four for Pure Science and four for Applied Science?—Yes.

14,411. That would be getting a large representation as compared with Art, for instance, unless you can sub-divide Art. However, that would be your opinion?—Yes.

14,412. Suppose this were managed, can you imagine that any other branch should put in a claim to be treated separately. You could not have such a thing as a Faculty of Agriculture; but what would be the precise answer. Could you say no to them and yes to engineering?

14,413. (*Lord Reay.*) Would not the answer be that which you have indicated. That you would be quite prepared to put agriculture in your Faculty?—Yes, that is my answer to it. My own opinion would be that the Faculty of Applied Science should include agriculture as one of the subjects.

14,414. (*Mr. Anstie.*) And, of course, Chemistry?—Chemistry, of course.

14,415. (*Rev. Canon Browne.*) And all technical applications?—Yes, all technical applications.

14,416. Casting your eye over the whole field, you cannot see that there would be the difficulty that other branches would claim to be independent?—I do not see it, and I have looked over the question pretty fairly.

14,417. This is the one case?—Yes.

14,418. (*Lord Reay.*) And you would allow some of the professors in the Faculty of Pure Science to be present when you were considering up the subjects of the Preliminary scientific course?—Yes.

14,419. That is your idea?—Yes.

14,420. Of course they would not be present when you were discussing subjects which entirely appertained to your own Faculty?—They would be *ex officio* members of the Faculty where it was necessary to have their opinion.

14,421. And you would not claim to attend the meetings of the Faculty of Science?—No.

14,422. Now we come to the fourth point, "Title "of Degrees to be given." "Character of Examina- "tions and the arrangements for practical training?" —That is the point that I wished put back from the beginning. It is such a very important question that I thought I should like to deal with it as one question. It should be remembered that all the Universities that I drew attention to, with the exception of Dublin, give a degree of B.Sc. only, and do not give a degree of engineering. Bachelor of Science in engineering it is called in one or two of the Universities, but the letters are simply B.Sc.

I have considered very carefully the question as to whether or not it was desirable for a degree in Engineering to be given, that is to be called a degree in Engineering. The opinion I have come to after very careful consideration of it, and after conversation with a good many engineers, is that it would not be satisfactory to call it a degree in Engineering, but it would be satisfactory to call it a degree of Practical Science. I do not think there should be any separation of title at all, whether it were taken in applied or pure science, but Bachelor of Science only.

It is very difficult to examine a man in the subject of Engineering or in the practical application of Chemistry, because it involves examining him in practical work, and I cannot quite see my way to such an examination. To call a man a Bachelor of Engineering, or a Master of Engineering, when he has simply attended a college and passed an examination would be simply like calling a man M.D. when he had never been inside a hospital.

I do not quite see how to get out of the difficulty if he is to be called a Master of Engineering or a Bachelor of Engineering, I do not see how an examination in practical work can be carried out successfully. You can examine a man in problems which involve the applications of science in that subject, or on what is very often called theoretical work, but you cannot examine him on his practical work.

14,423. (*Rev. Canon Browne.*) Could you not make him a Bachelor for that?—Of course, with the profession, and with those engaged in University work, there would be no difficulty in differentiating between a man simply holding that degree and a man who is a trained engineer, but the general public would be inclined to think that when a man called himself a Bachelor of Engineering he was an engineer. It does not at all follow that a man because he has had a training in applied sciences is an engineer.

14,424. (*Mr. Anstie.*) If you gave the degree of Bachelor for the technical branch you would be giving a degree in the early part of the graduate's career for University distinction for what was practical?—Yes.

14,425. That would hardly agree with the view you have been expressing?—I say if you give a Bachelor of Engineering degree it would signify that the man was an engineer from the practical point of view and not merely a theoretical engineer.

14,426. And your view is that the University should rather give the scientific recognition?—Yes.

14,427. Do you think the other and more professional bodies are the proper bodies to give a certificate of efficiency from the professional point of view?—Bodies like the Institute of Civil Engineers and the

T. H. Beare Esq.

9 Nov. 1892.

Royal Institution of British Architects are bodies who ought to give the stamp of practical work. In fact, the training in the college is half the training. It is like the medical profession in that respect. The training inside a college is half, and the training in the hospital is the other half, which fits him for the proper performance of his every-day work. We cannot have hospitals for engineering purposes; we can only have the shops and offices where the work is going on, and when the student is there he is away from the professors. It has occurred to me that the degree might be given in this way. You might give the degree at the end of two years of practical work, but you have no guarantee that the two years have been usefully spent, unless you examine him, and I do not quite see how the examination is to be done.

14,428. (*Rev. Canon Browne.*) Would you throw that difficulty upon some Applied Science body like the Institute of Civil Engineers?—Yes.

14,429. (*Lord Reay.*) Who have the means of watching his work while he is doing it?—Yes.

14,430. (*Rev. Canon Browne.*) Are there any great engineering workshops of firms in London which you could use for this purpose and accept the certificate of. I thought that was what Lord Reay meant in a question that he put to you—that you would take a certificate from them as sufficient?—Of course it does come indirectly from them. For instance, admission to the ranks of Civil Engineers is obtained by producing a certificate from an employer and other engineers that a man has during the time he has been at practical work spent the time usefully.

14,431. (*Lord Reay.*) But you do not propose to teach them?—I do not propose to teach them.

14,432. You had rather another body did it and not the University?—Much rather.

14,433. (*Mr. Anstie.*) I suppose that other body would be in closer touch with this matter than a University body could be?—Yes. I do not think a University could be properly in touch with that object. In the profession there is a distinct dislike to to the degree of Bachelor or Master of Engineering though it has only been given by one University at present—Dublin. Among all the men I have spoken to on the subject their is a distinct dislike to the degree. If you call a man a Bachelor of Engeering it would mean giving a special degree or title to every branch of Applied Science.

14,434. (*Lord Reay.*) Then you would give them the degree of Bachelor of Practical Science and Doctor of Practical Science?—Yes. Then as it really belongs to the same part of my evidence, I should like to make a few remarks about the position of the great professional bodies in this country. With regard to the education of their members, until five or six years ago there was no examination exacted at all from any candidate seeking admission to the ranks of civil engineers or mechanical engineers. I am now speaking of the Institution of Civil Engineers which is really much the older body. The Civil Engineers have three divisions; they have students; associates, *i.e.* those who have not been long in the profession; and finally the full members. The admission to all these until a few years ago was obtained on proof that a man was engaged on professional work.

About five years ago the Council after a very large amount of attention to the subject decided to exact either an examination or a proof of an examination having been passed before they allowed a man to enter as a student.

The examination on proof they exact is this: that he must have passed in English, mathematics, mechanics, one modern language and chemistry, or he must have taken a degree in some University, either arts or science, or he must have passed the London Matriculation; [three or four of the technical institutions have established a matriculation examination, and that is taken as equivalent]; or he must be a Whitworth Scholar. Anyone of these is sufficient to exempt a student from having to pass the examination, but unless he can produce proof of having passed one of these he must pass an examination in the five subjects, and whatever other examination is passed it must include those five subjects, English, mathematics, mechanics, one modern language and chemistry.

It is therefore only an examination in general culture and not a professional examination. That is a point that I wish to bring out distinctly. It is not any technical work at all, but purely an examination in general culture.

Apart from that the Institute of Civil Engineers requires no examination for admission to its body.

But I hope the Council will go a little further than they have gone, and will say that no student can be admitted who has not attended a technical institution of some kind and passed an examination.

14,435. (*Mr. Anstie.*) On what terms do they admit now?—They admit on the recommendation of other members.

14,436. In whose chambers a candidate has read?—After a student has proved that he has passed these examinations he must be proposed for admission by an existing member.

14,437. After he has gone out of the student rank he cannot become an Associate unless he can produce proof from five members that he has been actually engaged in the profession and is supervising work. And finally the transfer to a full membership is granted by the Council only on proof having been given that for five years he has been engaged on important professional work on his own account.

14,438. (*Lord Reay.*) The guarantee of theoretical knowledge is very slight?—Yes, but I hope that if the Faculty is established the Council would see their way to say at any rate that they would simplify very much the entrance of its students into their body.

14,439. And do most of the students of the Institute of Civil Engineers frequent any of the classes that have been instituted in London?—The bulk of them do.

14,440. (*Rev. Canon Browne.*) So it would not be really excluding many to require a little theoretical knowledge?—No, it would not. I may add that the Institute of Mechanical Engineers also require no technical examination and no examination in general culture at the present time, but notices were given at at the last meeting by the Council that they intended to alter the byelaws and make it compulsory to pass an examination in general culture similar to the one passed at the Institute of Civil Engineers.

14,441. (*Lord Reay.*) They have the same system of studentship? — They have. They call them "Graduates" instead of students; but it is the same system practically.

14,442. And the same system of affiliation?—Yes. First graduate, then I think Associate, and then full member. The Graduate corresponds to the student in the Institute of Civil Engineers.

14,443. You would give the degree of Doctor of Science to your Bachelor of Practical Science in the Engineering Department, if we may use that term, after he has done some practical work. There be an intermediate period of practical work besides further theoretical teaching?—I should be inclined to make it compulsory that the student shall have been in practical work for some time.

14,444. But you would not test the practical work?—I would not test the practical work.

14,445. And the practical work would have influence on the theoretical knowledge?—Yes, and on the scope of the examination of that theoretical knowledge.

14,446. (*Rev. Canon Browne.*) And practical work would not mean conducting operations, but working with your hands in workshops?—With mechanical engineers it would mean working with your hands in workshops. In the case of civil engineers it would mean a pupil in an office, engaged in survey work or preparing plans. Then my contention is that if a man could write after his name B.Sc., M.I.C.E., the public would then have a guarantee that the man had

a complete training not only on the scientific side but on the practical side.

14,447. (*Lord Reay.*) The University would undertake the scientific training and the Institute would give the imprimatur for the practical work?—Yes.

14,448. (*Rev. Canon Browne.*) The University would not require that information in the first instance to enable it to give a degree?—No.

14,449. But the man would be better if he got the two?—Yes.

14,450. I thought at first that you were rather leading up to the suggestion that the University should not confer the degree, unless there was this proof?—No; I did not mean that.

14,451. (*Lord Reay.*) And would you let the University suggest to him where he should get this practical training, or would you leave him to follow his own devices?—I think he should be left to follow his own devices; but I do think it would be very advantageous if some of the great engineering firms and offices in London would work in harmony with the University in granting facilities for students who have taken the degree of Bachelor of Science to enter their works and offices.

14,452. And there would be, of course, lectures to attend between the granting of a degree of Bachelor of Practical Science and that of Doctor of Practical Science?—Yes. It is done in Scotland; at Glasgow to a certain extent. The students attend lectures and also attend works at the same time.

14,453. (*Mr. Anstie.*) Independently of one another?—Yes. Independently of one another.

14,454. (*Rev. Canon Browne.*) You would regard that as a certain natural development if it was once started?—Yes. I think naturally engineers would prefer to take men into their employment who had gone through this training.

14,455. (*Lord Reay.*) Then you speak of the possibility of granting diplomas to such students for complete courses and the institution of scholarships for them. That is what you have called a certificate of proficiency for those who could not take a full degree course?—Yes. I think that is very necessary in any such work as Applied Science; that if the men cannot take a degree eventually, and it is well-known that certain men, though very good men practically, cannot pass examinations of the standard required for a degree, they should at least have something to produce as a proof of the classes they have attended. I think a diploma or certificate of proficiency would be valuable.

14,456. If students of the artisan class were to require a longer time, but were at the end of that lengthened period to show the same equivalent of knowledge which you have required from your Bachelor of Practical Science, would you be prepared to confer the degree of Bachelor of Science upon students of that class?—Yes; I would, if the student had attended definite courses for a long time, and was able to pass the examination.

14,457. Have you any experience of that?—I have. Before I held my present Chair at University College, I was Professor of Engineering at the Heriot-Watt College, at Edinburgh, where the bulk of the teaching is evening class teaching to artisans. I had in my class there men who proceeded eventually to Edinburgh University to take the degree in engineering.

They obtain self practically their whole training in the evening classes. They had to go to the University eventually, because by the regulations a degree can only be obtained by spending a part of the time within the University walls.

I think some of those men were attending classes for four or five years before they went up to the University. Then in one year they were able to take a degree at the University.

14,458. Therefore the University must be satisfied that the training they had received was equivalent to a certain amount of University training?—Yes; equivalent to a certain amount of University training.

14,459. You would be prepared to grant that?—Yes.

14,460. But the University would lay down the syllabus and keep the evening classes under its supervision?—Yes.

14,461. There would be another way of doing it by giving them scholarships?—I think the two might be worked together. I think bursaries might be given, and also men could take degrees though not quite up to the standard of a bursar.

14,462. You would have both classes?—Yes. Practically that a man might go on with research work which he cannot do to any large extent in the evening. He can attend lectures in the evening, but research work cannot be done by any evening student. It would give facilities to the evening student to undertake that work if you give him that bursary.

14,463. You do not require any knowledge of classics in your Department?—No.

14,464. You would confer degrees on those who had no knowledge of classics?—Yes.

14,465. (*Rev. Canon Browne.*) Do you think those men could have passed the University Examination when they left your hands at the Heriot-Watt College?—Yes.

14,466. So that the year was for formal purposes?—Yes.

14,467. But you could, in your evening classes, have quite well prepared them to pass the University examination?—Yes. It means a longer time; but apart from that I do not see the least reason why a man trained in good evening classes is not as well capable at the end of the course, and as well educated for professional purposes.

14,468. (*Lord Reay.*) In London, we may take it, that there would be a great demand for this training?—Yes. All those institutions which are being started in London are crowded with students. Directly the classes begin there is an immense rush of evening students. In this particular college in Edinburgh we had something like 3,000 evening students, nearly all of them of the artisan class. Certainly, all those attending my own class were of the artisan class, chiefly apprentices in works, and nearly all of them took a regular course. We laid down regular courses and they followed these courses from year to year.

14,469. And you found, I suppose, that the average of earnestness in these students was higher than in the others?—Much higher.

14,470. Have you anything to tell us about the Massachussetts' Institute?—I have. I think it bears very much on the question. I have with me a calendar of the Institute of Massachussetts. It is an institute which was founded comparatively a few years ago, and is governed by a corporation and by visiting committees.

The committees are very small, each committee dealing with one Department of the college work.

The members upon each committee are those who are directly engaged in the industry with which that particular Department is mostly concerned, so that it is more or less under the control of practical men engaged in business. The departments are Civil Engineering, Mechanical Engineering, Mining Engineering, Architecture, Applied Chemistry, Applied Physics, Mathematics, what is called Chemical Engineering, Modern Languages, History, and Literature. Each course is supposed to last four years, and students are only admitted on passing the entrance examination. They must be more than 17 years of age. The entrance examination is one of a pretty stiff character in general culture; for instance, they must pass in arithmetic, algebra, as far as the binomial theorem, plain geometry, history, geography, and one modern language. They must take four years for their course. During the first year all the courses are alike. It is more or less a course in Pure Science. The work of the first year is algebra, geometry, applied mathematics, chemistry; there is also work

T. H. Beare, Esq.

9 Nov. 1892.

in the chemical laboratory, a certain amount of physics, and then in addition one modern language, and English, and freehand drawing. That course is taken by all the students.

For the remaining three years a man chooses the particular Department he is going to work in, and devotes all his time to that Department. In each Department there are professors and lecturers. In some cases a man may lecture for two or three Departments, but in most of the Departments there is a separate staff of teachers. All the courses are of a very practical nature, and there are magnificent laboratories and workshops attached to the institution. At the end of each year of the course there is an examination, and at the final examination at the end of the fourth year the degree of Bachelor of Science is given to all the students who pass. They make provision for more advanced students by allowing them to come in at the end of the first or second year provided they can pass not only the preliminary examination but the examination of that year, that is to say, they will take a man who has been attending a University like Harvard provided he can pass an examination in the Pure Science subjects, so that he goes on at once on entry working at Applied Science. For the degrees, besides the examination, a dissertation is required. The dissertation they ask for is an account of some research work undertaken by students in conjunction with the teacher or in conjunction with some other student; or an original report on some machinery, plant, &c., or an original architectural or engineering design, accompanied by complete notes, as to why it was made in that way, and why the dimensions employed were adopted. If the candidate cannot obtain the degree a leaving certificate is given certifying the particular classes he has attended.

Mathematics is treated as an important part of the work, and is very specialised. That is to say, the courses of lectures are not the same in each Department, there are slight variations, and they lay great stress on English composition and English literature, because they hold that a man is not properly trained for his profession who is unable to express himself in good English when called upon to give a report on some special subject. They have attached to the college very large workshops, and they teach in these workshops the use of tools, so that at the end of his course a man has a very considerable acquaintance with the ordinary operations carried out by tools.

14,471. Would you have something of the same kind?—I should have something of the same kind. The fee for a course comes to about 200 dollars a year, which is, I take it, somewhere about the same fee as is charged in most of the technical institutions in London for not by any means such a complete course.

14,472. You mean the colleges?—Yes; I think at most of the colleges in London the fee comes to somewhere about 40*l.* or 50*l.* a year, that is somewhere about 200 dollars. As to the demand for that education, in that calendar will be found a list of the number of students attending last year. There were 1,059 within the walls of the institution; 50 graduate students; 146 in their fourth year; 140 in their third; 155 in the second; and 263 in the first. Then there were 305 special students—those that I have mentioned just now—students who have taken a degree or something of that character in Arts and who are going on with higher work in Applied Science.

14,473. Do they give privileges to students who have taken a degree?—Only that they can shorten their course. They have no need to take a four years' course if they can pass the examination which is given to all students at the end of the year; that is to say, they do not recognise the Arts degree in any University as equivalent to one year unless the stunents can pass the examination.

14,474. If he can pass the examination he is exempted from attending that first year?—Yes.

14,475. There is an examination on entry?—Yes.

14,476. And they only exempt graduates of other Universities?—Yes.

14,477. What degree is that?—Only the Bachelor of Science. I omitted one point in my observation upon the training. When a student has taken a degree of Bachelor of Science they will give the higher degree of Doctor of Science on condition that the student has done a certain amount of practical work and then comes back again to the college and attends certain lectures and does advanced work. These are called graduate students, and there were 50 present.

14,478. Is that practical work conducted under their supervision?—No, not under their supervision. It is practical work outside in the office or in the field, but not under the supervision of the college. I may say that all those thousand students have grown up in 10 years or less. I do not think the Institution is 10 years old. Our Faculty of Applied Science would be, I think, something like a sort of modified Institute of Technology, Boston. That is the line I should like to see the Faculty of Applied Science working on in London.

14,479. It would be part of a recognised teaching University?—Yes.

14,480. You do not wish to have it outside?—No, I wish it within the walls of the University.

14,481. You attach great importance to the connexion of your Faculty of Applied Science with the Faculty of Pure Science?—Yes.

14,482. Have you anything to add?—Only with regard to this. The question may occur to members of the Commission whether there is any particular value in such a degree in practical life. I think that question can only be answered by cross-examining engineers and architects who are actually engaged in professional work and in manufacturing industries, as to whether they consider that a man who can prooduce a certificate of having attended classes or obtained a degree is any better fitted for his work than one who has not. I have taken the opportunity of speaking to some engineers in London on the subject and the universal opinion of them is that they do prefer to take as pupils men who have been trained in technical institutions. Further, two or three have told me that if a man who has not been trained in a technical institution comes to them to enter as a pupil, they take him, and at the end of a year of his pupilage they send him away to go to some technical institution and then come back and finish his pupilage.

So I think there is some recognition of the value of the training and of the value of the degree.

It is a rough test only of what a man has gained in the college walls, but I do not see at present any other means of testing it. It is not sufficient for a man merely to say that he has attended these classes; he must produce some guarantee of having derived benefit from attending the classes, and I do not see any other way than by a degree. I was speaking to another engineer a few days ago; a man engaged in manufacturing work. The men I have been referring to just now are men engaged in professional work in London, ordinary civil engineers. This man I am going to speak of now is a manufacturing engineer in Yorkshire.

His point was this: At the present time works of manufacturing engineers are highly specialised.

Each manufacturer devotes himself to one branch of the trade in producing one particular article in the highest state of perfection, and therefore he wants more or less specialised draughtsmen and specialised assistants, and he finds that if he takes ordinary draughtsmen or ordinary men who have not had a sound preliminary applied science training, it takes a long time to train him for the work he is wanted for; but that if he takes a man who has been through a college course, and who is well trained scientifically, in a very short period he is able to make himself not

merely useful, but absolutely valuable in improving and enlarging the scope of the manufactures.

A man like that is much more capable of seeing possible improvements in a given piece of machinery, and making improvements, than a man who has not received a scientific training, because the education he has received fits him for that work. I think these points show the value of the degree, and that there is a value in the training, and it is recognised by the profession as of value and will be more so every year.

14,485. And the same thing would apply, I suppose, to ship-building ?—Yes, the same thing would apply to ship-building and to naval architecture.

14,484. They would fully recognise the value of theoretical training ?—Yes.

14,485. And it would also apply to chemical works ?—Yes.

15,486. Or to technical chemistry. The Germans, I believe, have made tremendous progress in technical chemistry in recent years ?—Yes, simply because they are well trained. Another way of emphasising this pointis that throughout England in the large works there are large numbers of German draughtsmen employed simply because they have been well trained in mathematics and in scientific work. I knew one or two engineers who employ exclusively German draughtsmen, because they can do things that ordinary English draughtsmen cannot touch.

14,487. Have you anything to add ?—I do not think I have. I have brought forward all that I wish to say with regard to this. It does not occur to me that there is anything further.

14,488. (*Mr. Anstie.*) As I understand you are in favour of having only one single title for the degree, the Bachelor of Science, but you seem to desire that there should be separate Faculties to deal with its branches. Is that so ?—Yes, that is so.

14,489. Do you think it is essential that the Faculty should be separately and distinctly constituted, or would it do to allow the Faculty of Science, constituted in due proportion of those who represent Pure Science and those who represent Applied Science to deal with it ?—No. My opinion is that it is necessary, not merely for the sake of the examination, but for the sake of teaching that there should be a special Faculty, a separate body.

14,490. But you agree that they are dealing with a matter, which to a very great extent is common ?—In the early stages. I think as soon as you have gone beyond the early stages there is a very great difference between the teaching of the pure and the applied.

14,491. Supposing you had, for instance, in the Applied Science such a man as Professor Henrici, would it not be a pity to withdraw him from the consultations of the pure scientific side ?—In a way it would of course ; I do not know that it is not a disadvantage to the Faculty of Pure Science to lose the members of the Faculty of Applied Science.

14,492. Might it not be a disadvantage to the Faculty of Applied Science to lose the Faculty of Pure Science ?—I think it is compensated for by the fact that you can make them *ex officio* members for consultative purposes.

14,493. If you had a proper sub-division into Boards of Instruction to deal with the several branches—— ?—I think even then you are liable to the danger of the members of the Pure Science Faculty interfering.

14,494. There is no community between Chemistry and Engineering ?—I think there is a great deal at the present time. All manufacturing chemists require a mechanical engineer on their works.

14,495. The engineer's work which a chemist requires has nothing to do with Chemistry. It is really one branch employing a distinct branch ?—I think an Applied Chemist is very much better for some knowledge of engineering.

14,496. But you do not seem to think that an engineer is better for a knowledge of Chemistry ?—To a certain length.

14,497. Is it not better there should be a constant connexion and intercourse kept up between the Pure and the Applied Science ?—I am afraid there is always a tendency with every professor to treat his own subject as the most important subject.

14,498. That is why I put the question, whether it might not be desirable to keep that tendency a little in check ?—I am afraid that tendency shows itself a little more in a Faculty made up of the Sciences together than Applied Science and Pure Science.

14,499. Why so ?—Because the Pure Science professor desires his subject to be made a vital subject.

14,500. So would the applied ?—And the applied would have a right to it, because his student is an Applied Science student and not a Pure Science student.

14,501. His Applied Science is based on Pure Science ?—On preliminary Science, not Pure Science.

14,502. What cannot be justified by Pure Science is not Science at all, is it ?—No. I think you will find that it is very difficult to convince a man who is entirely given up to Pure Science that there is any value in the application to Applied Science.

14,503. Might it not answer your purpose if this Commission were to report strongly upon the necessity of giving due weight and scope to Applied Science ?—No, I am afraid it would not. I should be very sorry indeed if the Commission did not see its way to report that a Faculty of Applied Science should be established as a separate Faculty.

14,504. I do not quite follow what you said about the condition which you would desire to see attached to the degree of Doctor of Science, speaking, I suppose, of Applied Science ?—Yes.

14,505. You said he must be engaged in practical work ; how would you test that ?—The only test, I believe, which is adopted where that is required is that he should produce a certificate from his employer in the case of large works, or from an engineer if he was a pupil, that for a given length of time he has been in the office or works, and has done a certain amount of work, and has done the work well and attended to the work well

14,506. Is that the sort of condition you think you could require from a man who comes up for the extremely high degree of Doctor of Science ?—Yes ; because I think the degree of Doctor of Science should not be merely a degree in the theoretical application of Science, but in the practical application of it.

14,507. Is it not possible to test by original work and contributions to Science whether a man has that mastery over his subjects which is required ?—I do not think you could obtain it in that way.

14,508. Could you obtain it more by the certificate of somebody who has been using the pupil for his own advantage ?—With that and the exaction of an examination, or a thesis, or a dissertation, or something of the kind.

14,509. But you are putting this candidate for the higher degree at the disposal of some employer who is to say that he has been at the works and conducted himself properly. It seems to me to be a rather odd requirement for a University distinction ?—My point is that the degree altogether of Doctor of Applied Science should in some way be only given when a man has been practically applying that knowledge which he gained during the time he was trying for a B.Sc. ; in the practical work I should like to have an examination in practical work, but I do not see my way to do it.

14,510. Why not. Is not that done ?—No, I do not think it is.

14,511. Does not the London Univerasity do it, and is it not a fact that the degree of Doctor of Science is almost the only scientific degree that people pay much attention to anywhere ?—You have it in the Pure Sciences, but not in the Applied Sciences.

14,512. Why is it not possible to conduct an examination of that kind on that method. Are not discoveries made and investigations pursued in

T. H. Beare, Esq.

9 Nov. 1892.

Applied Sciences, as in the Science of Zoology, for instance?—There is a difference between the two, and I do not quite see how you can examine a man. Take a concrete case; take the case of a man who has obtained his Bachelor of Science degree. He has gone from the University as a pupil, say, to Sir Benjamin Baker; he has been with Sir Benjamin Baker, say, a couple of years, engaged in his office; at draughtsman's work, out in the fields surveying, supervising the erection of bridge work and so on, and therefore applying in a practical way the knowledge acquired at the University, and then at the end of that time he is desirous of obtaining the degree of Doctor of Science. During all the time he was actually at the office he ought to have been attending higher lectures. If not he must now attend lectures. Then at the end of that time he must pass an examination on paper, and an examination not in the practise of his profession, but a practical examination in those branches of Science where it could be a practical examination, and then he is given his degree of Doctor of Science.

14,513. But you see by this process you are making Sir Benjamin Baker or some other persons in a similar position a part of the University. You say somebody should be emplyoyed on their works in order to enable him to take what is University distinction?—It is only like requiring a Doctor of Medicine to have been so many years at a hospital. That is exacted. The University of London will not grant a man the degree of Doctor of Medicine simply by their own examination. He must produce a certificate from a hospital.

14,514. But the hospitals and medical schools are recognised places which are put down on a list as educational establishments which are responsible to the public. But I do not gather that you require anything of that kind here. These are not schools; they are places of business?—A pupil is supposed to be taught his work just as much in an engineers' office as in a hospital.

14,515. (*Lord Reay.*) Could you not put it in this way to reconcile what you are contending for and what Mr. Anstie wants to know, that he goes into the practical work because practical work will make it easier for him to produce some essay of original work? The practical work is wanted not to get a certificate. He does not get Sir Benjamin Baker's certificate to be admitted for a degree, but he goes in order that he may get the application of science to original work which should be required before you grant him the degree of Doctor of Science?—That is the reason of it, but I want at the same time a certificate from him.

14,516. (*Mr. Anstie.*) Why?—If he can satisfy your condition why should he go to Sir Benjamin Baker?—I do not think it is possible to learn it elsewhere.

14,517. Then he will not get his degree. If that is the condition of the degree he will not get his degree?—It is conceivable that a man might get knowledge sufficient to take a degree. It is very difficult to make an examination which a man should not pass without being able to do thoroughly his practical work.

14,518. We are speaking of high examination. Do you mean to say a University could not find a competent authority to test whether a man had practical knowledge or not?—I do not think you would get that merely from University professors. I think you want something from outside people as well.

14,519. For instance, it occasionally happens in the case of a Doctor of Science in the London University that papers of the highest value are submitted to the examiners, and they are not able perhaps, to agree upon their verdict, but an external person of high rank in the science in question is called in. Why should you not have such experts to determine this work?—If you grant that an outside examiner must be appointed and that that outside examiner shall be a man who is an engineer practically at work, then I admit it.

14,520. That is very much what I am supposing. Then you admit that if that condition could be fulfilled you would not think it necessary to require the other?—No, I think the examination would be a sufficient test.

14,521. What you mean is that there should be a practical examination by practical experts?—Yes.

14,522. Now with respect to what you said about various technical institutions in London. I suppose you are aware that those practical institutions deal to a large extent with work which cannot be properly brought within the limits of University work?—Which techical institutions are you referring to?

14,523. The evening institutions?—Of course all their work would be brought within the limits of University work, a good deal of it.

14,524. It would only be the upper portion of it—the top level of their work—which could be brought into the level of the University?—Yes, what I would call my advanced classes in my own place.

14,525. Would it not be very undesirable that a University should attempt to deal with so vast a field as that covered by the lower grades pursued at those institutions. Ought not those to be left to some other body?—I do not see any other body that can possibly deal with it.

14,526. There may not be any other body now existing, but do you not think there should be some other body constituted whose duty it should be to give diplomas of a different character, and that the University should be relieved from the responsibility and obligation of looking after work of that description?—My own view is that it is more satisfactory for the University to do it.

14,527. Do you see what an enormous body of work this would throw upon them. If the technical education and industrial education, as you call it, pursues its present course in London would it be possible for any University to deal at the same time with the higher branches of education, and to deal with this vast mass of industrial knowledge?—I do not say that they should supervise in any way the actual carrying on of these institutions, but that they should lay down certain regulations as to the teaching of those places.

14,528. (*Lord Reay.*) On broad lines?—Yes.

14,529. (*Mr. Anstie.*) Would not those be better exercised by their appointing officers, whose duty it might be to give advice and direction to those institutions rather than by having a scheme which would incorporate them into the framework of the University?—No; I think if you leave them out altogether there is a great danger of their being neglected by the University.

14,530. Suppose you appointed persons to direct the institutions in their relation to the University. Might not that be an advantage to them, and also be as much as the University could do to help them?—I do not quite follow. Do you mean that those persons appointed should be appointed by the University?

14,531. Yes?—That they should be practically appointed out of their own body?

14,532. Yes—directors of study?—Yes, that meets the question.

14,533. Would not that be the most practical way of dealing with these institutions of lower grade?—Yes; then you must make some provision for that in your Charter.

14,534. I am supposing that to be done?—That would practically meet my views.

14,535. Would not that be better than attempting to incorporate the whole of the institutions into the University system?—I do not want to incorporate the whole of the institutions into the University system, but I want to give some control over the institutions.

14,536. Some directive influence?—Yes, some directive influence over the scope of the teaching on broad lines.

14,537. You spoke of the value of the title of the degree in practical learning. May it not be said

that perhaps no degrees merely, as such, are of much value in practical life ?—I do not say that a degree is of particular value in practical life, but it is some guarantee of a particular training.

14,538. As a matter of fact in engineering, I suppose it would be worth a great deal more to a man to say he has been so many years in Armstrong's Works, and had held such a position, than if he had gone to a University?—Yes, but my contention is that those positions would not be filled except by persons who had taken a University degree.

14,539. You mean to say the employers should ask, "Have you got a University degree"?—Yes. They would begin at the bottom rung of the ladder with their degree, and they would have a better chance than a man without a degree. After they had once got into the swing of practical life, I do not think the employer would think anything about the degree.

14,540. Then the value would be only as introductory to practical life?—Yes.

14,541. It would fulfil much the same function that degrees do where under an Act of Parliament or a Scheme a man is only competent to an office if he has got a degree?—Yes.

14,542. But it would not go much further than that?—No, I do not think so.

14,543. (*Lord Reay.*) Did you say that in the Institute of Technology in Boston practical men had any influence over the institution?—Yes.

14,544. As a board?—Yes, I think the Board of Governors consists very largely of practical men.

14,545. Would you in the Board of Studies and the Faculty of Applied Science include any practical engineers for the purpose of meeting that direction as to the practical work?—If there should be outside examiners in the University, I think the outside examiners should be men engaged in the Applied Sciences practically, and those outside examiners should have some say on the Boards of Studies.

T. H. Beare, Esq.

9 Nov. 1892.

14,546. (*Mr. Anstie.*) The external examiners should be on the Boards of Studies you mean?—Yes.

14,547. (*Lord Reay.*) And they should be taken from men in practical life?—Yes. In most of the provincial colleges there is a very active engineering committee I may call it, composed of local engineers dealing with the engineering schools only. They look after the work of it and the general scope of its teaching, and make recommendations at the council of the college as to that and suggest any possible improvements. They have no absolute power to do anything. They are merely a consultative body.

14,548. And the professors of the Faculty of Applied Science would be quite prepared to accept outside influence?—Yes.

14,549. (*Mr. Anstie.*) Does the Institute of Boston give degrees?—Yes, the Bachelor of Science.

14,550. Then they are a University?—Yes, they have that power. That is the only degree they give.

14,551. How long ago is it that that University was founded?—I think about eight or ten years ago.

14,552. By an Act of the State?—Yes. It was incorporated by an Act of the State at Boston.

14,553. (*Rev. Canon Browne.*) I see the Corporation manage. There are Corporation committees?—Yes.

The witness withdrew.

Adjourned to to-morrow morning at 12 o'clock.

Thirty-second Day.

Thursday, 10th November 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
R. C. PALMER, Esq., B.A.
Principal G. H. RENDALL, Esq., M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

W. T. THISELTON DYER, Esq., M.A., B.Sc., examined.

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

14,554. (*Chairman.*) I think you are at the head of the establishment at Kew?—Yes.

14,555. You are well acquainted with the University of London?—Yes, I am a graduate of the University; I have been an examiner and a member of the Senate.

14,556. Has your attention been directed to the subject of the establishment of a teaching University for London?—Yes, for a considerable number of years. The desirability of certain changes in the management of the University has occupied for a considerable time the attention of the Convocation of the University of which I am a member, and during the time I was on the Senate of course the subject was repeatedly considered.

14,557. How long it is since you left the Senate?—I think it is two years now.

14,558. Then you were not a member of the Senate at the time they drew up the scheme and presented it to Convocation for their approval? You had left the Senate before that time?—Yes, at the time that the last scheme was drawn up I was not a member of the Senate.

14,559. I think your opinion is that whatever is done ought to be done in connexion with the present University of London?—Yes. I am very strongly indeed of opinion that it is most undesirable to have more than one University of London. One reason why I feel very strongly upon the point is from what I have seen of

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

the working of the Victoria University at Manchester, and elsewhere. What the teachers in London very much complain of is the want of adjustment between the requirements of the University and the practical needs of their pupils. Well, there is no doubt a good deal to be said upon that point. But the point that I wish to urge is this, that the difficulty would be enormously enhanced if, instead of one University for the teachers to deal with, you had two, and that difficulty would not be appreciably diminished in my opinion if one of the Universities were in the hands of the teachers; because what I find is the case in Manchester is this, that the teachers have to adapt their instruction to their own curriculum, and also to the curriculum of the University of London, which still examines on a large scale in Manchester and elsewhere. Well, it seems to me that for a teacher to have to conduct his instruction in obedience to the needs of more than one central institution is not of the nature of a remedy, but is a positive additional incubus upon his work.

14,560. You think that in the new University they would still conduct their teaching in a degree to meet the wishes of the other University?—It would be absolutely impossible for them to abstain from doing so. Suppose, for the sake of argument, that University College were converted into a University, and the teachers were perfectly free as regards the alumni of their University to conduct their teaching as they chose; unless they were favoured with an endowment they still would not be able to dissociate themselves from the University of London students. Those students would work under their own curriculum, and the teacher would, therefore, have to divide himself as it were into two parts, one that would attend to University College students, who were working for one curriculum, and the other that would have to attend to students preparing for examination in Burlington Gardens.

14,561 Supposing we agree to work through the London University, you think it would require a great deal of remodelling and alteration in order to perform its new functions?—That, I think there can be no question about, I think most people will agree that in this country it is a very rare thing for an institution of public utility to be launched into existence in its complete and full development. Most things in this country grow and grow in accordance with public needs; I think that the existing University of London has done inestimable service to the cause of education, but my impression is that the lines on which it has worked for that cause are at the present moment pretty well exhausted. I think that those lines were adequate for the half century or thereabouts, during which they have been worked upon, but I think that the cause of the present discontent is that the machinery is now in arrears—is not in accordance with the educational necessities of the Metropolis.

14,562. It is doing very good work now as an Imperial University, giving examinations to the whole of the kingdom, is it not?—Well, I think the Imperial functions of the University of London have been very much exaggerated, and I do not myself attach very much importance to that aspect of the work of the University. Of course a good deal is said about examinations that are held in the Colonies. Those examinations are only of a fragmentary kind, and are really not for an academic purpose at all. They have been stimulated for the purpose of giving scholarships in connexion with the Gilchrist Trust. That is an anomalous and accidental thing, and I do not think the London University on that account deserves the title of "Imperial," any more than the University of Oxford deserves that title, because I see in the papers it has recently affiliated to itself some Colonial Universities. I think the Imperial aspect of the University of London is really an inconsiderable element in the question.

14,563. You would be willing, at any rate as far as your interest in the University goes, to put that in a subordinate position, and put the teaching apart?—I would leave the Imperial aspect of the University of London alone. I think when you have an institution it is mere pedantry to circumscribe any reasonable activity which it can manifest. If it can do good work let it do it. But I think the thing that we want for the University of London to concentrate itself upon is the function of a University in the largest city in the world, and that seems to me its primary duty. It may add to that duty others which it can perform just as every institution in this country is required to make itself useful, without too rigidly investigating the logical principles upon which that usefulness is based.

14,564. If you remodel the Senate and introduce the Faculties and Board of Studies composed of the teachers in London at different institutions, and give them considerable representation upon the Senate, you would not be afraid of that interfering in any way with the Imperial work that is being carried on by the University?—No, I apprehend not; because I think the persons of the status and intelligence of those who would work the University of London in the future, if it were remodelled, would not be actuated by narrow views in obstructing any reasonable work which could be imposed upon the University.

14,565. Then, taking for granted that we start with the London University in a remodelled form, what kind of University would you create out of it. As you know, there are a body of men who advocate what they call a professorial system, which is that all the work should be done by professors appointed by the University, and that the existing colleges, University College, King's College, and others, should be gradually absorbed, and eventually cease to exist, that there should be something more of a kind of a German University established. Do you approve of that idea at all?—Well, I am not prepared to say that I disapprove of it; but I should draw the attention of the Commission to the fact that the habit of mind which animates my idea of the subject at present is that of administrator. I am no longer a teacher; I am now an official; and every official in this country when an administrative problem is put before him does not habitually consider the theoretical aspect of the case so much as what is practically possible, and I have not for my own part given very much thought to the idea of establishing in London a University on the lines of the University of Berlin, which is, I apprehend the sort of model that people have in view, because I do not think the thing is politically or practically possible. One has to take the world as one finds it. There are very distinguished and even splendidly equipped teaching establishments in London of very various orders, and when people talk about gradually absorbing them it appears to me a kind of vision which one can work out perhaps the conception of on paper, but which I think has really no practical importance at all. The thing cannot be done.

14,566. I think even those who advocate the professorial system would, most of them, begin by taking in the existing institutions, not absorbing them, though it would mean ultimate absorption. I suppose you would be willing to make a start, at any rate?—I find it very difficult to understand exactly what is meant by the professorial system. When you look at the body of students which you may expect in the future to have in London, I cannot conceive how any one central institution can be expected to properly deal with them. I think it is very much better to have a number of separate institutions working in touch with the central University. The idea which goes to the root of the professorial system appears to me to be an idea which is, rightly or wrongly, becoming more or less obsolete. The idea that the professor can conduct the whole teaching, and such examination as he thinks fit, and the graduation is a thing which you can carry out in a small German town, where you have a small number of pupils under your own eye, but it is a system which is absolutely, it appears to

me, unsuited for a place like London. Besides that, I have, I confess, very little belief in the professorial system at all. I know, of course, that every distinguished and earnest man in the prime of life may be trusted, not merely to teach his pupils, but also to pass judgment on their progress. But even the best of teachers, after a time, get into a groove. They feel a distaste for some portion of their course; they do not teach, perhaps, the whole of their subject, and they fall behind the day in various other ways. Well, if they are to examine their own pupils this degeneration, if that is not too harsh a word to use, is really not brought under their observation; but if their pupils are submitted to a competent external examiner any defectiveness which is arising in the teaching is at once brought into view. In the Scotch Universities, of course, for a long period the teaching and the examining were in the same hands, and I do not think it is a harsh thing to say that in consequence of that circumstance abuses arose. Now, the tendency of the Scotch Universities is to introduce external examiners. I have myself been asked, though I have no connexion with Scotland, to examine in the University of Edinburgh, and I am persuaded that both in the interests of the teachers and the students the professorial system in its extreme form is an undesirable thing, and in point of fact is a thing of the past. That being so, I cannot see why, if there is a proper relation brought about between the people who teach on the one hand, and the central University which examines on the other, there should be the smallest difficulty in carrying on the work of the University of London, very much on its present lines, as regards graduation and teaching without interference with the teaching bodies.

14,567. Do you think the scheme of affiliating the principal teaching bodies in London with the University, and giving them representation on the Senate and other advantages would meet the object you propose?—Well, of course, the construction and the new constitution of the University is a detached and difficult subject. I myself do not think that the principle of affiliation should be carried too far. I think, for instance, that a place like University College, with its distinction, its endowment, and its equipment should be interfered with as little as possible; at the same time, I think that the teachers should be recognised at the Universities and given an opportunity of taking part in its business and expressing their views. At present, at the University of London, the only people who strictly have any *locus standi* at all are the graduates. What we want is, in the first place, I should say, at the University of London, to organise Faculties, and in these Faculties I should place persons in the metropolis occupied in teaching of academic rank.

14,568. Without affiliating the institutions to which they belong to the University or without necessarily affiliating?—Without necessarily affiliating the institutions in their entirety. I am informed that at the University of Edinburgh at the present time they have made provision for up to a certain point, admitting external students to their examinations; and the system which they have adopted to control that seems to me worth consideration. Where a teacher at some institution in the United Kingdom proposes to send students to the University of Edinburgh he applies for a license as teacher, and then when he has obtained the license his pupils are admitted to the examination. I adduce that fact only so far as this, that it is an instance of the recognition of teachers by a University without a formal affiliation of the institution to which the teacher belongs.

14,569. Could a teacher—for instance, at University College—belong to the Faculty of the University of London, and at the same time be under the control of the college authorities without the college being joined to the University of London. Would not there be a confusion of authority. Would it not be serving two masters, or rather I should say, having a voice in the management of the one institution while he was still subservient in the other. Would not there require to be something in the nature of affiliation?—No, I think not, because the relations which he would have to the two institutions would be essentially different. As an official at University College, for example, he would have more or less a right to express an opinion, or take part in the management of the college, but as a member of Faculty of the University of London, he would be rather in the position of either criticising or of offering counsel and advice as to the mode in which the business of the University should be conducted.

14,570. He would be appointed by the college authorities and removable at their pleasure, and yet while they chose to continue him there, he would have a voice in the management of the University?—Those are details which, I confess, I have not studied very much. It seems to me that if one admits the principle of forming Faculties it is not difficult to devise suitable machinery for regulating the admission of persons to these Faculties, or removing them. Of course, this point has been very strongly impressed on my mind by my own experience in taking part of the administration of the existing University. No one who has not done so can have any conception of the extreme cumbrousness of the procedure at the University. The Senate of the University consists of a large body of very distinguished persons who have, however, little or no practical acquaintance with the business of education. They, of course, when a matter is brought before them are prone to act in an exceedingly cautious and conservative manner, and, if possible, avoid acting at all. It therefore requires an amount of insistance to obtain the smallest modification of the curriculum at the University of London of which, as I say, no one who has not undertaken the task can have any conception. That is the real root of our present difficulty. We want to have a system by which the practical interests of the students as expressed by the teachers can be dealt with by the University in a swift manner, and at the same time with that amount of technical knowledge and consideration which will prevent rash or ill-considered changes being made. Now, I cannot conceive any better system than the organisation of a Faculty for work of this kind. A member of the Commission who is present will remember a great tussle that we had at Burlington Gardens with regard to one of the examinations. That particular tussle was to me extremely instructive because we had on that occasion eventually, after a great deal of difficulty, a committee appointed. We had before us two very distinguished teachers and examiners who took diametrically opposite views on matters extremely important to the students. Well, you observe that the University might very easily make very considerable mistakes and do a great deal of mischief if it were to make alterations in the curriculum at the instance of any particular individual however distinguished. But if you bring together the principal teachers in London in a Board of Faculty, and one of them gets up and says, "The "present mode of teaching—chemistry, we will "say, or physiology—is bad." Probably some of his colleagues will differ from him, and after a discussion, he may to a certain extent give way, or he may fail to carry his colleagues with him. The result of such discussion will be that the Senate, if moved at all to make a change, will be moved to make a change of a moderate character, and that is very much better than the present system, by which, on the casual initiation of some energetic person, the Senate is tardily induced to alter the existing regulations.

14,571. Then you would give the Faculty the power of arranging the curricula of the examinations so that they should be in harmony with the teaching?—I should give them advising power in that matter.

14,572. Would you have one Faculty, or would you divide it into four Faculties, or more?—I think on the analogy of the University constitution in the

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

past there should be Faculties for the different subjects. I am not prepared to say how many. There would be one for Science; one for Medicine; one for Law; one for Arts, and so forth.

14,573. And the teacher of each of these different subjects would belong to the Faculty in which he taught?—Yes.

14,574. Then in order to bring their influence more closely to bear on the Senate, would you be in favour of their having the power to elect Boards of Studies out of their own number?—Yes; I think that is a very important point, indeed. People in London are now-a-days closely occupied. You cannot expect, therefore, that Board of Faculty would be willing to meet very frequently. The occasions on which it would be summoned should be adequate, and it should be summoned, or it should meet at regular intervals to discuss matters connected with the degrees and the studies in that Faculty as occasion might suggest. But I am strongly of opinion that besides that there should be a small Board in each Faculty, to assist the University in the practical conduct of the examinations, because at present the University of London is too much managed like a weak Government office. If anything goes wrong with an examination—and some of the examinations now are become exceedingly critical and complicated affairs—there is no one but the Registrar to whom you can appeal for help. There are a variety of questions which I need not occupy your time with giving illustrations of, but anyone practically acquainted with the examinations will know what I mean. There are perpetually small points arising which it is very advisable to have some authority competent to deal with, and the Boards of Studies would be, I think, an exceedingly useful apparatus for the general business of managing the examinations. There is also another function which I should assign to them. There is, I think, a good deal of feeling amongst the teachers that there is some variation in the standard of the examinations, and though I think that the examinations of the University of London are carried out with an efficiency which I know nothing superior to, still I think it is a very excellent thing to have a small body who would review the conduct of each large examination on its termination, consider the character of the papers, consider the per-centage of rejections and passes, and report to the Faculty, and ultimately to the Senate on the whole.

14,575. Whom should this Board consist of?—I think the Board would probably be elected from the members of the Faculty. The Faculty would be a large body, and the "Board of Studies" would be a delegation from the Faculty.

14,576. Would this be larger or smaller than the Faculty?—Much smaller. It would be more an executive body. My idea in brief is this: that all large theoretical questions, such as completely remodelling the method of teaching in chemistry, as recognised by the University, are matters which should be thoroughly threshed out by debate in the Faculty; but modifications in the examinations, for instance, whether it is advisable to give the men particular re-agents, or whether it is advisable to have a particular class of experiments, all the details of complicated examinations, should I think, be worked out by the Board of Studies.

14,577. Then this Board should be the executive body?—I mean that the Boards of Studies should be smaller than the Faculties.

14,578. It is to the Boards of Studies that you would give all this power. You would not have any other Board than the Boards of Studies?—No; that arrangement, it seems to me, would thoroughly bring the teaching body in the Metropolis in relation with the examining work, because every conceivable question that would arise, any criticism or any difficulty, would be by this machinery raised and dealt with. For instance, a teacher may say that the University is crushing his mode of teaching. Well, let him attend the meeting of the Faculty and say so, and give the reasons. Then if the Faculty are of opinion that the curriculum is obsolete (and curricula do become obsolete) the Faculty would address the Senate and propose a new syllabus, and if that came in a properly weighed form from the Faculty the Senate would of course accept it.

14,579. Most of the schemes have had the Boards of Studies with simply consultative powers. You have given them more power and make them the executive?—I think they should assist the University in the practical detail of the examination which has become more and more a serious administrative duty.

14,580. Would you give the chief power to the Senate?—The Supreme Governing Body of the University must of course retain the ultimate power in its own hands.

14,581. All the schemes seem to have that in common, and have Faculties and Boards of Studies with more or less power, making them consultative and leaving the Senate the real supreme authority. You agree with the universal opinion with regard to that?—I should like to say another word about the Faculties. I do not think in the University, as I contemplate it, that the business of the Faculties should be confined solely to the organisation of examinations. I contemplate the University of London in many aspects going very much further than it does at present. I should like to reserve for each Faculty the power of discussing any conceivable business which has any bearing on the proper instruction in the subjects which are included within the scope of the Faculty.

14,582. Would you also wish to strengthen the position of the teachers in any way by enabling them to have the nomination through their Faculties of any members of the Senate?—Yes, I think that would be a most necessary and important point.

14,583. In many of the schemes the Faculty is reduced to being nothing more than an elective body to elect Boards of Studies, who should advise the Senate. You would put the Faculty in a better position than that, make it a real consultative body, and you would also give Boards of Studies more power?—My idea is that the Faculties if properly constituted would really be the University. They would be the life and animating spirit of the whole scheme. I think there is nothing connected with University teaching in London which the Faculty, if properly constituted and properly got to work, would not be competent to discuss, promote, and advise, the foundation of new professorships, the provision of laboratories, and such superior teaching as would be desirable for the University to carry on; in fact, any measure which would promote academic work in London would be, I should hope, the aim and object of the Faculties to promote.

14,584. And they would frequently meet together in consultation?—I apprehend that they would.

14,585. And would the Senate be the real Governing Body of the University, only having a veto?—The Senate must be the real governing body. What I look forward to from the Faculties is impulse. For instance, suppose the Faculties resolved to consider the present condition of the teaching of physics in London, it would probably then appoint a small committee to make an inquiry and to visit the various places where physics were taught and to report on the accommodation and on the character of the equipment. Such a report might lead to the discovery by the Faculty that there was no provision in London for teaching certain parts of physics at all; that while different institutions overlapped there was large gaps in a complete course on the subject. The Faculty could then consider what steps should be taken to remedy that state of things. It might advise that measures should be taken to build a new laboratory or to found a new lectureship or even a new Chair, and my notion is that if such bodies as the Faculties made suggestions of this character persons would be found and ways would be discovered by which effect

should be given to their well-considered ideas. It is often said in London that it is astonishing that so little is done by private endowment for academical education, but the fact of it is this: I knew a man, for example, who had enormous wealth which he was willing to dispose of. He never could find anybody to tell him what to do with it. If he had such a body as I am describing carefully investigating the arrangements for academical education in London, pointing out their defects and suggesting new measures there you would have a practical basis, and you would only want your rich man to step in and do it. And I believe the rich man would be found.

14,586. Would the proceedings of the Faculty be made known to the public or would they only be forwarded to the Senate from time to time?—That, again, is a detail, but I have often thought that if we are to get the University of London out of its present somewhat torpid condition I do not see why it should not have a University Gazette, such as the Universities of Oxford and Cambridge have, in which the proceedings of the Faculties and Boards and various things of academical importance would be published. A good deal of it would be formal, but such of it as was of general interest would, of course, find its way into the daily papers and so would filter to the public ear.

14,587. The Faculties would consist of all the teachers in the different institutions. Then what would the relation of these different institutions themselves be to the University. You think the word "affiliated" would be too strong?—You admit their teachers, which, of course, would require appropriate machinery. You would have to decide what bodies you would receive teachers from and so forth. But beyond that I should strictly leave the teaching bodies alone.

14,588. You would not give the University any power to interfere with their internal arrangement?—No, I do not see how it is possible. For example, each of our great hospitals has a large medical school. You cannot conceive that a hospital like St. Thomas' would be very willing to allow the University to interfere with its medical school. It is not likely. I do not see how it could be done without an extremely drastic Act of Parliament which it would be almost impossible to pass. I do not see except in the mind's eye how such a state of things could come about. Every one of these institutions would resist anything of the kind, I am persuaded, and I do not think the thing is really necessary.

14,589. Then if you had merely this loose connexion, perhaps that would enable you to bring in these other bodies which are now under Government or are in connexion with the City guilds and other bodies?—Yes. I would make the thing as easy as possible. I think the Senate, which of course should still have a certain proportion of persons of position in the State upon it, would be a kind of tribunal to decide what teaching bodies, after careful investigation should be admitted to University privileges, how many representatives they should have and what Faculties they should be assigned to. They should require some proof. That is why I mentioned the proceedings of the University of Edinburgh. They would sit in regard to each application as a kind of court. They would inquire before they admitted any body to University privileges whether it had proper appliances for teaching, and make some inquiry about the competence of the teachers and so forth. Those inquiries proving satisfactory the specified number of teachers would be admitted. In that way the University would be able to bring a little pressure to bear upon the teaching bodies of really the most innocent and least complicated kind. If one of the smaller Medical Schools applied to the Faculty of Medicine the University would say, "We shall make an inquiry as to how your "teaching is carried on." If they found that the laboratory accommodation in chemistry, for instance, was inadequate, they would say, "No, until you set "your house in order and screw up your teaching we "shall not recognise you."

14,590. And that would mean "We shall not accept your teachers in the Faculty"?—Yes.

14,591. That would be the only mode of recognition?—Yes, but I think that would be so public a stigma upon the particular schools that it would act as a very powerful propulsion to induce them to improve.

14,592. Practically the only connexion between the University and the Medical Schools and the others would be that the teachers in the different institutions would form the different Faculties in the University?—Yes.

14,593. And could you extend that to any of the Governments departments, like South Kensington?—Yes, I do not see that there is any fundamental distinction from an academic point of view between an institution which is endowed and an institution which is subsidised by a Parliamentary vote. That is an accident, I think. I think that all places in London where teaching of an academic character is carried on should be associated through their teaching staff with the University.

14,594. Can you tell us a little about the teaching at Kew over which you preside. You do undertake teaching, do you not?—We do not undertake academic teaching. The only teaching we have at Kew is of the nature of a technical education. Kew in one aspect is a training school for gardeners, but that does not come within the academic sphere.

14,595. The people who teach there would not expect to belong to the Faculty of the University?—No, it is purely technical education.

14,596. It would not be brought within the scheme?—No; we only teach gardeners at Kew and their educational needs are sufficiently satisfied by the Science and Art Examinations. That performs to them the same function that the University of London performs in academic study.

14,597. Do many of them go and take degrees?—The Science and Art Department does not give degrees; it gives certificates; it is quite a different plan of education. It does not rise to the academic.

14,598. Do you think the Science and Art Department at South Kensington should be brought into this scheme at all?—Only to the extent of the College of Science.

14,599. You think their teachers might belong to the Faculty of Science?—Certainly, because the College of Science at South Kensington is beginning to send candidates to the examinations, more especially to the honours examinations.

14,600. You would enlarge and alter the present University of London so as to have a closer connexion between it and the teachers, but you would not have a very close connexion between the University of London and the different existing institutions, but only a sort of indirect connexion by the teachers in the institution forming part of a Faculty of the University of London, and you would wish to bring in in that way every institution that is giving a really good University education?—Yes.

14,601. You think that this would be a starting point, that it would be, as you say, a thing that would grow and would gradually shape itself, and would be the means of making a start in the direction of establishing a teaching University for London?—Yes.

14,602. Is there anything more you would wish to say?—There are one or two points of detail that I should like to mention before passing from the present work of the University. A certain difficulty, of course, exists in the minds of a good many people with regard to candidates admitted to the examinations, who do not belong to any teaching establishment at all, who come up from what is called private study. With regard to the Faculty of Science the measures which the University has taken of late years must tend to very much diminish the number of those private students, and I should hope ultimately to extinguish them altogether. When I was examiner I was extremely painfully impressed with the fact that one was obliged to reject a great many candi-

W. T. T Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

dates, who really showed quite as much ability and as much industry as those who passed. On one occasion I sorted the papers after a preliminary examination of them into two heaps, and I found it amounted to this: that one heap consisted of persons who had been taught, and the other heap consisted of persons who had not been taught; but there was no very marked distinction between them in other respects. Of course that is a melancholy state of things, because the amount of trouble which had been taken ought to have led to a more satisfactory result. You cannot prevent people from endeavouring to prepare themselves for an examination by reading, but in the scientific examinations the great work which the University of London has done, which has had a most enormous influence on the scientific education of the country is the insistance upon practical examinations. Now, it is almost impossible for a student to prepare himself without assistance for a practical examination.

14,603. Does this apply to all the Faculties, or chiefly to medicine?—It applies to the Faculty of Medicine, but more particularly to the Faculty of Science. So it will become gradually understood that it is very little use for persons improperly instructed to come up for the science examinations; but still the private student will always be a difficulty in the University of London system, and it has occurred to me that one useful measure which might be adopted would be to have at the University one or two official tutors, and I think that even in the Faculty of Medicine they would be extremely useful, because when I was a member of the Senate I obtained the appointment of a committee, on which Lord Herschell was kind enough to serve, to examine the practical difficulties under which medical students in London laboured in graduating at the University of London. By having before us the Deans of the different Medical Schools we were able to obtain a good deal of information which enabled us to remove many of the small obstacles in the graduation course; but I was very much impressed with the main difficulty, which is this: young men come up from the country, and very often from remote parts of the country, to a London Medical School; they know very little about the University of London, and they seem to want assistance in setting about entering upon a systematic procedure leading to graduation, and I think that if there were persons of the nature of official tutors at Burlington Gardens, who would see persons proposing to pass the examinations of the University from time to time, and without actually teaching, give them advice, as we used to say at Oxford, *sine ullâ solennitate*, in their room, on the conduct of their study, there would be some appreciable effect produced in minimising the lamentable waste of energy which these poor students very often exhibit in their attempts to get a degree. That is one practical point which I merely venture to submit to the Commission. It is quite a detail, but I think it would be of some use. Then there is another point where, I think, there is a positive abuse which I should extremely like to see remedied, and that is with regard to the prizes and scholarships which are now given by the University. Of course, these scholarships and prizes, which are rather numerous, are intended by the Government to aid poor men of ability in getting through the University course; but the present practice is to encourage a kind of scramble for those prizes on the part of members of other Universities, which, I think, is not altogether creditable, and is really of the nature of an abuse. I would, at any rate, impose a restriction to this extent, that if a man, for instance, obtained a mathematical scholarship at the University of London, I do not think that endowment ought to be given to him unless he can inform the Registrar that he is not receiving an endowment from some other University. I think the mere hunting for academic prizes and accumulating them, although, of course, a very pleasant thing for the persons having the ability to enable them to do it, is not what the State contemplated at all. I think, for example, if a man is in possession of a scholarship at Cambridge he should not be allowed to take a scholarship of the University of London as well.

14,604. You think he should not be allowed to enter?—I should let him have the credit of going in for the examination if he liked, for the glory of it, but I should not give him the money.

14,605. Would you give it to the second?—I should not necessarily give it to the second unless the examiners reported that the second was sufficiently good.

14,606. Of course, that is a detail?—Yes; the thing is carried to such an extent now that on one occasion, when the appointment of examiners occurred there were a number of very distinguished persons among the candidates, and the member of the Senate, who practically had the nomination, insisted on a Cambridge graduate being appointed, though I was very anxious that a Dublin graduate should have been taken, simply in order to get a wider scope, a difference of style in the character of the examinations. But then it was laid down peremptorily that the examinations in mathematics in the University of London were on the lines of the Cambridge Tripos, and, therefore, Cambridge men must be appointed. Of course, you have simply got a vicious system. The whole of the mathematical field of the University of London is simply now worked as an additional endowment of the University of Cambridge. That, I think, should be put a stop to.

14,607. Is there any other point which I have omitted which you would like to speak upon?—I should like to speak, if I may be permitted, about the further development of the University. Long ago the late Registrar, Dr. Carpenter, in the evidence which he gave before the Science Commission, pointed out that there was nothing in the constitution of the University of London to prevent its undertaking the higher teaching and having a body of professors, and I think Dr. Carpenter, to whom the University owes an enormous debt in carrying through its early organisation, always considered that it was only a question of time, the University taking up itself some part in the higher education of the Metropolis. I myself think that the function of any real University is twofold; part of its work is the conduct of the higher education, but as Döllinger pointed out, no University has ever been worth its salt which did not have some provision for adding to knowledge as well as imparting it, and I should like to see at the University of London a body of professors who would not compete with the professors of existing institutions, but who would take up the higher educational work where practically the teachers of existing institutions are obliged to drop it; because people may say what they like about their aspirations and their desires, but the work of the world has to be got through and at a place like University College or King's College what the professors really have to do, (and it is quite enough to occupy their energy and time), is to prepare men by a graduation course for taking their degree. And, of course, that has to be done within a definite time, and practically when men have got through their examination a teacher has to begin on a fresh batch, and although he may like to carry on those men further in their studies he has very little time or energy for the purpose But I think the University of London might afford opportunities to men who have taken their degrees, and who have exceptional capacity to go on farther. We have now altered the arrangements about the doctorate, so that the doctorate is now a recognition and a reward for what may be called post-graduation work, and that is, it seems to me, a branch of education which the central University should reserve to itself. A further advantage which I feel strongly about is this, that there are not for the most part in London at any of the educational establishments posts of sufficient emolu-

ment or leisure to retain in the metropolis our most distinguished teachers. The strain of teaching elementary students is, of course, in the early part of a man's life stimulating, but as he approaches middle age it is extremely wearing, and you will find that man after man rises into distinction and prominence in London as a teacher, and then just when he is beginning to be known, and to be a power in the Metropolis, he passes off to some other University. The depletion of London of its distinguished teachers is a continuous, and, I think, most disastrous phenomenon. I think if we had Regius Chairs at the University of London with, not less responsible, but less arduous duties, there would be something like a career for a distinguished teacher in the Metropolis. He would begin at one of the smaller teaching bodies, and as he became known and distinguished his claims would be recognised, and he would probably get one of the Chairs at the University. That is the state of things at Paris, and that is the state of things at Berlin. In those capitals you find the most distinguished people drawn together, members of the great central community. Here in London there are as sedulously driven away.

14,608. They should be well endowed, and only have a certain amount of lecture work so as to give them plenty of leisure to continue their research?—And also to stimulate research and higher study on the part of the selected men. I hope that in London, with our reformed University system, you would be still having the best men, not going away, but rising to the top, and passing on from the teachers of one grade to those of another; and finally the best men the country could obtain would be teaching at the central University up to the very limits of the known knowledge in each subject. That would, of course, apply to literature as well as to science.

14,609. The best men would probably retire from teaching altogether and devote the rest of their time to writing books or obtaining knowledge, would they not?—No, I do not think that is the case with a man like Helmholtz, at Berlin, who occupies a Professorial Chair. He does not teach what becomes arduous and repulsive after a certain time. He is not, year after year, breaking in the educational colt, and teaching him the rudiments of knowledge. You cannot expect him to do that. But he continues to teach students who are worthy of his attention, and he will to the end of his life. For instance, men like Professor Sylvester, after teaching the cadets at Woolwich, retired, and now he is a teacher at Oxford, and he is not only making mathematical discoveries, but founding a mathematical school, consisting, it is true, of only a small number of persons who have been interested in his methods of investigation and research, but who will carry on his work on the same lines after he is dead. There is no other machinery by which the continuity of work can be effected. If a man is isolated his work dies with him, but if he has pupils it goes on *ad infinitum*.

14,610. You want richly-endowed Regius Professors?—I would not say richly endowed, but adequately endowed.

14,611. Would the Regius Professor be appointed by the Crown or by the University?—On the whole I should prefer that in a place like London he should be appointed by the Crown. But that, again, is a matter on which I do not wish to speak too positively.

14,612. (*Sir George Humphry.*) From the valuable information you have given us it is clear that you would utilise the valuable existing teaching institutions in London?—Certainly.

14,613. And you would bring them into connexion with the University by means of representation in the Faculties?—Certainly.

14,614. Would you further exercise any controlling influence over them through the medium of any inspection of their schools and ascertain in that way that they were not only originally up to the mark when they were first recognised, but have continued to be so?—Yes, I think probably it would be necessary to have such a power. That would simply be a continuation of the processes by which the institution was recognised in the first instance.

14,615. And the power over those various teaching institutions would be given in the first place by their recognition, and, secondly, by accepting their teaching subsequently?—Yes.

14,616. And you would further institute a higher order of teaching in connexion with the University—a sort of post-graduate teaching?—Certainly.

14,617. That would require to be endowed and money found?—Yes.

14,618. Not only would there have to be professors endowed, but I suppose you would contemplate laboratories and higher teaching institutions?—Yes.

14,619. All that would cost a great deal of money?—Yes.

14,620. How is the money to be raised? Do you think the University could with a good grace go to Parliament?—Most decidedly.

14,621. You think it would be a real national work in which the prosperity of the nation would be involved?—I should hope that money would be obtained partly from national funds and partly from private sources. I think very often national funds are very dearly paid for. I am quite sure that if the University of London did not have a Parliamentary vote it would get annual bequests and endowments. But directly an institution is understood to have its fingers in the public purse any desire of private persons to assist it is alienated, because people think the exchequer is so vast that to throw their mites into it is a superfluity.

14,622. That sort of thing would have to be brought about gradually?—Yes.

14,623. In the first place the existing institutions might be made use of for that higher study as well as the lower study?—Yes, it would have to be done gradually.

14,624. There might be teaching of that sort connected with University College and King's College, so that they might carry out that work in connexion with the other graduate work?—Yes. My opinion is that the Faculties by the representation they could make would be of immense assistance to the teaching bodies; that they would obtain endowments for them by pointing out defects and even suggesting where a Chair could be created. If the Faculties said it would be desirable to have a Chair on a subject at King's College or University College, I am perfectly certain that people would be only too glad to find money to do it.

14,625. And the main organising work would rest with the Faculties?—Yes.

14,626. And the detailed carrying out of a great deal of the work, such as the examinations, would rest with the Boards of Studies?—Yes.

14,627. And the final decision on all important points would rest with the Senate?—Yes.

14,628. And upon that Senate you would have representation of the teaching institutions also?—Certainly. I should compose the Senate partly of representatives of the Crown, perhaps the representatives of one or two municipal institutions, and, unless Convocation were otherwise dealt with, representatives of that body; but mainly the representatives of the Faculties.

14,629. And in the proposal of any charter you would leave the University a tolerably free hand to adapt itself according to circumstances?—Yes, I certainly should.

14,630. All those points with reference to official tutors, distribution of prizes, and everything of that sort, would be left entirely free and open to the University?—Certainly.

14.631. Not fettering them in any way?—No, because I apprehend that there are a large number of very competent teachers in London. I do not see why they should not be able to transact their own business just as efficiently as the teachers at Oxford and Cam-

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

bridge. The State does not interfere with the management of those two Universities.

14,632. Could any use be made of Chelsea Gardens in connexion with higher teaching of that kind?—Certainly, the Chelsea Botanical Garden is the only botanical garden in London. A scheme is now, I believe, before the Charity Commission for dealing with it. Teaching is given there by lectures, and the garden is the only place in London where the students of scientific institutions can see anything like a collection of plants growing. The pupils at the Training Colleges, the South Kensington people, and a very large number of medical and pharmaceutical students make use of it.

14,633. This would contemplate not only plants, but actual botanical laboratories?—Do you mean in the Chelsea Gardens?

14,634. Yes?—The teaching of botany is now given as laboratory work in every Medical School, and several other institutions in the Metropolis.

14,635. That would be teaching with reference to graduation work?—Yes.

14,636. But with reference to higher experimental research work, and so on, and the teaching of a higher kind?—I do not see why it should not be carried out at Chelsea.

14,637. A further point in connexion with the University is its relation to what is called secondary teaching in London. A very large amount of secondary teaching is going on, partly in evening lectures. Would you bring them into relation with the University. There is a desire strongly expressed that the University should exercise an organising and regulating supervision over institutions of that kind?—On the whole I am obliged to say that I doubt very much whether that is the business of the University at all. I do not exactly see how it is to be brought in. It amounts of course to a kind of private study. Of course I do not wish to decry anything that is doing good work; but for University of London purposes this kind of secondary education is not adequate, and the attempt to pass a graduation examination on instruction of that kind leads to disaster. I do not exactly see how that can really be brought within the function of the University at all.

14,638. It would have to be a separate function appertaining to and carried out by some separate committee?—Yes. You might of course have a committee for that. But you might give the committee any other kind of miscellaneous work to do. I should have thought that kind of work was rather the province of the School Board. It does not seem to me, excepting in name, to be academic at all. I must confess that what is called University Extension is a thing that is very difficult to make head or tail of. How you can extend a University is never clear to me, and in what respect this is University work at all I have never understood. It appears to me to be more of the nature of the work done by the Science and Art Department, and a machinery of that kind seems to me to be more adapted to deal with it.

14,639. We have had a good deal of evidence from institutions of that kind, and a very strong desire expressed that the University should take some part in it, that part being general organising, and that it should exercise an influence over it through its recognition of their teaching as forming an avenue partly to their degrees?—I think that in organising any institution you must have a very clear and definite idea of what you are driving at, what your aim is, and what chance you have of effecting it. I regard this secondary education at present as a thing of an extremely nebulous character, and, as I say, its proper geographical position seems to me to be somewhat between the School Board and the Science and Art Department. Those are two organisations which have to deal with education which does not rise to the academical standard. I have seen a good deal of this secondary education, and I do not mean to say that it is absolutely useless or infertile, but it does not go far enough to be of any really solid importance in the academic field. A man goes down to a country town, or a suburb of London, and gives 12 lectures on geology. What possible educational value can that have? It may stimulate some of the middle-class people to take a little more interest in geology than they did before, and implant in their minds some idea as to the constitution of the earth, but imagine any miserable person who has pursued an extension course in geology going up for his degree at the University of London. Of course the thing is inadequate. It is simply the semblance of teaching without the substance.

14,640. It is represented to us that there is really very good teaching going on?—There are very able and distinguished persons who are good enough to do this kind of work, and of course they are tolerably cheerful about it, but if you ask what they really think of the thing, and the utility of it, you get a very different story indeed.

14,641. It was told to us that it was very valuable and important work, and that the men learnt a good deal?—All I can say is this. Of course I express my own ideas, and, as I am outside the educational world now, I express my ideas with the most extreme diffidence. I should like to see in London a University to begin with, and we might talk about extending it afterwards.

14,642. Then there is another direction in which it is asked to extend its influence, and that is in the technical teaching—engineering?—I must venture to say that I think this is absolutely monstrous. If a University is to teach everything it will teach nothing. If you are to begin with medicine and finish with shoemaking the problem is simply hopeless.

14,643. It did not propose that the University should teach, but that the University should recognise?—There is a fallacy which lurks in that, because if you control teaching it comes to very much the same thing as if you teach. If we are asked to take up technical education it is with a view to driving that technical education, and *qui facit per alium facit per se*. It comes to the same thing really. I should advise that the University should not meddle with technical education at all. I think that belongs to the County Council, and I should leave it there.

14,644. You would leave it to the University to carry on its business on the main lines which you have laid down?—Yes. I think one of the greatest evils of the present day is trying to do too much, and doing it very indifferently.

14,645. A very important point occurs with regard to how this is to be done. You are aware that no Charter can be proposed to Parliament without the assent of Convocation. A new Charter would be required?—I should make short work of it if you can get the Ministry to do it. I think the thing must be done by Act of Parliament. We have reasoned with and talked to Convocation long enough, and why such an extraordinary body was ever called into existence I cannot conceive. What happens is this. Convocation is spread over the whole of the United Kingdom, you may go and talk with the most persuasive eloquence at one meeting, and carry a unanimous vote; then directly the thing appears in the paper you may have another meeting summoned next week, and a special train run down from the North of England, and the whole thing will be reversed. It is perpetually coming to life like a polypus which has been chopped up. There is no end to its political vitality. We must treat Convocation as it exists, because you remember it still possesses a Parliamentary franchise, and, therefore, cannot be extinguished. We must treat it with respect, but we must not allow Convocation to have the mischievous power of simply obstructing everything.

14,646. You would recommend an application to Parliament direct, without reference to Convocation?—Certainly. I think the Charter of the new University would have to be incorporated in an Act of Parliament.

14,647. (*Mr. Anstie.*) There are two points I want to be quite clear upon. I understand you to say that you think that the teachers at the higher educational institutions in London ought to be represented and form the Faculty, and through the Faculty contribute to the formation of the Senate of the University; but am I right in thinking that on the other hand you are of opinion that as institutions they ought not to be represented on the Senate?—I do not think myself that the point is very material. I have not a very strong opinion about it. The great difficulty is to draw the line. I think if bodies like the Inns of Court, the great Medical Corporations, King's College and the University College would like representation on the Senate, and would ask for it, it would be a very desirable thing perhaps to give it them. But I see an extreme difficulty in saying at what particular institution you are to stop the senatorial representation, and how you are to make the selection.

14,648. You propose to recognise various institutions for the purpose of Faculty representation?—Yes.

14,649. And you propose to put all the professors in the same department into one body, and make them the Faculty in their own particular department?—Yes.

14,650. Why should you not do the same with the institutions, and make a kind of school representation in the different branches. Why could you not treat the institutions as you do the professors, and make them send up a contributory representation to the Senate? That would get rid to some extent of the difficulty you propose?—Yes. I think there would be no objection, but I might say that I have not occupied myself very much with the constructive details. I have rather fixed my mind on the extreme importance of bringing the persons who teach into the life of the University, and I have not followed my train of thought very much beyond that.

14,651. There is one point which is rather vital, which you have referred to, and which we shall have to consider very carefully. You may remember perhaps that the earlier proposals of the Senate give to the Faculties a considerable consultative power, at the same time also constitute Boards of Studies. The earlier Commission, presided over by Lord Selborne, reported against giving the Faculties any consultative power, and limited them to electoral functions. From your evidence to-day I understand that you are in favour of the other view, that you would rather give the Faculties consultative powers, and let the Boards of Studies have wider executive functions?—I thought the conclusion of the last Commission reducing the Faculties to electoral boards was one of the most futile that ever entered into the human mind. The very essence of the re-construction of the University of London, is to meet the grievances which the teachers have never ceased to express, that they have no voice in the management of the University; and the essential principle upon which the re-construction must be based is to bring the teachers into the University, and to give them power to ventilate and discuss every conceivable thing which relates to the promotion of the teaching of their subjects.

14,652. And that you think would not be adequately done by allowing them simply to elect representatives?—Certainly not. The important thing is to get the teachers' opinions—to get them to meet together and to discuss. As I said a little while ago, at the present moment people very much doubt whether chemistry is taught in schools or elsewhere in the right way. One man proposes one method and another proposes another. But if you could get all the teachers of chemistry—people who know the business thoroughly—and get them to discuss methods of instruction in the same room, you would probably arrive at something which was practically valuable.

14,653. (*Mr. Rendall.*) There seemed to me to be a little ambiguity with regard to the terms you used with reference to the admission of Faculties. There is the difficulty in admitting institutions that if you admit them *en bloc* as a whole you limit the University action to those institutions and make them too narrow. Do you not think it would be a feasible scheme, and perhaps a better one, to reserve the power of admission to the Faculty itself, and to make it rest on personal and professional qualifications?—Well, if one did that, one would lose the valuable power of putting some pressure through the central University on particular institutions.

14,654. Except that the Faculty or collected Faculties would then have the power reserved to them of not admitting the teacher of an institution of which they did not approve. Would not that be the easiest and most manageable method?—The suggestion is to make the admission to the Faculties personal to individuals.

14,655. Of course the Faculty could, if it liked, attach it to the particular qualification or the professor in certain colleges, but it would not be admitting the whole teachers of the institution *en bloc*, nor would it necessarily be excluding a teacher who did not belong to a different institution. There are different cases to meet, those of organised colleges, like University College and King's College, and those like the Royal College of Science which it might be better to admit as individual professors than as institutions to come directly under University guidance?—Yes.

14,656. Do you see special difficulties in that course?—I think it might be more difficult in practice.

14,657. For instance, some times there is a professor, or one who has the title of professor who has little or no distinction and who has nothing more than a titular connexion with the institution. On the other hand one has sometimes a demonstrator, who is a person of very high and marked scientific distinction. The University perhaps may wish to admit the demonstrator and exclude the professor?—I do not see how you could do that very well. That would be rather a drastic sort of discipline. The demonstrator must bide his time. When he reaches professorial rank I think it would be time for him to be admitted. I think it would be a strong thing to take a man's demonstrator and to exclude the man himself.

14,658. I do not mean to take the man's own demonstrator, but I mean a person who had the title of professor in some small and rather trifling institution, and on the other hand a demonstrator who had attained high distinction?—I think I should leave it to the Senate in the first place, and the Faculties subsequently. I do not think you can meet every conceivable contingency.

14,659. Except by leaving it free to the Faculty to accept or reject?—That is practically, I suppose, what it would come to.

14,660. I did not know how far you had thought that out?—I have not thought out the constructive details as I frankly admit.

14,661. (*Professor Sanderson.*) In the excellent article on the University of London, which you contributed some time ago to "Nature," you set out clearly the points which you have mentioned now. What you say there is what we should accept the existing University as a foundation, and should strive to remove its defects and give it higher work to do. You have explained to us very clearly what modifications you would introduce into the University of London with reference to the examinations and also with reference to the representation of teaching institutions. I think a point you principally enforced in your article was the necessity of making the Faculties bodies which should be deliberative?—Yes.

14,662. You attach much importance to giving the teachers opportunity for free discussion on all subjects relating to examinations?—Yes.

14,663. After you have dealt with those questions, *i.e.*, with everything which relates to the reorganisation of the University for examining purposes, you say that even if this were accomplished the real academic need of London is left perfectly untouched;

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

and you go on to say that you would like to see the University of London provided with a body of superior professors who would not merely add to its distinction by their own labours and public instruction, but would guide the studies and researches of the young graduates. Then you tell us, in further explanation of that general view to-day, that the establishment of endowed professorships would not be the full realisation of it. I should like to ask you to explain to us a little more fully what else would be wanted besides the creation of endowed professorships?—It would be absolutely necessary, of course, that the endowed Chairs should have attached to them laboratories and accommodation for the conduct of such teaching as I contemplate.

14,664. So that probably much the larger expenditure would be for that, would it not?—Certainly.

14,665. The mere endowment of professors would be relatively an easy thing to accomplish?—Yes. The gradual foundation of first-class laboratories would be a very costly thing.

14,666. I suppose you would not consider that it would be wise to attempt to do this in any other way than gradually?—I think all gigantic undertakings of this kind are better accomplished gradually. One has to feel one's way very much so as to avoid costly and disheartening mistakes. If one only saw one Chair founded at the University of London with its appropriate teaching, the experience which the University would gain in connexion with the Chair and the teaching in connexion with it would be valuable in proceeding to establish other Chairs.

14,667. Can you mention three or four subjects in which it would be advisable to establish institutes for study?—I should be very much inclined to think that Physics, Physiology, and Comparative Anatomy would be three subjects I should like to see begun with as early as any other.

14,668. You referred to the organisation of German Universities. I think we quite clearly understand that you would neither wish to introduce the mode of government of a German University nor the mode of examination which is adopted there; but you would hold to our present mode of examination, which, on the whole, is so well carried out by the University of London and its examiners, but you would adopt what is really the essential part of the German Universities, viz., the institutions for the higher study?—Yes, most distinctly.

14,669. If we did not recommend a scheme including that, we should accomplish very little for the academic needs of London?—If there is not some provision for the higher teaching I do not see why the present machinery might not just as well go on as it is.

14,670. Would you tell us, quite without reference to the question of representation, what sort of body would be best for managing such a University as you contemplate, I mean to say, as to its constitution. For example, ought it to consist half of men of action and half of men of science and literature, or do you think it would be quite sufficient to have a body which would consist simply of business men representing the interests of the public?—In the Australian Universities, which are comparatively modern, it has been found that it is practically of great importance to have in the Supreme Governing Body one or two men of first-rate municipal ability. They are a very valuable element; they bring into the Senate administrative ability in which teachers and professors are sometimes not very strong. But then, of course, you must have, in controlling an educational establishment, a large proportion of persons who know something practically about education, and who are not too remote from their knowledge. That is an extremely important point. It is not sufficient to have on the Governing Body of the University a man who at some distant period has had to do with teaching. He must be sufficiently near the practical experience of teaching to take an active interest in the business that comes before him, and have some idea as to in what direction it ought to be dealt with.

14,671. But would not a body consisting simply of administrative persons be effectually guided by such Boards of Faculties as you propose?—Not altogether. My experience of the Senate of London University is that it is not so easy to explain in a short time to a body of gentlemen even of more than average intelligence some piece of educational business, supposing they are entirely laymen. It is very desirable to have a nucleus of persons who at once see what the nature of the business is, and who can inform their colleagues, and so enable the Senate or governing body to come rapidly to a decision.

14,672. What proportion do you think you ought to have of experts and men of business?—I do not think you want more than a nucleus of men of business. But then in a body like the London University you must not have merely some distinguished men of business, but you ought to have some persons of ministerial rank. I think that is of very great importance. I think it is carried too far on the present Senate, because there are so many persons of Cabinet rank on the present Senate, that what practically happens is that they never attend the meetings unless when they are in opposition. The consequence is that they come down in their afternoons of leisure, and, though they are generally sympathetic and try to do their best, they have absolutely no touch with what is going on.

14,673. Then the general result is that it is desirable to have a stronger representation, both of literature and science on the Senate of the University than exists at present?—Yes. It is absolutely essential that you have persons upon the Senate who are more conversant than they are at present with the business that they have to transact.

14,674. Supposing the University was able to undertake the higher function which you have been speaking of, are you quite certain that it would be desirable that recommendations and details with that view, *i.e.*, with a view to the higher teaching, should be committed to the Boards of Faculties? Would it not be better to refer it later to a committee specially appointed for the purpose of guiding the Senate, a committee of its own body, I mean?—With regard to what?

14,675. With regard to the establishment of new professorships, extension of particular branches of teaching, doing what is necessary for what you spoke of as post-graduate teaching?—I think I could not have made myself perfectly clear. The post-graduate teaching I desire to be the peculiar province of the University itself, but the Faculties, I think, should be allowed the utmost liberty to occupy themselves with anything relating to graduate teaching in the Metropolis itself.

14,676. That I quite understand. I had though you considered that the Board of Faculties would be the proper body for the University to refer questions relating to the higher teaching to as well?—When I said "higher" I simply meant academic teaching. I do not think the University professors should be subordinated to the Faculty. They would be persons of such eminence that they would take care of themselves.

14,677. What I meant was rather the bringing into existence the higher teaching?—In a matter of that kind where a work is so desirable I would not scorn anybody's help in getting it done. I do not think it matters who sets the ball rolling so long as it arrives.

14,678. (*Rev. Canon Browne.*) I have no questions to ask on the principles which you have expounded so lucidly, but there is one question of detail on a matter of the highest importance, that is, the relation between what you call private students and the taught students. You said that you had had to reject students who showed as much ability and industry as those who were passed. Was it knowledge in which they were deficient?—Yes. Of course

an experienced examiner—and I have had a great deal too many years' experience—when he reads a paper can see at once, not merely the character of the instruction, but also a good deal of the character of the student himself. What I meant was that a great many of the persons that I rejected because they gave obsolete and absurd answers to straight-forward questions if they had come under the hands of a good teacher would have acquitted themselves respectably. For example, a student in geology may have read a text book 50 years old. He may have got that text book up in an industrious manner, but the information is not such information as you can nowadays accept. Therefore, with all respect to that person, you would have to pluck him, not because he is negligent and not industrious, but because he has never had any teaching.

14,679. As they show by not knowing?—They have never come in contact with current sources of information. I wanted to say how mischievous this private study is. You see that if such a person had come under a competent teacher he would at once have been put into a proper course, and would have arrived at a very different result.

14,680. I also have had some experience of examining. In the case of the person you mention, was it because his knowledge was not knowledge, or because it was acquired from an obselete book that you rejected him?—It was not knowledge in this sense, that it was absolutely obsolete.

14,681. You could not give marks for it?—I could not give marks. The candidate failed not from any want of industry.

14,682. He did not know enough facts. Was that it?—He did not get enough qualifying marks, so I treated him with respect, but without landing him where he wanted to go.

14,683. You urged, and very properly, if I may say so, the appointment of some Regius Professors. I suppose all Universities suffer from the depletion of some of their best men?—No; I do not think they do.

14,684. Dublin, for instance?—No; not to an appreciable extent. I mean the University of Dublin has one of the best schools of Mathematics in the three kingdoms.

14,685. Then, if Dublin would not be an instance, can you tell me without difficulty some half dozen important persons whom London has lost in that way lately?—We have just lost Professor Ray-Lankester. We lost your neighbour on the Commission not very long ago. There is a person whom we have the privilege of seeing occasionally, but whom we should like to have altogether, Professor Michael Foster.

14,686. I should think Dublin could run through as many names. However, of course you did not base your desire on that alone?—No. I do not think it would be difficult to make a considerable list.

14,687. You spoke about the University extension people. You said, "Some one goes down to a country "town and gives 12 lectures on Geology; what "would be the use of people going up for a degree "on that"? If those 12 lectures had been given on a University lecture system, would there have been any use in going up for a degree on those 12 lectures?—No; I should say not.

14,688. Then what is the difference?—There is no difference, except that no University professor worthy of the name would be such an impostor as to attempt to teach Geology in 12 lectures.

14,689. Neither would the University extension lecturer who goes down to the country town?—Yes; he does, indeed.

14,690. You must begin somewhere?—What I mean to say is this, that I do not understand in what sense the work that is going on now has any claim to a University character. As I say, a man goes to a country town or to a London suburb and gives 12 lectures on Geology. I do not say it is destitute of value, but I altogether protest against its being called in any sense University work. It may be breaking the ground, or ventilating the subject, or stimulating interest, or anything you like to call it, but it cannot be seriously regarded as University education.

14,691. But those very same 12 lectures if given as the first 12 lectures in the study of Geology by a University professor in a University lecture room would have been emphatically University work?—Yes; but they would not have been given as the first 12 lectures. When a man gives the first 12 lectures on Geology, it is an impoverished course, but it is symmetrical and logical as far as it goes. It is not the kind of work that I could conceive a University professor doing in a University at all.

14,692. But he must begin?—But this man ends. You cannot teach a large scientific subject in that way. You cannot have 12 lectures on a difficult subject like Geology, and call it dealing with the subject in an educational sense at all.

14,693. Do these people call it serious?—I do not know whether they call it serious or not. The subject came up here, and I was asked whether this kind of work ought to come within the scope of the University of London. I said, certainly not. It appears to me that you have now in the country an organisation for doing this peripatetic work. That is what is called the Science and Art Department. The Science and Art Department subsidises certain persons who carry on this kind of pseudo-academical work. I do not see why a University wants to interfere with it. Let them go to the Science and Art Department. There is the machinery for doing the whole thing.

14,694. I am not in the least dealing with your general argument. I want to know why these 12 lectures are not to be treated as in any sense approaching University work when the same lectures would be if given in the class room of a University?—If a man gives 12 lectures on Geology, it is a kind of skimming of important points which I have no doubt is done extremely well, and in a conscientious spirit. But I cannot conceive in a serious University that kind of sketchy work being done at all. If you have any serious teaching of Geology, you have to settle down to a systematic course. This does not begin with a systematic course at all.

14,695. You entirely disregard my terms. I say if these 12 lectures are properly arranged lectures how do they differ from lectures given in a University?—I really do not understand your point. Assuming that a man gave a course of 70 lectures on Geology, that is an adequate treatment of the subject. But what this man does is to go down to a country town and give 12 lectures. If that is so, it is a fragment of the University course which, being a fragment, is of very little use. But the things are not comparable at all, as I understand the matter.

14,696. Why should not another 12 lectures be given in the town?—I mentioned Geology because I happen to have an acquaintance, a University graduate, who gave this course of teaching, and he told me that he did it because of the necessity of his livelihood. He is now in a competent scientific position—there can be no doubt of his competence—but he said as to the thing being of the smallest use he could not hope that it would be, because it was such a modicum of instruction.

(*Rev. Canon Browne.*) You do not face my point. I will not trouble you further.

14,697. (*Professor Sanderson.*) Your point is that neither 12 lectures nor 24 lectures on Geology delivered to an ignorant person would have any good effect in teaching him Geology?—No. I think they might stimulate general intelligence, but you must have specimens demonstrated, you must have equipment for teaching a serious subject like Geology which you cannot introduce into a village in a peripatetic kind of way. I do not say the thing ought not to be done, but I say it is an educational expedient which does not rise to academic rank. It does not rise to the level of the education which is given in a University.

W. T. T Dyer, Esq M.A., B.Sc.

10 Nov. 1892

(*Rev. Canon Browne.*) That was not in the least my point.

14,698. (*Professor Sidgwick.*) You have a wide acquaintance, I think, with Universities. Are you acquainted with the working of the German or Scottish Universities?—No, I cannot say that I have much knowledge of German Universities, but I have seen something of the Scotch, and something of the Irish.

14,699. You would admit, would you not, that in both the Scottish and German Universities the teachers have a preponderating influence in determining the examination for graduation?—I believe that is so with regard to the German Universities. With regard to the Scotch Universities the system has been recently changed by the introduction of external examiners.

14,700. Do you think that it has yet been so far changed that the professor has not a preponderating influence in determining the lines of the examination?—I have not examined in Scotch Universities, though I have been invited to do so, but I do not think any professor would preponderate over me.

14,701. But if you were appointed an external examiner would you not generally think it your duty to follow the line of study that the professor had adopted? May I give an illustration? Replying to the Chairman you spoke of the bad tendency of the Mathematical Department of the University of London as it is now existing to follow the lines of Cambridge?—I did not mean that it would be a bad tendency, I thought it was not obviously necessary that it should follow them.

14,702. I suppose if you were appointed examiner in mathematics for the University of Cambridge you would think it the right and proper thing to follow the lines of study laid down by that University, rather than the lines of study laid down by the University of Oxford or the University of Dublin?—I should give, of course, some consideration to the general style of instruction in the subjects at Cambridge, but I certainly should not think it my duty to confine my method of examination to local lines, because I take it that the precise object of appointing an external examiner is to introduce an external element into the examination paper. Having recently examined in the University of Cambridge I may say that I set the papers simply from my experience as examiner of the kind of papers that ought to be answered, and without giving any particular weight to the local method of teaching. It did not seem to me to be my function to inquire into that.

14,703. You are acquainted with the system both at Cambridge and at Oxford under which the examinations are determined?—Of course, I am an Oxford graduate and I have been a Cambridge examiner. I have seen the two.

14,704. Do you approve of the degree of control which, in an indirect way, at both Oxford and Cambridge the body of resident teachers have over the examinations through the Boards of Studies; or do you think they have too much?—Things have altered a good deal since the time I took my degree at Oxford, but in my day I think there was a remarkable freedom in the Honours Examinations at Oxford, which are the only ones that are really important. Within certain limits you presented at any rate in the Science School a schedule of subjects for examination. You gave examiners with ample notice the schedule of subjects from which you were prepared to be examined, and they examined.

14,705. I suppose, however, we may say that there is so much local diversity in the organisation of the examinations at Oxford and Cambridge respectively, that suppose any legislation made it necessary for Cambridge men to go the Oxford examination or for Oxford men to go to the Cambridge examination that would immediately depress the teaching of the University so subordinated?—I should really be inclined to think that it would not. Of course there are points in some of the principal subjects taught at the two Universities, in which the teaching at Oxford and Cambridge have to a certain extent a local character. I suppose the Mathematical School at Oxford is not quite on the Cambridge lines, or the Dublin School, and there might be some little difference in the results if the examiners, and the candidates of the two Universities were interchanged, but I should say with regard to the Science school there is no particular difference.

14,706. With regard to another point as to your proposed University professoriate, I presume the advanced teaching you would desire is now carried on in the German Universities?—Yes; of course we had at the best period of his career, Professor Hoffmann in London, and he was afterwards called to the University of Berlin. We can hardly say that we have at the present moment anybody of the European calibre of Professor Hoffmann.

14,706. Is there any tendency in the organisation of the German Universities, as far as you know, to make the kind of separation that you have suggested between the advanced teaching and the elementary teaching, so that each is committed to an entirely different body of professors located in a different set of buildings?—I understand it arises in this way. There are a large number of Universities in Germany and these Universities are subject to a competition to keep up their reputation. That reputation largely depends on the distinction of the professors attached to their body. Of course, when a man in a German University has an external reputation, and what is called an European position, he can largely dictate terms to his employers. He can say, for example: I am now "engaged in a very important work with my advanced pupils. I am not going to be bothered "with the elementary teaching. You must get some- "body to do the elementary teaching": and they are obliged to do so. So you get a distinction in the German Universities between the junior men who do the graduate work, and the older men who do the post-graduate work, as long as their faculties are unimpaired. I take it that the distinction grows up somewhat in that way.

14,708. Does it not often happen that a distinguished professor takes the general course which a large body of students attend, and is it not now—as it certainly was 12 years ago when I made special inquiries on the subject—the prevailing view in Germany that one of the strong points of their system is that the widening of the influence of the greatest men that is thus secured?—Of course I may say frankly that I am only speaking second-hand. I have made inquiries on that point. It is no doubt the fact that the very distinguished people will sometimes take the general course—speaking frankly—on pecuniary grounds, because they get a very lucrative source of income. But it simply amounts to this, that they go into the lecture room, and give a highly stimulating lecture, but the burden of demonstrating falls on junior men. You will not get a distinguished man to spend the whole day on the preliminary teaching of beginners. He will not mind giving to a largely attended lecture room a lecture two or three times a week, but that leaves him the rest of his day free for the other advanced work, and the *privat docenten*, and the junior teachers carry on the rest of the work.

14,709. Then do not you think his share in the general work of the teaching of the students generally is a valuable share, and one that you would desire to maintain?—I think so, but it does not very much matter how you organise it. The thing is that here in London in most of our teaching institutions a single professor has to do the whole thing; he has to teach beginners, and he has to teach advanced pupils. The whole burden of my argument only amounted to this, that now-a-days it is more than any one human being could do. I suggested a classification of the teaching by which the elementary teaching might be committed to one set of men, and the post-graduate teaching to the other, simply as one mode of relieving the burden.

W. T. T. Dyer, Esq., M.A., B.Sc.

10 Nov. 1892.

14,710. Are you acquainted with the working of University College, of which you spoke?—Yes, to some extent.

14,711. It would appear from a paper before me—the Report of the Dean—that the Professor of Chemistry has two assistant professors, I believe there is a third assistant who is not a professor, and that a considerable amount of research is done in the laboratory. It would appear, therefore, that in University College there is already to some extent the kind of differentiation you would desire?—Yes.

14,712. You would not wish to put an end to University College for research work?—Certainly not. The whole drift of my evidence has been in the direction of interference with existing institutions, and their natural development, as little as possible. But I still think that there is room, notwithstanding all the work done at University College, the College of Science, and other places, for somebody at the top of the tree, as it were, who should be a kind of leader of the chemical body.

14,713. (*Lord Reay.*) You insist strongly that to make the new University a success the machinery of the organisation should be as simple as possible, do you not?—Yes, I do, because the development of the University must be, to some extent, experimental, and it appears to me to be highly unwise to start with too rigid machinery which you cannot modify, as the experiment advances. I think by having the whole organisation as simple as possible there is a much better chance for its developing in a way which is adapted to the needs of the situation.

14,714. And in your scheme the Faculty and the Senate would both discuss the main lines of educational policy upon which the teaching and education should be conducted, and upon which the examinations should be conducted, but you would leave to the Boards of Studies all those minor questions with which an executive has to deal, and probably you would have in the Senate also a small body to deal with similar questions which would come before them?—Yes.

14,715. Leaving therefore the Senate and the Faculty free to deal with the greater problems, what we might call the educational policy of the institution?—Yes.

14,716. But not with the executive details?—No.

14,717. You would leave the executive details in the hands of small and select committees, standing committees?—Certainly.

14,718. (*Mr. Anstie.*) I want to get your full view with regard to this University extension matter. Suppose that, in addition to the 12 or 24 lectures on Geology, or any similar subject, there were classes for tuition similar to the tutorial tuition carried on at Universities, and examinations founded upon that combined machinery of lectures and tutorial instruction, in that case will your answer be the same, that it was not at all within the range of University instruction?—I do not know that it would be. Of course, you can have every connecting link between University instruction and the merest popular skimming of a subject. Putting the thing in that way it is impossible to absolutely draw the line, but I still remain of the opinion that this peripatetic diffusion of knowledge rather belongs to the field of general State education, and it is not to my mind an academic matter at all. As I said before, I am not prepared to deny that a certain utility is belonging to it; but I think it is not necessary to mix up the work which is carried on in a definite centre with definite laboratories, definite staff, and definite appliances, with this more or less impromptu and missionary work which is carried on in the country. I think it should be dealt with by some organisation like the Science and Art Department, or the School Board, or the County Council. I mean it is a part of the State work. I cannot see that it is of an academic character. To my mind, academic work implies a defined academic centre.

14,719. To the extent to which education of that kind proceeded upon the best methods of academic teaching, including practical work, it would assimilate itself to the trust kind of University teaching, would it not?—Yes; it gradually develops into it.

14,720. There would still remain a large residuum of a more general and vague kind?—I might simplify the difficulty by saying that my main objection to the efficiency of this University extension work is the impossibility of accompanying it with any actual practical instruction. It is obvious that a man cannot go down to an out-of-the-way place with a laboratory in his carpet bag. My notion of the scientific side of University study is that there you have a full equipment, so that not merely do you have the instruction in the lecture room, but you see the phenomena. When a man goes into the country to give a lecture he cannot take a laboratory with him. It is a mutilated expedient. You only get a bit of the University system. It is absurd to call it University extension; it is simply the protusion of a single filament from a vast organism.

14,721. What I am asking you to assume for a moment is that in a special or inner circle of the kind that I am referring to those opportunities are provided for a student. Then, I suppose, it would approximate very much to University teaching. But if you leave out of account that inner circle, does it not seem necessary that there should be some body intermediate between University extension and merely elementary teaching which would take charge in a local sense of education of that kind. Would it not be desirable that there should be constituted, if possible, in the Metropolis some body which, perhaps with the assistance of University direction, should be charged with the function of controlling and stimulating secondary education?—I think it would be proper for the University to give advice in the matter, but I think the thing is essentially municipal. I think the County Council is the proper body to organise this movement, and it might apply for general advice to the University, which, of course, as an expert would give it.

The witness withdrew.

MICHAEL FOSTER, Esq., M.A., F.R.S., examined.

M. Foster, Esq., M.A., F.R.S.

14,722. (*Chairman.*) You are Professor of Physiology at Cambridge?—Yes.

14,723. You were formerly professor at University College?—Yes, in London.

14,724. You have thought a good deal about this question of the establishment of a teaching University for London. Would you tell us your views. In the first place, you say the advancement of learning (research, investigation) is a function of a University as important at least as the care of education (teaching). Then you say this is perhaps especially true in London. That is the opinion you express on the paper you have been good enough to hand in. In carrying out this scheme do you think you could make use of the existing University of London, or do you think it would be more advisable to start afresh and establish a new University?—In what I have put down there I have just placed some statements in sequence which show how I am led more or less to answer your question. Perhaps I might repeat those before I attempt to answer your question exactly. I should say that what I have to say here before the Commission amounts rather, it seems to me, to common place truisms than anything else. A great deal of this question must depend upon the management of details, and I do not feel, although the matter has been before me some time, that I have sufficiently thought over the subject to offer any suggestions as to the matter in detail. But I start with the first proposition—and that I feel extremely strong upon—

M. Foster, Esq., M.A., F.R.S.

10 Nov. 1892.

that it is the function of the University to take care of the advancement of learning, that is to say, research and investigation—quite as much at least as the care of education. That should be the first thing to be held in mind in attempting to consider the scheme before you.

14,725. Even before the comparatively humble task of educating the young men?—I think so, for this reason. Education being more or less a marketable commodity can take care of itself very much better than research, and it is research which more than education requires, therefore, careful supervision, direction, and aid. And I might say that in London especially, I think that applies, perhaps, more than anywhere else, because there are greater temptations, I think, to develop the mere educational side as against the side of inquiry. Then a University which has to be really successful in helping investigation should be, if possible, a large and powerful University, and I cannot help thinking that one University in London would effect the purpose in which I am chiefly concerned much more readily than two or more smaller Universities.

14,726. And as there is existing now already a University in London, you would prefer to make use of that?—Then I should go on to say this: a University which should effect that purpose should be a University which should not only deal with all the branches of study, but also should embrace within itself all the more important and leading institutions for study in the Metropolis, not only University College, King's College, and the Medical Schools, but it seems to me, especially the Normal School of Science, and the City and Guilds Institute. I do not think that any University can look to any great success in the general advancement of learning which leaves those two bodies outside itself, the Normal School of Science and the City and Guilds Institute.

14,727. What would be the connexion between the different bodies and the University?—That seems to me a matter of detail upon which I do not feel that I have thought sufficiently to give any opinion that would be worth anything, save, it seems to me this: that the connexion between the University and the constituent bodies, if you may so call them, should be something more than a mere arrangement by which on the one hand the University expected that its candidates should have been educated at the constituent colleges.

14,728. That you think ought to be one?—Yes; that one takes for granted with certain modifications which might be desirable. The other one says that the colleges in return should simply take such share in the University as concerns the regulations of the examinations for degrees. I think the tie ought to be a closer one than that.

14,729. Before we go to any closer ties, you take for granted that there will be these, and that the University of London in its new form will insist upon anyone who comes up for a degree having been educated at someone of these institutions?—I may state that as a general statement. It possibly would require some modifications. It is difficult to put into a single sentence.

14,730. That would probably alter its position as an examining body of the whole of the Empire?—Undoubtedly.

14,731. You contemplate a change?—Yes. Then putting all those things together, it seems to me that it would be easier to modify the present University of London in that direction than to attempt to make the proposed Gresham University fulfil the purposes with which I am chiefly concerned.

14,732. It would on the whole be better rather to sacrifice the present Imperial position?—I should rather put it that it would be better to modify the present University in that direction.

14,733. Those would be the two first links between this institution and the University of London, the obligation of the students to have been educated at one of these institutions, and the institutions having a certain voice in regulating the degree. But that would not be sufficient. You wish some closer tie than that?—There should be, I think, a closer tie than that.

14,734. And that it is difficult to define exactly, but in what direction should it be?—I should like the University to have such supervision of the constituent colleges as to be able to direct their efforts for the advancement of learning. In one way I think that might be done. Of course it is difficult to enter into details upon which, as I said, I do not feel competent to speak. But I may give an example taken from my own subject. The opportunities for the advancement of learning in Physiology in London are wholly inadequate compared with what they ought to be. Putting aside the laboratory of the College of Physicians and Surgeons, which is more distinctly devoted to Pathology, which, though a kindred subject, may be distinguished from Physiology, we have the laboratory at University College, we have the laboratory at King's College, and similar laboratories in the other Medical Schools. But no one of those laboratories is fitted for, nor are there arrangements there for the prosecution of research to the extent to which they ought to exist in a place of social and political importance of London. The accommodation, even at the best place, University College, is inferior to the accommodation which we provide at Cambridge where the accommodation has to be obtained out of a poor University in competition with a whole host of other studies, and I imagine that it would be one function of the University to see that there were in London adequate opportunities for the prosecution of Physiological research in a manner worthy of the metropolis; and that one may apply with modifications to the other studies.

14,735. Would the research which you have mentioned as being so necessary be carried on at the different Colleges, or would you recommend it being carried on by University professors distinct from any college?—That, again, is a detail on which I should be loth to state anything very definite. I can say this, however; I am definitely in favour of the University encouraging research by means of its constituent colleges rather than by carrying on research by itself independently from the constituent colleges. I have a very firm conviction as to the utility of carrying on research and teaching in the same place, and I should be very sorry to see even the ordinary teaching, at all events in my own subject, dissociated from research in that subject, and had I to deal with the matter I should strive so to arrange that the University should by appointing the University professors, or in some way or another stimulate, aid, and support research carried on in connexion with teaching in one of its members.

14,736. Would the same man who is engaged in constant teaching have sufficient leisure to pursue research at the same time?—That, again, is a detail. I think that a certain amount of teaching is in a certain number of cases a very great aid to research. On the other hand I can conceive that there are certain persons whose time should be given up wholly to research, and who should have no teaching duties at all. I take it that it would be the duty of the University, through its colleges, to allot the teaching of research in such a manner as to obtain in both directions the best results.

14,737. This would be done by endowing certain professorships of which the holders would have nothing to do but to pursue research?—That is where you have appointed a man to research and nothing else.

14,738. He would be independent of any college, would he?—No. I think as far as I can see that it would be undesirable to make the University as a University compete in any direction with any of its constituent members, and I should do my best to devise some scheme by which the individual who had either devoted his whole time to research or some part

of it to teaching should be connected with one of the constituent members.

14,739. Then with regard to the connexion between constituent colleges of the University, would you give the University power to appoint professors in the different colleges?—I had rather not enter into those details, because I feel that that is a subject upon which my opinion is of no great value. My view of the question is that it is a matter of adjustment between the bodies who are likely to form the University and the University, and the only way in which a successful issue can be obtained is by those bodies adjusting their several differences and agreeing for the common good. That can only be got by very elaborate discussion.

14,740. You have already expressed your preference for working through the present University of London, and you say that if a new University is started the present University must be made a mere examining Board, not a University, to remove all possible competition in the future between the two or the present University must be modified on the lines you have indicated?—If I may say so, the present University is a University in one sense, and to a certain extent an Examining Board.

14,741. Of the two difficulties you prefer remodelling the present University and sinking its present position as an Examining Board for all comers into a secondary function?—Yes, a secondary function.

14,742. You prefer that, on the whole, to leaving it in its present function, doing the work as it does now, and having the new work done by the new University?—What I feel is, that if you start a new University and leave the present University in its existing form, there is sufficient vitality about the existing University to render it possible, within a certain time, that the University by gaining strength by the adhesion of other bodies, should become a University which would be a rival and a competitor of the University which you would have established. I think it would be undesirable that there should be two competing Universities in London. Therefore, it seems to me that if you establish a new University, the Gresham University, you are almost bound, in the interests of learning, to take steps at the present time to draw the teeth of the present University and make it the Imperial Examining Board, with no chance of being developed into a University subsequently.

14,743. Then if you set to work to remodel the present University of London, and make it what you want, you would go, I suppose, on the same lines as the different plans which have been before us, and you would have Faculties and Boards of Study?—I imagine it would take some such shape as that.

14,744. Have you considered it in detail at all, and do you care to give us your views?—I think that my views would be of no value to the Commission on that part of the matter. I have not thought it out sufficiently. I have not been compelled by circumstances to take any part in the new University, and I have avoided spending time upon it. I mean I have been so selfish as not to think the whole matter out.

14,745. You have been a professor in University College, I think?—Yes. I take great interest in the subject. I am a professor of University College; I am a graduate of the University of London, and I am very anxious indeed that the University of London and University College should prosper in the future. Perhaps, if the fates would allow me, I ought to give my whole time to attempting a solution of the question, but I have a great deal else to do, and I have not been able to think it out.

14,746. There is a general question I should like to ask you about University College. You believe it is a thriving institution, and that it is doing very good work?—I believe it is doing very good work, and I believe that if it were a constituent member of, if I may say so, a properly constituted University of London, there is a very great future open to it.

14,747. And you think that University College and King's College would be most valuable ingredients in any new University?—Yes. It is only some absolute perversion on their part that could prevent it. I mean they must have hopelessly gone out of their way to do wrong, otherwise they would occupy an important position in the University.

14,748. (*Lord Reay.*) I think I understood you distinctly to say that you do not consider the fact that a man is engaged in elementary teaching makes it impossible for him, at least in certain branches of science, at the same time to concentrate his efforts on research?—It is simply a question of time or rather of energy. There is one man to whom the teaching of either elementary subjects or advanced subjects is a great labour, which consumes a great deal of energy which leaves from his total sum of energy only a small quantity for research, and yet he may be a man fitted for research. It is very undesirable that that man should spend so much of his energy in elementary teaching, but another man might carry on either advanced teaching or elementary teaching, and really have the greater part of his mind left for research.

14,749. In any case you would not think it desirable that the University should absorb the sphere of research?—That is a point upon which I think I may say I feel very strongly. I should not like to see the research institution separate from the teaching of the constituent members. I wish to give each constituent member not only the body of teaching, but the soul of research. I think if the University took that research it would absorb it all, and there would be very little left for the constituent members.

14,750. (*Professor Sidgwick.*) I can quite understand your reluctance to enter into the details of organisation, but there is one aspect of the scheme put before us which I should like, if you will assist me, to make somewhat more definite. As I understand you think that the normal student should be a student of one of three or four collegiate institutions?—Well, of the collegiate institutions.

14,751. Can you tell me a little more definitely what the relation of these students would be first to provincial University students, and secondly, to non-collegiate students in London?—Well, I have formed an opinion upon that matter. I do not know whether it is of much value or not. I think the provincial student question will in the future be very largely settled by provincial Universities, and they will be a continually diminishing element in the University. I should like, myself, to see the University continue to give its degree to those who are not constituent members, and it is a matter of detail into which one will have to go as to what should be the relation of those degrees to the degrees given to the students who were members of the constituent bodies, whether it would be desirable, for instance, to indicate the difference by any sign or otherwise, and what should be the privilege with the two classes of students in the University. It seems to me possible to think out a scheme by which that might be done. You will have two classes of students in the University, one of which would be, I imagine, in the future continually increasing, and the other would diminish for a certain time, and then remain relatively stationary or bear only a certain proportion to the population.

14,752. At any rate you would think that if we wish to induce students to go through a course of study in colleges, we must give them some substantial advantages?—Undoubtedly, and I should strive to devise some means by which they might be offered to them.

14,753. Do you think it easy to devise measures by which students shall have adequate inducements to go through a course of study in colleges, and which shall yet be received with satisfaction by non-collegiate and non-London students? — How received with satisfaction?

14,754. If I may put it the other way, do you not conceive that any scheme which would give substantial advantages to collegiate students must be of a kind that would promote opposition from all provincial students who now rely on the impartiality of the

M. Foster Esq., M.A., F.R.S.

10 Nov. 1892.

University of London?—But surely it is not a question of impartiality? Your degree given to the students of your colleges has a certain value. A person outside London who wishes to become in some way connected with the University of London cannot have those advantages. The degree has a less value, but the degree apart from that has a certain value.

14,755. Then you would indicate it in some marked way?—I imagine it would be indicated in some marked way. That, again, I have not thought out fully, but that is what I imagine would have to be done.

14,756. Do you not think that if it be desirable to make this distinction between two classes of students, the establishment of a second University is the easiest and simplest way?—I quite see the objections, but it seems to me that they are inferior to what you would lose by cutting yourselves adrift from the present University of London.

14,757. Then you say if the new teaching University were instituted in London it would be desirable at the same time to reduce the existing University of London to a mere examining board. In what precise respect is the existing University of London more than an examining board?—It was only the other day by a vote of Convocation that it was prevented from taking steps to make itself a real University. The many-headed Convocation might change its mind; the University might take steps to make itself a real University; existing bodies in London which have held themselves aloof from the Gresham University might say, "This is our opportunity," and you would have a second University then rivalling your previous one. If you are going to succeed with the Gresham University you must take steps to draw the teeth of the present University so that it will never do any harm in the future.

14,758. As the only chance then left would be for the existing examining board to ally itself with institutions of a markedly inferior qualify, do you not think the temptation to use its teeth would be small?—If the case were put before me that the institutions which I have mentioned, all the leading institutions in London, were prepared to form a new University, then I should have to consider more closely than perhaps I have done at present, what are the advantages of using the prestige of the old University, which is something considerable and perfectly independent of of everything else, and the disadvantage of being clogged with the external students. I cannot quite see even then that on the whole I should say it was better to stick to the old University. But that case has not been before me at present. In the proposal there is no mention, I may say there is a significant absence of mention of these two powerful Institutions in London, which, with all respect to University and King's Colleges, I feel to be very powerful teaching institutions, the Normal School of Science, and the City and Guilds.

14,759. Then you are not prepared now to insist strongly on your argument that there would be a serious competition on the part of the old examining body on the hypothesis of our being able to include these institutions in the new University?—No.

14,760. (*Rev. Canon Browne.*) Professor Sidgwick asked you if the establishment of a second University would not be the easiest way out of the difficulty of differentiating between the two kinds of degrees, and you answered, "Yes"?—It was simply that, I suppose, in your new University you would not have any external degrees at all.

14,761. Then I want to know in that case how you will differentiate between degrees you give and degrees that the present University, going on as a mere examining board, will give?—Of course, the degree of the University of London as it is at present is what I should call in the future only an external degree. The other degree, the internal degree, would be given to those students who had been educated in the constituent members of the University.

14,762. How would the world know the difference between the one and the other?—I should set to work and try to invent some sign.

14,763. Would it not be at least as easy for one University to invent two signs for its degree, the Imperial and the internal, as for two Universities?—Yes.

14,764. Then how would it be an easier plan to establish the second University?—Because, I think, there is a difficulty. I think it is a trouble having two different kinds of students.

14,765. Not two different kinds of students. One would not be students at all?—Well, I mean candidates. It would be simply because I should not wish to complicate the work of the University. The training in an educational establishment is an important matter, and I think it would be well if one could always designate that by the degree. The University has its hands full, and does not want it.

14,766. You and I have often worked together. Suppose you represent one and I represent the other. Why should not we sit in two different rooms, and each take one side?—No; it means more than that. It means all the organisation and everything. If the University has plenty of time and energy to spare, then let it take these external students; but, at first, at all events, let it devote itself to its internal students.

14,767. Your answer is that it is only a question of inventing a sign?—Inventing a sign in order that the public may know which is which.

14,768–69. Then could you tell me another thing. Professor Sidgwick spoke about all these institutions being associated with the new University of London. By what means could you prevent an institution allying itself with both Universities?—They must belong to one or the other. I should expect in the constituent colleges absolute loyalty to the University, and I should expect each college in the University to think that the interests of truth were bound up in that University, and in its being a University for London.

14,770. That comes to University College refusing to allow any of its students to present themselves for Imperial degrees?—I think that is a different thing. Mind you, in what I am saying to-day I am looking almost exclusively at learning. It seems to me quite a different thing what a student does. I have no objection to students coming to Cambridge, and putting themselves up for examination to-morrow, but that is a different thing from the constituent college being a member of the University and taking an interest in the diploma of the University.

14,771. I understand that there really is no practical answer. You could not prevent students of Colleges from going to other examinations?—No. That is a different thing from belonging to the University.

14,772. I think I know your own practice very well indeed; but speaking of the higher research and teaching, and elementary teaching, is it not the case that you yourself hold the view that it is best for the best man to teach the elementary student rather than the higher students?—I think that is a personal question, a great deal. I mean to say that I think I can teach my men the elementary things better than one of my lieutenants can, and therefore I take that work. I can quite conceive that my successor would take a different view and leave the elementary teaching to a lieutenant occupying himself entirely with the very highest lectures. It is a matter of special circumstances.

14,773. Is it not also your opinion that an advanced class may much more safely be left to a less practised teacher than an elementary class?—Yes. To put it in another way elementary teaching is much more difficult and requires much more experience and time than advanced teaching. You give them a tolerably competent digest of the latest researches, in the advanced teaching. In the elementary teaching your great difficulty is to know what not to say.

14,774. (*Professor Sanderson.*) I assume your idea to be that the University must be a powerful

University; that it must teach well and examine well and promote the progress of science and research. I want to ask you what the connexion of such a body as the University College with such a body as you describe would be. Of course the research work done at University College is very good work we agree, but, on the other hand, we also agree that the men who have charge of the department are very competent?—Yes.

14,775. So that if we had the appointment of research professorships—supposing such research professorships to exist—it is probable that these very men would be the men who would occupy them?—Probably.

14,776. And yet you have told us to-day that the arrangements are not adequate. It is very important that we should understand that that is the real difficulty. Is that your view?—It is my view. I should like to double the laboratories at least and treble the staff at the University.

14,777. I mean that the want of competence in teaching in London particularly at University College and King's College, and at the Science Schools, and this central institution is certainly not the want of competence in the men?—No.

14,778. Nor in the absence in the spirit of research?—It is the want of opportunity and largely the want of funds.

14,779. Although you say that you are very desirous that the University should make use of the opportunities which exist or rather make use of the very institutions which now teach for the purpose of carrying out the higher teaching, yet it is clear that they themselves could not initiate such an improvement. The new University must initiate it. They must act indepently?—That might depend upon circumstances. I can conceive one of the constituent colleges receiving a bequest. I imagine that its expenditure of that bequest in developing some particular branch would have the approval of the University; but it might be carried out absolutely by the college itself.

14,780. In that case would the college wish and prefer to have the complete management?—I mean if you are going to have a University in which you have constituent colleges they must be members of one body, and if the college is going to profit by the power and magnitude of the University it must be prepared to give up certain of its own autonomy in order to make the University prosperous.

14,781. Is there not a question whether that sort of arrangement would be possible between any University in London and the Science Schools, for example?—That, of course, is perhaps the greatest difficulty; but it seems to me a difficulty which I do not think itself passes the wit of man to compass.

14,782. But would it not be at once much more easily compassed if the University itself took the initiative in making any arrangement with the college, or whatever was done for the purpose?—Yes. Of course there you would have the difficulty of the University developing this institution rather than another, or that institution rather than another. There must be difficulties, but they must be met, I think, by mutual arrangements.

14,783. And they would be much more easily met if the new body were a very powerful one?—Yes.

14,784. You think it more likely that money would come in to a powerful institution like that than to a small body?—That is the last thing about which I have any opinion of value. I should fancy, you would be more likely to get money to a large powerful body which represented the whole of London than to a local body. Of course there are different opinions, but, on the whole, I imagine you would be more likely to get money to a large central body than to scattered institutions.

14,785. Then, on the whole, it would be better for the University to take the initiative and obtain the co-operation of the existing bodies rather than that they should be expected to take the initiative?—I should say that they should both meet half-way.

14,786. (*Mr. Rendall.*) I should like to press that a little further. You said in the early part of your evidence that the University should through its colleges allot the duties of teaching and research. In teaching that seems to me very easy when you confine it to graduate teaching, because there the University would probably have control of the University examination. That would be your view, I suppose?—Yes.

14,787. And having the control of the examination and the direction of curricula it would practically have all the influence it desired in teaching for degrees?—Yes.

14,788. But when you come to research, what machinery do you think of?—I think you only want opportunities.

14,789. You speak of mutual arrangement, for instance, but what hold has the University on the colleges?—As I said before, I think that must be mutually arranged.

14,790. Why should the colleges ever mutually arrange at all unless you give the University power of controlling and administering funds, and making appointments?—I imagine that there would be a share taken by the University. The college and the University between them would appoint the staff for carrying on the research in a particular branch.

14,791. Why do you say the college and the University between them? Do you know a system in working which shows you a combination between two distinct bodies?—We have something very like it at Cambridge, the mutual fitting in of University lectureships, fellowships, and University appointments.

14,792. What you have there is that the University allocates certain funds for particular purposes?—I am speaking apart from that, a kind of mutual arrangement by which the arrangements of various colleges are made to meet requirements, because where there is a certain feeling of loyalty between colleges, and when there comes to be such a loyalty existing like that at Cambridge, it would be merely a matter of arrangement. It would be known that there would be a great want of research. It would be clear that that branch would be best carried on in a particular institution. The result of that would be that it would be mutually arranged. I do not think it would be possible to put down in writing any scheme which would be successful unless there were that same freedom that there might be in mutual arrangements between the parties.

14,793. Even at Cambridge in the state of things that you describe is not the whole drift and tendency, both in the scientific departments where more centralisation is required, and where research is more important, to strengthen the University action and the element of University administration?—But the analogy in London would be the strengthening of certain institutions.

14,794. Why do you say that? I should have thought that it was the University that wanted strengthening?—You have, for instance, a large laboratory in one of the institutions as part of the University, that corresponds altogether to our University laboratory at Cambridge.

14,795. You view each college as a separate University?—*Quoad* that.

14,796. You said, I understood, that you thought the University would be more likely to attract endowments perhaps then the colleges. Would you reserve those endowments entirely to the administration or would you hand them over to the colleges to administer?—I imagine that what money is left to the University would be administered by the University, that there would be quite different accounts on the part of the University, and on the part of the college, although in many points they would overlap in their expenditure.

14,797. As far as funds were given to the University by the State or by individuals you would leave

M. Foster, Esq., M.A., F.R.S.

10 Nov. 1892.

paramount control to the University?—You must do that.

14,798. But in dealing with college funds you would not look to the University? — This is the kind of case that occurs to me. So much money is left to the University, it is desirable to spend that on a particular object. At a certain college or by that college coming forward to help in some matter the expenditure would be most effective in that particular college.

14,799. Could you trust to the good will and loyalty of colleges?—I think you cannot do anything else. But that, of course, is more or less a detail which I should think out fully if I had to do it.

14,800. (*Mr. Anstie.*) A question has been put to you, the expression of which seems to fluctuate to some extent between the word "principle" and the term "substantial" inducement. The substantial inducement relates to the normal student as he is termed, and you seem to have allowed yourselves to be puzzled by the question of differentiation. As a matter of title the graduate is described by the same letters in a very considerable number of Universities, is he not?—Yes.

14,801. Cambridge, Oxford, Glasgow, Edinburgh, Dublin, and elsewhere?—That is one of those details upon which I do not wish to express any definite opinion.

14,802. You do not wish to urge that the Commission should engage itself in a somewhat harassing and difficult investigation, what mode of differentiation it should adopt?—No, certainly not.

14,803. And, again, one may perhaps point out that at Cambridge or Oxford there are colleges which have very different degrees of reputation. There are some at Oxford and Cambridge which people are proud to belong to, and there are others which they are not proud to belong to. Is it not usual to describe themselves as belonging to Trinity or Balliol?—Yes.

14,804. Might not that be left to take care of itself?—It is quite possible.

14,805. With respect to the distribution of Chairs of Study and Research between the University and any institutions which form part of it or were affiliated to it, I suppose there, again, you would not say that you desire to lay down any hard and fast rule?—Yes; there I do feel rather strongly on that point. I may say again that I should regret to see the University taking up or establishing an institution for research apart from its constituent teaching members.

14,806. But I am not speaking of an institution for research, if you mean by that some distinct college?—Let me give a case in point. I think the Brown Institution would be much more profitable if in the future it were in connexion with one of the constituent bodies of the proposed University.

14,807. Would you say that the University ought not to have the power of establishing any Chair unless it got the concurrence of the various constituent institutions, and that it must be locally connected with one of the institutions?—All I can say is that I should very much regret its being driven to that step. Whether, when the circumstances arose, I might say that that was the lesser of two evils I cannot say.

14,808. One may quite agree with you as to the advantage of connecting such Chairs with an existing institution, but I want to know whether you say that the University ought absolutely to be precluded under all circumstances from establishing Chairs independently?—As I said I have not gone into any details, but if there were one general principle which would guide me in detail it is that I should *preclude* as little as possible.

14,809. (*Lord Reay.*) We may understand it to be your opinion, whatever may be the later developments of the University, that in the first instance the strength of the University should be sought in strengthening the staff and the plant in the best institutions which are at present giving University education in London?—I should say not only the first instance, but I trust that that would be always the general action of the University, whether or not it might be desirable to depart from it in special cases.

14,810. (*Mr. Anstie.*) With respect to a Chair of that kind may I pursue Lord Reay's question to this extent. Suppose the creation of a Regius University Chair, I suppose you would admit that such a Chair should be open to the attendance of students connected with any branch of the University?—That is a detail.

14,811. But it is rather an important detail?—I can conceive that that again might vary according to circumstances. I cannot conceive that that is a very essential detail.

14,812. Do you contemplate the creation of Regius Chairs in the University which should not be open to the general public of the University?—What do you mean by the general public of the University?

14,813. All those who are connected with the University system as students?—But what does that mean exactly? I have not at present supposed that there would be any restriction to the attendance on lectures.

14,814. I mean the free attendance, of course?—I cannot go into fees. It seems to me that if my plan is carried out of a University Chair in connexion with the College, that must be at the same time a College Chair and must be governed by certain regulations of the College. That must be a matter of arrangement between the University and the College when the Chair is instituted.

14,815. Are all these high Research Chairs to be Chairs which are to be open to ordinary college competition?—I do not quite follow your question.

14,816. College competition is, to put it broadly, the competition for students' fees. Are these great University Chairs of research to be open for competition as to fees?—It may please the University to make certain conditions with regard to the Chair.

14,817. What would you advocate?—What exactly are we speaking about?

14,818. Take, for instance, a Chair existing at University College, which has been sometimes suggested?—I am afraid we are at cross purposes. With regard to the question of research, I imagine that the opportunities of research, if possible, would be made independent of fees.

14,819. Then you answer me in the negative, and you say it ought to be independent of fees?—I should look forward to that.

14,820. Your view of the proper state of things is, these Chairs should be made independent of fees. Then I think you have answered my question?—As regards research. That is what I should look forward to as the best arrangement, if it were possible.

14,821. (*Lord Reay.*) At the same time if the University were to find that the work of research was well conducted at University College or elsewhere, there would be no objection whatever to the University adding to the plant and staff of University College, and thereby giving such encouragement to research as to make the College quite fit to receive any student of the University for purposes of research?—Yes.

14,822. That is what you mean?—Yes, that is what I mean.

14,823. (*Professor Sanderson.*) And clearly in the case of research students it should be open to all?—Yes.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Thirty-third Day.

Friday, 11th November 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.	JAMES ANSTIE, Esq., Q.C., B.A.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	RALPH C. PALMER, Esq., B.A.
The REV. CANON BROWNE, B.D.	Principal G. H. RENDALL, M.A.
Professor BURDON SANDERSON, M.D., F.R.S.	

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

THOMAS ROGER SMITH, Esq., F.R.I., F.R.I.B.A., B.A., examined.

T. R. Smith, Esq., F.R.I., F.R.I.B.A., B.A.

11 Nov. 1892.

14,824. (*Chairman.*) You are the Professor of Architecture and Construction at University College?—I am.

14,825. Has there been always a Professor of Architecture at University College?—Since 1841 when Professor Donaldson was appointed.

14,826. Do you have many classes? Do many people come to learn at University College?—There is a class for the study of Architecture as an art, and a class for the study of Architecture as construction. They are carried on each session, and a moderate number of students attend. We never have what may be called large classes, perhaps from 12 to 20 would be the average numbers.

14,827. Are they, most of them, men who expect to be architects in later life?—Almost exclusively. Occasionally I get a student who proposes to be a decorator or carver or something of that sort, but generally professional architects only.

14,828. I suppose the profession is rather overstocked, like most others, is it?—I am afraid it is.

14,829. You think that you are doing good and useful work by having a Professor of Architecture at University College?—I think we are.

14,830. And you think that any new University that is established ought to encourage that, and to have something of the same sort?—I think it should, my Lord; and I think it should go further than that; I think there should be not only specific instruction in Architecture, but that what may be called the scientific or theoretical basis of Architecture should be taught in such a way as best to prepare students of Architecture for subsequently learning the practical part outside.

14,831. You teach that now, do you?—No; my work is limited to three branches, to construction and materials; to the history of the Art with the features and ornaments and so forth of the different styles; and to some of the difficulties of professional work. I do not give instruction in the scientific studies which to a certain extent lie at the basis of the architectural profession.

14,832. The deeper science that would be necessary for Architecture would also be necessary for many other things, I suppose?—Yes, especially for engineering. The two run very closely together.

14,833. There are certain parts of science which would be useful to Architecture and Engineering, and several other practical professions which might be taken separately?—Undoubtedly there are.

14,834. And which you would call by the name of Applied Science?—Which I think should be called by the name of Applied Science.

14,835. And it is for Applied Science in general, not only as regards Architecture, that you would wish that a degree might be given?—It is. I think that what would be most useful would be a degree in Applied Science, but that it might be taken with modifications in part according to the profession in which it was taken. There might be a degree in Applied Science taken by a mechanical engineer, and, with a certain difference, by a civil engineer; with a certain difference again by an electrical engineer; and, with a more considerable difference, by an architect.

14,836. Are there any other professions that would come in?—I should think, probably, mining engineers would.

14,837. Engineers of all kinds, and architects?—Yes.

14,838. Would any other Art. I suppose the sense of proportion and things of that kind are necessary to Sculpture to a certain extent, are they not?—Yes; but Sculpture is really a pure fine art, and I think it would be going beyond the limits of reasonable expectations to require a sculptor to learn Mathematics, Chemistry, and Physics, which ought certainly to be at the basis of such a degree as I am suggesting.

14,839. Architecture is something between, say a union of Art and Science?—Yes. Architecture certainly ought to have a scientific basis. The architect ought to know a good deal of Natural Science and some Mathematics, and he also must know the artistic side of his profession, the forms and features and decorations of various architectural styles; and he must possess skill in drawing.

14,840. And he must have a natural taste which nothing can give if it is wanting?—Nothing can be a substitute for that nor give it if it is absent.

14,841. Supposing that Architecture is taken up by the University, do you think it would be better done by the University, or left to the different colleges. That is rather a large question, and one which touches other professions as well?—No doubt it does. I think in the first place that the professional side of Architecture should be left to the professional societies; that you should not attempt to give an architect such a degree as would serve as a diploma. You cannot test his practical skill; you cannot teach the actual work of building and superintendence of building in a college. Therefore, I do not think you can refer the professional work of the architect to the University. Other necessary acquirements would no doubt be taught in some of the affiliated colleges, but I should think that as regards the examination for the degree, that ought to be an affair for the University. Of that I am, perhaps, not so good a judge as many other witnesses you have had before you.

14,842. You think that the examination ought to be done by the University; that there ought to be a degree for Applied Science, and it ought to be suffi-

T. R. Smith, Esq., F.R.I., F.R.I.B.A., B.A.

11 Nov. 1892.

ciently wide, and there ought to be a sufficient choice of subjects to enable men of different professions to take it?—That is exactly the view that I wish to support.

14,843. Perhaps you could tell us what means of instruction there are open now to architects in London, and what examinations there are which they can pass, and what certificates or other honours there are which they can gain, which are useful to them in after life?—As regards the means of instruction the practical side of the profession is universally learned by pupilage. A young man who wishes to become an architect becomes the pupil of an architect, and sees and shares in his work, and I cannot see any other method for learning the practice of Architecture. The organisations that we have for learning the theory are almost all of them based on the idea that the students shall be pupils, and that most of the instruction shall be given in what is really their leisure time, in the evening. My own lectures, which I have already described, at University College, are given in the evening, and I have a set of gentlemen who are almost all of them architects' pupils. They have class examinations at the end of the term, and they can get certificates and prizes. A very similar set of lectures, examinations, and certificates exists at King's College, and has existed for a considerable number of years. At the Royal Academy the Art of Architecture, but not anything in connexion with structure, is taught. There, for many years, there has been a professor of Architecture. Until lately his duties were confined to giving about six lectures in the year. That post has been held by many very eminent men, and very interesting courses of lectures have been delivered. But since the time when Mr. Street held the professorship a regular systematic course of study in drawing architectural features and details and designing has been instituted. A teacher of architecture is retained at the Academy, and Academicians attend on stated evenings as visitors and inspect the work that the student is doing. At the Royal Academy there are valuable prizes, some of which are open to architects. There is a travelling studentship, and there are medals for which the students compete, chiefly by submitting drawings. There is a society called the Architectural Association, which is a society among architectural students for mutual instruction. That has been in existence for about 50 years, and now is a large and flourishing society, and it has only just within the last two years reorganized its methods of instruction. It has now a very complete series of classes, which at present, are, I believe, entirely evening classes for the instruction of young men who are otherwise engaged during the day. It has prizes, which it offers. The Science and Art Department gives elementary instruction in Architecture at a great many Schools of Art. I have the honour to be an examiner and I have each year perhaps 300 sets of answers to questions to examine. Most of them do not go far, but some of the schools give somewhat advanced instruction, and occasionally very good work is sent up by some of the students. Then there is the Royal Institute of British Architects, which is the principal architectural society. That has established examinations. Perhaps I should first say, that it has, and has had for many years, prizes, one of which is of considerable value, in the shape of a travelling studentship. That is competed for annually, and the mode of competing is by submitting drawings and designs. It has a considerable number of other prizes, which are obtained in the same way. It has lately established with considerable trouble an entrance examination, which is mainly in professional subjects and is somewhat severe, and which every person who wishes to hold the position of Associate tn the Institute of Architects has to pass. It has established also two preliminary examinations for students. The preliminary examinations are more or less in subjects which show that a young man has a fair general education, and also has made himself acquainted with the scientific subjects in which he ought to be to some extent trained, and in the theoretic knowledge of his art. The final examination is mainly a practical one. I think that embraces the mode of instruction and the examinations that are accessible in London, and to a large extent in England.

14,844. Then the practical part of the education you pretty well provide for, and it may be safely left to the instruction which is given to the pupil by the architect whose pupil he is, and by the different institutions?—I think so.

14,845. As far as I can make out it is the deeper and more scientific part which would be also useful in other professions, Engineering and so on, which you think the University ought to take up?—I think so.

14,846. And your opinion is that it should be by University professors, rather than by college professors?—I think it should.

14,847. You think that the Gresham University might do great good in recognizing this science and theory? Does that imply that you have any preference for the Gresham University over any other plan?—I do not wish to put forward any views upon that, but I am quite sure that any University which could give a degree of University rank would be encouraging the higher and better education of members of my profession. I should like to say that at present there is no academical degree which it is considered desirable for an architect to take. We have a few men who are M.A. or B.A., but that is simply an indication of general culture. I am not aware that there is a single architect who has taken the degree of B.Sc. The subjects of examination for that degree are many of them too far removed from the general scope of his studies and work, but my opinion is that some modified degree in Applied Science which could have at the same time the sanction of University rank would act as a stimulus to study and as a reward to study.

14,848. And I think you told me that you consider that you stand in a different position from the other Arts—painting and sculpture—because they are pure Arts?—They are pure Arts. Architecture is so mixed up with structure, and even also with questions as to expense of building, that a very large amount of other knowledge is necessary for an architect successfully to carry on his practice.

14,849. And the Art part of your profession you are quite ready to leave to other sources?—I think so.

14,850. (*Sir George Humphry.*) An important point would be what are the Sciences, or what is the Science which really lies at the basis of Architecture, and which would be the more especial subject of University study and University examination?—I think an architect should have a good knowledge of mathematics, a good knowledge of physics, light and heat, electricity and sound, and he should have a knowledge of geology; and he ought also to have some knowledge—perhaps not a very profound knowledge—of chemistry. Those at any rate are scientific subjects without which he is not altogether well equipped. And he should certainly have a scientific knowledge of the construction of iron work, and the application of mathematical formulæ to ironwork of every sort.

14,851. In fact, the kind of physical knowledge which lies at the basis of all practical work of that kind?—Yes.

14,852. Architecture, Engineering, and so on?—Yes. Then the different complexion which the examination ought to assume would be given by adding to it every part of building construction. Possibly you might add a knowledge of the elements out of which the design of architecture is built up.

14,853. So that according to your view there might be a common examination in physical science for all these various branches, such as Architecture, Engineering, and so on; and then there should be in addition some special examination applicable to the

particular subject?—Yes, that is the view that I wish to advocate.

14,854. So that there might be one examination for all the various subjects?—Yes, and one degree; that is, a degree taken in one or other subject.

14,855. With regard to drainage, would any particular knowledge be required?—Yes.

14,856. The tubes that best transmit fluid, and so on?—Yes, I ought to have mentioned sanitation. It is one of the subjects that ought to be thoroughly studied.

14,857. And sanitation applied to buildings?—Yes.

14,858. But in Architecture so many other points come in such as taste, and not only real taste but public taste, that that could scarcely be a subject for examination?—I do not think it could further than this. You might examine a man in his knowledge of past styles, and you may take styles instead of an individual building, and examine him in his knowledge of that building, to see that he has studied it, that he knows the features of it, that he knows the details, and see whether he has a personal familiarity with it. Beyond that I do not think you can go.

14,859. For practical construction the knowledge of the ratio of material to weight to be borne, and so on?—Yes, and of the mode of protecting materials from decay, and using them economically.

14,860. All those would rather come in in the special division of the examination?—Yes.

14,861. You mentioned the word "preliminary examination." Do you think the student should be required to pass some such examination as that which is called the matriculation examination of the University of London?—Yes, I think he should. You want, if possible, to ensure that a man is educated up to a certain level in general knowledge, and in that general education which equips him for doing well in any profession.

14,862. So that you would, I infer, on the whole, desire that they should be required to pass a preliminary examination in what we call school knowledge?—Yes.

14,863. Then that they should be required to pass an examination in Physical Science?—Yes.

14,864. And thirdly, an examination in some special division of that Physical Science?—That is so.

14,865. The prizes you have mentioned are rather given for the latter kind of knowledge—the technical work?—Yes, except the travelling studentship of the Royal Academy. That is given, I think, exclusively for design.

14,866. May I ask what is defined under "Architecture," it means rather, I suppose, building?—I consider that "architecture" means good building.

14,867. The construction of bridges, and so on, you would rather put under the head of engineering?—I am afraid bridges have gone from architects, and are in the hands of engineers now.

14,868. So that that is not one of the points in question so much now?—No.

14,869. (*Mr. Anstie.*) I did not quite understand the last answer you gave to Sir George Humphry. Do you consider bridges out of your province?—I do not think they are out of our province, but, as a matter of fact, when people wish to build bridges they now invariably go to an engineer.

14,870. For a stone bridge?—Yes.

14,871. But are not the principles on which bridges are built the same principles as those upon which houses are built?—No doubt they are.

14,872. I am speaking of houses on a large scale?—*Mutatis mutandis*, and carried out on a large scale; but there is nothing to except bridges from architecture.

14,873. I wanted to know how far you go in the way of limitation. Would you allow a degree in architecture to be given to a person who is not able to deal with the principles of construction of bridges?—I do not think I would; but, at the same time, if you ask me whether bridges are now habitually entrusted to architects to build I should say that I do not think they are.

14,874. That is hardly my question. Perhaps if you were to have very accomplished architects produced by degrees they might be entrusted with bridges again?—Possibly. I think the fact that we have not studied the science as much as we ought to has removed a certain quantity of work from the hands of architects into the hands of engineers.

14,875. It is the fact, is it not, that architecture has not been, speaking generally, scientifically pursued?—That is the fact, no doubt.

14,876. There are one or two topics you have mentioned, which cover a very wide field, which strike one as rather belonging to the mere handling of materials, than to a scientific acquaintance with the matter. Geology, for instance, you mentioned?—Yes.

14,877. I quite understand that you say an architect ought to know what kind of stone is to be used, but does not that depend more upon the practical handling of the material than on scientific knowledge?—No doubt it does.

14,878. We are told that in a northern town a certain wall was built by the Romans of stone out of a particular pit, and that the stone has remained perfect and entire; but of stone out of the same pit a wall has lately been built which has already decayed, because the stones were put in the wrong way?—Geology would not prevent a man's permitting face bedding. Still a man should know, if he has to build in certain parts of England, what sort of stone he is likely to find ready to his hand, and matters of that description. I do not press the point far, but I know it is of great advantage. I know a little geology myself, and I know it has been of great service to me when I have had to build in the country and to look out in what kind of quarry the stone I wanted could be found in the neighbourhood. I think if I had been absolutely ignorant of stone I should have been less likely to serve my clients well than with the small knowledge I have.

14,879. Let me put it a little further. It would be very important in giving a degree that it should signify a high value?—Yes.

14,880. Many know a great deal about Geology in what we may call an amateur way, or a practical way even, without knowing much of the science of it. But if the University examine in the science of Geology, would it not be a little of a mistake to allow the examination to rest in so merely practical a region as would be required for your purpose?—I believe that it is desirable that an accomplished man should know a little more of his subject than he is absolutely likely to want to use even for the mere sake of mental cultivation. I should suggest that it would be desirable that a man should know something about geology beyond what would simply enable him to look at stones in a quarry.

14,881. Would you desire to have any certificate of practical experience?—I think not. I think you must let the certificates of practical experience be given by the practical societies. You cannot superintend a man's examining buildings very well, or even his designing buildings, in a college.

14,882. Would it be desirable, do you think, to require from these practical societies a certificate of a practical nature as a necessary condition for conferring a degree?—I should certainly prefer to keep the two things separate. There might be an advantage in the course you suggest, but my impression is that the degree should be granted for simple theoretical knowledge and not for practical.

14,883. But you would not think it of much advantage for the profession if a certain number of persons were turned out with degrees to their names which ought to indicate high professional qualifications, who are at the same time destitute of the necessary practical experience?—I do not think it would be desirable at all.

T. R. Smith, Esq., F.R.I., F.R.I.B.A., B.A.

11 Nov. 1892.

14,884. Might it not for that reason be desirable that the University should secure that they had a practical experience?—Yes, on that view it might, but at the same time my impression is that anybody who educated himself sufficiently to procure the degree which has been talked of, would be sure to acquaint himself with the practical side of the profession, I should hope so at any rate.

14,885. You do not contemplate any further division, you would not divide an architectural degree into two parts? You would only have one degree?—I would only have one.

14,886. Indicated by the title of "B.Sc.," or whatever it was. You would not allow a man to specialise within those limits at all?—I should like to specialise him so far as this, that he might have a degree as an architect, but I do not think I would suggest dividing an architect's degree up again into construction and something else, or anything of that sort.

14,887. In your judgment are the principles of architecture the same as applied to iron-work, wood, and stone? Would the same man be competent to design iron work, wood, and stone?—He ought to be. In many respects the principles are different, because the nature of the materials is different, but he ought to have a sufficiently wide knowledge to grasp both.

14,888. But is it or is it not a fact that forms suitable to one are not suitable to the other?—No doubt it is, but I think a man who has to execute buildings in an age where brick, iron, and terra cotta, are used ought to be able to design the necessary forms for all those materials.

14,889. And you think that practically that can be done?—I think so.

14,890. (*Mr. Rendall.*) Do I understand you to say that you wish to treat Architecture as a part of Applied Science, and Applied Science as a distinct Faculty?—Yes.

14,891. Why would you separate Applied Science from the Pure Science as a Faculty?—I apprehend that the difficulty of having the instruction such as should tend directly towards a practical end would be considerable, if you made the instruction and the degree only the work of a Faculty of Pure Science. There is a great deal of difference between what ought to be done in fitting a man definitely for the pursuit of some profession, and in educating him generally, and I should like, if possible, to see education very carefully directed towards equipping a man thoroughly for my profession, and that equipment recognised; and I think it would be best given by a separate Faculty.

14,892. I think you selected as the Sciences resting at the basis of Architecture, Mathematics, Physics, and Geology as the three principal ones?—Yes.

14,893. Mathematics is Pure Science, Physics is, in its major part, Pure Science, and Geology is Pure Science?—Yes.

14,894. Therefore the three base Sciences all fall under "Pure Science" rather than "Applied Science." Is it not a little paradoxical, and rather introducing unnecessary Faculties, if that be so, to separate your Applied Science into a distinct Faculty from your Pure Science?—I think, to a large extent, if they are to be taught thoroughly and completely, a good deal of each of those Sciences is commonly taught which the engineer or architect does not usually need to apply. If the teaching could be so shaped as to go specially and directly towards his ends, I think a good deal of time would be saved and probably a good deal of definite information would be conveyed.

14,895. But you would wish to give the representatives of those Sciences all of them a voice in the training and curriculum of the architect, would you not?—Yes.

14,896. And I understand that for the definitely practical part of the profession—sanitation and surveying, and the principles of designing—you would rather rely upon the office than upon the college?—A theoretical knowledge of sanitation—perhaps something a little more than a theoretical knowledge—could be easily given in any College, and it is the same with regard to at any rate the elements of designing, and to a large extent the materials out of which design can be made; but the practice of applying that knowledge to actual work is only, I think, what can be learnt in the office or workshop.

14,897. Specifications and quantities, I suppose, would be in the office, not in the University?—They ought to be in the office, and not in the University; indeed the whole routine in the working up the building, from its first inception to its actual erection and completion, is a thing so definitely professional and technical that I do not think it can be sufficiently studied in a college.

14,898. I do not quite understand that. I thought you were holding that the theory of structures, the knowledge of the nature and strength of the materials, and the principles of sanitation and surveying, could all be taught with advantage in collegiate schools?—Yes, I think they could; but when you have mastered those, the application of the whole of them to the design, and the erection of the building is really a very different thing, and requires considerable practice and considerable experience.

14,899. Would not the right theory of the University degree be that it should imply a knowledge of the theory of all those parts of the Art, and that then the students should pass on to the pupilage afterwards?—That was my notion.

14,900. At present an Engineering degree does not mean that a man is an accomplished engineer, but it is regarded as preparatory to rather than supplementary of the practical stage?—Yes, that would be the idea that I should advocate.

14,901. That would make the Architectural degree rather preparatory than supplemental. I think the classes are now held in the evening?—The classes now are held in the evening. I do not advocate that. I would far sooner they should not be.

14,902. That does very much come to what I thought should be the actual place of the Architect's degree, possibly with some remission, such as in the Solicitors' profession?—I think that would be a satisfactory basis.

14,903. And would you, if it was put on that basis, wish to press strongly that separation of the Faculty? If you separate your Pure and Applied Science Faculties, you have to put nearly all the Pure Science on to this Applied Science Faculty?—Yes.

14,904. Mathematics, Physics, Geology, and Chemistry are all necessarily on the Pure Science side; which would you group with them on the architectural side?—I should certainly take part of the work that is now done—in my own college for example—by the Professor of Engineering. All that he teaches the student with regard to iron work, and so on.

14,905. Is not Engineering in your college treated as a part of Science pure and simple rather than as a sub-divided Faculty?—Yes.

14,906. Do you find that objectionable?—I do not know that it is objectionable, but I think the more the whole instruction could be specialised the more force it would have.

14,907. I think there ought to be some fairly strong reasons given before one proceeds to break up Faculties, because a representation of Faculties will affect the unity of the University, and probably there must be some representation of Faculties on the governing body. One does not want to disintegrate the University, and split it up into fragments without some really strong and valid reason. You would not press it, I understand. It works fairly well as you have been accustomed to it?—I should like to say this, that when I have tried, as I have to some extent, to get some of my own students to take other courses I have found that the courses have hardly been suitable for their purposes. Take the case of sanitation, for example; I have strongly urged my students to take Professor Corfield's course. My students found the

course embraced a great deal which is intended rather for a Medical Officer of Health to learn than for an architect to learn. They found that it was burdened with a good deal that would be of very little practical use to them. I think that has stood in the way. If they can have a course of instruction which would leave out questions of food and climate and analysis of water——

14,908. That is a good deal medical?—Yes, that is a good deal medical. That is an illustration of the kind of difficulty which I think would be to some extent met by specialising the instruction; and it appeared to me that it was of sufficient importance, and I may say growing importance, for the new Faculty to at any rate seriously consider.

14,909. May I ask now broadly why you are dissatisfied with the present condition of things, I mean with the qualifying examination for the R.I.B.A., and why you wish to supplement it, or substitute for it a University architectural degree?—I do not say that I am dissatisfied with it.

14,910. Then will you define your gains?—I think the gains would be these, that those men who are ambitious, and especially those men who are starting with a good education—either a college education or a good school education—would cultivate the branches of Science which lie at the root of a good deal of architecture and construction to a much greater extent and with much more completeness if they saw the prospect of getting a University degree as the result of that cultivation.

14,911. They would devote more time and thoroughness to a preparatory groundwork?—Yes.

14,912. And it would be essential that they should attend a fuller day course?—Yes, I think it would.

14,913. (*Lord Reay.*) The object of a separate Applied Science Faculty is chiefly that the curriculum, which your Applied Science students would have to follow may be differentiated from the lectures which the students in Pure Science would have to attend?—They would.

14,914. From the beginning?—From the beginning, or almost from the beginning.

14,915. You can support your argument by the fact that in Germany not only there are separate Faculties but separate institutions—*technische Hochschule.* They have found it impossible to include this education in the general University curriculum?—I believe so, and in Switzerland also.

14,916. But you are of opinion that it is desirable, if you can obtain a separate Faculty, to incorporate it in the University?—That is my feeling.

14,917. And to make the degree not that of Bachelor of Architecture, or Bachelor of Engineering, but that of Bachelor of Applied Science so as not to create an impression among the public that the degree fits a person for practical work?—Certainly; I hold that very strongly.

14,918. May I ask about the artistic education which is to be given to architects. Do you consider that the Art department should be represented by Art schools outside the University, or do you contemplate the University having a Faculty of Art, or School of Art, which would be under the control of the University itself?—I think there should be a School of Art under the control of the University itself, at any rate as regards my profession; because it is very desirable that the student from the first should have his draughtsmanship cultivated, and his attention directed towards what is a very slow process, viz., the acquisition of an intimate knowledge of the details of forms of architectural style.

T. R. Smith, Esq., F.R.I., F.R.I.B.A., B.A.

11 Nov. 1892.

14,919. Therefore you would make that an integral part of the curriculum?—I should like to do that.

14,920. And you would like to have chairs for that purpose?—Yes, or instructors. We are at the present moment at University College starting a course of instruction in architectural drawing in connexion with my students.

14,921. And you think that further extension might be given to that Department in the University?—Yes, I believe it might.

14,922. And should be given?—I think it should.

14,923. The mode of teaching Art to the architectural students and the lectures they would attend would again be differentiated from the lectures given in Art to specific Art students?—Yes, it would, certainly.

14,924. Then with regard to the practical part of their profession, would acquire it through apprenticeship *pari passu* while they were attending lectures at the University, or would you make that supplementary?—I think that the most satisfactory thing would be for the lectures at the University to come first, and for the practical part of the profession to be taught them afterwards. It would be better learnt, and in a shorter time.

14,925. Might we contemplate this arrangement: the University alone to undertake their training up to the degree of Bachelor of Science, but after that and before they were to obtain the degree of Doctor of Science, the University lectures to be given simultaneously with practical work performed in architect's offices?—If you go beyond Bachelor of Science I think you ought certainly to include, if you can get it, some certificate of competence in practical work.

14,926. Before they are given the degree of Doctor of Applied Science?—I should think so.

14,927. (*Chairman.*) At what age do the students generally become articled or attached to an architect?—From about 17 to 19 or 20 as a rule. Now and then, of course, a man has fortunately gone through Oxford or Cambridge, and then he is older, but generally 17, 18, or 19 is the age.

14,928. And then he begins to learn at once the practical part of his profession?—Yes.

14,929. Therefore it would be difficult to adopt your plan of teaching the theoretical part first and the practical part afterwards?—I think in the cases of men who are anxious to educate themselves well, if it was pointed out that the proper thing was for them to go for two years to college, and then enter an architect's office, a great many men would do it. There is no course at present of that description that I can recommend to a student, but I would gladly urge men who come to me as private pupils to graduate first if there was any college in which they could graduate.

14,930. You think they would not lose a start in life by coming to you a little later than others?—No, I think not. A man who is thoroughly equipped for his profession has a better start in life, even if he has taken several years to gain that equipment, than a half-equipped man.

The witness withdrew.

ALEXANDER BLACKIE WILLIAM KENNEDY, ESQ., F.R.S., M.I.C.E., examined.

A. B. W. Kennedy, Esq., F.R.S., M.I.C.E.

14,931. (*Chairman.*) The chief evidence which you wish to give relates to the question of a degree in Applied Science, I believe?—Or for the University preparation of men who are going to take to my profession, which is engineering.

14,932. I will first ask you to tell us exactly what your position is. I think you are a consulting engineer, and you have been a Professor of Engineering at University College, London?—I was Professor of Engineering there from 1874 to 1889, and I am now a Consulting Engineer simply.

14,933. I will ask you whether your lectures are attended by a large number of students? I do not ask that for the sake of knowing whether the lectures are good, but for the sake of knowing whether there is a great demand for that kind of study?—In the year I left I think the junior class contained some 35 students, and there was a senior class of 15 to 20,

A. B. W. Kennedy, Esq., F.R.S., M.I.C.E.

11 Nov. 1892.

and there were others coming irregularly. I think the classes are larger now, but that was the case in 1889.

14,934. All these students, I suppose, afterwards expect to become engineers?—Yes, the whole of them.

14,935. Perhaps you could tell us what openings there are in London, besides University College and King's College, to people desirous of studying the Applied Sciences which are necessary for the profession of an engineer?—Besides University and King's Colleges there is the Central Institute of the City and Guilds at South Kensington, and for a somewhat lower grade, if one may say so, of students, there is the Finsbury Technical College, also belonging to the City and Guilds Institution partly devoted to engineering.

14,936. You think that any new teaching University which was established ought to take up the matter, and to superintend the scientific training of people who wish to go into the profession which we are discussing?—I hope it will be so. It has been for years a matter of controversy among civil engineers with regard to young fellows who are going to be engineers, whether they should have a scientific training, and it is practically admitted now, I think by all engineers of standing, that it is distinctly advantageous for them to have such a training; it is even formally recognised in regulations by the institutions of civil engineers and mechanical engineers, and therefore, seeing that professional men have come round at last to the opinion that a scientific training in their profession should be encouraged, I should hope that it would be encouraged by any very influential or central academic body that might be formed in London.

14,937. I gather from your answer that there are a certain number of mechanical engineers who are inclined to take the other view, that a good theoretical education is not necessary, or that there were such engineers?—There were a great many. I think there has been a great change of opinion within the last 12 years.

14,938. But of course the professional training must always be, if not the most important, a very important part, and that you do not propose that the University should undertake?—I do not.

14,939. What is the present plan for a man who wishes to enter the profession? Does he become the pupil of an eminent engineer?—He practically becomes a pupil in some form or other. Might I add this as to the recognition by the profession generally of the necessity of scientific training. The Institution of Civil Engineers, which is our principal professional society, makes it a condition of entering as what they call a student, that is their lowest rank of membership, that the young man should produce evidence of having had some general and partly scientific training; and they recognise as such evidence, among other things, certain certificates both from University College and King's College, and other institutions of that kind.

14,940. Do you think the scientific training ought to come before the practical training, or might the two go on concurrently?—No, practically they cannot go on concurrently. An engineer has, I dare say, more a necessity for working thoroughly at scientific matters than even an architect, and it is necessary that he should devote his whole time, at least it is most desirable that he should devote his whole time for two or perhaps even three years, to working at the scientific part of his work.

14,941. At what age does the ordinary student finish his college course? Of what age are the pupils who attend your college lectures?—When I was at University College the majority of my students entered at, I should think, 18 when they left school. I dare say 25 per cent. entered at the age of 21, 22, or 23, after they had served their time, as we call it, in some office or other, after they had served their pupilage.

14,942. They began at the wrong end. They took the practical part first?—Yes, they took the practical part first.

14,943. And you think it would be possible to get hold of men sufficiently young to give them their theoretical education in time to enable them to become afterwards pupils to distinguished engineers without losing a start in life as compared with men who become pupils earlier?—I think so; in fact it is a thing of daily occurrence.

14,944. And those generally get on the best who have a good foundation?—I am happy to say that my old students, a great many of whom I see continually in London, are doing very well, and they are clearly better from the knowledge they got from my colleagues and myself at University College.

14,945. You have given an opinion that preliminary training may be got from outside sources, and I think you drew a distinction with regard to the case of medicine, in which the work is all organised under a college?—Yes. It appears to me that medicine may fairly be considered a technical profession very much analogous to my own, but for certain reasons the whole of the technical or practical part of it is organised, and under the cognisance of teachers, or could be made under the cognisance of a University; and the University is fairly qualified to say that men have passed well through it, but there are no analogous circumstances in engineering. A University could hardly be qualified to say that men were good engineers.

14,946. Therefore, you take it for granted that the University can teach only the sciences on which the profession is based. What are those sciences?—The students who used to attend my own lectures attended, or were expected to attend, classes in Mathematics, Mechanics, and in Physics; generally in Chemistry; certain of them also in Geology, because Geology is of great importance for civil engineers at any rate. In addition to those, there were lectures partly by the professors of the Pure Sciences, partly by some more technical men, especially for engineering students of one kind or another; very frequently mathematical courses, for a great many years certain special chemical courses, and other analogous matters.

14,947. And these are the matters generally recognised by professional men as those in which a young engineer ought to have training?—That is so.

14,948. You wish the training to be followed by a degree, and to lead up to a degree?—I think it would be an advisable thing, because it would add some dignity to that particular training if it were followed by a degree, and it would make it somewhat more likely that men would devote themselves earnestly to it. At present there is no degree.

14,949. And this degree would not be a degree in engineering; it would be something wider than that; it would be a degree which other people who were not going to be engineers might also be desirous to take?—To a certain extent, yes. I should hope—but I do not speak as one who has studied the whole subject all through—if it were found best that the degree might be established simply to be called the degree of Bachelor of Science, just as the Cambridge degrees are called Bachelor of Arts.

14,950. There is a degree of Bachelor of Science given now by the University of London, is there not?—Yes, there is a degree of Bachelor of Science given by the University of London, certainly.

14,951. You would have a new degree only comprising certain parts, would you?—I would have it differentiated from the ordinary Bachelor of Science degree very much as one tripos in Cambridge is differentiated from another. Have it, if possible, of the same standing, but have the examinations partly in similar and partly in analogous subjects such as the application of physics to engineering problems, and so forth.

14,952. It would have some different name; and would be differentiated in some way from the ordinary degree of Bachelor of Science?—I believe it would be most useful if it could only be differentiated as one Bachelor of Arts degree at Cambridge is differentiated from another. If a man has taken his degree there in one tripos or another tripos that is known to friends,

or in a testimonial if he puts it so, but it is not known to the world at large.

14,953. He would be merely a Bachelor of Science like any other ?—Yes.

14,954. I believe some people take great objection to the name of Applied Science. Professor Huxley did not at all like it when he was before us. You might invent a new name for it ?—I am not very fond of the name.

14,955. Then I understand that you wish to say something about the objections to a degree in engineering. Is there any demand in the profession for a degree in engineering simply ?—No, but there is still, I think, in Ireland a degree given in engineering, and it is not liked by professional people at all, because they say—and I think they say truly—that it is a degree in work done in a college and not in engineering. It is as if an amateur were to be examined as an M.D.; it is not a professional degree really, but it is a professional name, and I think anything of that kind would harm the University very much if they were to attempt to give nominally a professional degree, except in medicine, where there are special circumstances which make it proper.

14,956. As you express it here, it seems undesirable that a University should label men engineers when it had no means of making them really engineers ?—Quite so.

14,957. And the actual training of engineers or architects must always include some years in a workshop, no matter how long or how distinguished the University part of the career. That, I think, you have already intimated ?—Yes.

14,958. Then with regard to the subject of the degree of Bachelor of Science and Engineering, what would it include ? I will read out what you have written down, and ask you whether it is correct: Strength of Materials, Theory of Heat, Design of Structures, Drawing ?—Yes. I give those mainly as illustrative of the sides of certain other sciences, which would have to be included in a degree, such as might be called a Bachelor of Science degree in Engineering, or in an Engineering Department, or whatever would be the proper term. Of course it would also have to include and must include Mathematics and Mechanics.

14,959. You have mentioned these merely because there are some which do not appear at all, or appear only to a very limited extent in an ordinary or Pure Science course ?—Yes.

14,960. But, of course, there are other things which do appear in a Pure Science course which you have not mentioned there ?—Yes.

14,961. Then you think that it is a serious question whether there should not be a Faculty of Applied Science as well as a Faculty of Science ?—That presented itself to my mind as a very difficult matter. Looking at it as well as I can from the position of an old teacher, and one who is now solely engaged in professional work, I think that the balance of advantages would be in having a distinct Faculty. The reason is this. Although some of the subjects are the same, and most of all Mathematics, of course, because it is a foundation subject, I do not think the treatment of Mathematics is really the same. I do not think, if one may put it so, that the men who are most competent to teach Mathematics with a view to making a profession of Mathematics, or making a man a mathematician, are always those who are sufficiently in sympathy with the sort of problems engineers have to do with to lead their students on to those problems. May I put it in this way, a man who is going to be trained to be a first-rate mathematician must have a very deep knowledge of mathematics, but he must have his problems limited always in their conditions in order that they may be soluble, that is to say, even in the most difficult problems, they must be made so that they can be solved, and, therefore, a great many conditions are left out of them. Now an engineer has to do with mathematical problems continually. They very seldom require the very highest mathematics, but their conditions are always very complex and not simplified, and often enough partly insoluble. I think that the training which would be most useful for a man who wished to take a high place at Cambridge, for instance, would not be even in mathematics the most suitable for a man who had to use his mathematics in a different way. I do not wish to speak solely from a utilitarian point of view, or to say that the engineer is not to be a mathematician, I try to take a wider point of view. I think that the men should be trained in a somewhat different way, even where the subject is the same. I believe it would be necessary, either that the professor should be different; or that at least the lectures should be different. The same is true to some extent of mechanics, though not to the same extent; and to some extent of physics also again, though not to the same extent. But, of course, mathematics we have to base our work upon.

14,962. If we adopted the Gresham Scheme, or anything like that, in which the whole of the thing was divided into Faculties, and each Faculty had a certain number of representatives on the Senate, and each Faculty elected Boards of Studies to control examinations, could there be one Faculty of Science for those purposes, or would you divide them into two ?—I do not think I ought to answer that, because I have not thought over it sufficiently. I have only been thinking of the separate Faculties from the point of view of providing teaching, not from the different point of view of the government of the college.

14,963. Separate teachers for the Applied Science, and for the higher science ?—I should not like to call the other the higher science, but that may be my narrow way of looking at it!

14,964. The more abstract science ?—Yes, the more abstract.

14,965. Then with regard to the organisation of the German Universities you say there is something which would apply to this ?—In the German Technical High Schools the matter is very greatly differentiated. There may be in one German High School—one knows a number of cases—four or five or six Professors of Mathematics, and those are solely for the men who are to be engineers or architects, apart altogether from the University professors, or any other teachers of men who are taking art degrees. So that it is differentiated in a very large degree abroad.

14,966. Has the High School anything to do with the University ?—It corresponds to say the teaching in the Engineering Department of University College. It is the school also which a young fellow goes to when he has left his own school, before he goes into professional work.

14,967. Is it connected with the University organisation ?—I think they are quite separate.

14,968. There are a number of people in England who think that technical education is not University work, and ought to be treated separately ?—Yes.

14,969. But you would have this undertaken by the University ?—I should hope so. It has been connected with something like University work in England for some years, and it would seem a great pity that it should be thrown adrift.

14,970. If such Faculty had a separate existence it would form the best means of connecting such existing institutions as devoted themselves solely to technical work. Does that mean you would bring the different institutions that devoted themselves to technical work within the University system ?—I think perhaps I should not have expressed any opinion on this matter, for I have not properly considered it. I had rather not express any opinion about it.

14,971. If this Faculty were founded it would become a question whether it should have separate chairs of Mathematics, Physics, &c. You think this ought to be the case ?—To a certain extent I think so, and if not separate chairs separate lectures. But I think further chairs would be necessary or advisable.

A. B. W. Kennedy, Esq., F.R.S., M.I.C.E.

11 Nov. 1892.

14,972. That is the case in Germany. They have separate chairs?—They are separate institutions there, and there are separate chairs, of course.

14,973. This would be a separate chair of Mathematics from the ordinary chair of Mathematics merely dealing with the subjects that would be useful to engineers. Would there be two chairs of Mathematics in the University?—Yes, surely.

14,974. One a higher one?—One would take Mathematics further than the other, and therefore might be called higher, but the chair, whether it was held by a separate professor or not, which dealt more with the Engineering students would have to deal with a different class of problems, and therefore would have to work in a different way. It is reaching a different end. The problems which an engineering student has to face when he has to design a complicated structure or to design a difficult moving machine are very different from the paper problems which he would naturally have to solve if he were working at Mathematics for its own sake.

14,975. Then the engineering laboratories, laboratories of Applied Electricity, and possibly of Applied Chemistry, would take an important place in the Applied Science Faculty. Are there laboratories now of this description at University College?—Yes, a laboratory of engineering and one also of what I suppose may be called Applied Electricity, or Electrical Engineering, are both there. There are a number throughout the country, and I am sure I can say that they have been found extremely useful in the improvement of the educational standing of young engineers during the last few years.

14,976. Would they remain in the separate institutions to be worked through them?—I do not know how that would be.

14,977. You do not care to go into the question whether they ought to be taken by the University and absorbed by them and made use of by them?—I have not an opinion that is worth giving upon that matter. I have not studied it sufficiently to make it worth while to give any opinion.

14,978. Then Drawing and Languages. You would hardly have a Professor of Drawing connected with the University, would you?—No; it would be an instructor of some kind, or it might be that the Professor of Engineering would teach drawing, but it is very, very important.

14,979. You are very anxious that the University should not have the appearance of undertaking what it could never do, that it should not have the appearance of taking the place of offices and works?—Yes.

14,980. Then you say that the University should not attempt to teach things that cannot be learnt there. Is there anything more you would wish to add to what you have already said?—No, I think not. I feel rather strongly about the fact that it would be wise to have separate mathematical and mechanical teaching if the whole thing were to be organised on a large scale for this class of students. I know the difficulties about it, and the question of a separate Faculty, of course, involves other questions also, but it was from the point of view of the teaching that it seemed to me a proper solution of the difficulty.

14,981. Would there be a Mechanical Chair. I suppose you would embrace the whole of Mechanics?—Yes; the whole of Mechanics up to a certain point.

14,982. (*Lord Reay.*) You are distinctly of opinion that the student in Applied Science ought to follow a separate course from the day that he enters the University. Of course, he might attend some lectures in common with other students, but for his benefit it is desirable that his course should be absolutely differentiated from that of other students?—Almost absolutely; for his benefit.

14,983. You would require, before giving him the degree of Doctor of Science, some original work?—I have considered that, and I think that he would have to give some original work, but I see great difficulty in a University giving a degree of Doctor of Science in this department. However, he would have to bring a thesis, or obviously some work of that kind, as part of his final examination.

14,984. And in order to produce this original work it would be as well that he should acquire previously some knowledge of the practice of engineering?—Yes, it would be absolutely necessary.

14,985. You would prefer, therefore, to confer the degree of Doctor of Science on this class of students after they had been to a certain extent introduced to the practice of their work?—Yes; I would not like the University to take cognisance of their practical work, further than that they might make it a condition that they should bring evidence in connexion with their thesis of being in professional work of some kind.

14,986. All that might be done in order to see whether he possessed the faculty of applying the knowledge which he had received; that he might in his work show that he knew how to apply principles to practice?—Yes.

14,987. Without going into the practical work itself?—Yes.

14,988. Then, before you gave him the degree of Bachelor of Applied Science you would not allow him to do any practical work. For that period of his career he should devote himself entirely to the lectures?—Yes, but he might, of course, have taken the practical work before. Many men do.

14,989. You see no objection to that?—Well, many men will do it.

14,990. But you had rather it should come afterwards?—On the whole, yes. There is a great deal to be said on both sides, but on the whole I had rather it came afterwards.

14,991. The Faculty of Applied Science, whether it is a separate Faculty or a branch of the Faculty of Science is really a matter of detail, would, I suppose, be composed solely of the professors and of the teachers. Then a Board of Studies would be elected by the Faculty. Would you be in favour of appointing also on that Board of Studies men who were actually engaged in the practice of engineering. Do you think it would be advisable that the professors whenever questions came up for discussion, should be in some way in touch with the men who devoted themselves entirely to the practice of the profession?—They ought, or many of them ought, to be in the practice of the profession themselves. It is so in many cases; it was so in my case; it is so in the case of Professor Roger Smith and Professor Fleming whom I see here.

14,992. Would you like to strengthen the Board of Studies still further by appointing some of the eminent engineers whose names carry weight in the profession?—I could hardly say without thinking that over. It seems to bring in a new element into the Board of Studies. I do not know how the two would mix. It had not occurred to me and I have not thought it over.

14,993. Is there a great want in London of new laboratories and new appliances? Do you require a great increase of plant as well as of teaching power? As compared with the German *technische Hochschule* how do we stand?—I think we differ from them mainly in the staff more than in anything else. They have the staff differentiated very greatly, half a dozen Professors in Mathematics, several in Mechanics, and a great number in different branches of engineering, as, for instance, *Eisenbau*, *Maschinenbau*, and many other things. We of course represent the whole of these by some very small number of men.

14,994. Then you think there is a greater need of increase of staff than of increase of appliances?—I think there is a difference between us and a German *technische Hochschule* in the staff more than in the other matters, because our engineering laboratories are quite as good as theirs.

14,995. And of course something might be done by making the most of the resources we have in the way of teaching, by co-ordination?—Yes.

14,996. For instance, University College and King's College might come to an agreement that certain

branches such as you have mentioned might be taught at one college, and others at another college?—Yes.

14,997. A great deal might be done by a better distribution of work?—Yes, I do not suggest for a moment that it would be a wise thing to differentiate as much as is done in Germany. I do not think it would suit our pupils.

14,998. But further differentiation is required?—Yes.

14,999. (*Rev. Canon Browne.*) As a mere matter of equipment would you have the University adopt the principle of men learning the behaviour of metals under treatment at all?—Under strain.

15,000. And the use of tools?—I do not think it is part of the work of the University to teach men the use of tools.

15,001. But the behaviour of metals under treatment and strain?—I think these are among the most important things for students to learn.

15,002. Testing machines?—Yes, these we ought to have. The work upon them forms almost a branch of Applied Mathematics and Physics, namely the study of Elasticity. I had the pleasure of developing this matter very fully indeed in my work at University College.

15,003. The other things are very much better learnt in business shops?—Yes, *i.e.*, the use of tools.

15,004. So we need not go to the expense of setting up a shop?—No, certainly not.

15,005. Then just referring back, let me ask a question with regard to the separate Faculty. You will remember no doubt that some years ago (I am not referring to the recent successful attempt), there was a desire to get an Engineering Tripos?—Yes.

15,006. My experience was that the plans were opposed by most of the Mathematical people, and most of the Natural Science and Physical Science people, on the ground that we were making partial use of the subjects they were so proud of. It seemed to me that that would have some bearing on the necessity for, I will not say a separate Faculty, but at least for this, that the persons who managed the Applied Science examinations must have a perfectly free hand not hampered by what I may call the views of the Pure Science people?—It would be very difficult to reconcile them in some points, I know.

15,007. So that whether there was a separate Faculty or not, the Applied Science people must have a free hand?—I think they ought to have.

15,008. (*Mr. Rendall.*) Do you know anything about the Victoria University?—Only in a general way.

15,009. Do you happen to know any of the Applied Science Professors there who express regret or feel hampered by their position as members of the joint Faculty?—I do not. I have never discussed the subject with any of them.

15,010. As it is, at Leeds, Manchester, and Liverpool there are strong engineering schools. All the members act as members of the general Science Faculty, and we have in the University a rather highly specialised degree for Engineering. Do you think there is any reason to suppose that it would act differently in the newly-constituted University, if the professors of Engineering had a voice?—I am, of course, speaking entirely from my own experience in London. I have had the good fortune to be associated for some years with one or two front rank Mathematicians, who also had sympathy with engineers. With such men things went very well. But generally we found that it was very difficult. A man who was of very high rank mathematically did not care to look at things from the Engineering point of view. We have always found that difficulty. I did not put this in answer to Lord Cowper. The sort of men whom we have found go in for Engineering, lads of 18 or 19, were really not capable of following abstract Mathematics, although they were very often quite capable of working difficult problems put to them in a somewhat different way; and therefore there was always a difficulty about their getting their mathematical training.

15,011. Every college must organise distinct classes for the engineers. Even in arithmetic there would be have Mensuration classes and so on, especially for engineers. In your own college would you have had apprehension that if you had acted with your colleagues there would have been a disposition to resist the just rights of Engineering, and not to give it a fair place with a specialised degree leading up to the training of certain students?—I can not quite answer that question, because our difficulties fortunately did not come up in the acute form of "just rights."

15,012. "Place," I would say, rather than rights?—We had always great difficulty in getting the theoretical side so organised as to suit the men.

15,013. Suppose we take the other way of the distinct Faculties. You would not keep the professor of Mathematics off the Applied Science Faculty, would you?—I think there would certainly be another professor of Mathematics.

15,014. You would say a distinct professor of Mathematics?—Yes, I should say so.

15,015. And you would not give a pure mathematician a place on the Applied Science Faculty?—I do not think so.

15,016. Take a subject like Conic Sections; that would be given to the pure mathematician, would it not?—Conic sections must be treated in both, but it is treated in a very different way on the two sides.

15,017. You could not have a different professor taking conic sections for the pure and a distinct one for the applied?—It happens every day in Germany,—there is no difficulty about it.

15,018. I should have thought it would have broken down in practice unless you multiply professors. For instance, with regard to such subjects as differential and integral calculus, all learn that, and all learn the conic sections. Those two seem to me necessarily to belong to the Pure Mathematics, and unless you are going to have at least four professors in Mathematics alone, you can hardly separate them in distinct Faculties, and not give the pure mathematician a place in the Applied Science Faculty?—I should say that a professor of Pure Mathematics would have his hands quite full of actual work in training the men who are going for the ordinary degrees. He could not give a double course of lectures. There are a few men who would be capable of giving double courses, but there are not very many. I do not at all think that four Professors of Mathematics would be too many for such an Institution as is now in view.

15,019. As a matter of Faculties there are colleges as well as a University. How do you think University College and King's College as well as other institutions could manage practically, in trebling or quadrupling, unless you have a separate college for engineering alone?—I should not wonder if it came to that, but I must not express an opinion upon it because I have not really studied it.

15,020. But still if it could be managed, your opinion is that you would prefer the absolute distinction of Pure Science and Applied Science, and having separate professors entirely for the Applied Science side of the University?—I would not say entirely. The professor of Geology, whose hands are not full, might give lectures in both Faculties.

15,021. He specialises for engineers even more than a professor of conic sections?—But he has nothing like so much work to do. We did not find in London that he had a very large number of students.

15,022. There is one other point which is incidental to this practical and theoretical training. You say they could not go on concurrently?—I think not.

15,023. Sometimes theory precedes practice, and sometimes practice precedes theory. You prefer theory first and practice afterwards?—Yes.

A. B. W. Kennedy, Esq., F.R.S., M.I.C.E.

11 Nov. 1892.

15,024. We have experience of having students for theory for the six winter months and practice six summer months. You would not wish to exclude that?—No, I would not wish to exclude that. I know that it has been tried and sometimes succeeded, and sometimes failed. It is a matter of consideration, but my own opinion is that it is not advisable.

15,025. Anyhow it is emphatically a matter to leave quite open to the University?—I think that matter must be left open. It is a matter which could not possibly be arranged in certain places. That six months' division can only be arranged in some places. You could not arrange it in London for reasons connected with the office work.

15,026. It cannot be arranged for degree students, but for all the others it is very common?—I know it is done in several places, but I do not know to what extent.

15,027. (*Mr. Anstie.*) With reference to that last question I should like to hear a little further. One has heard a story of a man of distinguished engineering attainments going through a great yard who failed to recognise a common engineering joint which was lying on the ground. Would that be a creditable thing?—I should doubt the distinguished engineering attainments.

15,028. He had all the knowledge which could be put on paper, or extracted in *viva voce* examination even, but he had not that practical experience which Principal Rendall has referred to. Would not that be rather an odd state of things?—I find it difficult quite to realise the circumstances. It would be a very odd state of things.

15,029. As a matter of fact, in the application of Science, is it not desirable that a man should have some practical application of the material with which he is dealing and to which his calculation is to be applied?—I think he should.

15,030. There was an answer you gave which a little startled me with respect to testing. I understood from your answer to Canon Browne that you thought the question of strain of materials was not one which ought to be considered, but testing was?—Then I cannot have been clear. I understood Canon Browne to speak of the use of tools.

15,031. But he also spoke of the strain of materials and bearing power?—That is part of a very important training in an engineering laboratory beyond all doubt. I am sorry if I was not clear upon it.

15,032. With regard to drawing would you call that part of a scientific training for a man to be examined in?—I think he should be examined in it.

15,033. In the principles of drawing?—No, that the examination should include the making of a drawing in a certain way; either the design of some portion of a machine or a structure, that it should at any rate include the student's faculty of putting down on paper what he has to say.

15,034. Putting down, you mean, in the form of a drawing?—Yes, because that is our language as you know, and it is quite an important part of a student's education.

15,035. Drawing of machines?—Drawing of machines or structures.

15,036. In the conventional mode known as mechanical drawing?—Yes.

15,037. Would not that be a thing which would rather belong to those practical institutions which you have referred to?—I can only say that I should not have got on with my students at all without teaching them drawing simultaneously with their other work.

15,038. That I can quite understand, but at the same time it seems to me to throw a little difficulty into the broad distinction which you attempted to draw between the scientific and the practical part of the training?—I do not think I can follow that.

15,039. In that case and in some other cases is not the practical training really an essential condition of a fruitful and accurate scientific knowledge in the applied branches?—Do you mean the practical training first.

15,040. Either preceding or accompanying?—In London, where alone I work, the question of having the two contemporaneously had practically to be put on one side; it could not be worked. Therefore I never had to make a trial of that, but I generally found that young fellows of 18 or so who wished to be engineers, had themselves taken steps to make themselves acquainted with a great many technical things before they ever came to college at all. They read books about steam engines; they probably have a lathe of their own at home; and in general they are not quite as ignorant as you might think them to be in that direction.

15,041. Would you think that the possessing of so much proficiency as that might be properly made a condition for their attendance upon scientific classes?—If that were practicable I do not see at all any objection to that. It does not occur to me at the moment how it could be done, but I have no doubt it could be done.

15,042. By an examination at the college or at the University?—Yes.

15,043. So in that way they would bring, you say, sufficient preliminary knowledge to enable them to profit by the scientific instruction. Then would come the scientific instruction, and then would come the practical business of life?—Or the practical instruction first, and then the practical business of life. I rather think that would correspond pretty nearly to what we call at University College an engineering matriculation examination. I dare say Professor Fleming can say something about that.

(*Professor Fleming.*) There is such an examination, I think, at the present time comprising a certain group of elementary subjects which the students are expected to pass before they are admitted to the engineering technical classes. At the present moment I have not a list of those in my mind.

(*Professor Kennedy.*) That was established in 1886 or 1887.

15,044. (*Mr. Anstie.*) There is one point I should like your experience upon which I think is a little germane to this question. You have said you had boys of 17 or 19 coming to you. On the other hand, you have had men coming to you who have had some practical experience who are of 21 or 22 years of age. Could you, from your experience, say which class, or whether, as between the two, either class, is the more susceptible to scientific impressions and reasoning?—I do not think I could say that either class, taken as a whole, was more susceptible to scientific impressions. Of course the older men were much pleasanter to deal with; they knew much more; they learnt much more quickly, and were much more seriously in earnest because they were older, but then they had put themselves under the drawback that they had left their work at 21 or 22, they had come to college for a couple of years and had put themselves out of touch with their work, and it is rather a serious thing to ask a young man to do. He has left his employer; he is no longer in touch with the people who can keep him going with work, and it is making a great sacrifice.

15,045. But what is suggested is that he is not bound to make that complete severance. He might come to you for the science, at the same time keeping in touch with the practical work?—Hardly; if the science classes were day classes, if he had to be in college most of the day attending lectures or laboratory work.

15,046. In answer to my question as to whether you did not see any difference as to scientific power of reasoning. You say you cannot see any difference?—I think not. Very good cases on both sides occur to me at this moment.

15,047. May I take it that in the main what you really desire to see is a greater degree of apt and suitable instruction?—Yes.

15,048. The creation of a separate Faculty of course would not strengthen teaching power, what you want in a teaching Faculty is the multiplication

of chairs and the endowment of chairs. Is not that what you really want?—I do not quite understand why you should say the creation of a separate Faculty would not strengthen the teaching power. Would it not increase the number of chairs considerably?

15,049 Not unless you got money to do it. The mere creation of a Faculty would not multiply chairs, and if on the other hand you get chairs properly multiplied, is there any sufficient reason for saying there ought to be a distinct Faculty?—I think things would work better if there were, but I quite recognize that there are important points of policy in connexion with the matter which are out of my mind at the moment.

15,050. It is Science that you teach?—We say so; yes.

15,051. And Science which falls within the same general description as Pure Mathemetics—mathematical science?—Yes.

15,052. Might there not be a mutual advantage in the mutual counsel of those whose function in life was the teaching of Pure Mathematics, and those whose function in life was the teaching of Applied Mathematics, a mutual advantage I say, without treating one as higher and the other as lower?—I should have thought the advantage would be really gained by the continual friendly intercourse with the same sets of people without the actual meeting together for formal voting on particular points.

15,053. In the settling, for instance, of a syllabus, allowing what you say, that the syllabus ought mainly to be settled and the curriculum ought mainly to be settled in Applied Science by those who were the teachers of Applied Science, one would imagine that that would come under the review of the whole Science Faculty. Might it not be an advantage that the syllabus on each side should be reviewed by those who were professors of the other branch?—Clearly. But would not that be so in any case that any syllabuses used in any Faculty should be reviewed by the Senate or by the combined Faculties.

15,054. In a practical sense one cannot say that. The Senate would not, except under exceptional circumstances and under advice, charge itself with the responsibility of a curriculum. Would it not be an advantage in the preparation of the curricula that men of science of the same kind should mutually supervise one another's work and advise upon one another's work, and might it not tend to prevent too great a particularism?—Of course I see the point perfectly well. I am sure that mutual consultation is a great advantage. There can be no doubt about that. Whether it is advisable that the consultation should be on the basis of one set of folk having practically a veto on the other I do not quite see. I am not sure that that would be an advantage, indeed I think it would not.

15,055. Do you not think that would work itself out if you had a proper division of the subjects?—It is quite possible it might. I do not feel dogmatically upon the subject.

15,056. In the University of London at present there are nine subjects, and you might take them in groups of three. Here is one group of three:—Mathematics, Mechanics, and Experimental Physics. Then the next is Chemistry. If the subjects were grouped in proper manner would not the arrangement of the curricula naturally be left in the hands of those who were responsible for the subject, but might it not at the same time be an advantage to them to be in intercourse with those who were pursuing similar studies?—I am sure it would be an advantage to them and to the others also. It is in my mind whether the Applied Science Faculty should actually decide on the thing or make their decision jointly with the others.

15,057. When practical men meet together do not these things generally settle themselves?—Very often they do of course.

15,058. Provided always they are in sufficient strength; and I am asking you of course to suppose that the branch of Applied Science is adequately represented and properly provided with Chairs?—That is so.

15,059. (*Sir George Humphry.*) Do you think that students who are intending to pursue the course you propose should go through an examination in what we may call preliminary subjects, that is to say, school knowledge?—A kind of Matriculation examination, do you mean?

15,060. Yes?—I certainly think it would be an advantage that they should first go through that. I myself often wished that we could have that for everyone at University College.

15,061. Then with regard to what we may call the scientific part of this sort of knowledge, Mathematics, Physics, and Mechanics, that would be an examination, first, in preliminary school subjects; secondly, in general science subjects, Mechanics, Mathematics, Physics; and, thirdly, some special examination in the application of those subjects to the special science?—I think that after the Matriculation, which is the qualifying examination for the lad to come in at all, the other two had probably better include some of the subjects which may be called Applied Science, if one likes to call them so.

15,062. Are not the fundamental principles of Mathematics, Physics, Mechanics, and so on, alike for all?—Certainly.

15,063. Therefore the students might study those several subjects in the common classes at first, at any rate, Mathematics, Physics, and Mechanics?—As I have said, I doubt whether they should all be the common classes. At any rate if there is a large number of students, I believe in some of those it would be better to start even from the beginning to go along somewhat different lines.

15,064. Even the earlier parts of Mathematics, Physics, and Mechanics?—The early part of Mathematics could hardly be less, for instance, than a year's training, which means a matter of 90 or 100 lectures, and, therefore, which carries a lad a considerable distance. I should think quite within the year's training that lad, if he were going for an industrial pursuit, ought to have had the examples given him for working out of a very different kind, if possible, from the ordinary text-book examples that one is so familiar with, and which are quite sufficient for, and probably the best thing for, a lad who is going to pursue that subject for its own sake further on.

15,065. Mathematics usually deals with definite data?—Yes.

15,066. Whereas the data to which Mathematics have to be applied in regular life always include indefinite data?—Yes.

15,067. Then with regard to Heat, Electricity, and other branches of Physics, you would wish that examples there should be taken from the subjects with which we have to deal in life?—As you know, examples are generally taken from such subjects.

15,068. But those subjects might be studied in the first instance in common?—I should think the Physics might, certainly.

15,069. And Mechanics?—And Mechanics, in the first instance.

15,070. So that the differentiation would not necessarily be so very early?—No; but I think still in the first year. Supposing there was an examination at the end of the first year, I think in the first year a young fellow might probably have some instruction, which might be in the elements of the strength of materials or matters of that kind, which would not go into other courses at all, but which might form quite well a part of his first examination.

15,071. And when they come to the special examination those several points would be carried out still further?—Quite so.

15,072. The instruction given in the City and Guilds is of a very high class, is it not?—I believe it is very good indeed throughout.

15,073. With reference to the very point you have mentioned?—Yes.

A. B. W. Kennedy, Esq., F.R.S., M.I.C.E.

11 Nov. 1892.

15,074. (*Lord Rcay.*) Have you had anything to do with the evening classes of the University extension? — Nothing. I gave certain evening classes at University College a good many years ago in connection with the City and Guilds Institution. At that time they gave an endowment for the purpose. But that is all the evening class work that I have done.

15,075. With regard to the students at your lectures at University College, were there any artizans?—Only at the evening lectures. At the evening lectures there were artizans.

15,076. Would you be prepared to give a degree to those who attend the evening lectures after they have attended them over a longer period, if they have acquired in the longer period the same knowledge which your day students have acquired in a shorter period?—If they have attained the same knowledge through attending classes.

15,077. Spread over a longer period?—I should not see any objection to that.

The witness withdrew.

JOHN AMBROSE FLEMING, Esq., M.A., D.Sc., F.R.S., examined.

J. A. Fleming, Esq., M.A., D.Sc., F.R.S.

15,078. (*Chairman.*) Perhaps you will tell us shortly what position you occupy?—I am at the present time Professor of Electrical Engineering in University College, London, and I have held that Chair for the last seven years. Previously I held for a short time the position of Professor of Physics and Mathematics at University College, Nottingham; and prior to that I was Demonstrator of Applied Mechanics in the University of Cambridge, under Professor James Stuart; and for the last ten years I have practised in London as a Consulting Electrical Engineer. For some fifteen years I have been connected with the teaching of Applied Science. I have also had considerable experience as an Examiner in Physics to the Science and Art Department; in the University of London; and also for the last six years I have been examining in Electrical Technology for the City and Guilds Institute, London.

15,079. You were present during the examination of the last witness. Do you, in the main, agree with what he said?—Yes, in the main. I hold the same views I have heard expressed by Professor Kennedy about the advisability of establishing what may be called a Faculty of Applied Science in any proposed University of London. Perhaps I may give shortly the reasons why I take that view. They are briefly that, according to my opinion, University training and University education ought to be concerned with the future life-work of the students, and it therefore ought to provide teaching which shall have special reference to the wants of students, who will afterwards go into the various professions. At the present time all those sciences and arts, which I may briefly call the constructive sciences and arts, such ar Architecture, Engineering, Mechanical, Civil, and Electrical, Building Construction, are definite professions in this respect, that those who are employed in them have to bring very special technical knowledge to bear upon them. They have to apply fundamental scientific principles to special subjects, therefore, in providing courses of study and training, the wants of students who are to enter these professions afterwards should be borne in mind. Therefore it seems to me to be essential that such students should study not only the fundamental sciences, Mathematics, Physics, Chemistry, but that teaching should be provided at the same time in the application of those sciences to the special constructive arts.

15,080. Professor Kennedy drew a distinction between the practical instruction and the theoretical, and he seemed to think that the University should not supersede the workshop, but he rather looked to the University only attempting to teach the more theoretical part, and the part which it really could teach without attempting to teach anything practical. Do you draw the same distinction as the previous witness drew between the practical part of the education and the theoretical, and are you of opinion that the University ought not to attempt to teach the practical part?—Yes, in this sense, that the University can never, in my opinion, teach the whole of the professional work or the practical work. It can only teach half of it. It cannot teach that portion which can only be properly learnt in the architect's or engineer's office. I do not think the University ought to teach the practical trade or the practical business.

15,081. But it can teach sufficient of the practical part to bring the theoretical part to bear?—Yes.

15,082. I mentioned the view of the previous witness, because I fancied you were rather advocating a contrary opinion, but that is not the case?—No, I did not intend to convey any opinion on this point contrary to the evidence of the previous witness. I distinctly think that the University can never attempt to teach, and never ought to teach the professional work. It can only teach the application of fundamental principles to the special Arts and Sciences.

15,083. Would you, like the previous witness, draw this distinction between medical teaching and engineering teaching in that way, from long custom and from having the means and from other reasons the practical part of Medicine may be taught by a University, but that the practical part of Engineering would not be in the same position and ought not to be taught?—Yes, and for this reason Medicine is very different from Engineering in the respect that we have nothing in the teaching of Engineering that corresponds with the hospitals or with hospital practice. We cannot take our Engineering students and bring them in contact with the real engineering work, therefore in teaching Engineering we cannot teach any part of the subject which deals with questions of cost, and which is most important from a practical point of view.

15,084. At the same time, though you would not supersede the work in any way, you say that the student who proposes to enter your profession has not only to acquire general scientific training in fundamental subjects, but he has to acquire the mode of applying this knowledge to his special subject, and this mode of applying this knowledge to the special subject, you think, might be taught by the University?—I think so, because taking, for instance, such a subject as Mathematics, we may regard it in two entirely distinct ways. The study of Mathematics may be looked upon as an end in itself, in which the laws of space and time are investigated, but it may be also looked upon as a means to an end, as an instrument of research, and as a means by which certain problems of Engineering and Physics are solved, and the student who is intending to become an engineer, an architect, or a mechanician ought to have his teaching in Mathematics and Physics conducted in such a way as to bear upon his subsequent life-work, otherwise he is in danger of being left unpractical; and when he comes in contact with his subsequent professional work he finds an inability to bring to bear the knowledge he has acquired in Mathematics and Physics on practical problems.

15,085. And the best way of maintaining the practical teaching of the subject is, I gather from your paper, to insure that the teachers themselves should be persons who are practically engaged in these constructive Arts and Sciences?—Yes. I think it is an exceedingly important thing that the teachers in these applied subjects should be men who are either in practice or have been in practice in the profession,

otherwise there is a danger that their teaching may become (to use a word that is sometimes used) academic, and not in touch with the real wants of the student in his subsequent career; and the student will thereby be in danger of acquiring a mass of information which may be correct, and which may in some senses be useful, but which at the same time is not useful to him in his after life.

15,086. Every year I suppose the necessity for a scientific training is more felt among the engineers?—Yes.

15,087. And though it might have been possible to do without it in former days, every year it is becoming more difficult to do without it?—Yes The conditions, I think, have totally changed in the last 15 or 20 years; the professional man, the engineer or architect, is constantly called upon to face problems in which he requires to be able to apply principles and not mere precedents. He must be able to deal with the things he has to do with as opening lines of research or investigation, and he must, therefore, be trained as a student in what I may call the art of practical discovery, otherwise he is constantly brought face to face with circumstances in which he is unable to go beyond what has been done before. He is then bound down by certain rules of thumb, and he is a much less useful individual and a much less competent professional man, if he has not been trained in that art of original research, or rather that art of research as applied to certain practical arts and sciences.

15,088. Then he must not only have a preliminary scientific education, but it must be in those particular parts of the science which will have to do with his profession in after life, and it must be taught by men who are themselves practical men in that profession. That, I think, is your view?—Yes. Perhaps I may give personal experience on that point. Among the students who have come under me as engineering students, who want to become electrical engineers, I find the mathematical knowledge which they have is possessed in such a way that they cannot possibly apply it. They have been taught a certain amount of Geometry, conic sections, and Algebra, but they have not been brought up to the point at which they can apply this elementary knowledge readily to the solution of practical problems. I find that for the most part—I have to make a digression from my own proper teaching to go over matters in Mathematics, Physics, to teach students things they really ought to have been taught at the beginning. For that reason I should like to see the mathematical teaching in the University divided in such a way that students intending to study Mathematics, Physics, or Mechanics simply from the educational point of view or as purely scientific subjects could do so; but other students who are intending to become engineers, architects, and so on, should be taught in a somewhat different manner; that is to say, taught in a way in which they are not occupied with subjects which have not much bearing on what they are subsequently going to do, but taught with a view to that which they subsequently to use it for.

15,089. This leads up to the necessity of having a Faculty of Applied Sciences in the New University?—Yes.

15,090. A separate Faculty to that of more abstract Sciences?—Yes.

15,091. Then with regard to the degree that it would lead up to, do you agree with the last witness that it need not be a special degree, but it may be one particular branch of the Science degree?—Yes, I agree with Professor Kennedy as to the inadvisability of giving degrees in Engineering which might be looked upon as a kind of hall mark of professional knowledge, whereas they cannot be really that because the utmost the University can do is to teach the application of scientific principles. It cannot teach that portion which can only be learned in the workshop or drawing office. But I should be strongly in favour of making it possible for the student to take the degree of B.A. or B.Sc. in subjects of Applied Science.

15,092. What subjects would that contain? Mechanics, Mathematics, Physics and Chemistry are what you have put down. I suppose those are the principal subjects?—Yes. I think that such a degree should comprise attainments in the fundamental Sciences to a certain extent—Mathematics, Physics, Chemistry and Geology—and also should comprise attainments in the application of those to special Sciences such as the theoretical portions of engineering, electrical engineering, building construction and architecture; but no attempt should be made to examine in the professional side of the work.

15,093. You would wish to have a separate Faculty and also separate Chairs for the Applied Sciences?—Yes.

15,094. What professions besides your own would take this degree or take the Science degree in this particular form. There would be the Engineers and the Architects?—I think it should be possible for students intending to be architects, mechanical engineers, civil engineers, electrical engineers, to take that degree

15,095. And technical chemists?—Chemical technology I have included. I do not know much about that subject myself, but I should think there is almost as much difference between Chemistry as taught as a scientific subject and Chemistry as applied to various chemical industries, as there is between Mechanics taught as a scientific subject and taught as it ought to be with reference to engineering.

15,096. Of course there would have to be provision by means of laboratories and demonstrators for this branch?—Undoubtedly so, because this teaching of Applied Sciences must in its very essence and nature be practical. The student must be taught to deal with things and not with names. He has to see for himself and to realise for himself by practical experiment and experience the application of principles to real things; otherwise they exist in his mind in a manner such that he has no proper grasp of the subject.

15,097. You say that the proposed course would take three or four years to put the student in possession of sufficient knowledge of his subsequent professional work. Would this three or four years course take place before his practical instruction began, or concurrently with it?—That is a question in which much may be said on both sides. As a matter of experience I may tell you that some of the students who come to me to study work at electrical engineering at University College come straight from school or from certain other collegiate institutions. Some others go as articled pupils first of all to engineers and then they come back to University College and they take a course of a year or two years of work. I think there is much to be said in favour of both plans. In the one case if a student comes to study these subjects straight from his school period and his college studies, he still possesses in some degree the art of study, but when he has been to an engineer's workshop for a year or a couple of years he has been hard worked manually all day long, and he has probably done very little during his evenings, except amuse himself, therefore he has lost, to some extent, the art of study. I should prefer myself to see the professional work (that is to say, the articled pupil's work) deferred until after the student has completed two or three years in collegiate work.

15,098. You have been a professor of this subject in University College, Nottingham, and you have also been engaged in teaching it since. Therefore you can tell us how much of the student's time would be taken up in each week or each day during this two or three years' course in learning this Applied Science?—I should think that the first year's course in such an Applied Sciences Faculty ought, unless the student is already well qualified, to be entirely taken up with the study of Pure Sciences, that is to say, the first year's course should consist exclusively of such sub-

J. A. Fleming, Esq., M.A., D.Sc., F.R.S.

11 Nov. 1892.

jects as Mathematics, Physics, Chemistry, Geology, Mechanics, and other subjects perhaps, including some foreign languages, and that when the student has attained a certain level of ability in these subjects, then the second year's course should comprise a further progress in these sciences, but beginning to specialise them with a view to the subsequent technical work; that is to say, a second year's course of Mathematics, a second year's course of Mechanics, and all the other subjects should embrace the special application of these subjects to technical work; and then that the third year of the student's course should be occupied with special classes in the technical subjects, such as mechanical engineering; the principles of machinery; civil engineering; surveying; levelling; the theory of construction of bridge work, and electrical engineering; the application of principles of physics to electrical and technical work; and then if the student can remain a fourth year, or if a fourth year's course is provided, that should be a further continuation of special work in which the student is encouraged to take part in original work with the object of educating the inventive faculties and the power of independent investigation.

15,099. And this course would occupy the whole of his time and intellectual power, in fact the whole of his energies. It would be impossible for him to learn any practical work at the same time?—Yes, but I think the student would be making a good investment of his time. I think it is very advisable for the student to lay the broadest possible foundation before he commenced what the Germans call the "*bread studies*," that is to say, his professional work. Before then he is not really competent to take advantage of all he can learn in a drawing office or workshop until he has laid his foundation.

The difficulty I find in many students who come to me after having begun at first in a workshop is that they have merely become young journeymen. They have obtained a certain facility in the use of tools, but they have not really been able to see the meaning of what they are doing far less obtain the power of any independent design or investigation.

15,100. Suppose a student has been through his four years' course with you he would have another two or three years' course in learning the practical part of his profession before he could set up for himself?—Yes, but I think such a thorough preparation would to a great extent shorten the necessity for a long articled pupilship. It is a custom now in the engineering profession to article pupils for various periods from three to five or seven years. In times gone by that ong pupilship was probably very necessary, because in it the student had to acquire everything; but I think that the man who had passed through such a technical course as I have described could learn in a year and a half or two years, in a works or drawing office as much as an old-fashioned student could learn in five years.

15,101. It would not add very much to the time of preparation. He would be six years before he could hope to earn anything for himself?—He would probably be six or seven years from the time of commencing his first scientific education until he was in a position to touch practical work.

15,102. Or, to put it in a practical way, before he could earn anything for himself?—Yes, before he could earn anything. But I do not think there would be much difference in that respect from the other learned professions.

15,103. You would frame your regulations for the Bachelor degree, whether Arts or Science, in such a way. You have also said that you do not think a degree should be taken in Engineering, and you have given your reasons. You would wish, like the last witness to specialise the work of teachers or professors in different branches?—Yes. I think that the teaching that I have described as proper for a first year's student in this Faculty might be very well conducted by lecturers who are not necessarily professors, but who had enough knowledge of the application to conduct the teaching on the right line[8] Then with regard to the higher teaching or the more advanced teaching, I think that a great deal of economy of ability and teaching power might be made by specialising the different teachers in the different colleges.

What I mean by that is this: We have many colleges in London in which engineering is being taught, architecture and electrical engineering.

Each of these professors is probably going over the same ground; each of them, however, possesses certain special abilities; that is to say, he is probably more or less eminent in one or more particular branches of his own profession; and it would be an advantage if an arrangement could be made by which the teacher or professor in one subject could to some extent specialise to that there might be an economy in teaching power, every teacher or professor not going over the whole ground in his subject, but taking those branches which he is more particularly competent to deal with, something of the sort that is achieved at Cambridge in what are called the inter-collegiate lectures, where it is found to be an advantage, that one lecturer at one college should take certain subjects and specialise them. Then students attend these lectures going from one to the other and getting from the different men the best that they can give.

15,104. Then there is a suggestion that the Boards of Studies which should direct the examination, and the examining board who control and supervise the Faculty of Applied Science should include among their number those who are themselves engaged in professional work, that would mean outside people, people not belonging actually to the University?—Yes. Whether they are outside or inside the board of studies I think they ought to include amongst their number men who are not only teachers but who are in the actual practice of these professions; and for this reason, they would thereby be kept in touch with the actual needs of the profession, so that the teachers in these subjects would be guided and prevented from exercising their teaching in directions which may not be the best directions for furthering the practical education of the students under their care. In other words, that these members of the examining boards of studies would serve to keep the teaching rigidly in touch with the actual needs of practical life.

15,105. They would in themselves be practical engineers and professional men?—Yes, practical professional engineers and architects.

15,106. Therefore it would be giving this particular Board of Studies power to associate outsiders with itself in the work they have to do, in arranging examinations and in advising the Senate and everything connected with that particular branch?—Yes.

15,107. Is there anything you would wish to add?—I think not, except just to enforce the view which I take of the necessity for Applied Science teaching, which shall be directed to educating the student in the theory of the subject which he is afterwards to practise. The fault that I find with most of the students who come to me in the special subjects with which I have to deal is that there is a great deal of their knowledge which is perfectly useless, in the condition in which they possses it, they have to begin and find out for themselves a great many things which they ought properly to have been taught. As the student's time is not unlimited a great saving of time and labour is effected by teaching him from the beginning certain sciences with a special view to what he will afterwards have to do. I think that mental training can be attained just as well in that manner for the student. The same education of the mind and intellectual faculties can be obtained just as well as by directing his whole attention to those subjects, in a manner which is sometimes described by the word "academic," meaning that which is unpractical.

15,108. (*Sir George Humphry.*) Do you think the students you contemplate should have to pass what is called the Matriculation examination in school knowledge?—I think it is very desirable that at the

beginning of the career of a collegiate student he should be examined by an examination which may be called a Matriculation examination.

One should ascertain that he has actually had a fair education in English subjects, certain languages and elementary mathematics.

15,109. Do you think the specialisation of study and teaching should take place through what you describe as the first year's course?—No, I think the first year's course ought to be a course which is entirely unprofessional, if I may use the word. I think it is purely educative.

15,110. It might be attended in common with students of the University pursuing other subjects?—Yes.

15,108. (*Mr. Anstie.*) I want to see whether I really understand your evidence combined with that of Professor Kennedy. I understand you in substance to say or assent to the proposition that an important and necessary condition of Pure Mathematics is to exclude conditions and variations, which would reduce the solution from a general to a particular answer?—Yes. Perhaps I might illustrate that point, and enlarge what Professor Kennedy has said, by pointing out the difference in the way in which a small part of mechanics ought to be taught. Take, for instance, the subject of friction, which is a very important subject for an engineer. The ordinary text books of mechanics, such as are used in schools and colleges, treat that subject in a way in which the results have no utility whatever in actual life. The investigations are based for the most part on false assumptions, or assumptions which are so faulty that when they come to be logically followed out they do not agree with the facts. The engineer requires that which is in accordance with the facts of nature, and he must be taught so that the student is conducted at the end of the investigation to real results and not to statements not in accordance with fact.

15,112. Then comparing this with Pure Science the difference would consist in this, that on your side you would make a study of the conditions on which the variations depend, and the mode of calculating the effect of those variations on the problem in hand?—Yes, and the conclusion of every investigation or of every demonstration which is presented to the student ought to be one which conducts him to a position in which he can solve a real problem in real life, and not one in which he is left with certain conclusions which when he comes to apply them he finds do not so assist him.

15,113. Then I should like to put this question to you, whether with reference to the advance of true knowledge it might not be very desirable that the minds of those who are primarily concerned with the problems in a pure condition should be brought in contact with those who are to deal with the more applied form of those problems, and that, on the other hand, those who are to deal with those complex problems should be constantly in touch with those who have to deal with the stricter solutions?—I think, as I said in my evidence in chief, that subjects such as Mathematics, Mechanics, and Physics, are capable of being regarded in two aspects; they are capable of being regarded as an end in reference to the education of the mind, and for following out assumptions which may or may not be true to their logical consequences. But, on the other hand, they are capable of being looked upon as a means to an end—as a means of showing the student what are the actual facts of nature, and showing him how to enlarge his knowledge—and the world's knowledge generally. The effect upon the student of a too exclusive teaching on the theoretical lines is that he is left with the idea that there are two great regions of knowledge, a theoretical, which is altogether useless, and a practical, which is only to be followed out by certain rules of thumb, and the result of that you see in the way in which engineering students deal with mere results in pocket-book formulæ.

15,114. That is not your view. There are not two regions?—There are not two regions. There is only one region.

15,115. Science is true science, so far as it deals with facts?—Yes.

15,116. What I am suggesting to you is whether it would not be a mutual advantage to those who pursued the more unconditioned form of problem to be in contact with those whose attention is to be addressed to the more conditioned form of problem, and *vice versâ*?—To some extent, if I follow you correctly, your question amounts to this, does it not, that it would be of advantage to the student who was to become an architect or an engineer——

15,117. I was rather thinking of teachers and the results of the teaching as shown in curricula syllabuses of instruction?—I think that the teachers who are concerned with teaching science in a manner which may be described as pure Science ought always to hold in view, as far as possible, the application. They are not doing the best kind of teaching if they are conducting their students into those avenues or lines of investigations which do not conduce to practical results.

15,118. I say, does not that point to the desirability of not having too great a divorce between these two branches of Science?—I think it must be looked at from this point of view as well. The student has only a certain limited amount of time which he can give to the study of any subjects whatever, three or four years, as the case may be. He has many subjects which he must learn. He can only give, therefore, a certain limited amount of time, say three or four hours a week, to Mathematics. If he subjects himself, or is subjected, to the ordinary course of teaching the result will be that in those three years his time may be wholly taken up in very full education in the lower branches of Mathematics, but it may not conduct him to that point at which he begins to find it of use to him.

15,119. I quite see the force of what you say as to the necessity of getting the student on to the course of teaching that he will find profitable, but with respect to teachers who are to influence the pupil's mind, do you not think it desirable that the divorce between the two branches of Science should not be made too great? Have you considered whether it would not be desirable that they should, so far as possible, be constantly kept in touch with one another, and move, if I may so express it, not in unison, but in harmony?—Entirely so. That is to say, that there should not be a hard-and-fast line between the teaching of Pure Science and the teaching of Applied Science.

15,120. Would it not be desirable that they should be constantly in council with one another?—Entirely so. As a matter of fact, I have myself not infrequently made suggestions on the teaching of Mathematics with a view to Engineering, in order that there may be a certain amount of harmony between the wants of those students who are being taught Electrical Engineering and the instruction that they are receiving in Pure Mathematics.

15,121. Now one other point with respect to the examinations. I understood you thought it an advantage that there should be outside examiners, who should be persons engaged in the practical pursuit of their profession?—Not necessarily outside examiners, but the Board of Studies should contain persons who might be called in one sense assessors or advisory members of the Board of Studies, whose function would be to make suggestions with the view of continually preserving the teaching of Applied Science in touch with the practical wants.

15,122. Would it not be an advantage if you had such persons nominated as examiners?—Undoubtedly, if they had a certain amount of experience as teachers as well.

15,123. Would it not be almost essential for their useful influence upon the Faculty that they should have had some experience as teachers?—If you could get the men who had.

J. A. Fleming, Esq., M.A., D.Sc., F.R.S.

11 Nov. 1892.

15,124. But it would not be of much use unless they had some experience as teachers?—I think, for example, the practical engineers who had not themselves been teachers in the professional centres, and who had not conducted examinations, might nevertheless make very useful suggestions.

15,125. Of course it would be always open to a body charged with duties of this kind to solicit advice?—Yes.

15,126. That would be open to them without any prescription in the matter?—Yes. How it would be done would be a question of detail. The only point I wish to enforce is that the principle should be recognised of keeping the instructor, and the schedules of teaching of the instructor, and the examinations strictly in contact with the actual needs of practical life.

15,127. Those schedules and courses ought to be settled on the responsibility of the teachers, subject to the general overruling decision of the Senate or governing body?—Yes, unquestionably so; that is to say that the teachers should have a preponderating influence.

15,128. So it would be open to the teachers in framing that curriculum, having themselves obtained knowledge of what was required in a practical sense, to consult those persons, who might supply advice on any point that was desired?—I think if you left it open entirely to the teachers to consult, when they required or did not require, they might not always consult on the occasions when it was important; that is to say, they would only go for the advice when they found the necessity of it. But I want something more than that. I want to have the advice tendered to them.

15,129. It is really a practical question. Could you expect much valuable assistance to be given by persons who were to this extent outside the University system and the teaching system. Would it not be better to allow the teachers to consult them when they desired rather than make them a portion of the body?—I think if you leave it to the teachers to consult only when they desire it will not be enough.

15,130. Practical teachers, mind, in the sense of being Applied Science teachers?—Yes, I think they might be in danger of not going where they ought to go, if I may put it quite plainly; that is to say, the teachers themselves, unless they are men engaged in the practice of their profession, may get out of touch with the real wants. What I would like to say is that on the Board of Studies there should be certain persons who are practically acquainted with the profession, and who will have the function of preserving the schedules of study, and examination schedules, on the right lines.

15,131. I quite understand that that would be so if you were dealing with the pure branch, but having regard to the relations existing between the most eminent teachers in Applied Science and the practical world, do you think there would still be the same necessity?—I think if the teachers themselves were actually engaged in the practice of the profession, as I think they ought to be, it might probably be that they would not require to be supplemented by men who were not themselves teachers.

15,132. Must they not be to a large extent?—Yes.

15,133. If they are engaged in practice might it not be left to them to determine?—No, for this reason. A man who is engaged in any sense as a teacher is probably not so much in contact with practical work as if he is exclusively a professional man.

15,134. Then you would still desire to have this advice not at their will, but forced upon them?—Yes.

15,135. (*Mr. Palmer.*) I understand you are in favour of a Faculty of Applied Science as distinguished from one in Pure Science?—Yes.

15,136. And secondly, a degree of Applied Science as opposed to a degree of Pure Science?—Not necessarily as opposed to a degree of Pure Science, but as capable of being taken in the special subjects.

15,137. But you would not give a degree in Engineering as you have stated?—No, because such a degree might afterwards be mistaken by the public as the hall-mark of a professional knowledge which is not really possessed.

15,138. Similarly in other branches, such as Architecture or even Agriculture?—Yes.

15,139. All those branches of Applied Science presuppose, according to what you have given us as your year's instruction for engineering, a great deal of Pure Science. Pure Science would be common to all the branches of Applied Science in the first year's instruction you have given?—Yes, or might be.

15,140. You have given us, for example, Mathematics, Mechanics, Experimental Physics, Geology, as being necessary instruction for engineering?—Yes.

15,141. These, and more than these, sciences would be requisite for Agriculture and, perhaps, for Architecture. Is there such a difference between Applied and Pure Science as to warrant separate Faculties and separate degrees?—To a certain extent it is a question of detail. I do not know that I would contend absolutely for the creation of the name of a Faculty of Applied Science provided I could get the teaching, if the University had the professors and teachers who were capable of imparting the knowledge I have suggested as necessary for engineers and architects, whether they should be grouped under a Faculty of Applied Science or all included in the general Faculty of Science I think is a question of detail. I am not prepared to say whether I should enforce that rule.

15,142. But you see that every bread winner and every practical student in Applied Science will be rather anxious for a special Faculty and a special degree which will suit him. On the other hand, those who are in favour of the best education will want to centralise all the Faculties and all the degrees into as few as possible. Then it becomes necessary rather to see where the real difference is I was very anxious for your opinion as to how far Science should be separated into Pure Science and Applied Science for the purpose of a degree?—I have already said that I do not think there ought to be separate degrees, that is to say, in the sense of special titles. I should be opposed to any such degree as Bachelor of Engineering or Master of Engineering, or Doctor of Engineering, because I think these would be taken by the public to imply the possession of knowledge which cannot be obtained in the University, but which can be obtained only by means of practical work. Therefore I should be opposed to practical degrees. I do not see any difficulty myself in arranging a course for a degree which might be called Bachelor of Science or Bachelor of Arts, but in which the subjects examined in should be scientific subjects purely. For instance, at Cambridge there are a series of triposes. Everybody is B.A. who has passed the B.A. examination, but he takes it in Classics, Moral Science, or other subjects. There is no distinction in the title or degree that is bestowed. The only distinction is in the subject that he is examined in.

15,143. (*Professor Sanderson.*) In the subjects that I am concerned in we feel very strongly that it is extremely important, indeed essential, that Applied Science should be taught by a scientific man. For example, we should consider that pharmacology would be best taught by a scientific chemist and not by a druggist; that Organic Chemistry for medical students with a view to Medicine should still be taught by a scientific chemist. You said something a little while ago which seemed rather to imply that you thought that branches of Applied Science (and I think you mentioned Applied Physics) might be taught with advantage by a man not strong in Mathematics, and consequently not strong in Physics?—No; I meant rather to convey the idea that the applied subjects should be taught by those who are in connexion in some degree with practical work in life. Take, for instance, the subject of Electrical Engineering. I

think that that ought to be taught, not by a Professor of Physics whose whole life work is the teaching of Physics, but it ought to be taught by a person who is an engineer in the sense that he is engaged in doing real work in Engineering.

15,144. You would not advocate the employment of what are called practical men to teach scientific subjects, whether Applied or Pure?—No, because I think teaching is in itself an art; that is to say, you cannot go and take any engineer and appoint him as Professor of Engineering. He may be an excellent engineer, but he may not have the faculty of communicating his knowledge; he may not have the faculty of teaching. And the persons appointed to fill this position would have to possess a double faculty: they would have to possess the art of communicating their knowledge, and they would also have to be practical men in the sense of knowing what to teach.

15,145. Do you not think that if you separate the teachers of Applied Science from the scientific teachers who would be included in the Faculty of Science you would run a considerable risk of their becoming, if one may say so, too practical?—I do not think so, because as a matter of fact you do not find it to be the case. If you take the existing colleges in London you find that the professors of engineering there are all of them or nearly all unless their appointment precludes them from being so, consulting or practical engineers as well; that is to say, they combine the two things. And it is in the same way with many other technical subjects such as Chemistry. They may be teachers in a college, but at the same time they have connection with outside work by being advisors of chemical works or constructive works of some kind.

15,146. But would not they do their work all the better in consultation and in concert with men who are actually teaching the sciences of which their subjects are the application?—Undoubtedly, I think they ought to be closely in contact with those who are teaching the fundamental sciences, but at the same time I do think that the teachers of Applied Science must be men whose profession is something else than teaching.

15,147. Then I suppose your point is that it is necessary to have separate teachers, separate laboratories, and separate machinery for the teaching of Applied Sciences, but that separation being accomplished that is all you want?—Yes.

15,148. You do not attach any importance to the separation of the Faculty into two?—As long as I have the real thing I do not know that I care a pin for the name; that is to say, I do not know that I care for the actual existence of a Faculty which is called the Applied Science Faculty as long as I can see in the University the teaching which I desire to see in these Applied Sciences.

15,149. Your object would be attained if you could have a special Board of Studies?—If I could have the proper teaching and the proper laboratories and appliances, and the proper Boards of Studies and the examiners carrying out the work of teaching those Applied Sciences, whether called Faculty of Applied Science or not, I do not much care.

15,150. (*Rev. Canon Browne.*) You said that you and your colleagues had more than once communicated with the teachers in pure Mathematics with a view to modifying the teaching a little to suit your work?—Not altogether with a view to modifying it, but with a view to supplementing it; that is to say, we have suggested to a Professor of Mathematics that he should take, somewhat earlier in his course than he usually does, a course of elementary differential calculus. The professor would naturally take his class through the subjects of trigonometry, conic sections, the theory of equations, and analytical geometry, before taking the other subjects. It would not be until the third year that he arrived at the differential calculus, and yet the engineering student requires the language of the differential calculus at a very early stage of his work.

15,151. Have you been aware of any such incident as of a Professor of Mathematics coming to you and suggesting a difference in your treatment?—No, not personally.

15,152. Can you imagine such a thing?—I cannot imagine such a thing very well for the reason that there is a certain relation between the subjects which is not capable of being reciprocated.

15,153. So that while it is of extreme importance that you should be able to get him to attend to you, you could hardly conceive circumstances which will bring him down upon you?—Yes, because I look upon Mathematics as an end in itself, or a means to an end, whereas Engineering cannot have the same relation to Mathematics.

15,154. Then you took the example of friction—a very interesting example. When you are teaching the pure Mathematics principle of friction you are supposed to be dealing with an impossible material—incompressible, inelastic, rigid?—Yes.

15,155. The teacher of Pure Science would be sure to say, "This can never work out in real life." You would not expect the teacher of Pure Mathematics to go further than that, would you?—No; and it is for that reason that you want the other teaching.

15,156. But so long as the teacher of Pure Mathematics says, "If you apply that in practice you will find it all comes wrong," that is as far as you can expect him to go?—But the student would require to be taken a little further; he would require to be told not only "this is wrong," but what is right.

15,157. You would then deal with substances which were compressible, elastic, non-rigid?—Quite so.

15,158. But by the nature of the case you bar those from Pure Mathematics treatment. You say, I can not conceive Pure Mathematics going further. Now coming to your side you would say that if bodies were incompressible, rigid, and inelastic this would hold, and from that you would pass to the tremendously different conditions with which you have to deal?—I am not sure that I should. I should rather take the system from the very beginning. I should rather treat the subject as a subject in which we ascertain as far as possible what are the facts. Then try and connect those facts together by generalised laws. I should not start with the subject and treat it as it is done by making certain assumptions which, when followed out in their logical consequence, do not agree with the facts of nature.

15,159. Which do not profess to be facts of nature to begin with?—Yes.

15,160. That throws up into extreme importance the difficulty some of us have felt with regard to engineering students being taught by Pure Mathematicians. This means an entirely different kind of investigation and different kind of treatment from the treatment of Pure Mathematics?—I think so.

15,161. And it points to a different professor altogether?—Yes.

15,162. (*Lord Reay.*) Carrying that a little further, you would not mix your students up, even in the first year, with Pure Science students?—No. I think it might be found to be an advantage from the very beginning to let a student be subjected to totally separate teachers.

15,163. The curricula must be different?—The curricula must be different.

15,164. The teachers must be different?—Yes.

15,165. The teachers must be different, not because they are less academic or because they are less scientific, but because they teach Science in accordance with different methods?—Quite so, and because they have different aims. The professor of Pure Mathematics is teaching his subject with a view to educating the mental powers of the students to deal with the laws of thought, space, and time as a philosophical study.

15,166. The aims of both are scientific and are academic?—Quite so.

15,167. But in one case the factor of practical illustration plays a more important part than in the other?—Yes.

J. A. Fleming, Esq., M.A., D.Sc., F.R.S.

11 Nov. 1892.

15,168. It is very important not to lose sight of the fact that though the practical factor comes in, still the scientific factor in the Faculty of Applied Science would predominate?—Yes.

15,169. Practical subjects would come in, and practical illustrations as a handmaiden to scientific principles?—Yes; that is to say, the teaching of those must, as you say, be scientific, but it must be guided by the objects to which it is directed, and I think there would be a considerable difficulty in throwing the whole of the mathematical work upon one mathematical teacher or one mathematical professor. It would be an advantage to have separate men teaching those students who are Pure Science students, and those who are Pure Science students in the Applied Science Faculty, if I may so speak.

15,170. And it is not merely to avoid waste of time, but because there is that there is a distinct difference in the method in which you teach?—Yes, I think there is a distinct difference in the aims and in the method of the teaching which must be held in view from the very outset.

15,171. If that is not kept in view from the very outset there is a great risk of confusion. There is a great risk of your students not getting the training which they ought to get?—Yes, entirely so; and in that sense there is a great risk of loss of time. The student finds afterwards that a great portion of this study to which he has devoted attention and time is not a subject which assists him in the special work which he afterwards wants to follow out.

15,172. In fact, in order that your Applied Science student, if we may call him so, should be entitled to academic honours, it is necessary that he should not be mixed up with the Pure Science students, not because his scientific development is less, but because it is different?—Yes.

15,173. You distinctly hold that?—Yes.

15,174. It is important that we should obtain this information, in order to make it quite clear that it is not for the purpose of making your students less scientific, but more scientific, only in another direction?—Yes; I want the students in the Applied Science Faculty to be so trained that their minds are just as capable of independent research, just as capable of logical thought, and just as capable of correct judgment in intellectual matters as are the minds of the students who are being trained in the subjects of Mathematics, Physics, and Chemistry as purely scientific subjects.

15,175. The differentiation is not for practical purposes, but it is for scientific purposes?—Entirely so.

15,176. (*Rev. Canon Browne.*) In speaking of your first year lectures in Algebra, the first year's lectures in Geometry could be given quite well to all in common?—Yes, I think so.

15,177. (*Lord Reay.*) If you claim a separate Faculty, it is because the subjects for discussion would, as a rule, be entirely different from those which would come up in the Pure Science Faculty?—Yes.

15,178. There might be some subjects on which it would be important to have the opinion of the combined Faculties, but as a rule it would save time (and we know what that means in London) if the two Faculties were to meet separately?—I think so. It would be a question of detail afterwards as to where the sub-division of the studies should take place, whether the first year students should be taught entirely by the professors of what I may call the Science Faculty, or whether they should be taught by their own teachers, but there is a point, which may take place at one time or other, at which the student should pass into his own special Faculty.

13,179. And of course in the higher stages you differentiate more?—Yes, entirely so; because as the student's intellectual development proceeds so must he more and more specialise.

15,180. The whole tendency of the present day in the higher reaches of Science is to specialise more and more?—Yes, and that is because the accumulation of facts and principles in these different sciences is so enormous that it is no longer possible for one man to master more than one portion of one subject; the day has passed when a man could do the work of an engineer, builder, and a number of other things.

15,181. The technical chemist, for instance, would require an entirely different scientific education from the constructor of ships?—Entirely.

15,152. And different from that of an electrical engineer?—Yes.

15,183. You are driven to that by the development which Science has taken?—Yes.

15,184. Therefore in giving these degrees of Bachelor of Applied Science and still more of Doctor of Applied Science, you would be very careful, even in the Faculty of Applied Science, to make subdivisions?—Undoubtedly so.

15,185. That is to say, you would examine a man thoroughly before you gave him the degree of Doctor of Applied Science in what is called his principal subject, with some knowledge of two other subjects. But the principal subject on which the technical chemist would get the degree of Doctor of Science would be an entirely different principal subject from the one on which the Civil Engineer would get it?—Exactly so. Still as at present in the examination of the existing University of London the Bachelor of Science degree is a degree which is obtained by a knowledge of certain broad groups of subjects. The Doctor of Science degree is a degree which is obtained only by specialisation. The candidate has to present a very special and thorough technical knowledge of one subject.

15,186. In fact, if you are to require original research, and if you are to require a very searching scientific education, it is absolutely necessary that he should be limited to that one subject?—Yes, because the subjects are now grown so large.

15,187. Between his acquiring the degree of Bachelor of Science and his acquiring the degree of Doctor of Science you would have no objection to his doing practical work?—No; I think it is almost essential that he should do so; that is to say, I do not think he could carry forward his knowledge of the special subjects to that point at which he should become deserving of a doctor's degree without having engaged to some extent, perhaps to a considerable extent, in real practical work.

15,188. But that would come in essentially to give him some assistance in his scientific research?—Yes. That is to say, by engaging in practical work he would have the opportunity of carrying out researches, which had perhaps a purely scientific side, to carry them to a degree to which he never could carry them simply in the laboratories of the college.

15,189. But with regard to the degree of Bachelor of Science, would you keep him to his theoretical work?—Yes, I think so.

15,190. There would be no practical work?—No.

15,191. When you have spoken of the mode of teaching him how to apply his knowledge to his special subjects, would you explain what you mean exactly, how that would be done in the lecture room?—Perhaps I may take an illustration from my own particular subject, Electrical Engineering. A student may attend classes in Physics, and he will study the subject of Electricity at certain lectures and certain demonstrations, and read certain text-books, but that knowledge is not sufficient to enable that student to design a dynamo machine or to understand thoroughly the working of apparatus which is used in Electrical Engineering, because the questions which are involved in practical work are quantitative in a very different sense from that in which the subject is dealt with in pure research. That is to say, for instance, a student will study the subject of Electricity in a class of Physics under a professor of Physics, and he will have his attention directed to certain fundamental laws, but he will not have his attention directed to questions of design of machinery at all. He would not be able with the knowledge which he gains in the lecture room from a professor of Physics to start designing even a

simple form of dynamo machine. That is because he has not been taught the applications of principles and methods of measurement to that particular thing. That is a separate thing altogether. He may acquire that without instruction in what I have called the application of Physics to Applied Science.

15,192. Do you agree with what Professor Kennedy said, that there is a greater want of increase of staff than of increase of laboratories and plant generally?—I think that there is great want of increase of the apparatus of teaching, in London at any rate. We are not sufficiently well provided in London in many Departments with the apparatus of teaching; that is to say, our laboratories, in which our students are taught are not nearly so well fuunished as the laboratories in colleges in America or Germany of a similar standing. I may give you an instance of the kind of thing that is now done in colleges in America. The Cornell University has a very large and important Faculty of Applied Science in which Electrical Engineering is very well taught. They have large and extensive workshops which are provided with electrical engineering appliances of all kinds, dynamo machines, engines and other apparatus for measurement, by which the student is taught the scientific principles underlying the structure of these pieces of apparatus. He is not taught to make machines; he is not taught that knowledge which he can only acquire in a workshop; but he is taught the art of investigation with the object of furthering applied knowledge. We in London are deficient in that. The laboratories of many of us are exceedingly ill provided. I myself have had to teach the subject for five years with means which would be considered absolutely and totally inadequate to a fifth-rate college in Germany or America, and it is only with considerable difficulty that I have been able to realise ideas which I had formed as to what ought to be the kind of apparatus and plant that is in existence for teaching my own particular subject at University College. In addition, I think we require in the teaching, in London especially, an economy in teaching power by specialisation of the work of existing teachers. There is a great waste of teaching power which might be saved and great advantage accrue by allowing one teacher who is particularly competent to teach one branch of the subject to do so, and for other teachers to take up other branches of the subject.

15,193. At this moment, as a matter of fact, there are some classes at King's College and University College which might very well be consolidated, and which are not numerous enough for two teachers?—Yes, and with some advantage to the teachers and the taught.

15,194. At the Cornell University is there a Faculty of Applied Science?—Yes, I think they call it the Faculty of Engineering, but I am not sure. They are very well endowed not only with the apparatus for teaching, but also with the men to teach. They have not one but several Professors of Engineering; one or two Professors of Electrical Engineering; and in addition to that a staff of demonstrators and assistants.

15,195. They form a distinct group?—Yes. I may add, perhaps, as following out the question that you have just asked me, that a great advantage I am sure would accrue to the profession generally, and to the constructive arts from the existence of these laboratories, properly provided with apparatus and with men who had the power to investigate as well as to teach, because a great part of the progress of our knowledge of engineering cannot altogether be carried out in factories and workshops. In a factory the only investigation which is undertaken generally is that which is absolutely necessary from a commercial point of view, whereas the increase of knowledge and the making of new knowledge in various directions must be carried out purely with uncommercial aims, and it can only be carried out, therefore, in places in which there are all the appliances, both of men and things, for aiding and increasing technical knowledge in various directions—in other words, making new investigations and opening out new avenues for practical work and application.

15,196. What you say there is illustrated by the fact which, perhaps, is known to you, that at some works in Germany, for the convenience of the engineer in charge of those works, the owner of the works keeps a special laboratory in which he can work out his problems?—They do, and our English manufacturers are to a great extent not nearly sufficiently provided in that respect. For instance, a German chemical factory—a technical factory—will employ probably half a dozen men in doing nothing else all day long but pure research, whereas an English chemical manufacturer will think himself very lavish if he employs one.

15,197. The research being essentially scientific for practical purposes?—Yes.

15,198. But it is scientific work which can only be done by a man who is scientifically trained?—Yes. He must be trained in the art of research.

15,199. (*Mr. Anstie.*) Did I understand you to say that a special laboratory or workshop was provided by the German manufacturer for investigation?—Yes. In many chemical works, and in electrical works, and various kinds of engineering works, men are kept specially with a view to making purely scientific investigations.

15,200. Why does he do that?—He does that with a perfectly commercial object in view.

15,201. And he pays for it out of the profits of his business?—Yes.

15,502. Is it that the German manufacturer is wiser in his generation than the English?—Yes.

15,203. If the Englishman became wiser in his generation he would also provide special laboratories for the work?—Yes.

15,204. Then we may perhaps not consider so closely the question of the University providing that for the advantage of the manufacturer?—I think he would be inclined to appreciate more highly then the possibility of getting young men trained to do that work.

15,205. But we need not provide those things which the manufacturer, if he is wise in his own interest, will provide?—The object of the University, according to my view, is not research in itself, in so far as it has commercial utility, but it is the training of men who are capable of doing it. It is the making of men, not of things.

15,206. All you want is to practice the men in that energy and habit of mind which will enable them to carry it on?—Yes.

15,207. That brings me to another question which I wanted to ask you with reference to an answer which you gave to Canon Browne. You said, apparently to his surprise and a little to mine, that you would desire that even in the early parts of Mathematical training a student's mind should be directed to that branch whether pure or applied to which his subsequent studies were to be directed. Am I right?—Yes, that is to say, that if the student himself has made up his mind that he will go through with this curriculum he ought, from an early stage, to be subjected to that character of teaching.

15,208. That brings me to a question, which I should not have had the boldness to put but for its having been stated to me by a mathematician conversant with Cambridge mathematics. That is as to whether the present teaching of Mathematics is not too abstract and whether it might not be with advantage made more concrete?—It is a large question to answer at once and without very careful forethought. But I do think myself, and have always thought, that there is a great want in the general teaching of Mathematics. The student's mind is directed at a too early stage, I think, to abstract ideas, and he is not brought sufficiently into contact with the uses of the things he is doing. For instance, I think a student ought, at a very early stage of his mathematical training, to be taught how to plot out observations on paper in such a way as to obtain the most probable

J. A. Fleming, Esq., M.A., D.Sc., F.R.S.

11 Nov. 1892.

result from a series of observations. That is a mathematical operation itself, a part and department of a very advanced stage of Mathematics. The student usually never gets as far as that under his ordinary mathematical teachers. For the most part he is confined to analytical treatment of subjects where a graphical treatment would be more intelligible to him.

15,209. Am I not right that Professor Henrici has applied that method to the teaching of even elementary Mathematics?—Yes, I think he has, with great success.

15,210. So there might be something to be learnt by mathematicians from engineers?—Perhaps. I think so.

The witness withdrew.

Adjourned to Friday, 18th November 1892.

Thirty-fourth Day.

Friday, November 18th, 1892.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*

J. Westlake, Esq., Q.C., LL.D.

18 Nov. 1892.

J. WESTLAKE, Esq., Q.C., LL.D., examined.

15,211. (*Lord Reay.*) You are Professor of International Law at the University of Cambridge and a member of the Institute of International Law?—Yes.

15,212. Might I ask whether you are of opinion that there ought to be only a Faculty of Law or an institution besides of a professional character?—I think there is no room in London for a professional school besides the Faculty of Law at the University. The number of law students is very limited. At present there are very few beyond those who study for professional purposes. It is possible, and I hope probable, that that number might be increased by the establishment of a University Faculty of Law, but still we cannot expect that the number of law students in London will ever be very great beyond those who now attend what may be called the professional school of law, that is, those who are studying either for the Bar or for the profession of a solicitor. Consequently if there were still a professional school of law which attracted the majority of those students there would not be very many left to support a University school of law; and the efficiency of any school of study, the zeal which the teachers in that school carry into it, must depend very much upon the number of students which they have. It is not likely that the teaching will be as zealous and as good, and that as much thought will be given to the subject by the teachers, if the school is a small one as if the school is a large one. No doubt two schools on any subject may so exist in a healthy manner in different places, just as Victoria University comprises colleges at Liverpool, Manchester, and Leeds. Between those colleges there is a healthy rivalry because each has a natural command of the students at its own city or town who cannot conveniently go elsewhere. So there is a healthy rivalry between those schools. Each does the best it can for its own students and their rivalry consists in that. There cannot be a healthy rivalry between two important schools in one and the same place even if that place be as large as London. Or at least, if there could be such a rivalry between two schools in the same place for a Faculty like that of arts, which in a very large place might attract a very large number of students, I think it could not be so for a Faculty like that of law in which the number of students must always be expected to be limited. The rivalry between two such schools existing in the same place would be of that unhealthy kind in which each would attempt to attract students, and necessarily attract them from the other, and the mode in which it would attempt to attract them might probably not always be the best mode. It would open the door to what might sometimes happen, if not generally, a competition for students by lowering the level of attainment, by lowering the aims of the school or popularising the methods of the school. Then, again, the University School ought to satisfy every demand that a student of law can make. It ought to present the subject to him from the deepest point of view of principle, and with the largest range of application, whether his object be scientific or that of acquiring a practical mastery or both combined. The University ought to satisfy those wants. Unless it does so, the University must be considered as maimed and incomplete. If it has no such school of law as that, the University would not comprise within its scheme of study one of the subjects which is among the best as an exercise of the reasoning faculty, and one of the most important as an application of philosophy to practical human life. On the other hand, the professional school has not necessarily so high an aim. The school as it exists now under the direction of the Council of Legal Education appointed by the Inns of Court, I think I may say, without unduly derogating from it, has never put before itself so high an aim as that which the University School ought to have and would have; and if it continued to exist alongside an efficient University School there is a danger that it would sink still lower, that the best students of the professional school would be attracted to the University School in which they would get all the professional school could give them and more besides. And the professional school would sink to about the lowest level which might be considered indispensable as a condition for the call to the Bar. That seems to me to be the great danger which would exist if the professional school continued to exist alongside the University School. I think, therefore, there ought to be one school of law in London, and that ought to be the University School.

15,213. A University degree given in the Law Faculty would, therefore, in your opinion, represent a guarantee of the scientific knowledge of law?—Certainly;

a University degree in law should not, in my opinion, be conferred without some scientific knowledge of law, we will say some considerable scientific knowledge of law. Perhaps the same remark might be applied to other subjects, but certainly to law. I think it might not be reached by one single method. There might, and should be, different qualifications obtainable in the University, each of which should lead to the degree in law. The study of law in the University would include its science and philosophy; its history; its detailed knowledge and practice with regard to English law and English courts; also international law, both in its public branch for the diplomatic service, and in its private branch for the consular service; it would include also a great deal of administrative law which magistrates and other persons desirous of exercising local functions in England, whether in town or country, would find exceedingly useful and in fact indispensable to a proper performance of those functions. You could not say a man should have passed through the whole of such a course as that, some parts of which he might not require, before obtaining a degree in law. What I should suggest would be that there should be certificates of proficiency given by the University Faculty of Law in the different branches of the subject, and it would then be for the University to consider how many and which of those certificates should be sufficient to constitute, when combined, a qualification for the degree in law. Below the standard which entitled the student to the degree in law, the University might decide that certain certificates granted by the Law Faculty should count towards the qualification for the degree in Arts, that is, that the degree in Arts might be conferred upon the attainment of certain certificates in arts and certain others in law. Then, again, the University of course (supposing the professional school extinguished) would have nothing to do with the actual call to the Bar or the actual admission as a solicitor. Those would be left to the authorities of the profession just as they are now. The effect of extinguishing the professional school would be that the authorities of the profession, instead of seeking to determine the capacity and knowledge of an applicant by methods of their own, would accept the judgment of the University, leaving all other qualifications, such as those of standing, conduct, and so forth, all other qualifications but those of knowledge, to be decided by the legal authority just as they are now. There, again, it is not the degree in law, I should say, which should be required by the professional authorities as the necessary condition, the educational test for call to the Bar or admission as a solicitor, but the acquisition of certain certificates from the Law Faculty of the University. Certain certificates would naturally be required for practice at the Bar; certain other certificates would naturally be required for admission as a solicitor, just as now the examination at the Bar and the examination for the profession of a solictor are not the same and ought not to be the same, because very different attainments are requisite for the exercise of the two branches of the profession. Then, again, we must remember that the degree in law would not be given, I presume, for knowledge of law only. In order to attain it some knowledge would be required of the general subjects of a liberal education, so that the holder of a degree in law should be certified by that degree, not merely as a good lawyer in two or three or more branches of legal study, but also as a man of sufficient general liberal education. You cannot expect that the students for the Bar, most of whom are of an age beyond the usual University age, and who have gone through the tests of a general liberal education at Cambridge, or Oxford, or some other University before, or at any rate, if not at a University, may have completed their general liberal education in some place or other before they begin to study for the Bar—you could not expect that those men should again submit themselves to such tests other than legal tests as the University might require for its degree in law. The authorities of the legal profession would expect that they should submit themselves to such part of the tests imposed by the University in its legal Faculty as those authorities of the legal profession considered were suitable to that branch of the profession in which they sought to engage. On every ground, then, I should say that we must not have a single course ending in a single law degree. The Law Faculty of the University should confer a variety of legal certificates, certain combinations of which, together with other proofs of a liberal education, should entitle to a law degree; certain other and less important combinations of which might, together with other certificates to be obtained in other Faculties, entitle to the Arts degree; and certain other combinations, which would have to be determined in conjunction with the authorities of the legal profession, should entitle the holder for admission to the Bar or to the profession of a solicitor so far as regards the satisfying of educational tests or requirements for that admission.

15,214. Would you grant the certificate after examination, or simply for attendance at a course of lectures?—I think a certificate granted merely on attendance on lectures would be wholly unsatisfactory. The certificate ought to be granted after examination. In saying that, I do not preclude the possibility of granting a certificate on some proof of attainment other than examination; for instance, original work I merely mean to say that attendance at lectures would certainly be insufficient, and that only by examination or by some other proof, such as original work, of a man's attainments could he qualify himself for the certificate.

15,215. Who would conduct the examination for a certificate? Take, for instance, a certificate in International Law. Would that be conducted by the Professor of International Law with an outsider, or how would you organise the examination?—I should say that the examiners should be either appointed by the Board of Legal Studies of the University, or at least recommended by that board and appointed by the Senate or Council, or whatever the governing body of the University may be called; and that the professors either of International Law or of any other given department of legal study should be eligible as examiners in that department, and should be frequently so appointed. I should not make it a necessary condition that the professor should be an examiner.

15,216. In addition to the combination of certificates, would you be in favour of a further examination before granting the degrees of LL.B. and LL.D.?—I do not see the necessity for that.

14,217. And the examination for a certificate would be in a single subject, or would you have an examination for a combination of subjects grouped; for instance, International Law, Philosophy of Law, and Constitutional History and Constitutional Law?—You might fairly say that the degree in law should be given to a man who showed a thorough knowledge of Roman and English Law, without obliging him to know International Law besides.

15,218. Would he be examined in Roman Law and English Law separately, or would the examination be conducted at the same time in the two subjects?—I think that any certificate of proficiency in English Law should only be given if the student showed at least some respectable knowledge of the principles of Roman Law as well. That, I think, would be quite necessary in order to give him the necessary breadth of view, and the necessary historical knowledge of the subject in order to constitute him an accomplished English lawyer. But, of course, the Roman Law which would have to be combined with English Law for the purpose of obtaining what I may call the English certificate, would be very inferior to the extent of the knowledge of Roman Law which would be required from one who took that as his especial subject. I have said that the law degree might be given for a knowledge of English and Roman Law, without regarding International Law as a necessary subject; but I might add that English and International

J. Westlake, Esq., Q.C., LL.D.

18 Nov. 1892.

Law constitute a field so wide that I think a degree might be given for them without requiring Roman Law as a special subject, only requiring so much of it as would enter into the certificate for English Law. Then, again, you might grant a law degreee for Roman Law and International Law combined.

15,219. You mean that you might have a principal subject. The student would select his own principal subject, and then he would have one or more auxiliary subjects connected with the principal subject?—Yes.

15,220. I conclude from what you have said that you contemplate the absorption in the Faculty of Law of the existing Chairs of Law in the Inns of Court?—Yes, I do; and I think the Inns of Court have strong motives for agreeing to that. In the first place, they would be directing the attention of their students to a school of law which would aim at and attain higher than any merely professional school could be expected to do. Then, besides that, if they came in and endowed the University Faculty of Law, which is a necessary condition for its thorough efficiency, because it could not be made thoroughly efficient without ample funds, (and I see no source from which those funds could be obtained except the Inns of Court) they would be fulfilling as far as that went (and that is to a very great extent) those duties which it is perfectly well understood by themselves as well as by others that they owe to the study of law and to the legal profession. Their property, which is very great, if not trust property in the ordinary sense, has undoubted public duties attaching to it. Perhaps the chief reason why it is not trust property in the ordinary sense is because the public duties, though they exist, are so ill defined. It rests with the Inns of Court, and, in the ultimate result, with Parliament, to define those public duties better, and make provision for their being carried out. I see no way in which, with regard to the educational portion of those duties, they could fulfil or define them better than by coming in to endow the Faculty of Law in a University for London; and by doing so, not only would they be making the best provision for their own students, and fulfilling a public duty, but they would also be crowning their own series of undertakings, which in some form or another have been carried on almost without intermission to the present time. They taught law, as it was then understood and practised in this country, in the Middle Ages, and for some time after the Middle Ages, much more thoroughly than they do now. They have had more than one system of teaching in my own knowledge as a student and barrister. There has been hardly a time in which they have totally intermitted this teaching. Their teaching has not been so successful as it has been desired to be, mainly on account of the want of allying it with those deeper principles which the University would supply. To avail themselves of that opportunity of allying themselves with those larger views, when it is offered them, would be to put a crown upon their efforts. It would be a thing which they would justly have reason to be proud of, and they would not, by doing so, terminate their connexion with the educational work of the law, because obviously, in return for the endowment by them of the University Faculty of Law, considerable powers would have to be given to them to assist in the management of that Faculty by electing representatives who, in some shape or other, would assist in that management. I think, therefore, that the motives for the Inns of Court to endow the Faculty of Law are so strong that we may fairly hope they will sooner or later prevail.

15,221. How would the Inns of Court be represented in the University? They would be represented of course, by those professors whom they appoint, and those professors would, as University Professors, become members of the Faculty of Law, and would have a voice in the selection of the members of the Board of Studies.

15,221*a*. But, besides that, would you desire further representation of the Benchers on the governing body of the University, and further representation say of the Council of Legal Education on the Faculty or on that Board of Studies?—There must, I think, be two bodies—the general governing body of the University (call it Senate or Council) and the governing body of the Legal Faculty, which might be called an assembly of the Faculty, a term which I see is used in the draft Charter, or it might be called a Board of Legal Studies, a term which is also used in the draft. I hardly see the necessity for two bodies such as are mentioned in the draft Charter, the assembly of the Faculty and the Board of Legal Studies. One of them, by whichever name you call it, I think would suffice alongside the governing body of the University. The governing body of the University would certainly for its own purposes, have to exercise great powers over the practical work of the legal Faculty. I have suggested that certain of what I may call the less important certificates granted by the legal Faculty should in combination with certificates of other Faculties entitle the holder to the degree in arts. There you see is a combination which transcends the functions of any one Faculty, and which would have to be settled by the governing body of the University. Then, again, I pointed out that for the degree in law, the certificates which proved legal attainments would have to be combined with some certificate proving the possession of a general liberal education. There, again, you have something which transcends the boundaries of a single Faculty, so that the ultimate determination of a great number of points—probably of all points connected with the degree—would have to be made by the Senate or Council of the University. But it could only be usefully made by them after consultation with the assembly of the Faculty or Board of Legal Studies—or whatever else you call it—a separate Board of the Faculty; and that consultation would be even more necessary in the case of the Faculty of Law than in the case of the Faculty of Arts on account of the greater speciality of law, and on account, therefore, of the impossibility of obtaining any satisfactory information upon the legal aspects of the case except from those who are experts in that Faculty. The Government of the Faculty of Law therefore having to be distributed between the governing body of the University and the special body of the Faculty, it seems to me that in order to keep them in touch with each other each would have to be represented in the other. As an instance of what I mean, I may take the organisation of the Board of Legal Studies in the University of Cambridge, which is only an example of the way in which the Boards of all special studies are constituted in that University. The Senate of the University elects three members to serve for three years on the Board of Legal Studies, and the Board itself elects another member every year, whose nomination is to be approved by the Senate. They, together with the professors and readers belonging to the Faculty, and the examiners for law honours for the current and last preceding years, constitute the Board of Studies at Cambridge. There you have the representation of the Senate upon the Board of Studies, and the power of the Senate to approve the member elected by the Board itself. There is not at Cambridge a converse provision for the representation of the Board of Legal Studies on the Senate, because the members of the Board of Legal Studies are themselves members of the Senate in virtue of their degrees. But supposing that the body corresponding to the Senate in the new University of London was not constituted as at Cambridge, of those who have taken the higher degrees of the University, but was a special body composed either in the way which the draft Charter provides for the University Council, or in some other analogous way, in that case it would become necessary that the Board of Legal Studies should send its representatives to the Council as well as that the Council should have its representatives on the Board of Legal Studies.

15,222. Would the Council of Legal Education which at present controls the education given by the Inns of Court claim to be represented in the

new University?—The Council of Legal Education is not a body which at present has any character of permanence. It is not incorporated. It has no royal charter or existence by Act of Parliament. It is simply appointed by the Inns of Court and depends upon their will. They might put an end to its existence at any time. It, therefore, seems to me that the Council of Legal Education is not the sort of body which ought to be recognised by the Charter of the new University. Take clause 24 of the draft Charter with regard to the admission of colleges. That clause says:—"The Council, after considering "in each case a report to be made by the Board or "Boards of Studies of the Faculty or Faculties in "respect of which the application is made, may "accept the application of any college in the district "herein-after mentioned to be admitted as a college "of any Faculty or Faculties in the University, or "of any Faculty or Faculties in addition to those in "respect of which it may have been already admitted, "on the Council being satisfied:—First. That the "College is established on a basis justifying the ex-"pectation of its permanent existence, and is under "the independent control of its own governing "body." That is a condition which the Council of Legal Education does not, in my judgment, at present satisfy. Depending as it does on the continuance of the will of the Inns of Court with regard to it, I can hardly say that the expectation of its permanent existence is justified, and formed as it is of the representatives from the different Inns of Court I can hardly say that it is under the independent control of its own governing body. It does not seem to come within the principles laid down, and if I may say so, I think justly laid down, for the admission of new colleges to the Gresham University. But the question of its representation on the Council I know may be regarded as in some degree different from the question of its admission as a college. Yet there is a great deal of analogy between the two, and a body of a character which would not entitle it to admission as a college I think is hardly fitted to be recognised as having representation upon the Council of the University. Besides which, the object I desire to attain, as I stated early in this examination, is the extinction of the professional School of Law as a distinct body—its being merged in the University School of Law. On every ground, therefore, it is not the Council of Legal Education but the Inns of Courts that I should like to see brought into organic connexion with the University. If the Inns of Court the Faculty of Law of the University they will by so doing entitle themselves in my judgment to a representation upon the Board of Legal Studies, or assembly of the Faculty, or whatever you may call it. They will be entitled by the fact of that endowment to a representation upon a special board having the special direction of the Legal Faculty in connexion with the general body of the University. And it is not merely that it would be a *quid pro quo*, it is not merely that their representation on the Board of Legal Studies would be a sort of compensation or acknowledgment to the Inns of Court of what they had done for the Faculty by endowing it; they would also contribute to the Board of Legal Studies trained legal opinion outside the mere teaching and examining circle. My notion of a teaching University is not that it should be a merely professorial University, not that its government should be confided exclusively or nearly exclusively to its professors. It ought, if possible, to include within itself a body of competent—what I might call expert—public opinion upon the different subjects comprised in its studies, such a body as is furnished by the graduates of any University that has existed for some time, and, that public opinion should have some expression in the governing body of the University. At Cambridge, I may say, the public opinion of the graduates is supreme, because the graduates constitute the Senate; and I have shown how, through the representatives of the Senate upon the Board of Legal Studies, that outside expert competent opinion is combined with the professorial and examining opinions in the constitution of the Board of Legal Studies. It is evident that before such an opinion could exist a University must have existed for some time, so as to have a considerable body of graduates acquainted with its different departments, and that it must have existed in one place in or round which those graduates congregate, as is the case at Cambridge and Oxford. We may hope that that latter condition will be satisfied in the case of London by this proposed University being a special London University, so that in course of time there will be a considerable number of London graduates interested in it and residing in London, as there is at Cambridge a considerable number of Cambridge graduates interested in the University, and as there are at Oxford a number of Oxford graduates interested in and residing at Oxford. But the condition, that they should exist in sufficient numbers to form a competent and well-considered body of opinion in London cannot be fulfilled until the University has lasted a considerable time, and the Inns of Court, as forming within themselves the great competent body for the representation of law, would be able from the first to contribute that opinion which I wish to see there in addition to the professors and examiners.

15,223. You claim representation for the Inns of Court on the Board of Studies; would you also claim it on the governing body of the University?—I think that would be unnecessary.

15,224. Assuming that the other Faculties would only be composed of the professors—say the Medical Faculty only of the teachers in medicine—it would become necessary to have a Faculty of Law also wholly composed of the teachers in law. In that case, I suppose you would consider that your object would be attained by a Board of Studies elected partly by the Faculty, and partly by the Inns of Court?—Yes, it would be so attained.

15,225. Would you desire the future law student to be matriculated? I am alluding to those law students who attend the Faculty of Law to obtain a degree, not the professional students. Would you be satisfied with evidence of preliminary general education of the Matriculation standard, or would you require the higher standard of B.A. or B.Sc., or some other degree?—That would depend, of course, upon how high the Matriculation standard was fixed. At Cambridge all our entrance standards, whether for Matriculations in the University or for entrance in the different colleges are fixed so low that I could not accept them as sufficient proof of liberal education to be combined with special certificates.

15,226. Let us assume the present Matriculation standard of the existing University of London; would that satisfy you?—I am sorry I do not know it. I have never had any practical connexion with the University of London.

15,227. But assuming that the Matriculation standard represented a liberal general education, that would satisfy you?—Certainly, if it did so.

15,228. Have you anything further to add with reference to the relation between the Faculty of the University and the legal profession?—I do not know that I could add anything to what I have previously said.

15,229. Do you contemplate a further examination before admission to the Bar, or would the admission to the Bar be regulated by a certain number of those certificates?—Entirely in the latter way. I am glad you have suggested that, because that points out another reason why the Inns of Court ought to be represented on the Board of Legal Studies. It is for them in conjunction with the other members of the Board of Legal Studies to fix, or at least recommend to the Senate or Council of the University for fixing, the whole scheme of certificates. The University, therefore, in fixing that scheme of certificates, will want advice from the authorities of the legal profession as to the nature of the certificates which should be

J. Westlake, Esq., Q.C., LL.D.

18 Nov. 1892.

established with a view to their being adopted by the authorities of the legal profession as the educational conditions for practice.

15,230. Then in addition to the University students who attend University lectures, do you contemplate other students who might be called unattached students?—Yes. I think that the University for London should recognise and include all teaching of what may be called University rank which exists in London; and a great deal of that teaching is not only outside the two great colleges—University College and King's College—but is likely always to remain outside any colleges of that description. The draft Charter in clause 3 makes a certain provision for non-collegiate students. They may receive certificates of proficiency in any branches of knowledge. It says:—"The University shall also have power to grant "to students of any college in the University"—you see it is not only of any "College in the Univer- "sity," but—"or who have attended University lec- "tures, after such examinations, in such mode and "on such conditions as to the University from time "to time shall seem fit, certificates of proficiency in "any branches of knowledge." I do not see why, if they have obtained a sufficient number and variety of those certificates of proficiency, which number and variety of course it will be for the University to settle, they should not have a degree. Then, again, for the teaching of such students a provision is made in this same clause 3 for University lectures:—"The Univer- "sity may appoint lecturers independently of a college, "to give instruction in any subject, whether it be or "be not included in a Faculty." It is possible that those words may be intended to include the recognition by the University of lecturers not originally appointed by it, lecturers who are found giving instruction in London either in some existing body like the Working Men's College or Bedford College for Ladies, or in other ways. If the words I have read were not intended to include such recognition, I think that such recognition should be added—that the University might not only appoint lecturers to lecture to students outside a college where it finds there is a real want for such appointment, but it should also be empowered to recognise teaching of University rank which it finds is actually being given in London. It may be as well that I should read from the Ordinances of the University of Cambridge what is provided for the recognition of teachers. There is a distinct provision for the appointment of University lecturers in another Ordinance, quite distinct from the one I am going to read. This deals with the subject of recognition of lecturers. The Ordinance says:—"That any col- "lege lecturer who with the concurrence of his "college throws open all or any of his lectures to the "whole University, or any graduate of the University "who proposes to give lectures open to the whole "University, may apply for recognition to the special "Board of Studies connected with the department "to which the lectures belong. The application shall "be made in writing, and shall be accompanied by a "statement of the nature and subject of the intended "lectures. The special Board may require any evi- "dence of competency which they may think fit. If "the recognition of the special Board be granted, the "lecturer shall be admitted to the conference as "described in 4. The recognition shall continue "in force until withdrawn by the special Board, pro- "vided that the lecturer deliver in each year at least "one course of lectures approved by the Board, open "to all members of the University either freely or on "payment of a fee approved by the General Board "of Studies. If this condition be not fulfilled the "recognition shall become void, but may be again "given on a fresh application." Then the Ordinance goes on to provide for a conference to be called by the special Board. It is a conference upon the subject of the studies, and the recognised lecturers are to be invited as well as the readers and teachers. Now just see how that would work in connexion with an institution like the Working Men's College in Great Ormond Street. I have no doubt whatever that a good deal of the instruction given there is of University rank. Instruction can be obtained there as good as is given by the University lecturers, and many of the students avail themselves as thoroughly as University students avail themselves of the instruction placed before them. Many of the students from that college, from the teaching given in that college, would be competent to obtain certificates of proficiency in various subjects. It would be impossible to recognise that college as a college of the University, because what I have said does not apply to it as a whole but only to certain departments, and because from time to time the instruction and proficiency in different departments will vary according to the teaching which the college has been fortunate enough to obtain for it. But wherever it was found that at any given time there was a department of that college in which teaching of University rank was being given and received, I should wish to see the teachers of the college recognised as teachers of the University upon terms similar to those concerning recognised teachers which I have read from the Ordinance of the University of Cambridge. It is possible that such recognition may be intended by the words I have read from the Gresham Charter:—"The "University may appoint lecturers independently of "a college;" but, still, I think by the words "appoint lecturers," something different would commonly be understood from that which I have suggested. The lecturers would be appointed by the Working Men's College, in which they gave their lectures, but they would be recognised by the University. In that manner the Working Men's College and any other similar institution would obtain from the University recognition from time to time, exactly to the extent and in the department to which and in which it from time to time deserved that recognition; and if any one was found to be giving instruction of University rank, even independently of an institution like the Working Men's College, I do not see why he also should not be recognised. Then, again, as I have said, I do not see why if there is a person who is perhaps of greater age than collegiate students, and the conditions of whose life do not permit him the leisure which would be required for pursuing a regular course in University College or King's College, if by persistent efforts through a course of years, making use of all the leisure he can gain and of all the opportunities presented to him, he has really acquired (and that acquisition has been tested by examination) a sufficient proficiency in such a number of subjects as would entitle him to the Arts Degree if he were a member of one of the two colleges, I do not see why he should not obtain that degree; I do not see why he should be put off with the mere certificates of proficiency to which clause 3 of the draft Gresham Charter would confine him. It is a case which exists necessarily in connexion with a population of a great capital. If a University existed in a smaller town you would not find there many persons coming under the description I have attempted to make. There would be many students who would attach themselves to the University in a different way, and go through the University course in a normal space of time, but obviously in London, or in any great capital, there must be a vast number of students deeply interested in study, whose interest in study, it is, in my opinion, one of the functions of the University to encourage and guide, but who are utterly unable to go through a collegiate course from their age and occupations. It seems to me that the necessary education and guidance might be and should be held out to them in the way I have suggested. Moreover, by doing so, the University will after all be only carrying out what I understand to be the idea that has governed those who have framed this draft Charter, but which idea, I venture to submit, they have not fully carried out, that is the idea of recognising whatever teaching of University rank actually takes place in London.

15,231. Your view is that anyone showing the same efficiency as a graduate of the University, although he had obtained that knowledge over a longer

number of years, should be given the same degree as a man who had obtained that knowledge within a shorter number of years?—Provided also that he had obtained that knowledge under the instruction of teachers recognised by the University, the recognition of which teachers would bring their teaching into an organic connexion with the University, so that the examination which he had to go through and the teaching which he would have received would have been examination and teaching directed by the Board of Studies of the University in the particular subject, and altogether homogenous with the teaching and examination which would be received and submitted to in that subject by regular students.

15,232. In such a case you lay, if possible, even greater stress upon control of the teaching and of the methods of teaching by the University, than in other cases?—Certainly.

15,233. Now with regard to the appointment of professors, would they continue to be appointed by the Inns of Court as they are now, or do you contemplate a new system of appointment for all University professors?—I contemplate a new system. I contemplate the Inns of Court so completely ceasing to be a teaching body that they should not appoint professors. The professors should be professors of the University appointed by the University, the Inns of Court endowing the Faculty with the means of appointing them. But with regard to the appointment of professors, that ought not to be vested in a large body. It ought to be vested in a body small enough for each of its members to feel his responsibility and duty with regard to the appointment. It should be a body like the Boards of Electors for the different professorships which have been established at Cambridge. You must excuse my referring so much to Cambridge, but it is what I know best. I daresay similar things may exist at Oxford upon similar topics. We have Boards of Electors to the different professorships, each Board consisting of a certain limited number of persons, who as I say are made to feel their own personal responsibility with regard to the appointment. That, I think, is the only legitimate way of appointing professors, and if the Inns of Court endow the legal Faculty of the University of London, so that they gave the means by which the professors were appointed, and the means by which their salaries were paid them, then in consideration of that, and also in consideration of the fact of their being competent experts in the matter, I think they would be entitled to special representatives on the Boards of Electors for the different legal professors and readers, altogether distinct from, and in addition to, the representatives which I have suggested their having on the Board of Legal Studies.

15,234. Do I understand that you advocate the same Board of Electors for the appointment of all the professors in the Faculty of Law, for different Boards of Electors for different Chairs?—That is a point which I have not thought of. I think some difference might usefully be made. Most of the members of the Boards would be suitable members for Boards of Electors to all the legal professorships; but there might be some difference made.

15,235. In Germany, as you are aware, the system is that the Faculty recommends to the Senate, and the Senate to the Government and that, as a rule, the Government takes the nominee of the Faculty who is usually adopted by the Senate; your guarantee is that the body of professors are extremely anxious to obtain the best men they can secure for their University. You, on the other hand, do not desire to give the body of professors in the University any voice in the appointment of their new colleagues?—Not as such. They would be too large a body, even if you took the professors of a legal Faculty only. But one does not know yet how many there would be. That would depend very much probably upon the number of students which the legal Faculty attracted. They might be so few that it would be possible to include them all in the Board of Electors of the legal professors. I think that is a point that one must leave undecided until we know their number.

15,236. The point is very important. You contemplate that the Inns of Court should endow the new Faculty?—Yes, that is so.

15,237. It would not be an arrangement of the new University with the Inns of Court perpetuating their separate existence under which would be created between the Inns of Court and the University, but it would be really an incorporation of the Inns of Court by giving them an important representation on the Board of Legal Studies?—Precisely so, and I am so strongly of opinion that a satisfactory result with regard to the study of law in London can only be reached by that complete coming in of the Inns of Court into the University Faculty in the way you have mentioned that I should deprecate any attempt to establish a *modus vivendi* with them as a distinct body. I should fear that such an attempt would only lead to the perpetuation of the distinct professional School of Law, which is what I wish to avoid. If before the Charter assumes its final shape terms have not been arranged with the Inns of Court, so as to enable those terms to be introduced into the Charter, it seems to me it would be better that the whole subject of the legal Faculty should be postponed, and that at some future time, when it may be decided to arrange such terms, a supplementary charter should be issued for the Legal Faculty.

15,238. You would deprecate the University meanwhile starting a Faculty of Law or a School of Law of its own, I do not say in opposition but in juxtaposition to the existing school?—I should deprecate it. It seems to me that the University School of Law so started would not promise to be a strong one. There would be every reason to expect that it would be weak both in number of students and in funds, and that its existence in juxtaposition with the School of Law now carried on by the Inns of Court through their Council of Legal Education would only tend to perpetuate a dual state of things which I wish to put an end to.

15,239. Hitherto we have only mentioned London students, London teachers, and London institutions. Do you contemplate that the new University should also undertake to examine the students who have had their legal education elsewhere—out of London?—I think not. It seems to me better that we should have a distinct teaching University, going (as I have indicated in my remarks upon non-collegiate students) to comprehend and organise (we must not comprehend it without organising it) all the teaching of University rank in London; but there we should stop.

15,240. You think the University would have quite enough to do, and that the introduction of the outside element would be a disturbing factor?—Yes, and I think that if the University attempted to do more the system of examination would tend to control the whole system of the University in a way in which it ought not to be allowed to. My notion of a healthy University is that it should combine the three elements: the professorial or teaching element; the examining element, which would not be so wholly distinct but that professors and other teachers should be capable of being appointed as examiners and often so appointed; and then, thirdly, the element of competent opinion—expert opinion if you like—outside the teaching and examining circles, furnished by men thoroughly competent, living in the same place as men do at Oxford and Cambridge, so that their views become known to each other and influence each other, and who are constantly in organic connexion with a University. When you get these three elements combined in a proper organisation each of them is held in check by the others. The professorial element is held in useful check by the examining element in its results being constantly tested. The examining element is not allowed to lay down the law for teaching, but is perpetually reminded that its office is to test the teaching which a University con-

J. Westlake, Esq., Q.C., LL.D.

18 Nov. 1892.

siders it best to establish. Both these elements are held in check by competent opinion outside them, so as to keep them (which for a Faculty of Law is especially requisite) in constant touch with the needs of the day and the community in which they exist. That is my opinion of a teaching University, not merely a professorial University. But if you go beyond that, if you let the University invite to its examinations persons who have studied elsewhere under a system of teaching which it does not control, in the midst of a public opinion which, however competent and even perhaps expert, is not its own public opinion, then evidently the examinations tend to govern the real system; and that, I think, is not the best state of things for a teaching University. I do not for a moment deny that some such system of tests as can be supplied by an examining University is necessary for the scattered educational institutions of an immense Empire like this—so scattered that they cannot be brought into organic connexion with the teaching University existing at a particular centre, but wherever that organic connexion is possible I think those educational institutions should receive the benefit of it, and that the benefit of it should not be attempted to be diluted by extending it beyond them.

15,241. Therefore, you think that benefit should be conferred by an institution distinctly organised *ad hoc*?—Precisely so.

15,242. And that outsiders should receive degrees at an institution kept separate from the teaching University?—Yes—that is that the existing London University should continue as an examining University.

15,243. And you would especially deprecate that the professors of a teaching University in London should feel themselves in any way cramped in their lectures and in their methods of teaching by a system of examinations which would overshadow them?—Precisely so.

15,244. And you consider that danger would arise if the outside students were admitted to the examination?—Precisely so.

15,245. Have you anything to add?—No, I do not think I have anything further to add.

15,246. (*Professor Sidgwick.*) If I understand you rightly, you think that in the abstract, it would be desirable, for a University School of Law to give completely the knowledge required for admission to the profession; that there should be no separation made between academic study and professional study but that the University should give the whole of the intellectual qualification required for admission, so that the body which admits to the profession should only further require certain guarantees of conduct and standing?—That is my view, and I will carry it so far as this, that even the details of practice, which have no scientific value at all but which are necessary for a solicitor, should be taught in the University. They would form a subject perhaps for a special certificate, and one of the least important certificates, but they should be taught and certified, so that the Incorporated Law Society would have no need to examine its students further in them.

15,247. Then if the Inns of Court are to take the certificates of the new University in London; I suppose from the position they occupy, they ought to be similarly required to take the degrees of the other Universities. Or do you recommend that the new University in London should be placed in an exceptional position in relation to the Inns of Court?—No, I desire that the Oxford and Cambridge examinations should be accepted by the Inns of Court.

15,248. The Inns of Court, so far as regards their function of admission to the profession of a barrister, would be perfectly neutral in theory between the different Universities. That seemed to me to suggest a difficulty; it might create a certain amount of dissatisfaction in other Universities if the Inns of Court are to have this peculiar connexion with one University. The connexion must to a certain extent be peculiar, and it may be thought more desirable to have the two bodies more completely distinct lest the Inns of Court, in exercising their impartial function of admission, should be too much influenced by the Faculty they have themselves sometimes endowed?—The doubt suggested, as I understand it, is that the Inns of Court might withhold from degrees or certificates obtained at Universities like Oxford and Cambridge the value which they ought to have, might refuse to accept them as educationally sufficient for the call to the Bar, either from a natural predilection for the certificates of the University they had aided in endowing or from some other reason.

15,249. It would be from their special connexion with the University?—Yes, from their connexion with the new University.

15,250. They might either do this, or what is perhaps a greater danger, they might be believed to do this if they refused to admit certificates of other Universities, which those Universities regarded as of equal value. Might not this be attributed to an undue partiality for their own creation?—I do not think that danger exists, but, as you say, the danger might be believed to exist. All we can say is, as far as I can see, that if such a belief were found to exist then either Parliament or the Crown would have to inquire into the case; but I do not myself believe that it would exist. I think the views of the Inns of Court would be made so much larger than they are now, through the fact of their connexion with one great University, that they would be more ready to appreciate than they are now the advantages which any University can confer.

15,251. With regard to the difficult question as to the position the Inns of Court are to hold relatively to the University it would seem that if they are only represented on the Board of Legal Studies, as I understood you to suggest, and if at the same time the Senate is supreme—as I suppose it must be allowed to be supreme—over the Board of Legal Studies, the Inns of Court would be placed in an apparently inferior position; which they might refuse as much from a sense of dignity as from consideration of the practical working of the scheme. Do you not think that consideration might render it desirable that if they came in at all, they should be represented on the Supreme Governing body?—That is, no doubt, a reason for giving them a representation on the Supreme Governing body as well as on the Board of Legal Studies.

15,252. Suppose the Inns of Court are reluctant, and I presume from what has so far happened and so far gone on, that we may expect a certain amount of reluctance on the part of the Inns of Court to take up a position in the New University, would you rather defer the whole constitution of the Law Faculty than establish any relation between the two, other than that of complete absorption in the University so far as the School of Law is concerned?—I should prefer a postponement.

15,253. You would not think it would do to give the University, or a board created and controlled by the University, the power of recommending to the professorships endowed by the Inns of Court, leaving the Inns of Court, or any body they choose to appoint, the final power of appointment? It might be suggested that by that scheme the independence and prestige of the Inns of Court would be maintained, and that the practical effect would be in nine cases out of ten the same as if the University had the whole of the power of appointment. Do you think that any compromise of that kind might be acceptable?—Something of that kind might be acceptable if the Inns of Court would greatly enlarge the system of education which they now have. At present it is a system of education intended for students to the Bar alone. It does not make provision, or at any rate it does not make sufficient provision, for the scientific side of law apart from any of its practical applications. It does not make provision for the special wants of the solicitors' branch of the legal profession. It does not make provision for that class of students that I should hope we might see arising in London, who would

like to combine a certain knowledge of law, fitting them to perform their duties with regard to local government or the magistracy, with the study principally of the subjects of the Arts Faculty. But, however, if the Inns of Court would really enlarge their system of education, and bring it up or nearly up to the standard of what a University Faculty of Law ought to be, then some solution, though I think not the best, might be found in leaving them in control of it, subject to a considerable voice of the University in the appointment of their professors.

15,254. In the organisation of this department in the new University you seem to deprecate the notion of the two bodies mentioned in the Charter, the separate Faculty and the Board of Legal Studies; but does it not appear to you probable that, if any Faculty is so developed in numbers as to meet the needs of London if the University flourishes, the whole body is likely to be too numerous to make a good administrative organ for the department? I think it was on that ground that the Boards of Studies were appointed, and the assemblies of Faculties reduced to the elective function. Of course it may be the case that this large number is more likely to occur in the department of Science and Arts than the department of Law, but I presume you would agree that the administrative body should be not too large?—I do not think 20 or 30 would be too large for it.

15,255. Does not experience show when a body gets larger than 12 or 15 it is likely not to be such a good administrative body?—No; I do not think 20 or 30 would be likely to be too large a number.

15,256. As you have referred to Cambridge, I may say that I do not think any Board of Studies at Cambridge reaches that number. The Board of Legal Studies does not?—No, certainly not. All would not take an active part on the Board. There naturally would be certain members who took the leading part.

15,257. As I understand you, in the plan of recognised lecturers you would attach important privileges to recognition. That is, in requiring attendance at University lectures you would include those recognised lecturers among the lecturers who might give the certificate of attendance?—Whose classes would entitle the person to stand for those certificates.

15,258. That is not given as a privilege in the recognition of lecturers at Cambridge to which you referred. The only advantage gained by recognition is the privilege of the publication of lecturers in the list of the Board, but there is no compulsion to attend any lectures as a condition of obtaining a degree. Do you think it would be desirable for the University to maintain such compulsion?—Whether or not it was desirable for members of colleges like University College and King's College, it would be desirable for non-collegiates if they wished to go up to the University, because unless by attending classes recognised by the University one does not see how those students could be brought into an organic connexion with the University.

15,259. In what way do you think effective control could be maintained over the academic character of the teaching given by the recognised lecturers. What I mean is this. Suppose a graduate of the University is anxious to give any teaching that might be required, and that he might find remunerative, of course he would be glad to have the title of recognised lecturer. But if the class who were disposed to employ his services was not really of an academic character there would be a strong inducement to degrade the teaching somewhat. How do you conceive the University would be able to exercise due control? In the case of a college the results of the institution as a whole it is easy to control and check, but it would be more difficult in the case of an individual?—It would be very much more difficult in the case of an individual.

15,260. But you think it might be effectively worked. You think it would be possible and not difficult to prevent this recognition from being used in the way I have indicated?—It would be possible to limit the recognition to teachers in connexion with some institution.

15,261. So that you would connect with the University two classes of institutions; some would be colleges of the University, and others would be so far included that they would employ recognised lecturers?—Yes.

15,262. (*Mr. Palmer.*) I understand you to say that if the Inns of Court and the Incorporated Law Society were not to consent, you would still leave the School of Law in the hands of the University. I mean you would have the School of Law in the hands of the University in the first instance?—Yes, I think you would not constitute the University without a School of Law.

15,263. What I mean is this: If the Inns of Court and the Incorporated Law Society or either of them were to refuse their assent to that state of things, should you be able to start anything like a practical professional school?—No. Certainly if the Inns of Court and the Incorporated Law Society were to refuse their consent it would be a weak school.

15,264. And, therefore, it will be very necessary to meet the views of those Corporations if possible?—I think that if a reasonable scheme inviting those Corporations to come in in the manner I have suggested were prepared and submitted to them, there would be very great pressure of public opinion upon them to come in. Of course public opinion might not bring matters to a successful result in the first year or in the first two years, but it would be a rapidly growing body of public opinion—growing in strength and intensity, and I think it would very soon realise its object. I should not be inclined to relinquish the chance of that object being realised, or to upset that chance by establishing a *modus vivendi* which would put a stop to all further consideration of the subject for some time to come.

15,265. And would you give the same opportunities to students for the profession of a solicitor as you would to students for the Bar?—Yes. I have said it in this little memorandum, but I think I have not said in my evidence that not only the Inns of Court but the Incorporated Law Society should have a representation on the Board of Legal Studies.

15,266. And you would think it indispensable that that branch of the profession should be represented as well as the other?—No doubt—not merely from a spirit of fairness, but because that branch of the profession as well as the Bar goes to constitute the body of expert opinion existing in London which I should wish to see brought to bear on the governing body of the Legal Faculty of the University.

15,267. The education of solicitors who have direct dealings with their clients and the public is of even more public importance than the education of barristers?—No doubt, it is of importance educationally.

15,268. (*Mr. Anstie.*) I should like to know whether you contemplate the creation of this new school by terms of arrangement or by the superior powers of an Act of Parliament?—I think Parliament must step in if, after a time had been given and public opinion was pronounced, the Inns of Court did not come in voluntarily, but I do not wish to suggest that now because I think they would come in voluntarily.

15,269. Then your view is directed to an arrangement?—Yes.

15,270. And do you think that the Inns of Court having the whole of the funds which would be appropriated for the purpose, the most complete system of legal education existing in this country, and the only one approaching completion, or indeed of any kind at all existing in London, and having at the same time the duty imposed on them and exercising the power of regulating the terms of call to the Bar, would be likely to consent to an arrangement of the kind you have indicated?—I think in no very long time they would when public opinion had been sufficiently enlightened on the subject.

15,271. But does not that assume that the enlightened public opinion will accept as the reasonable

J. Westlake, Esq., Q.C., LL.D.

18 Nov. 1892.

solution the solution that you have given? Suppose that were thought by public opinion not to be a reasonable solution, what then?—I suppose we should have to turn our attention to some other scheme.

15,272. Do you not think that the position occupied by those bodies, and the work that they are already doing in educational matters, would form a considerable element in the determination of public opinion on the question of what was reasonable?—Yes. If the Inns of Court had now in operation a system of legal education satisfying all University objects, it would then be a matter of very great importance for public opinion to consider whether they should be abolished or not. But that is not the state of facts which exists. Public opinion would, I think, see that the question to be solved is the establishment of a thoroughly complete system of education, complete from the scientific point of view as well as from the practical point of view, and that however good a practical school has been established by the Inns of Court (and about that there may be some difference of opinion) certainly no school even aiming at going beyond the practical point of view has been established by them.

15,273. That would scarcely correspond, I think, with the evidence we have heard or with the details contained in the syllabus of lectures and examinations. That is not limited to the practical subjects by any means?—No, but if you look to the provision made for carrying them out.

15,274. They may not be adequate, but you said they do not aim at anything. It seems as if, whether successfully or otherwise, they do aim at a good deal. There was nothing practical about the character of Sir Henry Maine's lectures?—No.

15,275. Nor is there anything practical about the lectures on Constitutional Law and History. I do not see what ground you have for saying that they have limited themselves to purely practical objects?—I think that whatever education the Inns of Court have offered, they have always offered it as something which in their view was, if not necessary, at least highly desirable for the practical English lawyer. They have taken a large view, I quite admit, of the needs of the practical English lawyer, but I do not think they have ever gone beyond that in their view.

15,276. Looking at this as a practical question, you really trust to public opinion to give effect and weight to the scheme which you have propounded, and you think public opinion might be trusted to give effect to that proposal if we made it?—It has seemed to me so.

15,277. (*Lord Reay.*) When you mentioned just now that you do not overlook in the curriculum the details of practice, do you include the education which those law students who were looking forward to a career at the Bar would receive in Chambers either after their University career, or *pari passu* with the attendance at lectures in the Faculty at the University?—Of course a man's reading and work in Chambers would not be a part of his University course; whether or not he found time for it concurrently is another question. That would be for his own private decision.

15,278. Do you contemplate that the students would attend the sittings of the Law Courts under the direction of the University?—I think that might be usefully done. I think that students, especially in the English branch of law, might very well be required to attend the Law Courts a certain number of times and present reports of their own making of cases which they had heard there.

15,279. (*Professor Sidgwick.*) I should like to get clearly Professor Westlake's view on a point which was raised before, but I will put the question in a different way. You are aware that when the Gresham scheme was brought before the Privy Council, the promoters of the scheme did not propose at the outset a distinct Faculty of Law, but only power to found it. But the Lords of the Council insisted that the University should from the outset possess in the Faculty of Law machinery of the same kind provided in the schools for the sciences. If I understand your view you would rather agree with the promoters. In case the Inns of Courts would not give in, you would only have the empty fragment of a Faculty, and wait till public opinion brought the Inns of Court in?—I should not wish to see any public attempt made to establish a Faculty of Law until public opinion brought the Inns of Court in.

15,280. Do you think the Inns of Court, apart from any other objection, might object to regarding it as their function to provide for the teaching of persons who have to be trained as solicitors?—The endowment by them might take one of two forms. They might endow certain professorships of which the utility was only for the solicitors' branch of the profession. Or it might take the form of the endowment of the Faculty, leaving the University to determine the application of that endowment. In that case, I suppose, the endowment would be proportioned to what they considered to be their duties in the matter.

The witness withdrew.

H. A. Giffard, Esq., Q.C.

HENRY ALEXANDER GIFFARD, Esq., Q.C., examined.

15,281. (*Lord Reay.*) You have been a Reader at the Inns of Court Law lectures?—Yes. I was professor for three years. I held the Chair of Equity under the Council of Legal Education from 1886 to 1888 inclusive. It was an office held for three years, but I was requested to take it for another year, and I resigned at the end of 1889. If your Lordship will allow me, I will just state what my position has been in the profession with regard to oatieducthesenal matters.

I was called to the Bar in 1865. At that time there were three ways of qualifying for the Bar. You might either pass the ordeal of a public examination or you might qualify by attending a prescribed number of lectures; or you might adopt a third course, which I adopted, that is of passing a certain number of years—one year was the minimum—but in common with many of my contempories, I passed two years in conveyancing chambers and two years in the chambers of an equity draughtsman, I was so qualified, and was called to the Bar. I practised in the Old Courts of Chancery, and after the fusion of the jurisdictions in the Chancery Division of the High Court. Before I was called within the Bar, which was in 1882, I took pupils and practised as an equity draughtsman solely in that branch of the court.

15,282. With your experience, therefore, of the existing state of legal education, I think I may venture to ask you at once what reforms you think desirable and how far you think the establishment of a teaching University for London, could be made useful for promoting those reforms?—Would you allow me to preface my answer by stating that our new scheme of education at the Inns of Court aims at being a teaching school as well as a technical school for the profession itself, and also at being or furnishing an examining body applying the tests for a certificate of fitness to practice. I believe Mr. Crackanthorpe has given evidence before the Commission. I have not had the opportunity of seeing his evidence, but we have discussed these matters, and he referred me to an article which has appeared in the present month in the "Nineteenth Century Review," which, I am told, is in accordance with and contains the substance of his evidence. I have studied that, and I may perhaps save the Commission time by saying that on broad lines, and as far as regards the broad features of his sketch, I am entirely in accord with him. I think it would be very desirable indeed to have either a legal University or a Faculty of Law within a London teaching University, such as I understand the proposed Gresham University, if it ever comes into

existence, proposes to be, which should assist the Inns of Court and their present Council of Education and Board of Studies by taking upon itself a portion of their educational work, leaving the Inns of Court to what I conceive to be their more proper function that of teaching and testing the purely professional acquirements of a practising barister, that is to say, to distinguish between the scientific and the purely professional training. I should propose broadly to effect economy in point of staff, and economy in other ways by taking the scientific training of the future practitioner into the hands of the University and leaving the Inns of Court freer to do that which must be subsequent in time to the scientific training, that is fitting the practitioner for the practical work of his profession. That applies to the profession only ; but there are one or two other points of view from which I should like to look at the question. I think the advancement of legal knowledge is not only desirable for the professional but it is equally desirable for the non-professional men. I think the laymen of England have very great interest in being educated in the laws of their country, not only as regards those who are contemplating official life, I mean magistrates or administrators of various kinds, but also as regards the training, encouraging, and developing that class, which, if I may venture to say so, is almost wanting, or at all events, is composed of very few individuals at any time, that is a class of jurists and legists of high attainment, in the scientific branches of the law.

At the present day, although there are some eminent names, and always have been some eminent names, still there is room for more, and one desires very much in the interests of the nation that that class should increase and have all the encouragement given to it by a legal training, quite apart from a professional future, or the temptation afforded by a professional career.

15,283. Limiting ourselves for a moment to the barrister, do you comtemplate that if the University has a Faculty of Law, the barrister of the future should attend the lectures of the University in the Faculty of Law for scientific purposes, and should afterwards attend for professional purposes lectures at the Inns of Court?—Well, broadly that is my view. For example, if I may take such subjects as Jurisprudence, International Law, Legal History, and Conflict of Laws, and the Civil Law and Roman Law, which are subjects which might well enter into the liberal education of every English gentleman, I think they might very well be made the subjects of the legal Faculty, quite irrespective of the future of the student. But with regard to those matters which are essential as instruments for the practitioner, I should leave those to be taught and tested as at present by the Inns of Court.

If I might venture upon an analogy, I should leave the Inns of Court to do both by way of teaching and testing, that which the Schools of Medicine do for their students in hospitals ; that is to say, I want the legal practitioner first of all to be educated scientifically in law, quite apart from the mere technicalities and details of English law. That, I think, should broadly speaking, be done for him by the University.

I also wish, for the purpose of guaranteeing the public who employ him, that he shall be competent to do that which he professes to do, that is to say, to deal in the concrete with cases as they arise, just as the practising surgeon has to operate, and not merely propound theories of surgery. He has to operate in given cases in the concrete ; he must be well trained to do so, and his fitness to do so must be properly tested. I should leave the latter part of my scheme to the Inns of Court.

15,284. What constitutes the scientific part of the Medical Faculty, that you would give to the University. What in the Medical Faculty is the clinical part that you would reserve to the Inns of Court?—That, broadly stated, is my view.

15,285. You would prefer that to the University undertaking the whole?—To pursue my analogy, I do not think it would be safe to trust laymen to test the fitness of a surgeon to operate upon a limb or even to admit laymen's votes as to the proper mode of conducting that operation. The University's Board would probably contain some non-professional experts, that is, men of science, and men of note in literature, or the literature of the science, who would take a very much broader and probably a more satisfactory view taken of the attainments of the students than would be taken by mere practitioners ; but you could not have that test of the journeyman workmanship and dexterity which is required of the practitioner.

15,286. In the Medical Faculty, as I need not point out, the clinical part, and the testing of clinical knowledge would be included in a University course, because hospitals would form an integral part of the University?—Perhaps I have not made my meaning clear. I apprehend that in a University having a Medical Faculty, the Medical Faculty would not test the student in his dexterity in the performance of a given operation.

They would leave that to be tested by the particular college (the College of Surgeons, for example, in the matter of surgery), and award or refuse their diploma in accordance with the result. I want at all events, as far as possible, the certificate of fitness to practise to be left in the hands of practitioners, leaving all above that, wherever the line is to be drawn, to be tested by a broader test applied by a body of more eminent men.

15,287. Would the Inns of Court require attendance in the Faculty of Law before the student entered upon their courses of lectures?—That, of course, is one of the difficulties that one feels in discussing these questions. One feels that life is too short for perfection. I am stating only my own view. I am not speaking here on behalf even of my own Inn, but expressing my own view. The view suggested is, I think, theoretically the best. But a student's period of study being so short, I am afraid it is necessary according to the exigencies of life that the periods should overlap one another.

I should not like to say that the Inns of Court might not begin their preparation of a student for his practical duties before he had received the stamp of a University degree. Probably he would not have lost time by that. I think the two might well overlap. But I should make the University degree or the degree conferred by the Faculty, a *sine quâ non* to the granting of the diploma to practise.

15,288. What you contemplate, therefore, is that a *modus vivendi* should be established between the Council of Legal Education of the Inns of Court and the Board of Legal Studies of the University, which should make it possible for the student to attend concurrently certain lectures in the University, and certain lectures in the Inns of Court?—I should like to avoid it, if possible, but I do not see my way to avoid it without so prolonging the period of study that it would be impracticable.

15,289. That you think is the practical solution?—Yes, that is the practical solution.

15,290. Turning now to the financial difficulties which exist with regard to the Law Faculty of the University, do you think the Inns of Court would be prepared to endow Chairs at the University?—I am not prepared to answer on behalf of the Inns of Court. I think the Inns of Court have shown their great desire—their great zeal in fact—in forwarding the education of members and students of their Inns, and that the zeal has been manifested in various ways. Whether all their efforts have been wise or not, it is not for me to say, but I do not think there is any insuperable obstacle to getting financial assistance from the Inns of Court towards any well-considered scheme of education.

15,291. In which case the Inns of Court would claim in the new University a certain amount of influence and power over the course of lectures —I think that unquestionably they would make that a condition of parting with any control and exclusive

H. A. Giffard, Esq., Q.C.

18 Nov. 1892.

privileges which they have at present. In my sketch, if I may venture to call it mine, I do not at all contemplate that any of the Inns of Court should part with the control of their property, or their exclusive privileges with regard to calling to the Bar, or disbarring, or their authority over their students, or their members. I should retain all those privileges jealously; and also I should give them a voice, and a preponderating voice too, either by sending members of their own body to constitute a Faculty of Law, or by exercising the franchise with regard to the Faculty of Law, which should give them the preponderating voice in prescribing the course of study, or at all events, securing adequate instruction in the kind of study that they think is most fitted for the future members of their body.

15,292. Only with regard to the future members of their body, and not with regard to all law students?—No, but future members of their body I should like to extend to both branches of the profession.

There are two branches of the profession, and I am not one who is frightened by the sentimental bogey, if I might call it so, of the dread of confusion between the two branches. I think the Inns of Court and the Incorporated Law Society together might possibly take the same view that it was desirable that the same system should extend to the education both of future members of the Bar and future members of the other branch who intend to become solicitors.

But more than that, I should imagine from what I have seen that there would be no insuperable difficulty in the way of the Inns of Court giving all their help to the founding of a Faculty of Law, which should educate and give degrees to those who are wholly unprofessional men; that is to say, open the schools of the Faculty and under the control of the Faculty to the public generally quite irrespective of the future.

I am only speaking for myself, but I am quite sure that there is a growing body of opinion in favour of admitting both branches of the profession to all the privileges of the profession, and also to the opening of schools of legal education to the public, so that whoever may like to benefit by the education may do so if he pleases.

15,293. But you strictly limit what you call the preponderating influence to students in both branches of the profession. You would not claim with reference to students reading for Civil Service and Diplomatic Examinations?—Speaking for myself again, I could not claim that for them, I think.

15,294. Have you given any consideration to the way in which this representation of the Inns of Court should be carried out in the University. Could you give us any idea of how many members you would wish to appoint on the governing body or the Board of Legal Studies?—No, practically I have not given any attention to that, and I am not prepared to state any details of the scheme.

15,295. Then with regard to the amount of liberal general education which you think a law student should have acquired before entering the Faculty; will you give us your opinion about that? Would you be satisfied with a Matriculation standard—I will say the Matriculation standard of the existing University—or would you require a higher standard?—I do not think I should require more than is provided for by our consolidated regulations, which I believe have been put before you as existing at present. I think that a sufficiently high standard for admission to the status of student for the Bar is already exacted.

15,296. Then with regard to the position of outsiders—those who frequent law schools out of London—have you given any consideration to the methods which should be pursued in dealing with them?—I have not travelled outside the authorities of my own University in any way with regard to that question, but I have been in correspondence with some of the professors in Oxford whilst I was an examiner in Equity for calls to the Bar. I examined in Equity for calls to the Bar from 1883 to 1885 inclusive. and there was a strong desire on the part of some of the leading authorities in Oxford to have joint action and to save labour. To put it shortly, what was proposed was this, that instead of requiring every Oxford man who had passed through the school of law, whether he was a Pass man, or whether he had taken high honours, to submit to our Pass Examination when he came up to Lincoln's Inn, the proposal was that we should accept, not their Pass Examination, but their honours degree, as an equivalent for our Pass Examination; and in order to guard against any possible abuse, or getting out of touch with our, perhaps, more practical businesslike minds at Lincoln's Inn, I think they made a very fair offer that the Inns of Court should have the power of selecting one, if not more examiners, upon their board of examiners to take part in their examinations in that school. I was myself in favour of such a treaty, but it did not find favour with the Council of Legal Education. It fell through.

15,297. (*Mr. Anstie.*) Was that proposition from Oxford only?—Yes, from Oxford only.

15,298. Not consolidated?—No, no joint proposal; but if I may answer a question put to me in that way, I should be very much in favour of any such joint action with each University which possessed a recognised Legal Faculty.

15,299. (*Lord Reay.*) You would propose to send an examiner?—One or more examiners to serve on their board and to accept their degree in honours as an equivalent.

I should like to go further if one could obtain sufficient guarantees, but I would accept that proposal.

15,300. For the purely scientific subjects?—Yes.

15,301. Always requiring the student to attend at your professional lectures either concurrently with, or in addition to University lectures?—That is so.

15,302. At this moment some of the subjects which are taught in the Inns of Court law school are distinctly scientific subjects?—That is so.

15,303. Then you would propose when the Law Faculty of the University was established that these lectures should cease; that they should in future be given by the University?—Yes; I do not mean for a moment to suggest that the teaching which is given in the scientific subjects is not excellent and of the highest class, but that is included in my proposal.

15,304. It would be a transfer?—Yes, a transfer.

15,305. Supposing that transfer were accepted by the University, I suppose there would be no objection also to transfer the endowments?—I should personally urge such a course, but beyond that I am afraid that my opinion is not of very great value.

15,306. And in the main we may take it, therefore, that your views are in accordance with those laid down by Mr. Crackanthorpe in his recent article?—Yes, I think so. If I may put my own views a little more into my own language, first of all, I agree entirely with Mr. Crackanthorpe in thinking that the nation is in want of a real system of legal education which would be available for laymen as well as professional men, and I think, as I have already said, that we are in want of a class of jurists as distinguished from practising barristers and judges and ex-practising barristers and judges. I very much feel the lack of men whose authority shall be felt, although they are not and have not been actually on the Bench or at the Bar. I also desire to see future solicitors, that is to say, articled clerks and others admitted for the scientific degree, if I may use the expression, to the same extent of education to which students for the Bar shall be omitted. And I should go further than Mr. Crackanthorpe, who desires a Faculty of Law which shall confer a degree quite irrespective of the license to practice which he proposes, and which I propose to leave to the Inns of Court; but I should, if I had my way, make the attainment of the degree, although there might be concurrent courses of lectures, an indispensable condition to the granting of the

license to practise. No barrister should be called to the Bar who had not satisfied the requirements of a scientific education.

15,307. You wish to raise the standard of scientific attainments?—Yes. With Mr. Crackanthorpe I should leave the Inns of Court in the possession of their present privileges, and of the power of calling to the Bar and disbarring, and dealing with the discipline and conduct, subject to appeal to the judges, as at present, over their students and the members of the Bar. If I might add to that I should wish the scientific and practical branches to be severed in some degree at least, in order to make way for that which has been lost owing to recent changes. I think I said that in my day there were three avenues to the Bar, and not the least resorted to was the one in which, instead of passing an examination or attending a compulsory and prescribed course of lectures, the student, the embryo barrister, learnt his practical work from concrete cases in the chambers of practising conveyancers and practising barristers. The result of recent changes has been this: I will not say a pupil in a practising barrister's chambers is entirely an extinct animal, but he has become a very rare animal. You will find very few pupils indeed in practising barristers' chambers, I think that that loss is a very serious one. I do not exactly see what the remedy for it is, but the loss has not been compensated at all events by any substituted mode of practical teaching. Several suggestions have been made, but none have been adopted. It was foreseen that when you had only an examination to pass in order to qualify for the Bar, and when the subjects of the prescribed examination were carefully set out in a syllabus, and the syllabus of these subjects, and the details of these subjects given, and when, as at present, the student was told that the examination by which he was to qualify should be confined to the subjects mentioned in the syllabus, the college student who only wished to get his license to practise and get called to the Bar would confine himself to that mode of study; and with very few exceptions the training for the Bar does not extend beyond qualifying by getting up the prescribed subjects. That opens up a new field to the crammer, and a very profitable one. The crammer can just apply himself to the student, and prepare him for this examination; but all the benefit that you got by training in practising barristers' chambers and practising conveyancers' chambers has disappeared.

15,308. Would you desire that the Board of Legal Studies of the University should impose on their students preparing for the Bar an apprenticeship?—No, I should not contemplate that at all; I should make their degree as far as they are concerned a degree which was not dependent at all upon the future of the recipient.

15,309. I anticipated your answer, but then might I ask why the Inns of Court should not on their side, and before admitting to the Bar make such a condition imperative?—Yes, I should desire it Then one is brought face to face with the ability which is found in the ranks of men who cannot afford such a course of study. It is an expensive mode of education, and I have no doubt that the consideration of expense has been the main deterrent. I imagine now that if every one who had gone through a practical training in barristers' chambers, and really made use of it, had the choice and could go through his course again he would unhesitatingly prefer that course to any course that could be prescribed if it were equally cheap.

15,310. You do not advocate it as the sole avenue, but rather as one of the avenues, without other scientific training?—No, I think it is too liable to abuse.

15,311. You merely look upon it as a proper auxiliary of the students legal training?—Yes, an auxiliary, but a very valuable auxiliary.

15,312. In the same way as the Faculty of Applied Science makes use of a workshop?—It is too early to judge of this system. It has not had time enough really to be tested by its results. I do not see how a workman is to be a skilled workman without a workshop.

15,313. And without knowledge of the use of tools?—Yes, and the knowledge of how to use them readily and at once. If I might use another illustration I want my hospital for sick patients and I want my student to be watching sick patients. In chambers we used to get sick patients; some of them died and some got quite well. We watched them with considerable interest. we knew their names, and how they were treated, and we knew the sort of thing when we saw it again, and remembered how it had been treated. That kind of thing a medical student gets, and I do not see how he could become a qualified practitioner without; but I am afraid that, except in very rare instances, there is no such training open to the aspirant to the Bar.

15,314. Would you like to add anything?—I think, practically, I have covered the ground. The Commissioners are already in possession of Mr. Crackanthorpe's views, and I thought it right not to travel over the ground again, but any information which it is desired I should produce I shall be very pleased to procure.

15,315. (*Mr. Anstie.*) You draw a very broad distinction between the education which you think necessary to qualify for a call to the Bar and the education which would qualify for the degree; and on the other hand (which a little puzzles me) you say no one should be at liberty to be called to the Bar unless he had a degree. Are not those two views entirely inconsistent?—Well, I do not see the inconsistency. I am allowed to raise the character of both my classes, that is, if I may say so, I want my student for the Bar to be a better educated man all round, and I also want to have an educated man who need not be a journeyman workman; he may have a scientific knowledge without being a journeyman workman.

15,316. We have had a great deal of evidence before us upon the cognate and similar problem of medical education which you have referred to. It has been pointed out to us by many witnesses that it would be a very great advantage to the medical profession to include the licensing requirements in the degree requirements, and to put them as far as possible under the same authority and with the direct object of raising the general character, tone, and educational power of the profession. Your view, as I understand, seems rather to go in the very opposite direction to that, and you would be disposed (correct me if I am wrong), to limit those whom I may call the licensing authorities to the more ordinary and servile parts of professional knowledge, and to cut them off from any direct contact with the broader and more liberal parts. Is not that an objection?—Well, I think my answers perhaps require a little more elucidation. I used the expression "preponderating voice" which your Chairman objected to, but I always contemplated that the Inns of Court should take a very large share, in fact, I should still say so long as they confined themselves to purely legal studies, scientific as well as practical, they should have with other non-professional men a voice in determining the scientific portion of the education, that they should have the exclusive voice with regard to the practical portion, but they should have the preponderating voice (still using that expression subject to correction), in the legal Faculty of the University.

15,317. May I ask you what you mean by "purely scientific"?—"Purely scientific" is not a correct expression.

15,318. Is there anything purely scientific in law?—I should think nothing. I was using it as a more or less accepted vernacular expression for the purpose of describing such things as constitutional law, jurisprudence, and so on.

15,319. Stop for a moment at constitutional law. Would constitutional law be in your view one of those scientific studies which ought to be banished from the Inns of Court and relegated to the academic studies of a University?—I have no desire to banish it at

H. A. Giffard, Esq., Q.C.

18 Nov. 1892.

all, unless the training in constitutional law can be better secured elsewhere; but I want to get more time for the local studies of the Inns of Courts.

15,320. Of course you know very well how very much the time required by the Inns of Court has been contracted of late years. It used to be in the time falling within almost the last generation, I think seven years, then it was five, and now it is three, or perhaps something a little less than three. On the other hand we are told that in medicine the time is advancing, that from three years it has now been extended to five. Is it not possible that it might be desirable, in the interests of legal education, that the time which has now been reduced to a very small time should be prolonged?—There is nothing I should desire more.

15,321. Then your view would be in favour of a prolongation of the required period of legal education?—Yes, always consistently, of course, with the requirementsof the people.

15,322. I do not know whether you would agree to this or not; with regard to certain branches of law studies it would be a reasonable thing to allow those to be prosecuted elsewhere than in London?—Quite so.

15,323. But allowing them to be prosecuted elsewhere than in London, would you think it a reasonable thing that the Inns of Court, constituted as they are, exercising the authority and administering the funds that they do, should not provide for those who could not resort to the other centres of instruction teaching in subjects which would be classed as on the scientific side of legal training? Would you desire that they should not provide, for instance, instruction in public law, which could nowhere be so well taught as in London, in Roman Law and Constitutional Law, to take those three subjects?—I should be very sorry to exclude them from any branch of teaching whatever, except with a view of securing two things; first of all, that the teaching of those branches could be adequately and conveniently had elsewhere; and secondly, that they would gain more—I used the word time—but more and better opportunities for concentrating their attention upon training in the say less scientific portion of their studies.

15,324. But is it necessary, having regard to the circumstances, that they should be relieved from what you seem to consider rather the burden and incubus of providing for the liberal study of law, in order that they may devote themselves to the more purely practical, and, to describe it so, more servile, branches of the study?—I think I have been misunderstood if I have been understood to say that I desire them to be relieved from those burdens. I should like them to take part in bearing them in conjunction with others. They would have an equal share in the burden which would be borne elsewhere, and they would have also to bear their own local burden.

15,325. Would this be a correct statement of your view, that the Inns of Court, should undertake to provide for a complete course of study in law, including not only the practical branches, but also the theoretical and liberal branches, but should at the same time recognise as concurrent with own teaching the teaching of other Universities in matters which belong to the more liberal and scientific side, though not in those which are merely practical?—That represents my view, but not the whole of my view. I should let them have in reserve all their forces in case they could not get the product elsewhere, but for the purpose of economy I had rather see the scientific portion produced elsewhere where it could be more cheaply and I think ably dealt with, and leave them to produce on the spot that which may be more cheaply manufactured on the spot.

15,326. When you say elsewhere do you mean elsewhere than in London?—Yes.

15,327. Is it cheaper for a man who is going to the Bar to be required to go through a preliminary course at Oxford or Cambridge in these scientific subjects and then come to London, or is it cheaper that he should have the opportunity in London of obtaining the whole of that instruction which he needs?—It would be cheaper for a local man in my view to go to the nearest local centre; cheaper for the London man to be educated in London, cheaper for one who was born in Oxford or near Oxford to go to Oxford, and cheaper for one who was born in Manchester or near Manchester to go to Manchester.

15,328. The man must necessarily qualify in London, and must take his instruction in certain branches there. Why is it cheaper to compel him to go to Manchester or some other place for the other branches? We have to apply ourselves to actual conditions?—The workshop must be in London, I agree.

15,329. Would you only have a half workshop there?—I should have a workshop as distinguished from the training in what I have described as the more scientific portion of the training. I should have my workshop necessarily in London. It would be equivalent to the London Hospital.

15,330. Do you exclude London from having a scientific school?—No, I am desirous of founding it in addition to the other Universities.

15,331. Then why should not the Inns of Court constitute that school and maintain it?—They have not yet, I think, approached anything like the constitution of a University as distinguished from a school. I do not think the Inns of Court do more at the present moment than lecture and give instruction. They do not for a moment assume the functions of a University.

15,332. In what sense?—In the sense of conferring a degree, and I say a degree on all comers according to the standards of the Universities.

15,333. Would you not agree that the great point is not the conferring of a degree so much as the giving of an education of which the degree is the symbol?—The evidence of instruction is the marketable thing, which alone, I am sorry to say, in these days is the thing valued.

15,334. That may represent the marketable side of the question, but I should like to know a little more clearly on what you ground your view that the Inns of Court should not provide that which they have for many years past been accustomed to provide—instruction in the higher, more liberal, and more scientific branches of the study as well as the more practical?—I confess that my view is that part of the funds applied in that way would be better applied in conjunction with other bodies, that is to say, in conjunction with those who, together with the Inns of Court, would, according to my sketch, form the Faculty of Law in the University.

15,335. Faculty, we know, is a very vague term, but I will put it in that way. What I am suggesting is, why should not they be substantially the Faculty of Law in the University?—I wish them to be substantially the Faculty of Law in the University. That is my view. Then that comes round to my phrase about having the preponderating voice.

15,336. Then what you desire would be in effect that the Inns of Court as licensing bodies should retain, as indeed they must retain, in their own hands the determination of the requirements of the license, but that in addition to that they should enter into and form part of the constitution of a University body which has to confer degrees, and that for the instruction required for those degrees they should themselves provide the means?—That is entirely my view.

15,337. With, of course, the implied assumption that, providing the means and providing the instruction they would have a very effectual voice in determining what it should be?—Certainly.

15,338. Then you would not agree with Professor Westlake that the professional school should be wholly extinguished and destroyed?—I was not aware until this moment that Professor Westlake entertained that opinion.

15,339. Do you agree with it?—I do not agree with it at all. Of course I have not heard his reasons

for maintaining that view. It would be presumptuous in me to question it.

15,340. He thinks there ought to be one school of law in the Metropolis, and that that school of law should provide instruction in all branches, scientific and practical, and that that should be a University school and not a professional school, and that the existing professional school of the Inns of Court managed by the Council of Legal Education, should cease to exist?—I do not agree with that view. I prefer the expression which the Chairman used that a portion of the school should be transferred to and fused in a larger and more important body.

15,341. Now with respect to the amount of transfusion or absorption of the degree and the method of it, I understand you to say that you have agreed that the Inns of Court should, like the Medical Licensing Corporations, retain in their own hands the determination of the requirements of the license. But retaining that, might not this licensing authority, or these licensing authorities co-operate with, and form a part of the body which gives the higher education and confers the degree. I think you agree that they might?—Yes I agree with that.

15,342. I want to ask you whether you had considered the full effect of what I understand you require—that the degree should be a condition of the license—is not that rather inverting and distorting the practical problem. Is it desirable, or would you think it practicable, that all persons who are to be licensed to practise, should be required to obtain a degree, and on the other hand, would it not tend to the lowering of the degree, and making it of comparatively little educational value, at least in the higher ranges, if you identified it with the license?—There would be a temptation to the University to do what I hope the University would be strong enough to resist.

15,343. We have to deal with practical probabilities, and do you not think that requiring the degree as a condition of a license would lead to reduce the degree to a very nominal value?—Not if the conferring of the degree was in the hands of a body which was partly to be infused with the larger spirit that I think would be infused into it by the admission into the board of men, who although to some extent the same, would not be identically the same, as the body who conferred the licence to practise.

15,344. Will you let me draw your attention to the fact that in medicine (as to which we have had a great deal of evidence) those who are most interested in the promotion of medical education, who, I may say, take the most scientific and highest view of it, apprehend two difficulties. One is that the divorce of licensing from University graduation may tend to lower the license, the other is that the identification of license with graduation will tend to lower the degree. So I think some rather favour the idea that the licence should be kept distinct from the degree, although the bodies who confer the license and the degree might be very reasonably and wisely brought to a great extent into harmony of action. I do not knew whether you have considered that point?—I do not profess to say that I do not see some possible danger in one or other of the directions, but I do not see that it is such an appalling danger, that they could not guard against it.

15,345. We have not only to deal with appalling dangers but practical dangers?—I should not be prepared, I think, to suggest that it was a sufficiently practical obstacle.

14,346. You would be prepared to say that no one should be allowed to practise at the Bar without having obtained a degree?—Yes, and I think that would raise the tone and character of the members of the Bar. That is my object in insisting upon it. From my own point of view it is what I should suggest—perhaps it is a little too ideal.

15,347. At any rate would it not make in the direction you desire, if we could charge the bodies which now have these licensing duties with University functions also?—I think it would make in that direction, but I think it might be checked.

15,348. With respect to the bearing of the scientific subjects upon practical law, and practical law upon scientific subjects, we had some evidence given by Mr. Crackanthorpe, as to which a degree, and merely theoretical or verbal formulæ, supposed to contain legal ideas, might really be of no service to the person who committed them to his memory, and would probably be of no service unless he knew the nature of the facts to which they were applied. You seem to think that the scientific branches of law ought to be taken, as it were, at a gulp, swallowed and disposed of, and that a man should then with that inside him (whatever it was) address himself to the directly practical problems of law. Would that be the best way of infusing into, what I may call the professional mind, a truly scientific way of dealing with the subject of the law?—I do not think it would be if I have understood you. I contemplate that my student on the scientific side, at all events, will not fall at his jump, but continue on his horse on the other side and go on with his science. That is to say, he will go on imbued with the love of the thing; he will not drop it, but will continue his scientific development side by side with the practical workmanship.

15,349. The educational powers of the University are confined to a certain extent to requirements which it makes and not merely to the opportunities which give?—That is quite true.

15,350. We have had some evidence given by a professor of the Johns Hopkins University that the scientific and the practical study of law ought to go on side by side, agreeing with Mr. Crackanthorpe in that, that the so-called scientific knowledge of law might be merely an empty and useless study unless the student was at the same time conversant with the practical problems of life. Would that be your view?—I think there is a great deal to be said in favour of it, but I prefer them in the order I have mentioned, first of all on the ground that it is that in which the student's mind is more apt to receive them after his University training. What I may venture to call the scientific teaching is more allied with what we call our extra course in ethics, politics, moral philosophy, and so on. It might overlap the extra University course to a great extent. I have been an advocate for a very long time of discarding some of the books which we use for the final classical school called *Literæ humaniores*, and introducing into the honours syllabus some of the books which would enter into anything like a school of education in jurisprudence and the history of law as distinguished from the teaching of any particular body of laws; and, although I have heard strong opinions expressed the other way, I have never been convinced that it was impracticable to make our School of Philosophy include many of the subjects that are now relegated either to another school altogether, or left to be studied till too late.

15,351. I understand you to say that you would agree that in the London school, whatever it was, those subjects would still be pursued?—Yes.

15,352. And may I add that your opinion is that those subjects should, if possible, be continuously pursued, and not abandoned at an early stage of the educational career?—Yes, pursued not only up to the time of licensing to practise, but through life.

15,353. We are supposed to spend our lives in learning; but, independently of that, at least up to the point of taking a degree, would it not be desirable that that should be pursued?—Certainly.

15,354. Then you would not be desirous that the degree-giving authority should content itself with insisting that a man should have studied certain abstract subjects with which he had then ceased to have commerce?—No, certainly not.

15,355. You would desire that he should be examined in those subjects, that his attainments should be real existing attainments at that time?—I do not wish to multiply examinations, but I wish to credit average human nature with having average human

H. A. Giffard Esq., Q.C.

18 Nov. 1892.

memory; and I think a test at every stage of a man's career of everything he was ever taught is disadvantageous.

15,356. I understood you to say that you would not allow in the degree a certificate of his having at an early period of his career studied abstract subjects. How would you attain that otherwise than by some method of examination?—I think if it is required to test them again, they should be tested; but although I would not require them, I should trust the average man to go on with his abstract studies without applying a test at every moment of his life, or any subsequent test.

15,357. Do I understand you to say that your former answer did not express your view upon the subject, and that you would be willing that a degree should be given upon a certificate of a man having, at an early period of his educational career, studied abstract subjects?—I am afraid I have not fully grasped what you mean by abstract studies.

15,358. By abstract studies, I mean those not immediately related to practical life, jurisprudence, analytical jurisprudence, and historical jurisprudence. (*Professor Sidgwick.*) Did you mean to say "degree"?

15,359. (*Mr. Anstie.*) Yes, I am only speaking of the degree?—I would not accept anything as equivalent to the degree of a competent University. If you are speaking of a certificate of competence, something short of a degree, I should say no; but if it is the degree of a recognised University, a degree in what you call the abstract subjects, then my former answer was misconceived. I did not think you were addressing yourself to that kind of certificate.

15,360. Then how does it stand, do you say you would take the degree of any other University, wherever obtained as forming one of the necessary elements of the degree of this University?—Oh no, I take it as an equivalent for it and an alternative for it.

15,361. But if he has the degree of one University, why does he want the degree of this?—I do not wish him to have two degrees.

15,362. There is an objection to two degrees, is there not?—Yes.

15,363. If a man is in one University, he should stick to that University?—Yes; if he had got the degree once, I should ask that that degree should be accepted as what I call my *sine quâ non* wherever obtained. I do not mean that if he had got the degree at Oxford or Cambridge, he should come to the proposed Gresham University, and get it over again.

15,364. That ought to be enough?—Quite enough.

15,365. But does not that again throw some difficulty in the way of uniting the degree and the license?—The difficulty of making one a condition precedent to the other, you mean.

15,366. Yes?—Does it, if what I call the recognised University can be ascertained? I suppose them to be ascertained.

15,367. You have seemed to me to present to us rather a complicated problem, a license which is to depend upon a degree somewhere?—Yes.

15,368. That degree might be a degree at Oxford or Cambridge, or Victoria, or it might be in London; but this London degree is to be something which is to be distinct from the course of study governed by the Inns of Court, for which they are responsible, but yet it runs parallel with that for which they are responsible?—Perhaps it involves this: that I am requiring my Inns of Court to have a preponderating voice in all the Universities the degrees of which they recognise. But I do not go so far as that. I expect that they would soon narrow themselves down to this view, that is to say, that degrees in the scientific portion of a man's training would only be recognised by the Inns of Court subject to conditions imposed by themselves.

15,369. You do not attach much weight to what has been called by several witnesses before us the needs of human life in respect of qualified practitioners. You think they are identical with the needs of educational theory?—I should like to hear the context in which the words "needs of human life" were used before I give an opinion.

15,370. Let me put this case to you. It is common knowledge that it is a very usual thing among solicitors for a man to be presented with his articles after a certain time of service. Such a man as that would be very unqualified to pass anything in the shape of a degree examination. Would you say that such a man ought not to have the power to practise?—I should say yes. I think that the needs of human life are not the same needs for everybody; and although I should be very sorry to exclude even the poorest man——

15,371. It is a question of circumstances?—Yes, a question of neediness and circumstances; and I should rather provide for him by finding him, through the means of exhibitions and scholarships, and such rewards, the mode of completing his education, than lower the standard of what I think is the necessary qualification.

15,372. Then you would desire that a man of 40 or 50 years of age should go through a course of instruction in the scientific branches of law and take a degree. You really think that would be advantageous to the community?—A man 40 or 50 years of age?

15,373. Yes; that is the sort of case you and I are familiar with. A man spends many years of his life in the very necessary performance of his duties, and he perhaps becomes an accomplished lawyer within a certain range. Then he is presented with his articles, and he becomes then a man capable of practising. You would desire that, to enable such a man to practise, he should go through a new course of lectures on Roman Law?—I find it is very difficult indeed to deal with such an exceptional case. I do not wish to shut the avenues which have been recently opened to members of the other branch of the profession to join ours.

15,374. I am not speaking of that. Confine him to his own branch of the profession, if you like?—I thought you were alluding to such a case.

15,375. No, I am merely alluding to the case of a man who is presented with his articles by the solicitors or by the firm in whose service he has been. Would you seriously desire that that man should go through a course of lectures on Roman Law before he should be competent to practise on his own account?—It is a hard case for that man.

15,376. But you are not startled?—No; we must be prepared to meet some hard cases.

15,377. (*Professor Sidgwick.*) If I understand you, you think that the Inns of Court should retain three functions. First, they should have the sole function of examining in whatever is required to be examined in, supplementally to the law examinations of various Universities, in order to justify them in granting their license. That we may call the professional examination function; and that they are to exercise alone without any connexion with the University. Then they have, in your view, still to retain, and, if I understand you rightly, to develop further the function of organising teaching in strictly professional branches of study which you would not regard it as desirable for the Law Faculty of the University to include. In that, also, they ought to act alone; it ought to be organised by them independently, as now by the Council of Legal Education. But then, thirdly, you think that they ought to combine with other elements a University Law Faculty in organising the teaching of scientific branches of law, and that so combining they should supply a preponderant element, but they should not supply the sole element. Am I right?—Yes; I think that correctly summarises my view of the proposed relations of the Inns of Court.

15,378. Then with regard to the latter part, in which they are to supply a preponderant element, could you at all tell me how you conceive that the other element, in London, for instance, would be supplied?—There are men of the eminence of Austin—of course he was a qualified barrister, but not a practising barrister; or

take, say, Mr. James Bryce at the present day—I am taking a concrete instance for the purpose of illustrating my meaning—men who have not been practising barristers in my sense, but who, nevertheless, are men, not only of widespread, but world-wide fame, whose opinions in guiding and directing education of the scientific kind would be invaluable, and ought not to be thrown away.

15,379. I think you suggested that if the Inns of Court were allowed the place you would assign them in the Law Faculty of the University, you yourself thought it desirable that they should contribute to the endowment of Chairs?—I certainly think so. That is certainly my personal view.

15,380. That they would, in fact, transfer to the University the Chairs that they have now established in the scientific subjects, and probably would be willing to increase, or, at any rate, you think it would be desirable that they should add to their number?—Speaking of my personal views, I should advocate in every way, not only the transfer, but the increase of professional endowment.

15,381. Do you conceive that if that arrangement were made the Inns of Court would allow the appointments to those scientific Chairs to be made by the body in which they had this preponderating share, but in which they combined with other elements?—If they transfer the endowments to a body in which they had the preponderating voice, I do not think they would be unwilling. At all events, my view is that they ought not to be unwilling.

15,382. Your view would be that they ought not to try to keep the appointment entirely in their own hands, but to submit them to the Board?—Yes, which would share their functions with them.

15,383. If I understood you rightly, you stated as the subjects that to your view would be handed over to the University Faculty, Jurisprudence, Constitutional Law, International Law, Legal History, and Roman Law?—Civil Law, including Roman.

15,384. What would be your view as to the subjects that would remain. I suppose the University Faculty would have a professor of English Law, possibly more than one Reader in English Law, in different departments; since the fact that English Law had so close a relation to the needs of the practitioner would not render it undesirable that it should be taught in the University from a University point of view?—To some extent I apprehend the subjects would overlap one another. I do not think it is practicable to build a nigh wall, and say it is a wall which nobody shall pass, and one upon which no creepers shall grow over so as to appear on the other side.

15,385. Then your view is that a certain number of subjects may be regarded as completely academic, and those would be handed over altogether; but there would remain other subjects in which the two bodies, the University body and the Council of Legal Education would carry on teaching side by side, and to a certain extent overlap it?—Yes.

15,386. And you anticipate no difficulty could arise from bringing the Inns of Court into this professional relation to one University. You think it would not prevent them from maintaining with regard to, say, Oxford and Cambridge and Victoria the harmonious relations which you would desire?—I confess I had not considered the possibility of any friction between those bodies in consequence of what I suggested.

15,387. (*Mr. Anstie.*) Might I just ask you whether you have perused the evidence given in 1846 by Professor Amos and others?—I have not read the report of Professor Amos' evidence. I read the report of the Committee of the House of Commons.

15,388. Not the evidence?—Not the evidence.

15,389. (*Professor Sidgwick.*) Do you happen to know anything about the method of teaching law in the United States?—No, I am sorry I have not studied that.

15,390. I have been informed that at any rate in the view of some teachers while it is no doubt desirable that the students should learn the application of the principles along with the principles, still an ordinary student can be more easily made to grasp the principles if the applications are not merely those that would come in his way by seeing ordinary remunerative work, but are carefully selected and prepared by the teacher with a view to illustrate the principles. Does there seem to you to be anything in that view?—As applied to the study of law, you mean?

15,391. Yes. Do you think that for the purpose of education pure practice is preferable to practice carefully selected and prepared with a view to educational ends?—It is very difficult for me to answer a question of that kind. Selection no doubt to a certain extent would go on. To take my practising barrister's chambers, there was as far as possible a broad division made between the advanced student and the mere beginner, but that there should be a selection of prepared phenomena which should succeed each other in their natural order, I do not think was possible there. I do not see how, except in such a very wide area perhaps as the whole of the chambers of all the judges put together, there could be any selection made analogous to the one you are speaking of.

15,392. May it not be said that the training of a Roman lawyer was, as Sir Henry Mayne suggests, more effective in securing a full grasp of principles because it was exercised on inventing cases?—I should like that very much indeed in arresting the student's attention and giving him *quasi* concrete cases to work on.

15,393. It might be made much more economical if it could be done in a class-room, and might not that, for some, take the place of the apprentice work? Since I think you said the expense of that would be so great that it would be rather hard to impose it at all?—Yes, I think it is the next best thing to the actual concrete instance, but it requires such skill in the teacher, such adroitness, and such wakefulness, that I almost despair of securing the services of the right men.

15,394. (*Mr. Anstie.*) May I put it to you in a definite form. There are books written on English law, which are substantially digests of cases. Would you compare that with the practice in chambers, and say whether you think one could be an alternative to the other?—I do not think they could be alternative.

15,395. What you ask for is something more practical?—Yes, much more practical; a sort of practice in which the attention of the student is arrested by a living thing, a thing which is not an imaginary thing, and not what you may call a historical thing, like the report of a case, but an actual case, which is either going to live or die, and which depends on the treatment applied to it whether it shall live or die. You might exhibit diagrams of patients in bed. But that would not, in my opinion, be half as instructive as watching the patients and their actual treatment day by day.

15,396. (*Lord Reay.*) I suppose we may take it for granted that the Inns of Court have recently themselves shown appreciation of the needs for improved legal education by the reforms they have introduced in their own course of studies?—Undoubtedly. I am quite sure the Inns of Court have been unanimous in showing such appreciation. Whether their efforts have been directed in the best way or not, I am quite sure that their zeal is unquestionable, that is to say, that they would appreciate any effort and appreciate any practical school provided they could work out what they think the best result, and do it generously. That is my conviction with regard to my own Inn, and I think it is the same with regard to the other Inns of Court.

The witness withdrew.

Adjourned to Wednesday, 23rd inst.

Thirty-fifth Day.

Wednesday, November 23rd, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
The Rev. Canon BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

Rev. S. A. Barnett, M.A., and J. E. Monk, Esq.

23 Nov. 1892.

The Rev. S. A. BARNETT, M.A., and J. E. MONK, Esq., examined.

15,397. (*Chairman to the Rev. S. A. Barnett.*) What position do you occupy at Toynbee Hall?—I am Warden of Toynbee Hall.

15,398. That is you are the head of it?—Yes, I am the head of it.

15,399. Will you tell us first the present condition of Toynbee Hall and anything about its history that you would care to have put upon the notes, and also the particular kind of work that it is doing?—Toynbee Hall was founded in 1883 as a sort of residential club in which members of the two Universities might live and make friends with their neighbours in East London and do such social work as came for them to do. During these years 67 men have lived there, some for periods extending to seven years, and some for a year.

15,400. Have you been connected with it from the beginning?—Yes, from the beginning. Of course living in this sort of way the men have got to understand very closely a few of the needs of East Londoners, some of them in clubs, some in connexion with the Trade Union movement, and some in connexion with educational work. On account of the connexion of some of the men with educational movements, Toynbee Hall has itself become a centre of education. University extension classes have met there and there have been special classes. I think there have been 40 or 50 classes going on of various sorts and 1,000 or 2,000 students attending. I am not quite certain of the figures. Our experience is that there is a large number of people in East London, men and women, who are willing to make sacrifices to get knowledge; willing after their work is finished to go to classes which are not, as we call them, bread-earning classes, but classes which offer knowledge for knowledge's own sake. We have found that there is a large number of men and women who are willing to come night after night and year after year to get knowledge. We can offer, as one example, the way in which Dr. Gardiner has lectured there for many years continually with a good class. As another example, we may say that Dr. Fison, a very excellent teacher in electricity, went on for two years, giving teaching to a large class; and this year he was so interested with some of the members that almost voluntarily, at all events, for a very small fee, he is coming down to teach 30 or 40 men the higher knowledge, he found them so anxious to acquire. On one side we find there is this regular demand for higher teaching, for teaching which makes for life rather than livelihood; and, on the other hand, we find that the supply of lecturers is very inadequate. We have only succeeded in getting those who as Dr. Gardiner and Dr. Fison are moved by enthusiasm to pass on their knowledge. It is impossible for any society to keep going on with teaching of the higher class without a much larger supply of teachers.

15,401. There are no fees, of course?—There is a registration fee of 1*s*. If Dr. Fison were not an enthusiast he would not come down to teach voluntarily for a whole year. So while we mark on the one side this demand, we see on the other side a very inadequate and insufficient supply. There are not the men to come in voluntarily for this sort of work. If a teaching University were started we should hope to it put high-class teaching in London within the reach of night students, so that every one might succeed in getting the highest teaching.

15,402. Your present funds are provided by voluntary contributions?—Yes, in a very uncertain way.

15,403. You would wish the public to support it?—All we say is, that somewhere in East London classes of this sort ought to be started. We are not here to urge the claims of Toynbee Hall for anything.

15,404. With regard to your exact position, in order that we should fully understand that, and the work you are doing now, and the way you are doing it, let me ask you this: Have you any examinations of any sort or kind?—Yes, in connexion with the University extension. Our highest classes are worked by the University Extension Association in Toynbee Hall. The subsidiary classes are not examined.

15,405. And you get certificates for a year's course and continuous certificates for a four years' course?—Yes, we work with the London scheme.

15,406. Does it ever lead up to a degree of any sort or kind of the London University or any other University?—(*Mr. Monk.*) I know of no instance of its having done so.

15,407. (*To the Rev. S. A. Barnett.*) There is the same continuous system that there is in the University Extension Association?—Yes. The University Extension Association occupies our rooms for four nights a week.

15,408. You work entirely with them?—We work with them.

15,409. And that ensures, as far as I can remember, a really good amount of continuity?—Yes. We have as well a system of students' residences, 30 or 40 men students live in houses in connexion with us, who are under a censor of studies, and who do read for degrees under the guidance of this man.

15,410. Do they pay anything for lodgings?—Yes, they pay their own way. Their rents pay the rents of the house. They pay 7*s*. a week for room and attendance. We provide the tuition.

15,411. By professors who come voluntarily?—Yes.

15,412. Then you come really to endorse the demands of the University extension people?—I do not know that. I am not quite clear enough about what their demands are.

15,413. You do not know anything of their evidence?—No. All we want is higher class teaching

established continuously in such a neighbourhood that night students may get the benefit.

15,414. And you think that the University ought to undertake this and do the work that you are now doing?—I think it is likely to do very much more than we are doing on those lines.

15,415. If they took it up there would be no room for you any longer, and you would be willing to go?—Yes, I hope so.

15,416. You think that the system of giving higher education, which this is, to all comers, free of expense, is one that is not open to any objection?—I cannot see any objection at all.

15,417. Somebody must pay for it. It would be either the endowment of the University or a public grant?—We, if we are University men, got the benefit of it at Oxford and Cambridge. We got the benefit of building and endowments which we never paid for.

15,418. But there is hardly anybody there who does not have to pay something?—They pay very much less than the cost of the thing.

15,419. Your only demand is that in some form or other the new University should take up the work you are now doing?—Or trying to do.

15,420. You do not go into any detail about the degree or the continuous course counting towards what would be the equivalent of residence in a college, or anything of that kind?—I do not think we are qualified to speak upon that. We are only qualified to speak upon our experience.

15,421. You speak from great experience, extending over some time?—Yes.

15,422. You say there is this great demand for education of a higher sort?—Yes.

15,423. And a growing demand?—Yes, a growing demand for it.

15,424. You think this ought to be taken advantage of?—Yes.

15,425. Is this equally with both sexes?—Both sexes.

15,426. In the same degree?—It depends upon the subject. In the science subjects men come more forward; in the literary subjects women come more forward.

15,427. Do they do it with the hope of teaching?—I think not. I think they are coming merely to fill their lives.

15,428. You have given us, or are prepared to give us, figures in the way of the actual increase of the movement, and the way in which it is taken advantage of?—Yes.

15,429. What sort of class exactly does the bulk of the attendance consist of. For instance, what sort of wages do they get?—(*Mr. Monk.*) The majority of them are teachers and clerks at wages averaging (of course it is only an average I could put) say from 70*l.* to 120*l.* a year. We have a few head-teachers; then we have in our science classes many workmen, who come direct from their work, both in our University extension classes, and our smaller reading parties, which help them just as well.

15,430. Then you have entirely to do with those classes, whether clerks or artisans, whose daytime is fully occupied in other business?—Yes.

15,431. I think I have now got very much what you want to impress upon us, and with regard to any details as to the working of the system they will be found in the paper?—Yes.

15,432. (*Lord Reay.*) How would you differentiate your movement from the University extension movement?—Of course the Universities Settlements Association has an entirely different object. We simply exist to enable University men to live in the neighbourhood of the great industrial centres. That is the reason of our existence, and it is because University men living in the neighbourhood of great industrial centres have found their wants that we have come to do what we have done. We say that in our experience, which is a working experience, the working men do desire this higher teaching. How that desire for higher teaching is to be met we do not know, but we think the present supply is inadequate. We do not think the University extension supplies all that these people demand. We want a much more regular and continuous system of teaching.

15,433. It is the regularity and continuity on which you lay stress?—Yes.

15,434. And you would look to the new University to provide these?—That is what we should look to. Our ideal would be for the University to start in the centre of East London a system of high class teaching available for night students so that they might come and get the teaching which would fit them to enjoy life.

15,435. Do you attach importance to the residence in the East End of the gentlemen who undertake those duties?—No, not as long as good teachers come down.

15,436. The settlement question is not the principal question?—No.

15,437. The principal question is the attendance at meetings and lectures?—Yes. We say that what East London wants in its midst is a system of high class teaching, and it should not be put off with technical teaching or merely bread-earning subjects.

15,438. Do you contemplate the transfer of your work to the new University?—We have not really realised that, but, of course, if the new University came we could not carry on the present system. The presidents might have reading parties, but we should give up the attempt to provide the high class teaching which we now carry on.

15,439. The resident teachers in Toynbee Hall might be utilised as advisers or tutors?—Yes, or if the new University liked to say, "We will "make Toynbee Hall our centre and use your lec- "ture rooms and laboratories;" we would say, "Take them and use them." That would be, of course, a matter for the new University to consider.

15,440. Some form of affiliation would answer your purpose?—We would not even ask for affiliation. As far as the University was concerned, if they liked to come and use the rooms they would be welcome to do so.

15,441. Have any of your students ever taken a degree?—(*Mr. Monk.*) From the students' residences that are grouping themselves round Toynbee Hall, which have been filled by students from the University Extension classes at Toynbee Hall, three have, at any rate, within the last three years taken their degree.

15,442. (*To Mr. Monk.*) At the London University?—Yes, at the London University; and there are at the present moment preparing for the London degree nine men in residence. These are men who are engaged during the day time earning their living and taking their course in the evening.

15,443. Which degree are they reading for?—The London B.A.

15,444. (*Rev. Canon Browne to the Rev. S. A. Barnett.*) You ask that there should be high class teaching at a centre in East London in the evenings. Is it your belief that men employed during the day for a good many hours, and in the evening having work of a thoroughly University kind given to them, receive from that the benefit which a man reading in the University under very different circumstances would receive?—Men such as Dr. Fison answer, yes. He has taught workmen in this sort of way, who come in night after night, and now after two years 40 have been found to go on regularly to the higher subjects; they went on through the summer.

15,445. I had the honour once of presiding at Dr. Fison's opening lecture on Magnetism. Have you heard that lecture?—Yes.

15,446. Would you agree with me that it is inconceivable that at the highest University in the world there could be a better introduction than his opening lecture on Magnetism?—I thought it was admirable.

15,447. You and I know what Universities are, and you cannot imagine yourself a better introduction to the Science of Magnetism than is provided by that lecture?—I cannot imagine anything better.

Rev. S. A. Barnett, M.A., and J. E. Monk, Esq.

23 Nov. 1892.

15,448. At your University did you ever get anything better ?—No.

15,449. Do you know of the existence of anything better than that ?—No, I do not.

15,459. Then you rather adopt Dr. Fison's answer yes, and you say you can give University teaching with the University spirit and the University advantage to men who can only give themselves to it in the evening ?—Yes. I quote Dr. Fison because he has a distinctly working man audience, and they follow it enthusiastically. I might almost say the same for Dr. Gardiner.

15,451. You cannot say that there is the same continuous growing grip in literature that there is in science ?—In 1885 Dr. Gardiner commenced with 123. That was in the spring of 1885. Then autumn of the same year, 160. 1886, spring, 122; autumn, 192; 1887, spring, 160; autumn, 128; 1888, spring, 107; autumn, 125; 1889, spring, 135, autumn, 151; 1890, spring, 137, autumn, 201; 1891, spring, 160, autumn, 191; 1892, spring, 138, autumn 140. That will show what hold he has upon the people.

15,452. You said, and my knowledge of the University extension, which is large, is entirely in accord with what you said, that the fault of the University extension was that it was not regular and continuous. Do you suppose the University extension system wishes to be regular and continuous ?—Yes, but of course there is a need of funds to keep it going and a need of men.

15,453. The difficulty, then, is not in the system but in the response to the system ?—Yes. I think if the University extension system were backed up with funds so that they could provide for unsuccessful classes it would be much better. For instance, the University Extension Society would not provide Dr. Fison for 40 men.

15,454. It is only the question of there being sufficient funds ?—Yes.

15,455. I am not asking these questions in the interest of the University Extension Society but in the interest of evening teaching. If some system, whether University extension or not, really is able to provide regular and continuous teaching, which the University extension could do if it had funds, that is all you ask ?—Yes; we do not care as long as we get the high class teaching in East London.

15,456. The one thing you can ask for is continuous and non-paying courses of lectures, because there is no money ?—Yes.

15,457. Would you welcome a visit from any of the Commissioners to Toynbee Hall ?—Yes.

15,458. (*Mr. Anstie.*) I hardly understand how you think Toynbee Hall is going to be useful in the future, except by providing lecture rooms in which other people may undertake University extension work ?—Toynbee Hall was founded not primarily to be a centre of education; it was founded to enable University men to live in East London. Its most important object has been to enable University men to come in contact with working people. It is only accidentally that they have been able to come in contact with education. Our view is that there is a large number of men in London willing to go in for high class teaching, but in the future if a University is established and it makes a fine centre there with buildings and so on, there will be no need for us to give any more teaching.

15,459. The difficulty in this matter is amongst other things the question of ways and means, and you seem rather to contemplate some University being established which will be in possession of unlimited funds, and which will be able to put down buildings and maintain a staff without further assistance in any portion of London where it may be needed. Is not that assuming rather too much ?—I do not think a University will do much good if it has not got some money.

15,460. This may mean a great deal ?—You must cut your coat according to your cloth. If you can give us a good big coat we should like it all the better.

15,461. Must it be assumed that Toynbee Hall would not be willing to maintain its independence and its autonomous action in connexion with a University which was charged with the responsibility of the higher teaching of the Metropolis ?—I am not speaking for the Council. If a teaching University were to say:—"We want "rooms and apparatus and if you will provide "rooms and apparatus we will provide continuous "teachers," I imagine the Toynbee Hall people would welcome such a proposal. They would be quite willing to put their resources at the disposal of any teaching body just as at the present moment they put their resources at the disposal of the University Extension Society. They simply say here are the rooms free of rent.

15,462. You regard the University extension as not up to the level you desire to maintain at Toynbee Hall. Am I right in thinking that ?—As I understood Canon Browne just now the University extension does not provide what I believe is wanted in East London.

15,463. You want something more than is provided by the University extension system ?—Yes, we want high class teachers continually at work, so that a man might come in and go on for three years in continuous study.

15,464. Am I not right in saying that the University extension system even as worked now is only worked by the self-sacrificing devotion of a great number of persons in the various parts of the Metropolis and committees organised by them ?—In my experience it is, yes. We depend very largely on the devotion of Dr. Gardiner and others.

15,465. Then this system depending so entirely on the voluntary action of individuals who are interested in spreading the advantages of education are you not imposing upon the University of the future a task which the University, as such, will hardly be able to perform ?—I cannot realise it as possible for voluntary action, but it seems to me a simple thing for the University of the future.

15,466. Has any University ever done so yet ?—That is no reason for not trying something.

15,467. But if we could find such an instance it might help us ?—There never was a 20th century before.

15,468. Then that is the only solution you afford us, that there is to be a University which is to get money, which, we were told yesterday, would amount to not less than 50,000*l.* a year, and which is to supersede all the voluntary action of Toynbee Hall and the University extension centres ?—I do not know whether it is to supersede all the voluntary action. I think it would give a much better basis on which voluntary action would work.

15,469. I am suggesting that the co-operation of the University might be exceedingly valuable; but I understand you to suggest that it should not co-operate but supersede ?—I think it must supersede in the sense that it must provide what is not at present provided, but there will be always room for voluntary action.

15,470. This whole system, of course, however valuable it is, and we may assume that it is very valuable, depends for its ultimate regulation upon the University system, and on the University level, and it is by having that University level as its measure of learning and knowledge that it is able to do what it does. May I not take that to be so ?—Yes, I think so.

15,471. Now, considering that the University system must be based mainly upon certain well-understood methods, "well-understood" methods, mind, I attach a great deal of weight to that, and that the University extension has to adapt itself to different circumstances, and to use, in many respects, very different methods, would it not be necessary, or at least desirable, that a University in

dealing with that class of education should have some other body to rely upon?—Than ——

15,472. Than itself; somebody intimately connected with the management of education of that kind; a body consisting of people who had the local interest and the educational experience that is required for enabling a system of that kind to be effectually worked in connexion with a University?—You mean, that supposing there were a teaching University established; supposing that teaching University determined to have outlying lecture rooms in various parts of London, whether those outlying lecture rooms should not be in some sort of way under the control of local committees?

15,473. You could have them at Toynbee Hall?—I do not know whether we could have them at Toynbee Hall. I agree with you that they must have some touch with the locality. I do not know what Mr. Monk thinks of that. (*Mr. Monk.*) My suggestion rather would be that if it were possible for the teaching University to place in different parts of London teachers similar to Dr. Gardiner you would be able probably to group around these teachers bodies of students some of whom might establish students' residences, with the University teacher as a constant centre.

15,474. (*To the Rev. S. A. Barnett.*) I may put it perhaps in this way. If we are to take a responsibility of this kind must not the University depend to a large extent upon, and hold responsible for its work, local organisation a little outside its own body?—Do you think more than the School Board depends upon local managers?

15,475. That is rather a difficult analogy. The School Board might be said, so far as merely educational questions are concerned, to be as well without its managers. That is a matter in controversy?—I think the School Board is better for local managers, and I think the University would be better for something of the same sort.

15,476. The managers are to a considerable extent an independent body?—They are nominated by the School Board.

15,477. They are nominated by the School Board, no doubt?—And they are pretty well kept in check.

15,478. Would you desire that these centres on which something very much more fine and broad than elementary education depends, should be only answered for by a body having so small a degree of responsibility as the School Board managers?—I should like to leave the control with the central body of the University, and I should like them to deal out the control.

15,479. Might there not be so large a contribution of local effort as to put this system of education on a different footing from that which is conducted at the University?—I do not think so myself. It is a large matter that I should not like to commit myself to.

15,480. (*Mr. Palmer.*) Do you think that teaching of the nature you contemplate is within the scope properly so called of an University and not rather within the scope of schools, colleges, evening classes, the University Extension Society, and teaching institutions generally. Do you not think there is a line to be drawn between the scope of a University and direct local teaching?—It has been my belief that it is only a University which could keep up the standard of teaching. There is a constant tendency on the part of colleges and teaching bodies to lower the teaching. I think the University is the only body which could give the teaching people want.

15,481. Is not the influence of the University felt through its examination—through its indirect means if you please—but especially without being directly connected with the various schools and educational institutions which look up to it. Are there not two totally separate functions, that of schools on the one hand and of the University on the other, the University exercising the greatest influence in proportion as it is not directly connected with the schools?—You divide University teaching and college teaching or school teaching.

15,482. I should have thought that the experience up to this time has shown that the great influence that all Universities had upon learning and upon teaching has been through indirect influence without direct interference with schools. It would appear to me to follow that your institution might be greatly influenced by an University, but that it would be beyond the scope of an University to take over the direct teaching which is given in those centres?—It seems to me that the only way to secure a high class teaching is by putting it under the direct control of a University with high class aims.

15,483. Would you say that the Universities of Oxford and Cambridge ensure high class teaching at Eton or Harrow by interfering with the management?—That is not quite the same, is it? I think Oxford and Cambridge are doing something of the sort. They do secure high class teaching by sending out men stamped with their stamp and approved by their delegacy.

15,484. Do you think any future University would have this influence upon the higher teaching of workmen if it were not distinct from the institution which gives the teaching?—I should think it would be a great help to get typical high class teaching established.

15,485. Which it would test, but which it would not be responsible for itself?—Does not Oxford do as much to keep up the class of teaching by the teaching it gives as by its examinations?

15,486. Not in the local centres?—But in Oxford itself. Oxford is as valuable to its students by its teaching as by its examinations; and so if there was an extension of London University, and if London University were to teach as well as to examine, it would do a great deal to raise the standard of teaching.

15,487. Teaching of a certain kind, no doubt, but not that teaching which is the direct school teaching, so to speak, of students?—I should have thought it did. Of course, one can only give one's opinion upon the matter.

15,488. Then there must be an illimitable extension of the teaching University?—Yes, I think so.

15,489. (*Sir George Humphry.*) Has Toynbee Hall any endowment?—No.

15,490. It depends entirely upon annual contributions?—Yes.

15,491. Which is rather a precarious tenure?—Yes.

15,492. So it could not, in any way, look forward to a permanency pecuniarily?—No; it only lives from year to year; but as long as it lives it would be willing for its rooms to be used.

15,493. And its subscriptions are from the old Universities?—Yes, it is not a large subscription.

15,494. The old Universities do not get richer, unfortunately?—No.

15,495. (*Lord Reay.*) The difference is this, that the men who attend these lectures, which you and Canon Browne have both called University lectures, which give higher education, have not really had sufficient preparatory education even less than the average undergraduate at Oxford or Cambridge either has had or is supposed to have had?—Yes, that is quite true.

15,496. Therefore, that differentiates, and until we obtain a sound system of secondary education will differentiate, the teaching of the evening classes from the higher teaching given to day students?—Yes.

15,497. That is inevitable?—Yes.

15,498. But although there is that gap, still you contemplate a further development of that higher teaching rather than to organise some kind of secondary education, which seems to me the greater used of the two?—They absorb the teaching. One sees it oneself, and one hears it from the teachers. They do take this high class teaching.

15,499. There is no difficulty in the assimilation of this high class teaching?—So I am told, time after time.

15,500. (*Chairman.*) Your lectures are open to all comers?—Yes.

Rev. S. A. Barnett, M.A., and J. E. Monk, Esq.

23 Nov. 1892.

15,501. Is there any difficulty whatever in preserving order?—No.

15,502. There is no tendency on the part of any roughs or people of that sort to come in?—No. The East End is much maligned.

15,503. You never have the least difficulty of the sort to contend against?—No.

15,504. You told us that this teaching is only one part of the work done at Toynbee Hall. With regard to most of the people who attend the lectures, which, as I see, average about 140, are they men whom you come across in any other directions also?—A good many of them are men one gets to know in other ways.

15,505. And they are purely influenced in coming to the lectures by their confidence in the institution and the personal feeling there is between the teachers and the pupils?—Yes, I think that does act as a motive.

15,506. And that would not exist with regard to an outside professor who had nothing to do with them, and merely came down from the University now and then?—No, but that motive does not now apply so much to the pupils who come to the larger classes, Dr. Gardiner's pupils know nothing much of him.

15,507. But there would not be quite so good an attendance, perhaps, independently of the other working of Toynbee Hall?—I do not know; the place gets a character of its own.

15,508. (*Rev. Canon Browne.*) One part of your work, I think, you did not mention. You do have occasional lectures, do you not, to bring people together?—On Saturday there is always a popular lecture.

15,509. And you have a considerable audience?—Yes.

15,510. You really collect a room quite full of people?—Quite so; every week we get a great number of people.

15,511. (*Lord Reay.*) Would you prefer that the University, if the professor had time and leisure, should use for your purpose its own professors, who lecture to the regular students of the University, rather than that the University should appoint a special body of teachers for this teaching *sui generis*?—Of course I speak here without very much knowledge, but my own opinion is that I should like the University of London to be established free of all other institutions in London and have its own professors, and teaching, and staff, and give in various parts of London, the higher class teaching, quite regardless of any institutions in London.

15,512. And you would not be satisfied with the University merely undertaking the task of examination?—No.

15,513. You lay great stress on supervising the teaching?—Yes. Assuming that funds are provided I should like a teaching University established in London to have its own professors and its own buildings, great central buildings in one place if you like, and smaller buildings in others, and give the teaching by its own professors so that every student, day and night students, might be within its reach.

15,514. And the teaching in close connexion with examining?—Yes.

15,515. (*Mr. Anstie.*) And a very large Parliamentary grant?—I suppose there are funds somewhere.

15,516. (*Chairman.*) You can hardly calculate upon a man like Dr. Gardiner giving his time to these half-educated people except from motives of philanthropy?—He is very pleased with the class, and I think Dr. Fison would say the same. Dr. Gardiner has given up a good deal of other teaching, and I think he prefers this.

The witnesses withdrew.

The Reverend Canon Elwyn, M.A., examined.

Rev. Canon Elwyn, M.A.

15,517. (*Chairman.*) You appear before us as a representative of Queen's College?—Yes.

15,518. What is your exact position in that college?—I am Principal.

15,519. Have you been long in your present position?—For six years.

15,520. Were you connected with that college before?—For a few months previously I was a member of the Council.

15,521. You can give us a full account of it?—Yes.

15,522. We should like to have an account of your exact position, and the work you do?—There is a very full account given of it in the Minutes of Evidence taken before the former Royal Commissioners; and Appendix No. 8 gives the names of the members of the Council and the Committee, and the system of education, and the lectures that were given at that particular time. It is very full. It is really the substance of our calendar which is published every year.

15,523. That was up to two years ago?—Yes. There have been some changes since. I have brought copies of our calendar of the present year so as to show exactly the state in which we are at the present time.

15,524. What are the principal differences between the state of things now and the state of things two years ago?—A more systematic and longer course of education was arranged by the wish of many of those who were connected with the college, and there was introduced what is called, in the first page of our calendar, an Associateship course, to be followed by the Fellowship course. This is mentioned in page 5 of the calendar, and it is more distinctly set out on pages 22 and 23, where there is a full account of the college curriculum with the regulations for the Associateship and Fellowship courses. By our Deed of Constitution we have the power of giving certificates, and we give certificates of Associateship to those who have distinguished themselves in examination, and also special certificates for distinction in special subjects.

15,525. And that to a greater degree than was done before?—After a more systematic course of instruction. By reference to page 23 it will be seen that the college regulations prescribe 12 hours class teaching a week arranged to comprise two languages, two sciences, English history and Holy Scripture. Those subjects, except in the case of Holy Scripture if objection is taken, are constant subjects. Besides those students can take other extra subjects.

15,526. Is there a choice of languages?—Yes; (1) English, and (2) either French, German, Latin or Greek.

15,527. English and one other language ancient or modern. Which language is generally chosen?—French and German are mostly taken, but we have a fair number who take Latin, and a smaller number who take Greek. Latin, Greek, French, German, and Italian are the regular languages.

15,528. What do those who learn Latin and Greek generally do after they leave you. Do they learn the languages with the view of being teachers?—Some do so, but others because they become fond of the subject. We have had two Greek plays performed. The Empress Frederick of Germany with some of her family came to see a performance of the first. We have a very good Greek professor.

15,529. And they really get a good knowledge?—A few do.

15,530. In mechanics, chemistry, natural sciences, music——?—On page 26 of our calendar you will find a very full time table showing the time given to these and other subjects. Every hour is accounted for.

15,531. And this has all been reduced and systematised to a much greater degree for the last two years?—Yes.

15,532. Partly in consequence of your wish to take part in the new University?—No, it was done independently, having been done some time in preparation. Queen's College was the first of all the women's colleges. It was founded principally by Frederick Denison Maurice, and the original idea was to make it self-contained rather than a special place of preparation for University examinations. Therefore we have not professed specially to prepare for any University examination; but many of our students have in each year been prepared for the Matriculation of the University of London. I have a list for the last few years. Some have afterwards taken the B.A., and there are some who have taken the B.Sc. Some have gone to Cambridge and Oxford, and have gained distinctions.

15,533. Do they go to stay there?—Yes. One of our students a few weeks since at a college in Oxford gained a Scholarship at S. Hugh's Hall, a branch of the Lady Margaret Hall.

15,534. Have you suffered at all in numbers because of the competition with Holloway College and other colleges?—Probably. Our numbers have not been so great in the last 10 years. We have a school which contains from 80 to 90 on an average, and the college generally has from 200 to 250 in attendance. In the last report the numbers are given for each term. The numbers (for college and school) were 303 for Eastern Term of this year, and the year before they were 293. If you go back some years no doubt there would be a considerable diminution. That is, I think, partly in consequence of the classes opened for ladies at Kensington in connexion with King's College. There are a great number of High Schools also, which take some of those who probably would otherwise come to the school.

15,535. When you began you were almost the only institution of the kind, were you not?—Yes. Bedford College followed shortly afterwards. We were founded in 1848, and the Charter was granted in 1853. It is, I believe, the only London College for Women which has a Royal Charter.

15,536. I do not want to go over ground which has been gone over already; and, therefore, I will only ask you to give us any important change that has taken place. With regard to the fee of 10 guineas, and so on, that is probably all contained in the evidence before the last Commission?—Yes. The particulars are set out in the Minutes of Evidence, page 285, in the Appendix. There have been a few changes since that time in fees, &c.

15,537. Then I will come more to what part you wish to take in the proposed new University?—Might I mention that we are very closely connected with King's College in this way, viz., that many of our professors are also professors of King's College. We did not know that application was being made for the Charter till an account of the proceedings of the first day appeared in the papers. When we saw that account we instructed our then treasurer, Mr. Gwyn Jeffreys, who is at the Bar, and he appeared before the Privy Council. The Council said at the final sitting that we had not practically suffered by not appearing before.

15,538. There is a clause in the Gresham Charter enabling new colleges to come in?—Yes. The Committee of the College wished us to represent to the House of Commons our desire to be constituent members. Our Council, however, thought it would be better to wait till the Charter was granted, and then apply. There was that difference of opinion between the two bodies.

15,539. Supposing any University sanctioned by us contained similar powers of admitting colleges hereafter, you would be willing to wait?—Some members of both bodies on the former occasion thought that the end would be gained by waiting for the Charter to be granted; but there was, as I have said, a difference of opinion between the Council and the majority of the Committee.

15,540. At any rate your wish is to be associated with the University?—Yes, that is our desire.

15,541. And to be associated in the way of having representatives on the Senate?—That is suggested. Of course it is a delicate thing to suggest what should be done; but it has been suggested by some that if ladies' colleges were represented at all, Queen's College, being the oldest college, would have a claim to be admitted.

15,542. And your teachers to belong to the different Faculties?—I presume that would go with it.

15,543. What position are you in with regard to similar colleges, Bedford College, and the others?—We have no actual relations with them.

15,544. Are you working harmoniously with them?—We have never, so far as I know, had any difference.

15,545. Would it be possible for you to work in common with regard to representation?—Yes, I think so. It has been suggested that if there were to be only one representative of ladies' colleges, one college might be represented first and then another.

15,546. I suppose yours is entirely a London college?—We have boarders, and some of them are from the country. We have two boarding houses, one adjoining, and the other very near to the colleges.

15,547. What sort of numbers have you in your boarding houses?—I think there are about 50 in the two houses.

15,548. You do not think that your case suffered at all from your not being present at the last Commission?—No oral evidence on behalf of women's colleges was given to the last Commission.

15,549. Therefore there is nothing that you would have said then that you would be glad to have an opportunity of saying now?—No; I think not, beyond what I have now said, and beyond the particulars given in our calendar.

15,550. I suppose like other people you have had the idea put before you of a professorial system of a University?—That has never actually come before us as a body.

15,551. The idea of that was that the whole work was to be done by a staff of professors, and by a University, and that the different existing institutions were to join with a view of being gradually absorbed and put an end to?—I have read the proposal that was made by Bedford College. The difficulty that many of us have felt is that that would probably involve getting a new Charter for our college, because we are bound by the present Charter of the college, and by the deed of constitution which is annexed to it. Then there is this difficulty; we have not freehold premises; we are hoping to have them, but at present we have only leasehold premises. We have been making an appeal lately to see if we could get the funds for a permanent habitation when our lease comes to an end.

15,552. You do not contemplate being absorbed by a new University?—I could not pledge our Council and Committee to such a view. It has never come before us as a question to be considered.

15,553. You are not in the same position as Bedford College, which rather advocates that?—No.

15,554. You have never expressed an opinion one way or the other?—No, not as a college at all. We have felt a difficulty because of the Charter and Deed of Constitution. Bedford College, I believe, is not bound as we are by Charter. We should in that case, I presume, have to surrender our Charter altogether.

15,555. And that you would not think desirable, even if possible?—I, personally, should like to see some modifications in the Charter and Deed of Constitution; and many, I think, would agree with me.

15,556. Might we ask in what way?—The constitution is in some respects very complicated. Everything that the Committee of Education does must be sanctioned by the Council; and, therefore, there are two governing bodies. Some points rest principally with the Committee and some with the Council. Instead of having one governing body, everything has

Rev. Canon Elwyn, M.A.

23 Nov. 1892.

to be done more than once, or even more than twice if differences arise.

15,557. Which is the larger body?—The Committee, practically, is the larger body, because it consists of all the professors of the college, and six ladies who are selected by the lady visitors. The Council are a smaller body; but all the financial arrangements and ultimate decisions rest with the Council and not with the Committee.

15,558. Supervision might include a good deal?—Yes.

15,559. Are the examinations and the curricula, as a rule, arranged by the Committee?—Yes.

15,560. Do the Council have anything to do with them?—Yes. Everything must come before the Council, and, therefore, nothing that is passed by the Committee, even on matters connected with education, can come into effect unless the Council approve.

15,561. And this practically causes a good deal of friction, does it?—It is, of course, liable to do that. I cannot say that of late it has done so, but there have been times when friction has been caused.

15,562. Would you like to see the Committee absolute?—I should like to see them represented on the Council. I perhaps feel it acutely myself, because the Principal of the College is the only member of both bodies. If the Council and Committee disagree, action may be delayed, and practical difficulties on some points be caused.

15,563. The Committee is more than merely consultative, it is executive?—They are called the Committee of Education, and by the Deed of Constitution they have the arrangement, control, and supervision of all matters relating to education in the college, and then comes the clause, "but subject to the approval of the Council," so every matter has to come before the Council.

15,564. That is rather a warning against two authorities?—Yes.

15,565. They do not always work together?—There must necessarily, from time to time, arise differences of opinion.

15,566. Is there anything more you wish to say with regard to your future connexion with the University?—No, I think not, my Lord. I would only say that we should desire to be connected with it if possible.

15,567. You would be willing to leave the details of your connexion open?—Yes, as we do not yet know what the leading features of the University may be.

15,568. (*Mr. Palmer.*) The words are—"With the approval of the Council." That is required for your Committee for all acts done. It necessitates an actual approval?—Yes; nothing can finally be settled by the Committee without the approval of the Council. The words are very large.

15,569. But it would be quite possible for two bodies to work in unison without having an express act of approval every time?—Some few years ago there was a proposal made to form one body with the professors represented upon the Council, so that there might be one governing body. That was proposed, but there were difficulties. By our Deed of Constitution any fundamental change must have the sanction of two-thirds of the Committee; but it is sometimes difficult to get in respect of important changes such a majority; at least, it has been so. I do not think it would be so difficult now.

15,570. The difficulty might lie with the express mode of relation between two governing bodies rather than in the existence of two bodies themselves?—Quite so.

15,571. I see in the report of the former Commission, and also in the report of the proceedings before the Privy Council, that Queen's College have a school for children, and also a higher department for students above the age of 18?—Yes. Many above that age attend lectures in the college.

15,572. How many students are there above the age of 18?—They would be comparatively few among the compounders. I could supply exactly the number, but I could not quite give it you off-hand. We have a large number of non-compounders who come for particular lectures. Some continue their connexion with the college for many years. They live in or near to London, and come for instruction in some special subjects.

15,573. Would those be the students who require University recognition?—My own personal opinion is that if there were a teaching University a larger number of our students would work with a view to such recognition. Up to the present time with the system of the University of London and the principles laid down at the foundation of our college, it has not been so much our course to prepare students for the examinations of that University, but we have had curricula of our own with examinations in them. I think the curriculum of our college would be made in many respects naturally to follow the curriculum of a teaching University.

15,574. The relations of the University with a school would be different from what they would be with University students?—Undoubtedly. Our school is regarded as preparatory for the college.

15,575. I am only trying to get at what, roughly speaking, would be the number of your students either now or what you might expect to have. Have you any kind of idea of the number?—I can get the number from the Lady Resident, who has all the particulars. I do not reside on the spot. I lecture regularly every week, and I attend all the Committee and Council meetings, and am at the college at other times. I could easily get the number of those who are attending the college.

15,576. Are there more than 100?—Not quite so many, I should think, over 18 years of age.

15,577. Are there more than 50?—Yes; including non-compounders (*see* Appendix No. 38).

15,578. Your buildings, you say, are leasehold?—Yes; the lease has 14 years to run.

15,579. Might I venture to ask a very impertinent question with regard to your endowment. Have you any considerable endowment?—No; that is our great drawback. We are now trying to raise an endowment and building fund. The Queen and the Archbishop of Canterbury have both contriubuted to it. It has only been privately circulated at present. I feel that to be the great difficulty of the college.

15,580. Have you any funded property?—Very little. We have a special endowment for one professorship and for one scholarship; and now we have a sum paid in under the appeal that we have made. There is an endowment for the Arnott Professorship consisting of 800*l.* Great Northern Railway stock. The endowment of the Dean Plumptre Scholarship is in the shape of 320*l.* North-Eastern Railway stock. Then there is the building and endowment fund for which we have just circulated an appeal. A sum of about 800*l.* has been paid or promised to that fund. These are the only endowments we have. The appeal has only been issued privately. We are hoping to issue it publicly soon.

15,581. But, nevertheless, you would not go so far as Dr. Russell of Bedford College in certainly desiring to be absorbed?—One great difficulty as regards such absorption would be this: Would any University absorb a college which has not got permanent buildings, and with all the liabilities of a leasehold, and would our Constitution admit of such absorption? That is another difficulty.

15,582. (*Mr. Anstie.*) I see on page 22 of the calendar that you have three courses: First, the school course, and then the Associateship course which is for students over 14 years of age, and beyond that there is the Fellowship course. Does the Associateship take three years beyond 16?—In some cases students cannot enter the college until they are 14 years of age. Many come who have not been in the school, and they often come at the age of 15 or 16, or even later; and very often they do not pass the Associateship examination until they are about 18 or 19. It is not necessary to be at the school before.

15,583. The lowest limit is 14, and three added to that is 17, so that the normal age is 17?—Yes, but they are generally nearer 15 than 14. Our scholarships at entrance are for those who are between the ages of 14 and 16, and I should say the average age of those who take the Associateship would be 18 or 19.

15,584. We were told by those who gave evidence on the part of Bedford College that they had formerly had a somewhat similar constitution to yours, but they had cut off the junior department, the school department, thinking it not possible to carry on successfully the two kinds of work, and they are now only engaged with the seniors. Is there any such proposal contemplated by you?—The school was started after the college. It was thought it would be a good preparation for the college work, and I think many of our most distinguished students have been in the school first, and have passed from the school into the college. I do not think there is any desire on the part of our body to discontinue the school. It has quite a distinct staff of teachers. The professors of the college examine its work at the end of each term. Bedford College has, I believe, always specially prepared for the London Matriculation and degrees far more than our college professes to have done. The idea of Mr. Maurice in starting Queen's College was to provide a regular course of education for the sake of education and for training teachers. Miss Beale, Miss Bishop, and Miss Day, are among the eminent teachers, who have been students at Queen's College. We have no prizes except the scholarships in the school or in the college.

15,585. Then you cannot state the number of the students who would be in the higher branch?—Not accurately. Our new system, which will probably require modification is in its initial stage. It has only been introduced two years; and, therefore, it is extremely tentative at present. If we had had the idea of the teaching University being soon a *fait accompli*, I doubt whether this new system, which was arranged some time before its introduction, would have been initiated.

15,586. Your terminal age is normally 17, but as a matter of fact it goes beyond that?—Yes, in many cases beyond that. Some do not enter until they are 16; and they would go in for the Associateship examination when they are 19. 18 would be the average age.

15,587. You referred to the constitution. I observe, looking to pages 23 and 24 particularly, it does seem rather complicated. Am I right in construing it thus; section 20 says:—"The Committee "shall have the arrangement, control, and supervision "of all matters directly relating to education within "the college;" but by a curious kind of anticipation clause 18 says:—"Provided always that in case any "question shall arise as to what are matters directly "relating to education within the college the same "shall be referred to the Visitor whose decision "thereon in writing shall be final;" and then clause 24 says:—"Provided always that the *proceedings of "the Committee* for the management, control, and "supervision of matters relating to education *and the "election of new members* shall be subject to the "*approval of the Council*, but so that no act or "matter for which the approval or concurrence of "the Visitor is hereby required shall if approved of "or concurred in by him be subject to be disallowed "by or shall need the approval of the Council." So it would seem as if the Visitor were the real authority in the college?—Yes; but practically his power is very seldom invoked. Would you kindly turn to the Charter, which, though it comes first in the book, is really subsequent to the Deed of Constitution. On page 11 it says:—"We do hereby direct that notwithstanding anything in the said Deed of Constitution "contained, all and every the arrangements relating "to the mode of education to be pursued at the said "institution to be determined on the Committee of "Education shall be subject to the revision and "approval of the Council of the said institution."

15,588. So far as that goes it appears to intend to draw the knot rather tighter; but does it not always include the supreme despotic power of the Visitor?—Yes, if it were invoked. The constitution is complicated.

15,589. (*Lord Reay.*) At page 24 I see that every candidate for the Associateship must have passed two annual examinations of the college. That is one way of becoming an Associate?—Of being qualified at the end of the third year to enter for the special examination for the Associateship.

15,590. But there is another way of doing it, after three annual examinations. There are alternative courses?—Yes, there are alternative courses depending on the proportion of marks gained in the annual examination.

15,591. Then a college course begins at the age of 14. Therefore at 17 the student becomes an Associate, and the year afterwards she becomes a Fellow?—14 is the lowest age and she must, as a rule, have studied three years after she has become an Associate before entering for the Fellowship examination.

15,592. "Candidates for the Fellowship must have "passed the examination for the Associateship one "academical year previous to entering for the Fellow-"ship examination." Are the three years for the Fellowship in addition to the three years for the Associateship?—Yes. That is the general rule. The exception would be in the case of students coming to the college at a later age, and being qualified to enter at once the Fellowship course. Before entering for the Fellowship examination they would be required to pass the Associateship examination.

15,593. That brings it up to 20?—Yes; that would be the earliest age.

15,594. She becomes a Fellow three years after she becomes an Associate?—She might become a Fellow if she were competent to pass the examination.

15,595. But suppose she is not?—No.

15,596. How does your course of lectures compare with that of the Association for Girls' Education. Do you consider yours higher?—I cannot speak with certainty. You will see the subjects are all set out on page 31. We have very good teachers. Our Professor of Latin was elected to a Fellowship at Trinity, Cambridge. Our Professor of Greek is also a Fellow of Trinity, and very distinguished. In mathematics we have Professor Hudson of King's College, who was third Wrangler and Fellow of St. John's, Cambridge.

15,597. Still you would not say that the girls are so precocious that at the age of 14 they can compete with the undergraduates of the colleges of Oxford and Cambridge?—No. The Associateship course would generally end between the ages of 18 and 19, the average age for going to college.

15,598. You would compare your Associate with a boy who is leaving Eton or Harrow?—As regards languages an Associate would, in many respects, I should think, be far above an average boy leaving a public school, she would be more advanced in French and German than in Latin or Greek.

15,599. What do you call a Compounder?—A Compounder pays 10 guineas a term, and for that 10 guineas a term she has a right to instruction in a certain number of subjects. A Non-Compounder takes special subjects, and she pays so much a term for instruction in those subjects.

15,600. Therefore you have students who attend particular classes, and there are other students who attend a group of lectures?—Yes; we try to have as many Compounders as we can, because we think they get the best and most systematic teaching. We have very distinguished musical teachers, and many students come specially to take music and singing, with, perhaps, English literature and one or two languages.

15,601. I understand you do not claim to be affiliated with the new University?—That would probably depend on the terms of application. I have no authority to say that we should claim under all circumstances; and we should probably be obliged to

Rev. Canon Elwyn, M.A.

23 Nov. 1892.

modify our Charter and Deed of Constitution. I think that we should be quite prepared to obtain some modifications of them.

15,602. I am not alluding to legal difficulties. I am asking the question from an educational point of view. Would you say that your lectures are on a level with those of University College?—Yes, I believe that they are. We have had from time to time one or more of the same professors—Professor Henry Morley was one of our professors, and our French Professor, M. Lallemand, is also Professor of University College, and I think the standard of those in our higher classes would be quite as good.

15,603. In the higher classes only?—Yes.

15,604. The Fellowship classes?—In the senior years generally.

15,605. You prepare for the Matriculation examination of the University of London, but you have not prepared for the higher degrees?—We have done so in a few cases.

15,606. You do not propose to do so?—The college, I think, would probably do so if a teaching University is established. We have not hitherto undertaken to do so.

15,607. There is a table on page 26 of the calendar. I see for the first senior and second senior you have Professor Marchant for Ancient History?—Yes.

15,608. Does that mean that he lectures to the first senior and second senior combined?—Yes; he does so.

15,609. Do you consider that the first senior and the second senior can profitably attend the same lectures in some subjects?—Yes.

15,610. Do most of your students belong to the Church of England?—Yes, the great majority do; but we have had from time to time non-Christian students. We have had some Jewish students.

15,611. And they are not invited to attend your theological classes?—No, not at all.

15,612. (*Chairman.*) There is nothing more you wish to say?—No, I think not.

The witness withdrew.

Lieut.-Col. Plunkett, R.E.

Lieutenant-Colonel PLUNKETT, R.E., examined.

15,613. (*Chairman.*) You have come to give evidence chiefly with regard to the study of Arabic, I believe?—Oriental languages generally, but especially modern Arabic.

15,614. You say every year it appears that there is more necessity for learning this language on the part of everybody who has anything to do with the East?—Yes, quite so. An Englishman is at a very great disadvantage in the East if he does not know the language of the country. He is at the mercy of the Levantine interpreters, or the interpreters of whatever province he may be in. He is at a disadvantage with regard to other Europeans. This applies to military men, to men in consular appointments, and it applies immensely to commercial people, though I do not speak with the same knowledge in that respect.

15,615. A good many natives, of course, speak Italian or some other language in which they can be communicated with?—Yes; but I do not refer chiefly to the Levant. I refer to the Red Sea, the Persian Gulf, South Asia generally, and India, and to that great continent which is Oriental, although it is really in the south, Africa. In the whole of the north of Africa, in Zanzibar, and in numerous ports on the coasts of Africa, modern Arabic, or a slight variation of it, is the language of commerce.

15,616. And even in India?—In India Arabic is a great help. I do not wish to confine my remarks to Arabic. Hindustani and Persian are essentially useful.

15,617. Then with regard to the manner of acquiring it, you say it is almost impossible to acquire it except through a native?—It is really impossible; and there are no facilities in London, or in England. I may say, for learning modern Arabic. The few exceptions that there are are so light and trivial as really to prove that there is no way.

15,618. It is very difficult to supply means of teaching, except grammatically, in England. Anybody who really wished to learn it would have to go out there?—At present; but there would not be the slightest difficulty in obtaining a supply of thoroughly qualified Arab teachers—not the slightest.

15,619. At present is England behind other nations?—We are immensely behind other nations. In Berlin, Paris, Vienna, and in Italy there are large institutions where a student can obtain instruction in Arabic and other Oriental languages absolutely free. In London he cannot obtain it at all, I may almost say; and if he does he has to pay for anything beyond a bi-weekly lecture a high fee, perhaps half a guinea or a guinea a lesson.

15,620. In these foreign countries do they have native teachers?—Yes, native teachers who are ready to talk with their pupils all day long, and in that way make their pupils as good speakers of the language as an Englishman can be made of French.

15,621. Is the instruction in Paris in any way connected with any University?—I think not. I have not a note of that. I do not know whether it is or not.

15,622. (*Lord Reay.*) Is the institution in Paris the École Orientale?—Yes, I cannot remember the name of the one in Vienna.

15,623. (*Chairman.*) You think it ought to be the same in London?—In London it is a proper thing to be taken up by a University as a branch.

15,624. The only practical method, as you say, is constant training of the ear, tongue, and throat, talking, and listening?—Yes. That applies to all Oriental languages as to European languages; but it applies doubly to Arabic.

15,625. Because the pronunciation is difficult?—It is.

15,626. I see you mention Dr. Schliemann's method?—In Dr. Schliemann's book, Troy and its Remains, he mentions how he learnt Oreintal and other languages. He took up, when he was a boy, foreign languages. When he took one up he devoted the whole of his spare time to that language. When he had not a teacher available, he got a native of the country to read it to him. If he did not take it all in he had it read to him in order to train his ear. I have met him in Egypt. He became thoroughly well up in English, French, Dutch, Spanish, Italian, Portuguese, Russian, and Modern Greek. He had not previously learnt classical Greek.

15,627. What you want is a supply of born Arabs, or natives in London in order to teach it?—Yes.

15,628. The faults in different teachers, of course, are intensified in their pupils?—If a man, say a Levantine, has learnt Arabic with a rather faulty pronunciation, and not with the idiomatic correctness of a genuine Arab, when he teaches his pupils they will greatly add to his faults.

15,629. It is rather trying to learn French from an Englishman who does not speak it well?—Yes.

15,630. Do you say it is difficult to get these native teachers?—At present there is no means of getting them. If a teacher of Arabic is asked for who knows English, and is able to instruct an Englishman, they are certain to get hold of the wrong person. There ought to be a proper organisation.

15,631. If they get them in Paris or Berlin they ought to be able to get them in England?—They could be got, no doubt. I cannot say what means they take in other European capitals.

15,632. Of course there a great many dialects?—There are many dialects of modern Arabic.

15,633. Which is supposed to be the purest?—There are several that are very pure. There are some Arab tribes in the Nubian desert between the Nile

and the Red Sea who speak it with great purity. I have met some of their Sheikhs and talked with them. I am told that there are other tribes on the Mesopotamian side who speak it with great purity.

15,634. Are the dialects sufficiently different for one man to have a difficulty in understanding another?—No; there is nothing like the difference there is between the English dialects of some counties.

15,635. But there is no standard, is there?—There is no standard except for the classical; but there are some modern dialects that are so nearly alike, and so nearly classical, that they may be taken as a standard.

15,636. Then you would propose that the University of London, or some other University should take it up, and that there should be a good training school in the East?—When I say a training school in the East, I mean a very small thing which might well be established by the University of London.

15,637. A training school for teachers?—Yes, a training school for teachers, with perhaps not above four pupils at the time, say three to four, five to six.

15,638. Do you mean you would have it taught in London by Englishmen?—No; I think the only way is to get good men, Sheikhs who are educated as an Arab understands it, and thoroughly competent to instruct in their own language.

15,639. The training school then would be for young Arabs?—Yes; to teach them English, and teach them the method of instructing English students in their language. That is what we want, because the Arabs' idea is to take a student who speaks modern Arabic and teach him classical.

15,640. You might have a professor of native Arabic attached to the University of London?—I should like to see two or three, a professor and assistants who would read with the pupils.

15,641. You would rather see a native than an Englishman?—Infinitely, because there is no Englishman competent.

15,642. Would there be a very great demand, do you think, for means of learning Arabic in London?—I think there would be.

15,643. Quite enough to keep a good class continually going?—Yes, I think so.

15,644. And to occupy the time of one professor?—Yes, I think so, certainly.

15,645. You mention other Oriental languages. Of course you would have a separate professor for each?—Yes, a separate teacher, certainly.

15,646. What other Oriental languages would you suggest?—Persian is the first.

15,647. Would you take Hindustani?—Yes, I would take Hindustani, but that would be less difficult and less expensive, because there are plenty of teachers ready trained to be got.

15,648. How do the servants of the Indian Government now learn Hindustani? Do they learn it out there?—I think they learn Sanscrit before they go out, which is to Hindustani as Latin to French; and then when they go out they learn the vernacular dialect of the part they are in, as, for instance, the Punjaubi or Bengali. Military officers, of whom alone I can speak from personal knowledge, learn it out there.

15,649. That is not compulsory, is it?—There are rewards given out there, and all officers are encouraged to study, and for officers of engineers like myself it is essential.

15,650. They get a man to teach them there?—Yes. There are plenty of good teachers there; and the reward given by the Indian Government is sufficient to pay all expenses.

15,651. In Berlin and Paris is it free?—Quite free.

15,652. To anybody who goes?—Yes.

15,653. No fees at all?—No fees at all. I think it is absolutely free—if it is not it is near it—in Berlin and Milan.

15,654. I should have thought that anybody belonging to a class who was thinking of learning Arabic would be willing to pay something towards it. You think it ought to be cheap?—I think it ought to be, very much less than it is at present. The present cost is prohibitive.

15,665. Your idea is that there should be a good means of learning it in England, and in order to make a good business of it you would have the teacher first study in Cairo?—It would be far better that he should. But the first and most essential thing is to get the right men who speak the right sort of Arabic, and who have spoken it from their infancy, and to teach them how to teach an Englishman Arabic. You would have to teach them sufficient English. Then by having one or two of these men in London, and perhaps other places such as Liverpool and Manchester there might be classes affiliated.

15,656. There is practically, you say, no means of learning Arabic in London. Is there any means of learning Arabic at all in London?—There is one class under the Imperial Institute at University College.

15,657. The English students, you say, should finish their studies at Cairo?—At present the Foreign Office have a system, as it is absolutely essential that they should have linguists for their consular service, under which young men after passing a certain examination are sent to Constantinople where they are trained in Arabic and Turkish. This, I think, would supersede it.

15,658. You attach great importance to teaching by natives?—It would be better that the Englishmen should learn from a proper Arab teacher in London and afterwards in Cairo. I think the broader scheme would supersede and include the one which has, no doubt, done good work in this way, but which is on too small a scale, and which only assists the Consular service. It does not assist travellers or commercial men.

15,659. You think the new University should have professors of Arabic, and that those professors should be natives?—Yes.

15,660. And the education should be either free or so cheap as to be within the reach of everybody?—Yes. "Natives" is rather a broad word. I especially mean natives who from their infancy have spoken the best dialects of modern Arabic, and who have been taught to teach, who have been taught to impart their knowledge of it to others.

15,661. They would be taught to teach before they came to London?—Yes, before they came to London was my idea, because I think you would not get the right men to come at all otherwise. I have conversed myself with Sheikhs—young men who would be perfectly competent to do this, but who would not, I believe, accept a post in London, and come straight to London. It would be too great a change to come from the deserts of Nubia or Mesopotamia, but they would go, I think, for a year's study in Cairo, and then when they were properly trained, and understood more clearly what their work would be, I do not think that we should having any difficulty in getting the right sort of men to come.

15,652. (*Lord Reay.*) The first step would be, therefore, to have in Cairo a normal school for teachers of modern Arabic?—Exactly, but on a small scale. I hardly like to use the word "institution" or "normal school" because people might get the idea that one means a large institution with a staff of professors. I mean one man, an Englishman in sympathy with the natives. The right sort of man, of course, would establish it on a small scale and with small expense.

15,663. Then the teachers in Cairo would be taught English before they came to this country?—Yes.

15,664. And when they came here they would talk modern Arabic with their students, and the students would talk English with them, so that they would improve their English, and the students would be improving their Arabic. You would have a certain reciprocal action?—Yes, necessarily these men, living in London, would improve their English. But I want such a staff that the best of them—whichever

Lieut.-Col. Plunkett, R.E.

23 Nov. 1892.

was appointed professor—could give one or two hours' lesson to each of his pupils, and the others, who would be his assistants, would give the whole afternoon or evening to reading newspapers or talking to the pupils, so that they should become thoroughly imbued with the Arabic idioms.

15,665. And know how to write Arabic?—Of course that would be included.

15,666. But you would keep the classicalpar, of Arabic literature separate from this instruction?—I think separate; but each would help the other immensely.

15,667. The modern Arabic would come before the teaching of the classical Arabic?—I should leave that entirely to the student. If the man going to the East was a merchant or traveller, and wished to learn only modern Arabic, I should let him. If it was merely for assistance in Hebrew studies, and he wanted only classical Arabic, let him take classical Arabic; but a man who wished to become thoroughly an Oriental scholar should go in for a course of both.

15,668. Your object is utilitarian?—Chiefly utilitarian. I think the material advantage to the community would be immense. But it would also assist scholarship, because only the man who has studied the modern conversational Arabic will thoroughly appreciate their classical literature.

15,669. Your contention is that English civil and military officers and English merchants in the East are at the present moment at a distinct disadvantage as compared with foreigners because they have not acquired sufficient facility of expressing themselves in modern Arabic?—Yes; quite so.

15,670. Then in the University classical Arabic would take a very prominent place in the department of Oriental languages, and for that you would have a separate professor?—I think so.

15,671. I understand that you consider the man who teaches literary and classical Arabic is by reason thereof almost disqualified for colloquial modern Arabic?—I should hardly say disqualified, because I believe the professor of the classical Arabic would benefit immensely by reading, as he no doubt would, and discussing literature with the modern Arab, but still keeping them quite separate.

15,672. My point is that the teacher of classical Arabic might very well be an English scholar?—Yes.

15,673. Whereas for modern Arabic you look to a native of Egypt to teach it?—Quite so.

15,674. Do you limit it to Egypt?—No, I do not distinctly limit it to Egypt; because it is only some tribes in Egypt who speak good Arabic.

15,675. What other countries are available for recruitment?—In Arabia. Those who speak it best in Egypt are those who emigrated within comparatively recent times.

15,676. At the present moment in London we are without the kind of teaching of modern Arabic which you contemplate?—There is only the one class. It is at University College, but I think it has been almost a failure on account of its expense, and other reasons.

15,677. Then this course of modern Arabic would form part of the school of Oriental languages?—Yes; I should think part, certainly. I advocate especially Arabic, because it is the most difficult; but I should be sorry not to see also a Persian teacher, and a Hindustani teacher, and also a Chinese and others.

15,678. You think it is distinctly desirable for that large and ever-growing class of Eastern merchants, Eastern travellers, and English officials in the East, that these facilities for acquiring the colloquial use of foreign languages should be increased?—Yes.

15,679. And you think there will be no difficulty in getting teachers from Japan, China (from India, of course, there is no difficulty whatever), from Egypt and from Arabia, to give that instruction?—None at all, I think. I know nothing of China myself.

15,680. (*Mr. Anstie.*) I want to be quite clear as to the relation which you think exists between colloquial forms and the classical development. Do I understand you to say that in order to master the classical form of such a language as Arabic or Persian it is desirable that there should be at the command of the student instruction in its colloquial forms?—I am not quite sure that I understand your question. Arabic, of course, is quite different from Persian. What applies to Arabic would not apply to Persian.

15,681. Would you say that, in order to give a good classical training in Arabic the student ought to have an opportunity of familiarising himself with colloquial Arabic?—It would be better, certainly. It is not essential, because we have scholars in classical Arabic in this country, well-known men, who are thoroughly up in the classical literature of Arabic; but it is my theory that a man does not understand a language properly from merely knowing it by sight. If he were accustomed to the sound of it also, he would appreciate it more, and understand it better.

15,682. You referred to Dr. Schliemann and his studies in modern Greek?—Yes.

15,683. He, I understand you to say, not being a classical scholar, learnt Modern Greek?—He was not a classical scholar when he learnt Modern Greek.

15,684. Would you say that a classical scholar would be a better scholar for a knowledge of Romaic?—I do not know if my opinion is really of value upon that. I rather think he would. If I have to form a theory I say I think he would. Of course I may be wrong.

15,685. Then with respect to Arabic, with which I believe you have the greatest familiarity?—Yes.

15,686. Which way should I take your opinion to be, that a man would, or that he would not be a better classical Arabic scholar for a knowledge of modern colloquial Arabic?—Certainly a better scholar.

15,687. Would you say the same with respect to Persian?—It would not apply to Persian, because the modern Persian is ancient Persian almost unchanged, with an admixture of Arabic. They bring in Arabic words in enormous numbers, and they bring in Arabic phrases, but otherwise there is no change. There is not the difference between ancient and modern Persian that there is between ancient and modern Arabic.

15,688. You view is directed, if I may say so, to the University side, and not to the merely mercantile side of this matter?—I want to see a thorough knowledge given; and in giving a thorough knowledge, such, I may say, as one may acquire of Italian or French, I do not think there is any very great distinction between the two.

15,689. But independently of its mere mercantile value you would say, I understand, that a knowledge of colloquial Arabic would make the scholar of classical Arabic a better Arabic scholar?—I think so. I think we could understand and appreciate Chaucer much more than a Frenchman or an Italian who began his English by learning the language of Chaucer before our modern tongue.

15,690. Then may I take it that with respect to Chairs in Arabic instituted or maintained at a University centre it is desirable that those who are responsible for Arabic teaching should take care that the classical is supplemented by the colloquial?—Quite so.

15,691. But if this Commission finds it is beyond its scope or function to go into detailed recommendations of that kind, you would be satisfied if they recommended the establishment of an Arabic Chair simply, and left it to the authorities of the University to work it out on the lines you indicate?—If they only appointed an Arabic Chair in the way in which they have been provided elsewhere, it would give very little if any assistance towards modern Arabic, and, unless it is modern Arabic, it would be of little use.

15,692. What I want to get at is whether your view is directed to cultivating among the mercantile classes and the Government services a knowledge of modern Arabic, or whether it is directed to the cultivation of Arabic as a subject of study in and for itself?—The former, I think, decidedly.

15,693. And not the latter at all?—Yes; the latter will be immensely benefited by it indirectly and necessarily.

15,694. (*Sir George Humphry.*) Professor Palmer, I suppose, has a good knowledge of modern Arabic?—I cannot say.

15,695. He had so good a knowledge that he passed as an Arabian. He was indistinguishable by the Arabians from an Arab?—I did not know that.

15,696. And he acquired that knowledge of modern Arabic without going out of England, I think?—I think that is hardly credible.

15,697. He had extreme facility in acquiring languages?—He had, I believe, very great facility in acquiring languages; but I do not think that what you say is quite possible.

15,698. I think it is?—A European, perhaps, might be taken by the Arabs for an Oriental, because there are so many varieties.

15,699. He travelled as an Arabian?—Richard Burton, who had an exceptionally good knowledge of colloquial Arabic, travelled in Arabia; but he took care, when he went into Arabia, to give himself out as an Afghan, because there are faults of pronunciation which no European can get over; and he hoped he would be put down by the Arabs as an Afghan. He said it would be absurd for a European to try and pass as an Arab.

15,700. There are varieties of dialects?—Yes.

15,701. So the knowledge of one dialect would not assist very much?—Yes, it would assist immensely. There is not such a difference as that. There is no difficulty in making oneself understood. *Lieut.-Col. Plunkett, R.E.* 23 Nov. 1892.

15,702. But you doubt whether an Englishman would obtain such a knowledge of modern Arabic as would be useful to him on the various occasions on which he might be abroad?—He will not acquire that much unless he learns from a real Arab.

15,703. (*Lord Reay.*) I understand that the teaching would be, not only by lectures, but that you lay stress on the teachers of this modern Arabic holding conversation with individual students?—He must do so to be of any use. He must have two or three pupils at a time, not more, and give individual instruction. Lectures to classes, which are given for instruction in the colloquial, are almost useless.

15,704. (*Chairman.*) It seems to me that there might even now be a very good career for an accomplished young Arab to come and settle in England. He would get a great deal of work as a private tutor?—I doubt whether the right man exists at present. They want training for it.

15,705. Is there anything more you wish to say?—Nothing more, I think.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Thirty-sixth Day.

Thursday, November 24th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir WM. S. SAVORY, Bart., M.B.	JAMES ANSTIE, Esq., Q.C., B.A.
Sir GEO. M. HUMPHRY, M.D., F.R.S.	RALPH C. PALMER, Esq., B.A.
Professor GEO. G. RAMSAY, M.A.	

J. LEYBOURN GODDARD, Esq., M.A., LL.B. *Secretary.*

RICHARD PENNINGTON, Esq., examined. *R. Pennington, Esq.* 24 Nov. 1892.

15,706. (*Chairman.*) You are President of the Incorporated Law Society?—Yes.

15,707. Could you tell us shortly something about that Association. First, I will ask you when it was established?—It was established in 1825 and was incorporated by Charter originally about the year 1831. If I may hand the Supplement to the Calendar to you, it will probably assist you very much. You will find the history of our Society from the beginning in that book. And I think some account of it was also given you by Mr. Crackanthorpe.

15,708. What was it originally founded for? Was it for the sake of holding examinations, or did that come subsequently?—That came subsequently. The Society was established for the mutual benefit of members with a view of facilitating the acquisition of legal knowledge and taking care of the interests of the profession at large, watching legislation, and generally seeing that anything that affected the profession was considered by somebody who would take care of the interests of members.

15,709. It was always confined to solicitors, of course?—Yes, it was always confined to solicitors.

15,710. Did you begin to examine about 1836?—Yes. First of all the judges reserved to themselves and alone had the power of examining. Prior to the year 1877 they only used us as a means of assisting themselves in the examination of solicitors, but in 1877 power was given to us by Act of Parliament to conduct those examinations ourselves, and they are now, with the assistance of one of the Masters of the Supreme Court entirely under our control.

15,711. Up to that time there was no regular examination, and nothing was required for a solicitor except to have been articled for a certain number of years?—Yes, examination was commenced as far back as the year 1836.

15,712. Compulsory?—Yes, compulsory examination. It is only the mode of conducting the examination that changed in 1877, when full power was given to us, with the assistance of one of the Masters of the Queen's Bench.

15,713. With regard to the final examination, you are all powerful, but with regard to the previous examinations there is a right of appeal, is there not, or does the right of appeal extend all through?—If the

R. Pennington, Esq.

24 Nov. 1892.

Society refuses to grant a certificate to a candidate upon any ground, he can always appeal to the Master of the Rolls.

15,714. Who has a complete power to over-rule or to admit a man without examination at all?—He would no doubt consider whether the grounds upon which we had refused to admit a man were sufficient. He could not dispense entirely with examination. He could only say, "I think this particular candidate "has passed your examination, and he ought to be "admitted. I think he has answered sufficiently "the questions which were put to him, and that I "ought not to refuse him a certificate." Then he also has power to consider our refusal to admit on the ground of want of moral fitness. That question arises more frequently than the other; in fact, I have never heard of an appeal from our Society on the ground that the candidate had answered sufficiently, and that we had refused to pass him on a sufficient examination. Occasionally it does happen, though not very often, that a candidate whom we have thought on moral grounds ought not to be admitted as a solicitor appeals. But that is very rare. We have had a case recently where we felt compelled to refuse a man his certificate on that ground. Up to the present moment he has not appealed, but he has the power of doing so.

15,715. You have four sets of examinations?—Yes.

15,716. The preliminary examination is held in different parts of the country?—Yes.

15,717. But the examinations, as a rule, are held at the Society's Hall in London?—Yes. Perhaps I may say that the preliminary examination is an examination in general knowledge, not in law; it is for the purpose of ascertaining whether a man has had what we think is a suitable education for a solicitor.

15,718. What subjects generally does that examination deal with?—They will be found at page 195 of the Supplement to the Calendar.

15,719. "1. Writing from dictation. 2. Writing "a short English composition. 3. (*a.*) The first four "rules of arithmetic, simple and compound; the "Rule of Three, and Decimal and Vulgar Fractions. "(*b.*) Algebra up to and inclusive of Simple Equations and the first four books of Euclid. 4. Geography of Europe and History of England. 5. Latin, "Elementary. 6. And any two languages to be "selected by the candidate out of the following "six, namely:—(1) Latin; (2) Greek—Ancient; "(3) French; (4) German; (5) Spanish; (6) Italian." In fact it is about equal to, or rather more than a Little-Go would be at the Universities?—About equal, I should think to that. Your Lordship will see what follows:—"With reference to the subjects numbered "3 and 6, no candidate is obliged to take up Algebra "or Euclid (No. 3*b*), but if any candidate elects to "do so, he may take up these with one only of the "languages (No. 6)." That was a regulation introduced by the Master of the Rolls who has to approve these regulations.

15,720. So that it would be, in fact, practically equal to a Little-Go?—Yes, I should think so.

15,721. There are several means of escaping this preliminary examination?—Yes.

15,722. A large number, I see?—Yes, a very large number.

15,723. "Bachelors of Arts, or Bachelors of Law, "at Oxford, Cambridge, Dublin, Durham, London, "and Queen's University, Ireland, Bachelor of Arts, "Masters of Arts, Bachelors of Law, or Doctors of "Law in any of the Universities of Scotland. Honorary degrees are not within the following exceptions. "Utter Barristers in England. Persons who have "passed the above examinations." In fact there are an immense number?—Yes, they are very numerous.

15,724. All you have to do is to satisfy yourselves that the candidate has had a good foundation, and is possessed of a fair amount of general knowledge?—That is what we want, and we frequently recommend the Master of the Rolls in cases that do not come within this list, to dispense with the preliminary examination where we find that a student has not, perhaps, in the way indicated here, had a good general education.

15,725. The intermediate examination comes next. That is more technical, I suppose?—That is an examination on Stephen's Commentaries entirely. It is on the book, or, rather, on portions of the book, not on the whole. These are specimens of the questions at the different examinations. They are the questions in the preliminary, intermediate, final, and honours (*handing same to the Chairman*).

15,726. The final examination is rather a test of practical skill?—Yes, that is an examination not from books, but upon law generally, that is to say, what we call Real Property, and Conveyancing, Equity, Common Law, (that is to say the law as practised in the Queen's Bench Division) Probate, Divorce, and Admiralty, and criminal law and practice and proceedings before magistrates. But although that seems comprehensive it is not necessary for a candidate to pass that he should answer or pass in every division; he may get the requisite number of marks in two or three, and every mark that he gets in any subject will tell.

15,727. What sort of numbers generally succeed as compared with those who fail?—I will give you the figures. I can give you them for the year 1892. In the preliminary examination in February the number of candidates was 130; 85 passed, 36 were postponed, and 9 were absent or withdrew. In May the number of candidates was 154; 98 passed, 47 were postponed, and 9 were absent or withdrew.

15,728. "Postponed" means practically that they were plucked?—Yes, postponed means plucked. In July the number of candidates was 147; 83 passed, 48 were postponed, and 16 were absent or withdrew. In October the number of candidates was 148; 93 passed, 48 were postponed, and 7 were absent or withdrew.

15,729. Roughly speaking, about two-thirds passed?—Yes, about two-thirds.

15,730. Then, in addition to that, there is an honours examination?—Yes. The figures I have just given you refer to the preliminary examination in general knowledge. I will give you the intermediate, final, and honours. In the intermediate the examination is in Stephen's Commentaries—half-way through the articled clerk's career in a solicitor's office. In the intermediate examination in January 1892 the number of candidates was 152; 106 passed, 36 were postponed, and 10 were absent or withdrew. In April the number of candidates was 157; 134 passed, 19 were postponed, and 4 were absent or withdrew. In June the number of candidates was 209; 163 passed, 39 were postponed, and 7 were absent or withdrew. In November the number of candidates was 201; 163 passed, 33 were postponed, and 5 were absent or withdrew.

15,731. A good many more passed that examination in proportion?—Yes, a good many more. Your Lordship sees that is an examination in portions of one book. Therefore an articled clerk with any reasonable amount of attention ought to be able to pass that examination. Then in the final, which is the most important examination of all, in January 1892, the number of candidates was 219; 149 passed, 58 were postponed, and 12 were absent or withdrew. In April the number of candidates was 161; 87 passed, 66 were postponed, and 8 were absent or withdrew. In June the number of candidates was 317; 212 passed, 88 were postponed, and 17 were absent or withdrew. In November the number of candidates was 243; 165 passed, 65 were postponed, and 13 were absent or withdrew. With regard to the honours examination I ought to say that that is of course a voluntary examination. No one need come up for honours unless he pleases. In January 1892, 81 gave notice for the examination for honours, 3 were put into the first class, and they were placed in order of merit.

15,732. Three out of 81?—Yes. I should perhaps explain that out of the 81 several probably would not qualify for the honours examination. The process is they give notice. They go through the examination the day but one after the final examination is over, and they run the risk of not having qualified for honours at the final examination. We require that at the final examination a man should have obtained a certain number of marks, otherwise his papers for honours will not be looked at. Therefore probably it may be (I have not the figures) that out of the 81 several had not qualified at the final examination and therefore their papers in that case would not be looked at. Out of the remainder, those who did qualify, 3 were put in the first class in order of merit, 13 were put in the second class in alphabetical order, and 3 were put in the third class in alphabetical order. We only put them in order of merit in the first class. With regard to the three prize men, that is to say, those in the first class, the first in order of merit took the Clement's Inn prize, value 10 guineas, and the Daniel Reardon prize, value 25 guineas. The second prizeman in the first class got the Clifford's Inn prize, value 10 guineas, and the John Mackrell prize, value 12*l.* 10*s.* Perhaps I may explain to your Lordship here that the John Mackrell prize is not a prize which a man gets on account of his general knowledge of law, but for the answers which he gives to questions upon practical matters of business. He is asked what would you do in a particular state of circumstances in order to ascertain who are the men who really have a good practical knowledge of the business of a solicitor apart from knowledge of law. In this case the second man in the first class got the John Mackrell prize. All the men in the second and third classes received certificates only that they had passed in honours—passed with distinction. That was the January examination. In April the number who gave notice for honours was 49. 3 were put in the first class, 7 in the second class, and 6 in the third class. Of the 3 in the first class, the first got the Clements' Inn prize and the Daniel Reardon prize, the second got the Clifford's Inn prize, and the third got the New Inn prize which is of the value of 5 guineas, and the John Mackrell prize. In June 1892, 105 gave notice to go in for honours, 2 were placed in the first class, 7 in the second class, and 17 in the third class. Of the two men in the first class the first got the Clement's Inn prize, and the Daniel Reardon prize; and the second got the Clifford's Inn prize. Those in the second and third class received the ordinary certificates of merit and one of them got the John Mackrell prize. The November examination in honours is not yet concluded, and I am not able to give the figures at the present moment. It may be convenient to your Lordship that I should mention now that in addition to the prizes which I have mentioned special prizes are given at the end of every year which are open to all candidates—"The Scott Scholarship, for the "candidate best acquainted with the Theory, Prin- "ciples, and Practice of Law." The Broderip prize "—for the candidate who has shown himself best "acquainted with the Law of Real Property and "the Practice of Conveyancing, and has attained "honorary distinction." Then there are some local prizes. There is the Timpron Martin prize for candidates from Liverpool and the John Atkinson prize for candidates from Liverpool or Preston— "the prize consists of a gold medal, founded by Mr. "Timpron Martin, of Liverpool; and is awarded to "the candidate from Liverpool who shows himself "best acquainted with the Law of Real Property and "Practice of Conveyancing, otherwise passed a satis- "factory examination, and attained honorary distinc- "tion, the Council have awarded to him the prize, "consisting of a gold medal, founded by Mr. John "Atkinson, of Liverpool." The Birmingham Law Society have founded a prize for candidates from Birmingham, consisting of a gold medal value 10*l.* Then there is the Stephen Heelis prize for candidates from Manchester or Salford—"For the candidate from "Manchester or Salford, who passed the best exami- "nation, and attained honorary distinction, consisting "of a gold medal." Would your Lordship now think it convenient to pass to our new system of teaching?

15,733. When was that established?—It was established last month. I should perhaps explain that up to October last there was a system of lectures and classes for students who were coming up for their final examination, the lecturers generally being barristers, but sometimes solicitors also, and there was also a Reader who lectured and gave instruction to students who were going up for their intermediate examination, that is to say, in the earlier stage of their career. The numbers at those lectures had fallen off to such an extent that it was felt by the Council to be quite useless to continue them. The numbers were extremely small. I have given them in the paper which is before your Lordship. They were so small that we felt that for some reason or other we were not doing the articled clerks the service that we ought to do during the course of their articles; so after a good deal of consideration the Council established a new system of teaching. This is the prospectus (*handing same to the Chairman*).

15,734. This was issued a few months ago, was it?—That was issued at the end of October 1892.

15,735. Will you give us the substance of it shortly?—The idea that we had was that with the assistance of three tutors who have been appointed, we should, as far as possible, assist articled clerks from the beginning of their career when they enter solicitors' offices in reading, and in preparing themselves for what is before them.

15,736. Had they of their own accord before you made this change, been accustomed to have Readers for themselves—what are commonly called private coaches?—A very considerable number of them, particularly the men who were going in for honours. A very large number went to coaches, the reason being that the examinations, particularly the final examination, has been stiffened up a good deal of late years. In my time it was rather considered to be a reflection upon a man if he got assistance to pass his final examination, but the final examination of my day was a very different thing from what it is now, and if an articled clerk had asked me before we established this new system whether he ought or ought not to get assistance, I do not think that in the majority of cases, at any rate in a large number of cases, I should have ventured to say that he should not get assistance.

15,737. He did not get the assistance that he required from the lectures?—No.

15,738. They were of no use to him?—At any rate that was his view, and I am bound to say that I agree in the view.

15,739. Then the students left off attending the lectures and had coaches of their own?—Yes.

15,740. You in your change tried to adapt yourselves to what they had already been taught, and to supply them with really good coaches?—Yes, of course, subject to this observation; we do not wish, and our strong desire is not to encourage anything in the nature of cramming. It is fair to the coaches from the knowledge that I have of the way in which they conduct their business, to say that they do not cram in the sense of what is ordinarily understood by cramming. Their system, I think, is a very efficient system, and personally from my knowledge of it I have no reason to find fault with it. Our object has been to establish some system which will prevent the necessity for a sudden cram, with a view to an examination. We wish to assist an articled clerk from the moment he enters an office; we wish that there should be somebody to whom he can appeal and who can guide him as to his method of reading, and how much he can read so that he might utilise his time to the utmost so far as is consistent with his duties in the office, which we consider to be by far the most

R. Pennington, Esq.

24 Nov. 1892.

important part of an articled clerk's education. At least, I feel that strongly.

15,741. Would it be quite impossible to do that by lectures accompanied by classes and papers? Do you think it would be possible for a good lecturer or professor to give this kind of training?—If you call the new tutors lecturers, your Lordship's question is answered.

15,742. Then they do give lectures?—No doubt. Men come to them and they hear a disquistion upon a certain branch of law, but it is done with greater system, and it is done continuously. The other lectures were given during a comparatively short periods of the year. One lecturer was only perhaps able to take up one subject, but the tutors having much more time at their disposal by taking an articled clerk from the beginning of his career during the course of three years they would be able, if they manage properly, to give very much more assistance than a lecturer pure and simple who sees a man during a few weeks in November and December, then not again until the early part of the year, and then not again till the spring. The work of the tutor is continuous.

15,743. He would be very much in the position of a good college tutor?—Yes.

15,744. This seems to me to be a most important movement. It seems to me to show that professor's lectures, as one might call them, are of very little use as compared with private tuition in which there is intimate relationship and constant intercourse between the pupils and the teachers?—Yes.

15,745. You say practically you have found that that is by far the better way to prepare for examination? We are rather anxious to avoid that suggestion. I do not know whether I am right, but from some inquiries I have made (and I made them within the last few days of October) I rather gathered that the system of lectures there is not found to answer.

15,746. And the reason of the change was because you thought this principle was the better one, not from any fault in the lecturers; otherwise you could simply have changed them?—Yes. We have had some very excellent lecturers. Perhaps at this point I may mention, in order that it may be upon the notes, that we have already got 67 pupils under the new system since the end of October.

15,747. Of course it is too early to judge yet whether the new system will produce better results in the examination than the old?—That remains to be seen. I should correct myself. We have 67 pupils who have not passed the intermediate and 33 who have passed the intermediate, but have not passed the final. Those are the correct figures. So that, we think, is a very good start; but what the effect may be upon the examinations of course it is impossible to say yet.

15,748. In addition to this work you support lectures and law class throughout the country at various places?—Yes.

15,749. And you are prepared to extend the system of law classes wherever there is a demand, that is to say, you are prepared to extend the system to other places throughout the country?—Yes. We should leave the mode in which they conduct their examinations to the local societies. We should not in any way interfere with that. If they find (and I believe they do find at Liverpool) that their present system of lectures and what we have called law classes answers very well, we should not in any way make it a condition that they should adopt our system at all.

15,750. You say "the Council consider that no "merely theoretical training in law would qualify a "person for admission as a solicitor, and they would "deprecate any interference with the examinations "of articled clerks as at present conducted by them." That means conducted by you?—That refers more particularly to the intermediate and the final.

15,751. What you mean is that no University degree would do instead of what you give?—No.

15,752. Therefore you would still wish to keep in your own hands the admission to the profession?—Yes.

15,753. You would be very unwilling that the degree from the University should confer a qualification. That is what you mean?—Quite so.

15,754. Supposing a new University to be established you would be willing to give them all the advantages that you give to the existing University?—Certainly.

15,755. Then with regard to the question of a law degree in the new University, have you turned your attention to whether it is desirable that there should be a law degree attainable in London from either the existing University or a new one?—I think it would be desirable. I think there are many students who would like to have the opportunity of getting such a degree. My own personal view as to the mode in which a gentleman coming into our branch of the profession should be educated is not quite consistent with that view, but I think it is a very general view that many students who are going to practice as solicitors would like to have an opportunity of taking a degree in the University.

15,756. Would a student do that in preference to devoting himself to taking honours with you?—I think it is extremely probable that the men who would take degrees at the University, would be men who would get honours at our examination. I should think that is the class of men who would probably like to take a degree at the University.

15,757. But they would have to choose between the two?—We should not interfere.

15,758. At what sort of age do the candidates generally go in for their final examination with you?—As a rule men who have not taken a degree at the University, and who have not matriculated are now articled at about the age of 17. If they have not matriculated or taken a degree, they serve five years as articled clerks and at the end of that time, or a few months before the end of their articles, they can go through the final examination and through the examination for honours.

15,759. They would then be about 22?—Yes.

15,760. Would a man after that be able to begin business. He would not care to go for a University degree after that, would he?—I should think it might be possible for some men to do both, so as not to lose time. I believe that a large number of articled clerks, particularly articled clerks in the country, would not avail themselves of the privilege of taking a degree at the University, but I should think at the same time that there are many articled clerks who might like to do it, and who might be able under some regulations to pass the necessary examination to enable them to take their degrees at the University very nearly about the same time as they would pass their final.

15,761. You think that some of your students would take advantage of it?—I think they would. We have had experience of that in some very distinguished members of our profession who have done it.

15,762. From this paper your attitude seems to be rather that you are not objecting to a University degree than that you are very anxious for it?—I think the attitude is rather this: that if there is to be a Faculty of Law, which we assume there would be—in fact the Gresham Charter contemplates the establishment of a Faculty of Law—then we, as having great experience in the practical part of law should be represented on the Faculty.

15,763. You would wish to be on the Faculty?—We should wish to be on the Faculty to assist in the teaching.

15,764. Perhaps you are aware that there is a movement on behalf of the Council of Legal Education that they should in fact be the Faculty?—I have not heard of that.

15,765. That they should fill the place of the Faculty in fact?—I have not heard that the Council of Legal Education had contemplated that.

15,766. You used the word "Faculty" in the sense of the general collection of teachers?—Yes.

15,767. You mean that your teachers should form part of the Faculty with others. Would that be your idea?—That we should be represented by some one—I have not exactly considered whom—but that we should be represented in some way which might be arranged on that Faculty or body of persons.

15,768. So as to have a voicé in settling the curricula, the examinations, and the syllabuses?—Yes, quite so.

15,769. You have not gone into any details as to how you would like to be represented?—No.

15,770. Would you care to be represented on the the Senate of the new University. Have you a strong wish for that?—Might I be allowed to refer to what Mr. Crackanthorpe said before the Privy Council. On the application to the Privy Council for this Gresham Charter. Mr. Crackanthorpe on that occasion appeared as Counsel for the Incorporated Law Society He represents a different interest now. He was then arguing our case.

15,771. I think he is quite willing now to admit you?—Yes, Mr. Crackanthorpe said; "Might I "tell your Lordships very shortly what happened "with regard to the University of London in the "approaches made to us at the time this Com-"mission was sitting," that is to say, the Commission which preceded the application of the two colleges, Lord Selborne's Commission:—"They had "no doubt a Faculty of Law, but they made this offer "to us: will you accept a seat on our Senate? They "made a similar offer to the Council of Legal Educa-"tion, and the Council of Legal Education, (meaning "by that the Inns of Court, from whom the Council "of Legal Education emanates,) courteously acknow-"ledged the invitation, and that was all they did. But "the Incorporated Law Society acceded to the invita-"tion, and they were willing to go on." Then later on he says:—"Of course there remains this cardinal "question, where are the other bodies interested in "the teaching of law. Where are the Inns of Court "and the Council of Legal Education? All I can say "is, they are where they were 17 years ago. I speak "as a Bencher of the Inns of Court, and as a member "of the Council of Legal Education, and I do not "believe that they who have just remodelled their "scheme of education, who have endeavoured and are "endeavouring now by putting forward a new "syllabus, and by appointing lecturers and sub-"lectures, and by otherwise reconstituting their "teaching staff, to attract audiences to the classes,—"I say I do not believe that they will lightly give up "their idea at all events until it has been thoroughly "threshed out in practice, which may take some five "or six years, and therefore I think any communica-"tion to the Inns of Court, will not result in any "practicable acquiescence by them in the scheme "proposed by the Charter." That was the view that Mr. Crackanthorpe put before the Privy Council in 1891. I do not know of course what may have happened since. I have read the evidence that he has given before this Commission, and that probably explains the present attitude of the Inns of Court. But in answer to your Lordship's question, I may say that I have not heard what they intend or wish in this matter.

15,772. On the behalf of the Incorporated Law Society you wish to form part of the Faculty of Law, and you would not object to representation on the Senate?—No.

15,773. In fact you would like to be connected with the new University of London with regard to their Faculty of Law?—Certainly.

15,774. You take an interest in the University degree, and you think that a good number of your students would avail themselves of it?—I think so. It is difficult to say what proportion. I should not venture to express an opinion.

15,775. You think it is a very good thing that there should be a good degree of law attainable. It would be useful not only to the solicitors, but to the outside world, even people who do not mean to be barristers?—Yes. I think it is an excellent thing that a man who is coming into our branch of the profession should receive as much education as possible whatever it may be. I think it is most useful.

15,776. You have already told me that you would not be at all willing to part with your present exclusive control over the profession, and the monopoly of the power of admitting candidates?—No, we should not.

15,777. Is there anything more you wish to say? Is there any other point that you think you could give us information upon?—No, I think not. It does not appear to me that there is anything that I could add which would be useful.

15,778. (*Professor Ramsay.*) With regard to this new system of education which you have introduced, I understood you to say that you have introduced that system with the view of improving the education given?—Yes.

15,779. I suppose with a view to all the stages of your examination, that is to say, the preliminary, the final, and honours?—No, not preliminary, intermediate, final, and honours.

15,780. Your lecturers before you say were highly qualified and capable if not distinguished men?—Yes.

15,781. If I understood rightly what you said just now, the only point in which the teaching fell short was that there was not enough of it?—No, it could cover enough ground, it could not carry the students through the books which they ought to read in a way which they ought to read in a way which really gave them the assistance they wanted or the assistance they ought to have. For instance, a gentleman would come to lecture in November, he would lecture from the early part of November, perhaps until the middle of December, and perhaps the only subject that he could present to the students in the form of a lecture would be the subject say of contracts alone. That is all he could do. Then the subject of trusts perhaps would be presented by another lecturer, and that possibly only to a very limited extent. Those lectures of course as far as they went were very useful, and a capable man would no doubt derive benefit from them; but it did not assist articled clerks who generally only attended those lectures for one year at the end of their articles, when they came to London. It did not give them anything like the assistance that they ought to have in preparing themselves for the practice of their profession, apart from examinations altogether.

15,782. You mentioned particularly, and I think you repeat the same thing now, that part of the weakness of that system was that it was not continuous. That was your word. I suppose you mean by that that it did not last all the year round, that, in short, there was a smaller amount of teaching throughout the whole year (and unequally distributed) than you thought desirable?—Certainly. And in addition to that, the articled clerks only as a rule avail themselves of the assistance of lecturers during their last year. The country men who come up to London offices during the last year of their articles could not avail themselves of this system of lecturing except during that year. That, according to our view, was wholly insufficient as a method of education. We wished that they should be assisted during the whole say five years of their articles, that from the very beginning they should be put upon the right road, told how to go on, and how to get into their minds all the knowledge they should possess.

15,783. Then it comes to this: that it is an insufficiency of time?—Yes, it is an insufficiency of time, and I think also the method is imperfect. It did not answer the purpose. It was a mere lecture of an hour with perhaps a few questions put afterwards to two or three men, or four men, who wished to be questioned. It was wholly insufficient as a system of education.

15,784. You mentioned just now that in the first place they gave few subjects; that they did not take the students over the whole of the subjects which you

R Pennington, Esq.

24 Nov. 1892.

required for professional purposes; and they treated that subject rather in the lecturing than in the tutorial mode?—Yes.

15,785. Do you mean by that that they took a too scientific view of the subject?—No, I think not.

15,786. That instead of treating a great number of parts of your examination separately they took up one subject like contracts or any other, and taught it in a scientific and theoretical way, and that your students could not afford the time, as articled clerks, to give to that sort of scientific treatment of the question?—You would see, if I might mention it again, that a man comes up to lecture in November, and he lectures till the middle of December; he has only a very limited amount of time at his disposal; he lectures once a week; in that course it is found that he can only deal with say the subject of contracts alone. He takes the men through that subject as well as he could be expected to—very often extremely well. But there it ends. So far as regards the articled clerk who is attending that lecture that is all he hears from that lecturer. Then another lecturer will take him through another subject, perhaps the subject of trusts, only. He will give him a very good series of lectures on that subject, but that does not cover the ground, and the articled clerks found that out. They of course wished, taking the case of the final, to be taken through the different books which would be useful to them, not only for the purpose of passing the examination, but also for the purpose of having imparted to them the knowledge which of course every solicitor ought to have.

15,787. That is to say, that the lecturers gave too much detail on a few subjects, and were therefore unable to deal with the whole of the subjects?—Yes.

15,788. When you said your new system was intended not only not to encourage but to discourage cram, what did you mean by "cram"?—I will take the case of a man who say three months before his examination having neglected to a very great extent his reading, as many unfortunately do, finds the examination coming on; he is bound to be prepared for it, so he sets to work with the assistance of a coach, and gets into his head as well as he can what he thinks will just answer the purpose.

15,789. That has reference to the mode of learning and preparing on the part of the student, and not to the mode of conducting the teaching on the part of the teacher. You do not mean to say that the lectures under the old system in the slightest degree partook of the nature of cram?—No.

15,790. In fact, you really mean that the students needed something more in the nature of cram to prepare them for their examination in all these various subjects?—I should not like to admit so much as that. In the case I am mentioning no doubt a man does need it, because in the course of three months he has to prepare himself to pass the examination for which he ought to have been gradually preparing himself throughout the whole course of his articles.

15,791. But, however gradually preparing himself, the real function is to enable the student, as a practical thing, to master the whole of the subject just to the extent and in the way that would enable him to pass the examination?—I do not think it ought to be looked at in that way. I do not think the passing of an examination is by any means the end to be attained. It is the imparting of knowledge to an articled clerk irrespective of examination which he ought to have in order to conduct his practice as a solicitor ought to conduct it.

15,792. And is it from that point of view that you expect articled clerks to attend these new lectures in greater numbers than they did before?—That is what we hope. What is in the minds of articled clerks of course I cannot say. It is impossible to suppose that they are not thinking very much of the examinations that they have to pass, and say what we please we shall not drive that notion out of their heads, of course, but we hope, nevertheless, that if we do succeed in fully establishing this system, we shall get into the minds of the articled clerks as they go on gradually the knowledge which they ought to be acquiring every year of their articles, and the result will be that they will be much more efficient solicitors, and at the same time they will be able to pass their examinations without anything in the nature of cram.

15,793. They may be attending the lectures with the view mainly to pass examinations, and you think you will be able to delude them into obtaining or getting possession of a certain amount of scientific knowledge which they do not desire?—I suppose an articled clerk if asked would not say that he did not desire to obtain knowledge, but I agree that an articled clerk, as a rule, has more in his mind the passing of the examination than he has of receiving knowledge in the way in which we wish to impart it.

15,794. At any rate your object and motive is that the education should be improved and not merely the examination prepared for, and if your system of working were to turn out in another way, and you found increased cram and decreased education, you would be the first persons to put a stop to it?—I could not say, of course, what the Council might be inclined to do, but personally I should drop it.

15,795. Your figures do not quite agree with the paper. You mentioned that you have 67 preparing for the intermediate examination and 33 preparing for the final examination?—Yes.

15,796. The intermediate examination, you inform us, consists entirely of examinations in portions of a particular book?—Yes.

15,797. Is it not essential that a course of tutorial instruction in parts of a particular book must be entirely of a cram nature and not of a general educational nature?—With submission I should have thought not. I should have thought if I had wished to acquire a knowledge of Stephen's Commentaries, which is the book I am referring to, that I ought to commence a systematic reading of that book in the nature of a study of the book, but not that I should cram the book in the way that I should if I were driven close upon my examination and had to take it up and pick out what I thought would be useful in the examination and learn that off by heart. I should have thought that was a different thing.

15,798. At any rate, the teacher is a guide for getting up that book?—Yes.

15,799. For how long a time do you think they would be attending a year?—If a five-year man two and a half years.

15,800. Take the intermediate man. How long do you contemplate a man in the ordinary state of things attending a class in Stephen's Commentaries?—If he is articled for five years I think he ought to be two and a half years.

15,801. On that one book?—Yes. For the three years' man one and a half years; for a four years' man two years. It should be up to the time that he has to go up for his intermediate from the time he is articled.

(*Professor Sidgwick.*) May I intervene for a moment, I think there is a slight misunderstanding. Professor Ramsay speaks of attending a class. As I understand you, the tuition begins with a year of instruction by correspondence.

15,802. (*Professor Ramsay.*) I was just going to ask you upon that point. Part of it is by correspondence. Those who are taught by correspondence are apparently different from those who are taught by lectures afterwards?—No, not at all. The object of teaching by correspondence is this. Of course, as you know, a large proportion of articled clerks are articled in the country, and they cannot attend the classes in London. We only have the classes at present at the Law Institution. The articled clerks in the country cannot attend there, and we had in some way or other to meet their wants. Therefore we felt that the only way to do that was to establish a system of instruction by correspondence, that is to say, the tutor, on the application of any articled clerk wishing to

have assistance, would tell him that he must begin with a certain book on Stephen's Commentaries; that he should read a certain portion of that book; that he should, if he wishes, correspond with him upon any particular point upon which he desires to have advice or information; and that upon that portion of the book, when read, he should answer certain questions which the tutor would transmit to him and hope that he will answer without looking at the book, with the view of seeing what progress he has made. That is the idea of tuition by correspondence.

15,803. Of course it is not quite fully developed?—It is not quite fully developed. I suspect it is developed by the existing coaches.

15,804. I take it for granted that the student in the country who does not come under the personal influence of the teacher will be mainly guided with a view to the examination?—I cannot say that he would not, because no doubt the articled clerk is very much disturbed in his mind by the idea of the examination in front of him. The right-minded articled clerk, of course, will understand that that is not the object, and he is made to understand that it is not, but that we wish to assist him in gaining knowledge in a legitimate and proper way.

15,805. Is there not a great danger in the system of correspondence—looking at other systems of tuition by correspondence in other subjects—that it might degenerate into a system of giving of tips and receiving them?—Giving tips for the examination, do you mean?

15,806. Yes?—If that was found out the teacher who gave the tips would leave.

15,807. I do not mean to that extent; I mean tips given by the wily teacher who knows the sort of thing that will pay in examinations?—I can only say that if that came to our knowledge the teacher would take his departure.

15,808. What precise function in the new University do you propose should be taken or suggest might be taken by your society. I understand you are willing to accept the examination of the University?—Yes.

15,809. That of course does not bring you within the sphere of the work of the University at all, any more than those other bodies whose examination you accept now. But what is it you propose to give to the University for the sake of which the University should as a matter of interest or of justice, or—how would you like to put it—in return for which the University should say, "You are a body who ought "to form a constituent part of the University"? What element is it you propose to contribute?—We think if the University is to teach law we should be very useful from our practical knowledge of law, which is a knowledge which cannot possibly be obtained from any professor of law who teaches what I would call the theory as distinguished from the practice of law. We think that in that way we might be of assistance in guiding the Faculty in their teaching of students who wish to take a degree of the University.

15,810. You mean to be of assistance by means of your teachers or by means of the members of the governing body or council?—It would be rather the assistance which would be given by the gentlemen who should represent our society upon this Faculty or body.

15,811. Then it is rather an individual than a corporate matter. It is simply that there are in your profession individuals whose knowledge and experience would be valuable to a University?—I think so. We did not contemplate that any of our teachers should occupy the position.

15,812. You have seen the scheme of the Senate of the University of London and the Gresham scheme, by means of which the Faculties are to be constituted out of teachers?—Yes.

15,813. You did not, therefore, propose that any of your teachers should be members of the Faculty of Law?—That was not contemplated, certainly.

15,814. What you did contemplate was that your society as a whole should send some representation to the Senate?—Yes.

15,815. There are no examinations conducted by you of any sort or kind which you could consider, as they now stand, of a nature suitable for the examination for a law degree?—We think it is indispensable that we should conduct our own what we call legal examinations as distinguished from the preliminary examinations. We think we ought to retain them, that is to say, the intermediate and the final.

15,816. That is not quite my question. My question was whether any of the examinations that you now hold for your own purposes are such as could be adopted by a University as part of the examination for a law degree?—That is rather a difficult question to answer, but I should doubt (at least that is our feeling) whether it would be prudent to allow any examination which takes place out of our own building, not being under our control, to be substituted for those examinations which are now held there.

15,817. It is not the question of the examinations which you require for your own profession, but whether any of your own professional examinations are such as could be accepted by a University apart from professional qualification as part of the examination required for a scientific law degree. You do not make that claim?—No, we do not suggest that.

15,818. Have you ever considered what would be the position of affairs if the other branch of the profession, the Council of Legal Education, were to establish a Faculty of Law as proposed in an article, which perhaps you may have read, by Mr. Crackanthorpe, in the "Nineteenth Century" of this month. Would you consider it possible that such a body could conduct your examination?—We should consider that they could not to our satisfaction.

15,819. If there were to be any course of instruction or any examination required as a qualification for the solicitors' profession, it must be conducted either by you or with your co-operation?—Yes.

15,820. Therefore your claim is that if there is to be a legal Faculty to establish education, both for the Bar and for the solicitors' branch of the profession you must be constituent portions of that Faculty?—Yes.

15,821. (*Sir George Humphry.*) To put that question with regard to the relation of the examinations in the University in another point of view, do you think that there could be any combination between the University and your body which would serve the purpose of granting both your license and the degree?—We think not.

15,822. Not a combination?—No, we think not a combination, the feeling of our Council is that our present examination must remain, or ought to remain under their exclusive control.

15,823. I do not know that I have quite made myself clear. I do not know whether you are aware that there was a proposal by the Senate of the University of London that the examinations in medicine should be conducted by the Royal College of Physicians and Surgeons, and by representatives of the University taking part in that examination; that the examination so conducted, would give the license and would contribute towards the degree; but that the colleges, which would correspond with your body should be able to conduct their own licensing examination independently. So, you see, you would have the power of conducting your own licensing examination, and, further, there would be an examination conducted by you, and by representatives of the University which would subserve to the license and to the degree also, which would be an advantage of course to your students; they would not have to pass quite so many examinations?—If I understand you correctly that suggestion would be, that our examination should be in some way dispensed with.

15,824. No; that the examinations should be conducted partly by your own body, and partly by representatives of the University, the two bodies arranging the curricula together and arranging the

R. Pennington, Esq.

24 Nov. 1892.

examination, so that there should be in your Hall, conducted by members of your Society and by members of the University combined, an examination which should confer your license and their degree at the same time?—Upon that I should not like to express an opinion. I do not know what the feeling of our Council might be upon that point.

15,825. That is a point which you have not considered?—We have not considered that.

15,826. You require a certain period of study for your license?—An articled clerk has to be articled for a certain number of years, that is the period.

15,827. Do you require any special course of education besides that of being an articled clerk?—We require articled clerks to pass what we call our preliminary examination in general knowledge, that is all.

15,828. You require the articled clerks to pass three examinations, the preliminary, the intermediate, and the final?—Yes.

15,829. But do you require them to go through any special course of study for those examinations?—No.

15,830. They simply are articled, and if they please, simply then come up for examination?—Certainly.

15,831. You do not require them to undergo any special course of instruction or attend any course of lectures?—No.

15,832. And upon the whole you have found former lectures rather fail?—Yes.

15,833. That might perhaps have relation to the particular kind of study, legal study might not be so well suited for what we call professorial lectures as some other branches, such as science, where there is more illustration?—Possibly so.

15,834. Therefore you tried the communication of the student with the tutors who direct him and give him a certain amount to do over a certain period, I suppose that is what the correspondence means?—Yes.

15,835. He says "You, in such a time, get up such a portion of the book"?—Yes.

15,836. Have you a power of withdrawing your license; can you take it away when given. I do not know whether license is the proper word?—After a candidate has been admitted as a solicitor, do you mean whether he can be removed from the Roll?

15,837. Yes?—He can only be removed from the Roll by a process which was recently established under the Act of 1888. A complaint must be made; it must be tried practically by a committee of our body, appointed by the Master of the Rolls, and on their report, the Court will, if it thinks proper, remove him from the Roll. That is the only way in which he can be removed from the Roll.

15,838. He cannot be removed from the Roll by your body without some other assent?—No.

15,839. (*Mr. Anstie.*) The power really always has been in the Court?—Yes, as regards that.

15,840. (*Sir George Humphry.*) Sometimes, as we know, there are very discreditable proceedings, and under those circumstances, such a man would be removed?—Promptly. As perhaps the Commission know, we do see that proceedings are taken, and they are very promptly taken, and I should think that no solicitor escapes who has misconducted himself.

15,841. There are cases of appropriating moneys and all that sort of thing?—Yes, as in some other professions also.

15,842. So far as the requirements for the University go at present, it is simply a representation on the Senate that you want. That is all you would care for?—That is all. As practical men of business, and having a practical knowledge of law, we think we might be useful.

15,843. But you are not prepared to speak with regard to the combination?—No, that I should not venture to express an opinion about at present.

15,844. (*Mr. Anstie.*) From your answer to Professor Ramsay, I gather that your body is now undertaking to discharge the functions which were formerly discharged by coaches whom you now seek to relieve from the necessity of carrying on that work, by doing it yourselves by authorised persons?—So far as the coaches conduct their business in the way in which we hope to conduct ours, that would be so. There may be a coaching which is really cramming. With that we have no sympathy; on the contrary.

15,845. Persons of academic interests never have any sympathy with cramming, but, as I think you have already pointed out, they cannot stop it?—It may be so.

15,846. The practical problem as presented to you, as I understand from your former answers was this; the lecturers did not do what the articled clerks wanted, who said, "We must be prepared for the final"; and in order to prepare them for the final, you instituted the tutorial system?—No, I should not like to put it so.

15,847. Perhaps I misunderstood you?—I endeavoured to put it in a different way. If we thought that this new system was established merely for the purpose of preparing articled clerks for examination, we should never have entered upon it at all. That is not the object we had in view. Of course, we are conscious that examinations must be passed, and that men must prepare for examination, but our main object is to give the men instruction from the time that they enter articles as men ought to be instructed, whether there was an examination or not, with a view of becoming fit to practise in the profession of a solicitor.

15,848. Of course, the system which you desire to establish for the purpose of instruction you would endeavour to establish on the best possible lines, but, to quote the old proverb, You may take a horse to the water but you cannot make him drink?—Yes.

15,849. The best methods will always be used by the best men?—Yes.

15,850. The ordinary men will do what is necessary to be done in order to secure the position, and they will do no more?—Well, I do not know. I may not, perhaps, quite understand the question, but I think the ordinary men, that is to say, the less talented and able men who wish to become solicitors will be more likely to avail themselves of this system even than the best men, because the best men probably will not make use of it at all; they will do as they have hitherto done; they will pass their own examinations by their own reading, as some do with very great credit, without any assistance at all.

15,851. Judging from experience, do not you think the persons whom you describe as persons likely to take advantage of this system will, in fact, demand that the instruction should be such as will take them through their final?—Undoubtedly they will expect that. It is impossible to disguise that from oneself. That will be so. We only hope that we may be able to give them the instruction which will result in that, and which will at the same time impart the instruction in the best possible way.

15,852. This is a very old question. You are familiar with the Report of 1846 of the Committee of the House of Commons which was appointed to investigate this question, and you are aware that the whole of this matter as to the best method of giving instruction was very fully and carefully gone into by very experienced witnesses who gave their evidence on that occasion?—I have not read any account of that.

15,853. In fact, we have no new question before us at all, but it is a question which was agitated, and which will probably be agitated to the end of the world, it is a question which we cannot hope to put an end to?—Very likely.

15,854. Now to come to the practical methods in which your Society may co-operate with or act in conjunction with the University will you allow me to draw attention to a question put to you lately as to the possibility of a combination of examinations. The matter seems to strike you as new, and it is one to which you are hardly ready to give an answer?—No, I cannot give an answer.

15,855. But that question, again, is not very new, is it?—I have never had occasion to consider it, and the Council have never had occasion to consider it, I think.

15,856. I daresay you are also familiar with Lord Selborne's Law School Bill of 1875, which was founded upon the recommendations of a committee composed in equal numbers of members of the Bar and members of your own branch of the profession, and I may say that on the Council I see the names of such solicitors as Burchell, Clabon, Cookson, Farrer, Freshfield, Hollams, Janson, Jevons (Liverpool), Lake, Longbourne, Marshall (Leeds), and Ryland (Birmingham)?—Yes, I remember very well.

15,857. You are aware, I daresay, that that Bill went a very long way, further indeed than has been suggested to you to-day, in making the examinations of the proposed School of Law valuable and effective both in the call to the Bar and for admission as solicitors. By the 16th and 17th clauses of that Bill the examinations were to be accepted on the one hand by the Inns of Court, and on the other hand by the Incorporated Law Society with a defensive provision of this kind, that so far as concerns the examination which should pass either the Inns of Court on the one hand, or the Incorporated Law Society on the other, it should be concurred in by the majority of the representatives of the body upon the Council?—Yes.

15,858. You do not seem willing to accept so much as was proposed by your predecessors?—That was in 1875.

15,859. And the committee which I mention was in 1873?—Yes.

15,860. It was an exceedingly powerful organisation?—Yes.

15,861. Which at one time seemed to be near success?—Yes.

15,862. Considering how far the proposal had got in that direction at that time, is it not possible that something perhaps a little less drastic might be carried into effect now?—That was before our Act of 1877, which gave us practically complete power over our own examinations; and our views since 1877 with regard to our own examinations are somewhat different from what they were before the passing of that Act. We have now got complete control practically and we desire to retain that complete control so far as the intermediate and final examinations are concerned.

15,863. Without dispossessing you of that control, may I point out to you that in the medical profession, in which, I am sorry to say, education is very much more systematised than in our own, the Royal Colleges of Physicians and Surgeons have for a long time exercised what are equivalent to statutory privileges in this matter. They are absolutely masters of the examinations, but they were not unwilling; in fact, they consented to conduct in conjunction with the University of London examinations, in which neither side would part with its responsibility, but in which the inconvenience of duplicate examinations might be avoided?—I should not like personally to express an opinion to the contrary of that at all. All I meant to say was that I did not feel myself at liberty at the present moment to say what views my Council might take upon it. It is not a question which has presented itself to us.

15,864. Personally do you see any objection to such a course being taken?—At the present moment I should not myself see that there would be any objection, that is, speaking at the moment.

15,865. That would be a practical course, you think?—I think so.

15,866. And such a course as that would be greatly facilitated if the Incorporated Law Society and the Inns of Court were given representation as was proposed by the Senate's scheme upon the governing body of the University?—Yes.

15,867. May I go a little further and ask this? Considering that you represent the whole of the Kingdom of England and Wales, would you see any objection to entering into similar relations with other Universities. Everyone knows you have very important bodies of solicitors practising in Liverpool, Birmingham, Manchester, and other great northern towns. Would you have any objection to entering into arrangements with the Victoria University?—That is a large question, and it is really one to which I have not given any consideration. Before giving an answer to that question I should prefer to have an opportunity of considering it. I do not know quite what its bearings may be. *Primâ facie*, and as put by you now, it does not seem to me that there would be anything unreasonable in that course; but I should not venture to say more at the moment.

15,868. I quite appreciate your position that you have a statutory duty to discharge and statutory powers which you hold, and you cannot part with those?—No.

15,869. But what I am suggesting is an arrangement by which acting with a University you might tend to spread the desire of a University level of education amongst the candidates for the profession, and, at the same time, tend to raise the level of the ordinary requirements of the practitioner?—I think I quite follow you.

15,870. And that is a course which you think might be practised with advantage; at least, you see no objection to it?—Speaking at the moment, it does not occur to me that there is any objection, but before I gave any deliberate expression of opinion upon that I should like to have an opportunity of considering it more fully. I never have considered it.

15,871. (*Sir George Humphry.*) Are the examinations remunerative?—Yes. The fees are given in the book which is before his Lordship. It gives all the fees at all the examinations. It is under the head of "Examination" in the index.

15,872. That would be a ground for the Society not being in an way willing to relinquish the power?—The money question is always an important question in these matters.

(*Mr. Anstie.*) I suppose there would be no difficulty in making arrangements with respect to the distribution of fees?

15,873. (*Professor Ramsay.*) Can you tell me the amount you spend in education as compared with the amount you receive in fees?—I have got it in our accounts. The amount of fees we receive from articled clerks leaves a very considerable deficiency in the course of the year in our accounts, because we charge the articled clerks not only expenses which are incurred directly in connexion with them, but we charge them with a proportion of the rent of our building, a proportion of rates and taxes, and a proportion of the working expenses. That was very fully considered by one of the members of our Society, and it was my duty as treasurer of our Society to see the Master of the Rolls and the Lord Chief Justice upon the subject. It was fully discussed, and the Judges said that the principle upon which we acted was entirely right. If the articled clerks could not come to our building, they must go to some building, and for that building they would have to pay some rent. The net result of it is that the accounts, instead of showing, as they otherwise would, a balance in their favour, show a balance the other way.

15,874. Do you mean by a balance against the articled clerks a balance against the sums which they pay for the examinations?—I am speaking of the whole of the expenses incurred with regard to articled clerks. The fees we receive, on the one hand, for lectures, for preliminary examinations, for the intermediate and final examinations from articled clerks, on the one hand, and all our outlay in lectures and fees, and in the salaries of our assistant examiners who assist us in conducting examinations, and all expenses properly and strictly attributable to articled clerks, result in the articled clerks' fund, instead of being to credit, being the other way.

15,875. The proportion of the total expenses of your Society?—Yes.

R. Pennington, Esq.

24 Nov. 1892.

15,876. So that they maintain and keep up to some extent your buildings?—They do.

15,877. (*Professor Sidgwick.*) I should like to ask with regard to one or two more points with reference to the new system of teaching. As I understand from the paper you have handed in which describes the system, it is proposed that an articled clerk who goes through the full five years' course should begin for 12 months at least with instruction by correspondence, and should not during that time join the classes. Is that so?—No, that is not the idea. The idea is that those with whom we cannot get into personal contact in classes, that is to say, those in the country——

15,878. May I read the words, and then you can perhaps explain. You say, "Students are recommended to subscribe for, first, a course of tuition "extending over 12 months at least." Then comes this: "The instruction both for London and country "students will be given by means of monthly letters "containing suggestions as to the general course of "reading, with hints as to points to be noted and "general advice, and with questions to be answered "from memory, and returned to the tutor with answers "within 10 days from receipt for correction and "comment." Then a little lower down it says:— "Also in addition students are recommended to subscribe, after the expiration of this tuition, whether "it be for one year or longer, to a class preparation"?—The idea was that there might be men in London at some distance, say, Kensington or Hammersmith, or other outlying places, with whom it might be necessary or desirable to communicate through the correspondence system; but we did not propose to prevent men in the first year of their articles coming to the classes. On the contrary, if that is so expressed, I think it must be a mistake.

15,879. I have only just glanced at it, but it seems to me that you have expressed very clearly what you now say you did not intend to express. Then in dealing with the intermediate examination you say:— "Students are recommended to subscribe for, first, a "course of tuition extending over 12 months. The "instruction, both for those residing in London and "the country, will consist of 24 fortnightly letters." Then:—"Also, in addition, students are recommended "to subscribe, after this course of instruction shall "have expired, to a preparation in class." There is no indication that I have been able to see that there are any students who are not to do that. That is, of course, rather a fundamental point in the plan as to where the letters and the introduction of correspondence should begin?—"In addition each student will "have, during this course of instruction, opportunities "of consulting the tutors personally on three afternoons each week, or at any time by letter."

15,880. That is, as far as I understood, distinguished from attending the classes?—No, it is not so intended.

15,881. Class work, 3 to 4.30 p.m., advice, 4.30 to 6 p.m. I should have thought, reading this, that the student during the first part—because it is so carefully put "after the intermediate examination"—would only come during the advice time, and not during the class time?—Certainly the intention is that every student if he wishes shall have personal access to the tutor from the very beginning of his articles.

15,882. Not that he should go to classes?—This application of the system of correspondence to London men was merely because it was thought that there might be some living at some little distance to whom it might be more convenient to receive letters in the same way as the countrymen.

15,883. Why do you so carefully say "after the intermediate examination"?—We say, "In addition, "each student will have, during this course of instruction, opportunities of consulting the tutors "personally."

15,884. You do not say, "attend the class," but you do say, "after the expiration of the course of "instruction by correspondence he is to begin a "class preparation"?—"Students may join the "classes, either those before or after the intermediate "examination, without subscribing to the course of "tuition by correspondence, but it is recommended "that they should avail themselves of both modes of "instruction."

15,885. Do you mean that they are recommended to, or do you conceive that they should, as a rule, do both at the same time?—I think what an articled clerk in London should do, and what it is contemplated he should do, is that he should come to the tutor personally, and receive instruction from the tutor personally in any way that the tutor thinks best, but that the system of teaching by correspondence should be confined, as far as it possibly can, to those who are at such a distance from the tutor that it would not be convenient. That is the idea.

15,886. May I ask how the country clerks were supposed to attend the classes at the end of the year. Were they supposed to come up to London?—No, it is entirely optional at first.

15,887. I see the student is advised, after the expiration of the tuition, to subscribe to a class preparation. Would that be really applied to those who live in the country?—I think it would be impossible in the great majority of cases.

15,888. Therefore, as far as your operations deal with those who live in the country, it would be almost, purely, an experiment in teaching by correspondence?—Yes, until we approach the final; then I think it is possible and probable that many of the country students will come to London and will avail themselves of the tuition here—the personal tuition.

15,889. May I say—having myself taken part in teaching by correspondence many years ago—that in my experience it requires intelligence rather above the average to profit by it thoroughly?—On the part of the pupil you mean?

15,890. Yes; pupils who know when they understand a subject can be taught almost anything, by correspondence, because they can ask with regard to what they do not understand: but I found difficulty in dealing with those who do not know whether they understand a thing or not. I do not know whether there will be a report made of the working of this system?—There certainly will be a report made, probably to the general meeting of our Society in July. We must make a report then, and we shall see, to some extent, at any rate, what the result has been. But, of course, what you have mentioned is extremely important.

15,891. You will compare the work in examination of the people who have been so taught, with the work of those who have been taught otherwise?—Yes, and we shall direct attention to the point which you have just mentioned, which is an extremely important point; that it is only the intelligent student who can avail himself of the tuition by correspondence. I do not know how we are to assist the unintelligent student.

15,892. Of course, by asking him questions, you may find out what he does not understand; but in the case of a student who cannot explain his own difficulties I found it was harder to convey the lacking information. I was very much struck with the remarkable success of the method, developing in the intelligent student clearness of thought. He feels that everything depends upon asking the right question?—Did you find any remedy for the other unfortunate students?

15,893. No; my experience was too brief; but it was sufficient to interest me in the way that the system works. Therefore I wished to know whether it would be carefully watched in order to prevent its being mere cram?—We are most anxious upon that point.

15,894. How far now do University men actually go into the profession?—There is a table in the paper I have handed in.

15,895. Do you think it is desirable that the number should be increased?—I am very strongly in favour of men, as far as possible, not only going to a

good school, but also following that by a University education, if they can afford it. I think it is most valuable, and I prefer personally that a man should not touch law until he comes into a solicitor's office. That is my own personal view.

15,896. I have not been able quite to gather how much time an articled clerk has to spare. It is said that he is to render all the services required?—The rules are very different in different offices. In some offices an articled clerk is left to do very much what he pleases, that is to say, he can read a book, or he can attend or not, I always take from all my articled clerks, and they are all men who have either taken a degree or matriculated at a University or who have made a personal promise to myself that they will attend during office hours, and will take part in the business of the office.

15,897. How long are the office hours?—From about 10 to 6, with a short interval for lunch.

15,898. Then during the hours from 10 to 6, a man's mind ought be to given to the work of the office?—To the work of the office, but in connexion with that, of course, he ought to look at the books which relate to the particular subject which he has in hand.

15,899. Then he may be learning a little out of the books while doing his work?—Yes, he ought to do so.

15,900. Supposing he has these eight hours in the office, would you say roughly that he would be really learning law and enlarging his knowledge of law for about half the time?—He ought to be learning it all the time; he would always be getting useful knowledge.

15,901. The legal part of an affair brought before a solicitor would often be a small point. You could not say he was learning law all the time, could you?—He would be learning the practice. He has to find out how to issue a writ, or enter an appearance, or draw a lease.

15,902. But he is not learning the principles of the law of England?—No, he is not upon such a subject.

15,903. Or even the general rules?—He ought. If he is asked to prepare a writ, or enter an appearance he ought to look at the books of practice, and see how to do it.

15,904. Do you think that unless a man is of great intellectual capacity or industry he would have much time for study after working from 10 to 6. He cannot do a great deal more work after that time, can he?—Not a great deal perhaps.

15,905. There are very few men who will?—Yes, but of course, they vary very much in that respect. A man might read a few pages of Stephen's Commentaries in the evening after that.

15,906. But it seems to me that you leave him very little time. If in your view he is to read no law until he has got through his University course, and then work from 10 in the morning to 6 in the evening at the details of his business, he has no time in which to acquire a systematic knowledge. Is he not apt to take up the study in a fragmentary kind of way?—It ought not to be so, because, in addition to the knowledge which he gets in the practice of an office, he ought to read, with the assistance or without the assistance of a tutor in hours other than office hours.

15,907. Then he must work very hard?—Yes, he must work very hard.

15,908. How many hours is the average articled clerk willing to work after spending from 10 to 6 in the office?—That varies very much; some men will read two or three hours after that; they will dine and go home and read, if they are industrious. Others, of course, will not read at all. I do not know that there are a large number of solicitors who take the same view, but my view personally is that the instruction which is given in the practical work of a solicitor's office is by far the most valuable part of the instruction which an articled clerk ought to receive to enable him to become a useful solicitor.

15,909. Then is it your view that it is undesirable that a man, even though he is able to go through a University course, should have made any systematic study of law, or of the history of law, or of jurisprudence, before he goes into a solicitor's office. Is that the view prevailing in your society. That seem to me to have an important bearing on the relation of the society to University work?—I should not like to say that my view is shared by many; I can hardly express an opinion; I do not know sufficiently what the views of individual solicitors are. I know that there are some who think that all this education is perfectly useless and unnecessary, and that it is not wanted at all; that the sooner you get your articled clerk into the office the better; and that if you send him to a University you are only destroying him as a useful articled clerk. I do not in the least agree with that view myself.

15,910. Of those who desire him to go to a University, would the majority still hold with you that he had better not during his University course devote his time to the study of law in its more scientific aspects. Does it not seem the natural course that he should devote at any rate the latter part of his time at the University to the study of jurisprudence and law?—It is very difficult to say what the views of solicitors in general are upon that subject. I have a very strong view that the proper thing is to give a young man coming into our branch of the legal profession as much general culture as you can. It is the only opportunity that he will have of cultivating his mind as a gentleman's mind ought to be cultivated before he comes to us.

15,911. There are some who think that there is no study more cultivating than the study of law?—I am sorry that I take a different view with regard to that; I quite understand it, and quite appreciate it, but I take the other view.

15,912. I mean treated in a scientific and in a historical way?—Yes, I perfectly understand that.

15,913. (*Lord Reay.*) You realise that if a Faculty of Law in the new University is established, the main object of such a Faculty must be to give professorial tuition?—Yes.

15,914. To give professorial tuition which will bear comparison with legal lectures in a continental University?—Quite so.

15,915. Those lectures will be given by the most competent jurists we have?—Yes.

15,916. Those lectures will be given during the day to day students, of whom a great number, as we may legitimately expect, will be future barristers?—Yes.

15,917. The question I should like to ask you is a practical one. When the lectures are once established, how many articled clerks do you suppose will attend those day lectures given by eminent jurists?—That is a question which I have put to myself, before coming here, and I have found it impossible to obtain any information which would enable me to answer it.

15,918. I am not asking you for the number, but I am asking whether in your branch of the profession encouragement will be given to young men entering your profession to attend those lectures during the day?—I should hardly venture to answer for the profession generally, because the views of solicitors with regard to articled clerks differ so very much. It would be almost impossible for me to answer that question.

15,919. May I put it in a still more practical form. Assuming that Sir Frederick Pollock lectures at 2 o'clock in the afternoon an articled clerk asks to be allowed to attend that lecture; will he get leave to attend that lecture, or will difficulties be placed in his way?—I think many solicitors would place difficulties in his way. I think a great number of others, particularly if our branch of the profession were allowed to take any part in the new University, would be disposed to assist the articled clerk to attend any lectures, that is, give him time to attend them. There are a great number of solicitors who would let an articled clerk do just as he pleased. They give him a seat in the office, and he is very much allowed to spend his time as he pleases.

R. Pennington, Esq.

24 Nov. 1892.

15,920. Now let me put this question. Sir Frederick Pollock lectures at 8 o'clock in the evening; how many articled clerks will then of their own accord attend lectures?—That is, again, a very difficult question to answer. It is almost impossible to say what proportion of articled clerks would avail themselves of the opportunity of obtaining a degree. It is extremely difficult to answer the question. For instance, country men, of course, would be practically out of the question. It would be London men only.

15,921. My question is strictly limited to London clerks? — It is an extremely difficult question. I have thought of it, because I thought it extremely probable that I should be asked the question here, and I came to the conclusion that I should not be able to give any statistics which could at all be relied upon.

15,922. Then, might I ask whether you have ever considered the cause of the difference which exists between Scotland and England in this respect. You are well aware that in Scotland a great number of writers to the Signet and procurators, as they are called, attend these professorial and tutorial lectures before they are admitted with great credit to themselves; and that the profession thoroughly appreciates a scientific legal training?—Yes.

15,923. How do you explain the difference between the two countries?—I do not say that it would not be the view of a large proportion of our own profession, I merely wish to say that I cannot say what their view would be. I have no means of knowing; I have never had an opportunity of ascertaining what the views of solicitors are, beyond this, that, as a rule, I think solicitors may be said to feel that the regular attendance at and work in a solicitor's office is the best training for an articled clerk who is to become a solicitor. I think that would be the general view, but it is certainly not the universal view. If it were put to solicitors as a body, I could not venture to express an opinion as to what they would say in answer to the question which you put to me.

15,924. You do not think that in Scotland the practical part has been neglected?—I do not know their system with regard to the education of articled clerks.

15,925. I do not think you would find that the work in a Scotch solicitor's office is done with less care or with less accuracy than the work in an English solicitor's office?—That I quite agree with.

15,926. Supposing that in the new legal Faculty, we not only organise courses of lectures in the higher branches, but also lecturers dealing with elementary principles of law on which, I gather from what you told Professor Ramsay you laid, and very justly, great stress; in that case would you consider it necessary for your Society to keep concurrent courses of lectures, or would you be satisfied with the University lectures?—Personally, I should think it probably would not be necessary if we found that the new system would result in an articled clerk receiving the same amount of instruction in practical knowledge as that which we hope would be imparted to him under our new system.

15,927. Could you contemplate an arrangement of this sort: the University to give the theoretical knowledge over the whole range of both the elementary principles and the higher branches of law; and your Society to give such tutorial assistance as you have mentioned, going more into detail with regard to special points, and *pari passu* the duties in chambers to be performed in such a way as to permit these gentlemen to attend the lectures at the University and the tutorial lectures. Do you not think that is a practicable arrangement?—Our examinations——

15,928. I do not refer to your examinations. My questions have reference to teaching?—Personally, I should have no objection if an articled clerk wished to pursue such a course as that.

15,929. Leaving, therefore, the University to deal with the scientific and theoretical side of law, and your Society to deal with the professional and practical side?—Certainly, they could go side by side until we got to the end, which would be our examination, and your examination which would give the articled clerk his degree. That would be a very convenient arrangement.

15,930. The examination of the University being limited to theory, and your examination being limited to professional purposes?—Yes.

15,931. Your examination being the sole avenue to the profession?—Quite so.

15,932. And the examination of the University being strictly limited to scientific purposes. That is an arrangement which you think possible?—If the two could go side by side, that is to say, if the articled clerk could spend his time in passing through both those courses, that would be satisfactory.

15,933. That would be a matter of arrangement between the Incorporated Law Society and the new University after it came into existence. You do not think your society would object to enter into such a *modus vivendi*?—I should think not, but I am not prepared to express an opinion for them. We should still have to deal with the individual solicitors, of course. The individual solicitors might refuse to change the present system, or to allow the articled clerks to go through such a course.

15,934. (*Professor Ramsay.*) As the subject of the training of Scotch lawyers has been mentioned both by Professor Sidgwick and Lord Reay, I should like to put the same question with a little more detail. Professor Sidgwick took the point of view of the student and his difficulties. This is the regular course in Scotland with a student who is going to become what is called there a procurator, or what you call here a solicitor. In the city of Glasgow the whole of the teaching of the profession is done by the University. The two main branches of it are Scotch law and conveyancing. Those are the two most important classes. Every man who is aspiring to become a solicitor, whilst an articled clerk attends lectures in these subjects, and in other subjects also if he looks forward to taking a degree. Professor Sidgwick's question about the time goes to the real root of the matter. This is what occurs in Glasgow. The University has law lectures at 8 o'clock in the morning and half-past 5 in the evening, and students go to those lectures in the morning, or in the evening, as the case may be. They have to attend to their duties all the day and give the whole of the evening to getting up the subjects of their classes. Then the examination is conducted by the Society, as you call it. The offices, of course, do not like losing the time of their clerks, but they universally recognise its importance, so that no difficulty is made as a rule. Every lawyer in Glasgow is ready to give his articled clerks the fullest assistance with regard to University courses. Then I should like to point out this. The teaching in our Universities is not of the theoretical character, which I think has been assumed in some of the questions that have been put to you. The Professor of Conveyancing in the Glasgow University is selected by the solicitors of the town. They gave the endowment, 200*l.* a year, from the funds of the Glasgow Society for the purpose of founding a Conveyancing Chair, and they have been allowed to keep the patronage in their own hands, because it is a matter of importance to the profession. That teaching prepares not merely for the degree, but also for the qualification for the profession, so that the possibility of the conjunction of those two bodies is entirely proved?—If an articled clerk here would go to a lecture at 8 o'clock in the morning I do not think a solicitor would object to him going to another at half-past 5 in the evening.

15,935. Then there is another point: articled clerks pay considerable premiums in England?—Yes.

(*Professor Ramsay.*) That is not the rule in Scotland. Indeed, the clerk usually gets some small pay. Consequently his time is more valuable to the employer, and ought to be more at the disposal of the employer.

15,936. (*Sir George Humphry.*) I suppose it might be made a condition in the articles that a pupil

might be allowed to do this, that, and the other?—No doubt; but first-class solicitors will not submit to conditions.

15,937. Then they would not get the pupils?—I think they would.

15,938. (*Professor Ramsay.*) It is a fact, is it not, that on the whole the feeling prevails in the profession that University teaching is rather injurious than the reverse?—As I expressed it a short time ago, with many, that is the view, I believe, and I hope that it is an erroneous view entirely. My experience has been a long experience with men who have been to Universities, and I am entirely of a different opinion.

R. Pennington, Esq.

24 Nov. 1892.

15,939. (*Sir George Humphry.*) Are your teachers appointed by the Society?—Yes.

15,940. Then they are under the direction of the Society?—Yes.

15,941. (*Mr. Anstie.*) Is it not a fact that now it is the practice with a great many leading firms to take by choice University graduates?—For the last 30 years in my office we have only taken graduates or men who have matriculated. We do not take any others.

The witness withdrew.

Sir Albert K. Rollit, M.P., LL.D., B.A., examined.

15,942. (*Chairman.*) You are a member of the Council of the Incorporated Law Society, a member of the Senate of the University of London, and a member of the Council of King's College?—Yes. I do not speak for the latter bodies; I speak as a member of the Council of the Incorporated Law Society.

15,943. You were requested by them to come and give evidence, and, therefore, you speak in their name as well as in your own?—Yes.

15,944. You on their behalf strongly approve of a University course and degrees for solicitors?—Yes, I think that is a general sentiment of the profession. Personally I entertain it in the very strongest degree.

15,945. Would you like to give us any reasons for wishing for it?—I think that general culture is the very best basis of professional reading and action, and my experience in the profession has taught me the practical benefit of previous University training.

15,946. With this object you approve of the Incorporated Law Society being a constituent college for law; that is to say, you wish it to be affiliated to the newly constituted University, or the new University, which ever it may be?—Certainly.

15,947. To be affiliated with regard to that one Faculty?—As a Law Faculty; either as a constituent college, or otherwise.

15,948. That would mean, of course, that you would wish to be represented on the Senate?—Yes.

15,949. With regard to the Faculty, you would wish to form part, at any rate, of the Faculty of Law?—I think so. I think the teachers of the Incorporated Law Society might well be represented on the Faculty of Law.

15,950. The Incorporated Law Society have just adopted a new system, and the old lectures are going to disappear and give way to new teachers, who will carry on their tuition by correspondence?—Yes, partly by classes and partly by correspondence. I supported that proposal partly because of the failure of the preceding arrangements, and partly as a hopeful experiment.

15,951. I only go into it at this moment by way of asking whether those are the teachers that you refer to?—Yes.

15,952. The new teachers would be the ones who would form part of the Faculty of Law?—I should be glad if there were also lectures, and in that case I should refer to them.

15,953. To anybody who under the scheme for the time being was engaged in the work of tuition?—Yes.

15,954. You prefer one University, you say, to two, for London?—That is my personal opinion.

15,955. And you would like to have the existing University re-organised rather than have a new one constituted?—Yes, by giving it teaching and other powers—professorial and other powers, and by incorporating with it constituent colleges.

15,956. You have looked into that question, and you think that can be done without interfering with the present Imperial character of the University?—I think it could be done, and I am strongly in favour of maintaining the present work of the University, especially so far as the non-academical students are concerned.

Sir A. K. Rollit, M.P. LL.D., B.A.

15,957. Of course it would require remodelling. You would have to remodel the Senate?—Yes. It would be a somewhat complex arrangement, but I think quite a possible one, and I feel strongly that any city University should be many-sided, and utilise existing organisations as far as possible.

15,958. You think it should avail itself of all possible teaching organisations without entering into unnecessary competition with them. This would be done by a system of affiliation?—Yes, and by supplementing their work where necessary, and where it was not being at present adequately performed.

15,959. By University professors?—Yes.

15,960. This, you think, would benefit both general and professional education?—I think so.

15,961. In the particular case of the Incorporated Law Society you think this would be an advantage in offering an inducement to law students to pursue a general education, and obtain degrees in Arts, Laws, &c.?—I do, and that it would re-act on professional education by tending to give it a higher and wider range.

15,962. You look to the professional man, the solicitor, taking degrees, not only in law, but possibly in arts also?—Yes. That used to be the condition of the University of London when I graduated—that you must take a degree in arts before your degree in law. I do not think I should wish to revert to that, but I should certainly encourage the taking of degrees in arts as well as laws.

15,963. And the degree in laws should also require some general culture?—Certainly; and this is still secured in the case of the University by the Matriculation Examination, which is a very comprehensive and high one.

15,964. I suppose that would hardly be sufficient? You would wish for something more than the general education which is required in your own preliminary examination?—Our own preliminary examination is a fairly high one, and the standard is, I think, well kept up. My own personal view would be that if it and any other of our examinations could be accepted *pro tanto*, it would be very desirable, in order to prevent the duplication of examinations and courses of study, which is of course objectionable.

15,965. I think half of your students are exempted from your preliminary examination owing to having passed something of the same value elsewhere?—Yes. I think it quite possible to compare examinations and to draw some fair inference as to their equality.

15,966. But only up to that point. You could not carry that further to the intermediate examination or the final?—I am inclined to think, and for this purpose I should not object personally to the association of University examiners, that where an examination can be accepted *pro tanto* it should be, and that the student should not be subjected again to the inevitable process of preparation as distinct from study.

Sir A. K. Rollit, M.P., LL.D., B.A.

24 Nov. 1892.

15,967. And that would refer both to taking the degree of the University, and obtaining the qualification from you?—I should personally propose to treat them reciprocally. I have a strong objection to students, instead of extending their reading, being detained by repeated examinations if it can be avoided.

15,968. Can the work be done to a certain extent concurrently? Would a student be able to read for a University degree at the same time that he is articled, and at the same time that he is reading for your examination?—I did so, and if I remember rightly, I passed all the examinations concurrently. I think I was admitted within a very few months of taking my B.A. degree. I took honours in both, so that there should be no formidable difficulty.

15,969. There has been a rough distinction drawn by previous witnesses between professional and non-professional law?—I believe that distinction is drawn at the Johns Hopkins University, at Baltimore, and in America generally, but personally I think the distinction is not a very clear one to trace. I think the one leads up to and shades into the other.

15,970. And the University degree, to be worth anything, would require a knowledge of the whole subject?—I think that is just where a University degree would be valuable. For our examination and for practical purposes one can hardly require a knowledge of jurisprudence and the principles of legislation. But these are the complement in my opinion of practical law, and can be well furnished, and ought to be furnished by University teaching.

15,971. (*Mr. Anstie.*) You are not perhaps aware that Prof. Emmott, of the John Hopkins University has given evidence before us, and has expressed sentiments very similar to yours?—I was not aware of that, but I am glad to be fortified by such an opinion.

15,972. (*Chairman.*) Do you attach much importance to the study of Roman Law?—Yes, I do, for the sake of principles especially.

15,973. That would be University work especially?—Yes. And equally I attach importance to the principles of legislation and higher politics.

15,974. Do you think a good law degree if established by a London University would be sought after by other than professional men?—Yes, I do. I happen to be Chairman of the London Chamber of Commerce, and as such I am familiar with the much greater organisation now required in relation to business, and the exacting demand which is made upon heads of great commercial houses, and I am satisfied that with regard to the laws of Shipping, General Average, Insurance, Banking, Currency, and so on, there are many who would desire to gain a knowledge of legal and economical principles. Again, Commercial History is being very much studied, for instance, all about the Trade Routes, and the Laws of Commerce with relation to politics, and so on, would, in my opinion, be of very great value; and so of the economical and positive laws relating to labour and the like. For those subjects some knowledge of law is most desirable.

15,975. You say the University would benefit by securing practical professional information, and the constituent colleges would benefit by being placed in touch with higher instruction, and by the dissemination of information among the students?—Yes. I mean there would be a practical touch between the two in such a case. The changing aspects of modern law would, I think, re-enforce the work of a University through a representative from the Incorporated Law Society, and, on the other hand, the college would greatly benefit by the additional knowledge which would inevitably be placed within its reach as to what was going on in University life in relation to the law.

15,976. Then you say "also by the consequential "widening of the area of its own work and examina- "tions." Would there be a well-defined difference that you can really put down in writing between the knowledge required for a degree and the knowledge required for one of your qualifications. I gather from what you say that they would rather run into one another?—Yes, but having a remembrance of both of them, and having passed them nearly simultaneously, I think each might be regarded from its own point of view as probably of nearly an equal standard and difficulty. I am now speaking of the honours degree and the honours examination, I should say.

15,977. Like the previous witness, I suppose you would be very unwilling to part with any of your own powers. You would insist upon keeping the entire control of the profession, and you would wish that nobody should be admitted, except by you?—I am convinced that that would be the view of the Council of the Society.

15,978. And you would not allow any interference with your present functions, though you would be willing to take part in the business of the University?—I think as to the admission of students that the Council would not entertain a proposal that others should join in that work, but my own personal opinion would be that some association of University examiners in order that the examinations of our Society might avail *pro tanto* in the University ought not to be open to objection.

15,979. So as to prevent the necessity of a duplicate course of studies?—Yes, and of examinations.

15,980. I see you say that owing to the increased organisation of industries general culture becomes more and more important in both branches of the legal profession. That is in accordance with what you have already told us?—Yes.

15,981. You say it is quite as important to solicitors as barristers since they must be all-round men and men of affairs?—Yes.

15,982. This especially is the case in the provinces where counsel are not so accessible. I suppose this is less the case than it used to be?—Well, counsel are as accessible as they were, but I think the Bar tends somewhat more, practically, towards specialisation. You know the abilities of a particular man for a particular purpose, and the profession go to him for that purpose; and, I think, therefore, that the solicitor who has to deal with the first consideration of a case has a greater demand put upon him for general all-round-law than in the case of a specialistic barrister. That is the result of my own personal observation. I do not think it is the duty of a solicitors to go forthwith to counsel, as was suggested by a witness before you the other day. I think he is bound to bring his own mind to bear upon the matter, and form a *primâ facie* opinion upon it. Then if he requires additional help he can go to counsel. That first consideration and the resulting opinion requires additional knowledge and training.

15,983. Then you say the exact form of association which the University adopt at its foundation is a detail and of minor importance?—I add that the connexion would develop, and the Charter would be amended according to experience.

15,984. And as in many other things it is better to leave the matter very much to adapt itself to circumstances?—I think it is one of those things that would grow, and would grow especially in this case from, comparatively speaking, small beginnings.

15,985. You have told me your desire to retain the conduct of your examinations, and certainly the sole right of admitting to practice. Then you say the higher subjects, such as Roman Law and Jurisprudence, would well and most usefully be dealt with by professors of the University?—Or by other colleges.

15,986. And you say this teaching should be available for students of the constituent colleges. Then you say that you would wish that the lectures should be open to your students?—Yes.

15,987. The best means of gaining a knowledge of the principles of law are all important?—Yes.

15,988. So you are in favour of the Society giving scholarships to select students to graduate at the University?—Yes.

15,989. Do you think they would be willing to do that?—Yes, and I think that is very important too, to lead up the best students to the higher University degrees.

15,990. And similar scholarships to be in connexion with the University. Then the funds of the Society might be supplemented, if necessary, by some appropriation out of the 50,000*l.* paid in the shape of duty on articles of clerkship?—That would, of course, require legislation, but an analogy in my mind is that of local grants in aid out of Imperial funds, and, I think, the 50,000*l.* paid in duty on articles of clerkship might to some extent be devoted to the aid of legal education by scholarships and otherwise.

15,991. To enable your students to graduate at the University, reside there, and take advantage of its instruction?—Yes.

15,992. Then with regard to laymen?—I think we have practically dealt with them.

15,993. You mean that there ought to be scholarships for them?—What I have indicated as a desirable course should be open to laymen on the ground of their engagement in business which now requires so much organisation and knowledge.

15,994. The Inns of Court should be dealt with similarly to the Incorporated Law Society. You mean in the way of being a constituent college, and being associated with the University?—Yes, I venture to think that.

15,995. And solicitors' students should have the same rights as Bar students? This was so formerly. Equally Bar students should have reciprocal rights at the Incorporated Law Society. Would the Inns of Court agree to all this?—I have no idea as to that, but I do know that a very large number of intending barristers do go into solicitors' offices for periods of study, and to learn practice, and that is undoubtedly allying very much more than in the past the two professions.

15,996. You think the two professions should be one, though practically and generally advocacy would be pursued separately. That was Lord Selborne's idea?—That is so in the States. There the two professions are one, but advocacy is generally relegated to one member of the firm. I think that should be so here.

15,997. Is there as much objection to the amalgamation on behalf of the Bar that there was formerly?—I do not know what advocates of vested interests might assert. I should not agree with them.

15,998. Then you say the funds of the Inns should be made available for teaching scholarships, &c. Have the Inns of Court got a considerable amount of money?—So I have always understood, and I think that is confirmed by Mr. Crackanthorpe's evidence.

15,999. You think a Law Faculty should be formed of the Council of Legal Education?—May I add the words "All or some of the following: Council of "Legal Education, Council of the Incorporated Law "Society."

16,000. What does your Council consist of?—Our Council consists of about 30 to 40 members who are elected at our annual meetings, and may be said, as a general rule, to be the representative men of the profession.

16,001. Are they all professional men?—All solicitors, all practising solicitors. I believe that is the qualification. They must be.

16,002. Not only the teachers, but you would wish your Council to be part of the Faculty of Law?—I think the Council of the Society should be represented on the Faculty of Law together with the teachers and others as well as upon the Senate.

16,003. And the Inns of Court on exactly the same footing as you. Do you think you ought to have about equal representation?—That is a detail, and I think it would depend properly to some extent upon the comparative contribution of funds. But I do not see why it should be very unequal. We have very large numbers compared with the Bar, even if they have a greater amount of property.

16,004. Then besides what you mention the Faculty would consist of the teachers in the different colleges, University College and King's College?—And the professors and teachers of the University itself.

16,005. There are present a good many law teachers at King's College, are there not?—Just recently we have established at King's College in connexion with the evening classes what is a good practical law course intended to prepare for the Bachelor of Laws Examination at the University. The previous law instruction was very meagre, but the new law course is extremely valuable. It appears in the Calendar for 1892, and it has, to my mind, the great advantage of being associated with the evening classes. I heard what was said about the evening and the morning classes. In my opinion the more evening instruction (and morning if they will avail themselves of it) the better.

16,006. Is that attended to any great extent by your students?—I am not aware.

16,007. The Faculty, of course, would appoint a Board of Studies according to the Gresham scheme, and the scheme of the University of London?—Yes.

16,008. The Law Faculty would be adequately represented on the Senate of the University, that is, you would wish to have a member at any rate, or perhaps more on the Senate?—Yes, I think the Faculty should be represented adequately on the Senate, but I do not conclude that a teaching University is necessarily a University of teachers.

16,009. Other elements should exist in the Senate which should in the last resort be supreme?—Yes, though practically, I may add, the Faculty and Board of Studies in relation to law matters, would, I take it, be all powerful.

16,010. And the Board of Studies, you think, should be really only a consultative body, not executive?—I think it should be a consultative body. Though practically it would be an executive body subject to the final control, if necessary, of the Senate, which would very seldom be exercised.

16,011. For instance, with regard to the curricula and the examinations, the Board of Studies would arrange with an appeal to the Senate, would they, or how?—The Senate, as the ultimate power in the University, I take it, would be supreme, but practically such a power would seldom, if ever, be exercised.

16,012. There might be friction and waste of time?—That is a detail which I really will not say that I have completely thought out. It is a matter of machinery to some extent.

16,013. You attach importance in City life to evening classes?—Yes, the very highest.

16,014. Then you say it is often like self-tuition in many cases alone consistent with professional and commercial life. The commercial man is occupied all the daytime, and can only attend evening classes?—Yes.

16,015. Speaking as Chairman of the London Chamber of Commerce, and President of the Associated Chambers of Commerce of the United Kingdom, and also as President of the Municipal Corporations' Association of the United Kingdom, you are of opinion that higher legal instruction so given would be of great service, and would be much sought by, and ought to be accessible under suitable conditions to laymen?—I am. In public life I think it would be extremely valuable.

16,016. That refers chiefly of course to commercial men?—To commercial men chiefly, but throughout public life. There are public duties, some of which every man ought to perform. I think it would be of great service.

16,017. You say the University of a great city should not be too academic?—I think it should not.

16,018. But you think it should be many-sided, and it must be a somewhat complex institution, and should utilise existing organisations for teaching and should teach itself supplementarily? That means that it should have professors for the higher branches of teaching which would not be taught by colleges?—Certainly.

Sir A. K. Rollit, M.P., LL.D., B.A.

24 Nov. 1892.

16,019. You think it should also examine and stamp knowledge however and wherever acquired. That is, keep open the examinations as they are now to all comers?—I attach the very highest importance to that. There are numbers of students, the great majority of students, who can neither afford the time nor the money to ever attend classes systematically, who must be left to do their work and get their knowledge as and how they can, and I venture to think that such knowledge however and wherever acquired should be readily stamped, the high standard being secured.

16,020. Would you make any difference between these outsiders, and those who have been brought up in the constituent colleges or would they go up to the same examinations?—I think as in one of the schemes proposed some difference might be made, and a certain value might well be assigned to culture obtained through the teaching process, to which I think importance should be attributed, but, on the other hand, I think that where that advantage has not existed, the degree ought to be obtainable. Still, I fully appreciate the value of teaching both directly and indirectly.

16,021. And that the University should be ready to quickly recognise new needs, and aid them by means of education, by the institution of new Faculties, for instance, in engineering, commerce, &c.?—Commerce was the one I intended chiefly to refer to. I am of opinion that the time has come, when, having regard to the importance of the intellectual aspects of commerce, it might well be recognised as one of the Faculties, and I may say that at the London Chamber of Commerce we have instituted with some success already both senior and junior courses of instruction and examinations which are wide and searching, and which are being applied in great measure throughout the country by other Chambers of Commerce. I have the syllabuses of the Higher and Junior Commercial Examinations of the London Chamber here which I can hand in, and I think the requirements and the character of these examinations quite fit them for adoption academically and of furnishing the means of conferring a degree in that particular subject.

16,022. A degree in commerce?—Yes.

16,023. What would be the subjects in commerce?—I will read from the syllabus of our junior examination what we require. The compulsory subjects are two of the following languages:—French, German, Spanish, Portuguese, Italian, preferably including one other than French or German; English Language and Literature, Composition, Précis, Shorthand (optional), Mathematics, Commercial Geography, Commercial History. The optional subjects are Latin, and one from each of the following groups, or three from one of them:—Commerce, Insurance, Commercial and Industrial Law, Chemistry, Physics, Mechanics, and Hydrostatics, Mineralogy, and Petrology, Metallurgy, Botany, Zoology, Microscopic Manipulation, Drawing, Freehand, or Geometrical, or Mechanical, or Designing, Photography, that is the junior examination.

16,024. All those things would be already taught in the University?—They would; but supposing they were so grouped as to carry with them a degree in commerce, I think that would be an encouragement to commercial teaching, and a means of allying what I think would be very important, viz., high culture with commerce. It would also be a good training for trade. It would make commerce more of a learned profession.

16,025. Partly Science and partly Law?—Yes, that is the characteristic of it.

16,026. (*Professor Ramsay.*) How many of the groups that you have mentioned must be taken?—After Commercial History come the optional subjects.

16,027. How many optional subjects must be taken?—Latin may be taken.

16,028. Do you mean that a certain number of these optional subjects must be taken?—Yes, one from each of the groups, of which Latin is one. Latin is to be taken as an optional subject. If a student takes optional subjects, Latin must be one.

16,029. And the others?—One from each of the following groups, or three from one of them.

16,030. And that will count as against any one of the other options?—Yes.

16,031. Latin or another?—No, Latin must be taken.

16,032. Then it is a compulsory optional subject?—That is one mode of expressing it. It is a compulsory subject among the optional subjects.

16,033. (*Mr. Anstie.*) You need not take that branch at all, but if you take that branch you must take Latin?—Yes. The fact is we wanted to include Latin as an obligatory subject. We found it impossible in the present state of general education to do so. We therefore placed it at the head of the list of optional subjects, and required it to be taken as one of them. Then in the senior course the compulsory subjects are English; Foreign languages, French, German, Italian, Spanish, Portuguese (any two of these, preferably including one other than French or German), Mathematics, Geography with especial reference to Commerce, Commercial History and outlines of Political Economy. Then the optional subjects from which the candidate may select any two, are:—"Mathematics, including the compulsory portion "treated more fully, and in addition Trigonometry, "Latin Commerce, Insurance, Commercial and "Industrial Law, Chemistry, Physics." I need not read the details of Physics, &c.

16,034. (*Professor Ramsay.*) How much does mathematics include?—We have a detailed syllabus.

16,035. I mean the one which you require in the senior grade?—"Arithmetic, knowledge of the princi- "ples of whole Numbers and of Vulgar and Decimal "Fractions, and facility in their use both for accurate "and approximate Computation, including Applica- "tions of Arithmetic, such as Per-centage, Proportion, "Interest, Discount, Stocks, Exchange, Areas and "Volumes of Rectangular Figures and other ordinary "subjects of arithmetical calculation, together with a "knowledge of the Decimal System of Weights and "Measures, Mental Arithmetic." I will not read the details of the algebra. Then in Geometry we require the first four books of Euclid with deductions from the propositions.

16,036. (*Chairman.*) You think it desirable to have a Faculty of Commerce for the University which will teach all those things, or if they are taught already will recognise them?—Yes, I think in the case of the University for a city like London, the City University, it is almost necessary.

16,037. You would not require any special professor? The professors would already exist for these matters?—Yes, it would be a grouping of the subjects.

16,038. It would hardly be a Faculty in the way of a distinct body of teachers belonging to it?—I think scarcely so.

16,039. It would hardly be a Faculty in the sense in which the word is employed throughout the Gresham Charter?—No, I think not.

16,040. What you want is that a man may take a degree in Commerce?—Yes; I may mention that King's College has formed a Commercial Department. In this matter the Chamber of Commerce has received a great deal of valuable help from Dr. Wace, the Principal. I think the same course has been adopted in other schools; certainly one result has been that a great many better books on Commerce, especially Commercial History and Commercial Geography, have been produced as the result of this movement.

16,041. That comes to the end of the notes you have given for our guidance. Is there anything else you wish to mention?—I do not think so.

16,042. (*Lord Reay.*) With regard to this very important subject of Commercial education on which you speak with so much authority, and to which you have given such a great impulse, I should like to ask whether you would not desire to see Commerce repre-

sented on the Board of Studies, so that commercial men might influence the organisation of courses suitable for the students you have in view?—Provided that instruction were given, I do not attach a very high importance to the degree. I think it is an outward and visible sign of work that has been done, but what you say might meet the matter. There might be either a degree or a diploma in Commerce; but I should prefer a degree.

16,043. You say the various subjects which you have mentioned belong to several Faculties, and that is one of the reasons why you wish for a new Faculty. Your wish could be met in another way by asking gentlemen from the various Faculties to join a special Board of Studies. That would be a simpler mode?—I think that would meet the matter.

16,044. Might I ask (and you will not be surprised if I ask the question) why in the great number of subjects you have mentioned you only alluded to the outlines of Political Economy? If there is one subject more than another into which I should think commercial students ought to dive deeper, it is Political Economy. In the course for your senior students, "Outlines of Political Economy" are included?—I do not see that qualification.

16,045. Was it felt that if one went deeper into Political Economy it had better be left to private study and private reading? That it would not be desirable to have a professor representing a system of Political Economy?—No, there was no reason of that sort, and the syllabus I have read had no reference to this Commission. It was only the record of the work we are doing. There was no reason of that description.

16,046. Then with regard to the law studies, are you in favour of a future barrister and a future solicitor going through the same course of lectures, or would you organise courses of a different nature? I suppose with regard to the elementary principles of law you would make the course identical?—I do not see why the course for both should not be identical.

16,047. All through?—All through.

16,048. And your object in constituting the Faculty of Law in the University would be to have the Legal Chairs filled by the most eminent jurists and the best teachers of law?—Certainly, just as is the case in the German Universities.

16,049. Would you let the University deal with what I may call the practical side of the subject, or do you think it had better be reserved for professional handling?—I should see no objection to the University dealing with the practical part of it. The present University does so. The LL.B. examination of London is a very practical examination, and the new course at King's College is distinctly a practical one.

16,050. Would you desire the University to deal with the practical as well as with theoretical aspects of law?—I should see no objection, but if the practical part were dealt with otherwise I should not be in favour of duplicating work which was well done else where, either in the University or outside the University.

16,051. Provided it was taught somewhere?—Provided it is adequately furnished somewhere. I do not think it is desirable to duplicate such work.

16,052. The University aiming at the teaching of principles of law in their more theoretical aspect?—Yes.

16,053. Of course with illustrations derived from practice?—Yes.

16,054. (*Professor Sidgwick.*) I am not sure that I quite understand the part that you give to the Incorporated Law Society in conjunction with the University. First, as regards the examinations, do you think that they might be arranged by the two bodies?—I should personally see no objection to the association of a University examiner with the examiners of the Incorporated Law Society with the object of the acceptance of the latter examination for University purposes *pro tanto*.

16,055. Do you think that another course might be adopted, and that the Incorporated Law Society, having some place in the University, might accept the examination of the University, as a substitute for a part, at any rate, of its own examinations?—Personally, at any rate, as to part, I should see no objection, but I am bound to state that I think that the principle of action with the Society would be the retention of their present examinations and powers.

16,056. Their examinations might, of course, be retained, although they accepted certificates of University examinations in lieu of them?—Yes, I think I said that those acceptances should be reciprocal, that is my opinion, personally, and remembering that I had the two examinations to go through closely together I think one of them might have been dispensed with, or part of one at any rate.

16,057. If I understand you, you think that those who are preparing to be solicitors should go through the same course of instruction as those who are preparing for the Bar?—I think it would be an advantage for them if they did so, but that you should require the higher law from every solicitor for the purposes of admission to the profession is, perhaps, too high a requirement.

16,058. Then supposing the University examinations, as might be the case, included a larger range of study or maintained a higher standard, there might be no objection to accepting them on the part of the Incorporated Law Society, even if the University did not quite see its way to accept the examinations of the Incorporated Law Society?—I do not know that the Council of the Law Society would receive them in any case, but I am quite satisfied that the possibility would not be improved by the suggestion which you make that there should be no reciprocity.

16,059. I make the suggestion only in view of the possibility suggested by your own previous answer that it would be found desirable in order to admit all the deserving students who ought to be admitted, to have a somewhat narrower range or lower standard than was thought desirable in a University degree?—I follow your argument, but I do not think that the Council of the Society would accept the University degree for practising purposes in the absence of any reciprocity, even if they would do so at all. I should be misstating what I think would be the feeling if I went further.

16,060. When do you conceive this preparation should be carried on—during the time that the man is also an articled clerk?—Yes, I think it is quite possible with fair average reading to do the work during the time of a man's articles, and to carry it on afterwards to the higher degrees.

16,061. The theory of the University preparation ordinarily is that the whole time of the student—or at any rate the whole working energies of the student—are to go to work that prepares him for his degree. I understand that a considerable part of the time of the articled clerk is required for the business of the office in which he is articled?—That is so, but he is in the best of schools—that is the workshop—and should be really learning his principles and the practice and law at the same time.

16,062. Do you think it probable that he could during this time go through the course of study that ought to be required for a University degree in law?—I think so certainly, considering the fact that he is engaged in an absolutely analogous occupation to his reading—I mean his practical daily work—for instance, going to chambers and hearing cases argued, conducting them in chambers sometimes, and looking up points of law for his principal, which is a constant practice with me, that is all training which is of a distinctly scholarly and practical character.

16,063. Do not you think it desirable that students should go through a University course before they become articled clerks?—I do not think it would be possible to go through a whole University course, even in law, before they become articled clerks.

Sir A. K. Rollit, M.P., LL.D., B.A.

24 Nov. 1892.

16,064. A large number, and, I understand, an increasing number, have taken a University degree?—Those who go to to residential Universities do that undoubtedly, but the great bulk of law students would have practically to do their work for the University and for the profession at the same time.

16,065. And you do not look forward to any considerable increase in the number of those who have gone through a University course before they came to the office?—I think their entry into the profession would be too much postponed, having regard to the circumstances and conditions of a great number of the students. But it is a very desirable luxury and advantage for those who can afford it in time and money.

16,066. I think you mentioned that subjects like Roman Law and Jurisprudence would form a part of the University teaching. Did you mean that the articled clerks should learn them, or that they should not?—If they desired a degree.

16,067. Besides doing their business and also preparing themselves in English Law, would they have time to study Roman Law also?—I think so, by hard work, especially if they had learnt Latin at school. And I would also mention that I think these higher requirements, if felt to be advantageous, would re-act upon school education, and a great deal of preliminary work would then begin to be done in the secondary schools.

16,068. Then, I suppose, in your view the articled clerk would spend the whole of his five years in the two studies. He could be preparing for the University degree during the five years?—I think he would, but he would carry forward his University degree work probably after the five years. One essential consideration, is what I have mentioned more than once, namely, the acceptance in each case *pro tanto* of the work done for the other examinations.

16,069. Then you think he should devote some further time?—I think he should devote some further time in taking his Bachelor of Laws, and afterwards Doctor of Laws degree.

16,070. Do you think that the number of the articled clerks who would be able to go through this wider course of study, including subjects like Roman Law, which have no direct bearing upon their practice, would be a large or a small proportion?—I think they would be a considerable proportion. It would depend a good deal upon the estimation in which the degree was held. If it were found that those men did their work well afterwards, I think others would be stimulated to take it up, and the value of the degree would be appreciated. I think that feeling is very much increasing.

16,071. (*Mr. Anstie.*) I understand you to say that you are in favour of the principle of equivalents so far as it can be practically applied?—I am, strongly.

16,072. I think you said you were a member of the Senate of the University of London?—Yes.

16,073. And you would be in favour of applying the principle there as far as practicable?—Yes.

16,074. As you said, with a view of avoiding the inconvenience of repeated preparation and examinations?—Yes, there is an amount of acquired knowledge which has to be got up inevitably for an examination.

16,075. You may have heard eminent lawyers say they would be sorry to have to pass an examination?—I have had that feeling myself.

16,076. I understand you to say that you would desire that the two regions of law should not be strongly separated?—No, I think not. I would not apply that quite so much to Roman Law, but I think to the principles of Legislation and Comparative Jurisprudence I should.

16,077. Roman Law is, of course, only an element in jurisprudence?—Yes.

16,078. Now I should like you, if you can, to give us an illustration of this matter. I will put a very concrete case to you. May I refer to what used to be known as the Eastern Bill of Lading?—Yes. There are bills of lading applicable to various trades—the Black Sea and other trades.

16,079. The Eastern Bill of Lading mostly applied to the Baltic, I think?—Yes.

16,080. Am I right in saying that the study of the Eastern Bill of Lading would familiarise the student with almost every principle of contract and contractual liability, as far as it relates to personal property?—I think that is a fair statement. To understand fully the rights and liabilities upon a bill of lading would involve a knowledge such as you mention.

16,081. I take that instance, because it is very specific. The Eastern Bill of Lading is one which brings the student into intimate relation with the actually existing facts of commerce, and legal right and duty?—Yes.

16,082. And, on the other hand, supposing a man to have studied in a general way the laws of general average, particular average, contractual liability, and so forth, would he, do you think, have as real a command of the principles of law as a man who had been able to study them in some concrete example?—Certainly not; he could not.

16,083. Then your view would be, agreeing with Professor Emmott, that it would be desirable that the study of principles should go along with, and not lose sight of, the study of the practical application of law?—That is quite my view.

16,084. In that respect your view would agree with that which appears to be held by those who are anxious for the advancement of education on the medical side, who tell us that mere abstract knowledge, book knowledge, of medical terms and medical formulæ, is not sufficient, without practical handling of the case?—I can draw on my own experience of the chemistry required for the Matriculation Examination. I am quite satisfied that I am no practical chemist, though I never cease to value the principles which I acquired for the examination of the University.

16,085. You would not agree with the view which appears to be sometimes taken, that a real knowledge of law, a fruitful knowledge of law, can be imparted without the study of instances and illustrations?—Law is a practical art, and it must be learnt as such.

16,086. Law consists of general propositions, of which practical details are the application?—Yes.

16,087. Then, having that in view, would it not be desirable to go as far as may be practicable in the direction you have indicated of knitting up, uniting, and giving a mutual relation to the theoretical and practical sides of law—I may say to the University and the professional sides?—I think so, strongly.

16,088. And it is with that view that you are disposed to advocate some such arrangement between the University and the professional bodies in law, as was proposed in the Senate's scheme between the University, and the professional bodies in medicine?—That expresses my view, how far it would be shared by the Council of the Law Society, I cannot say; but I should express that opinion there.

16,089. On the two sides of theory and practice, that would be in your view the best method of handling the question?—I think so.

16,090. With respect to assigning a value to the degree I suppose, assuming the University were to give degrees in the way you indicate, accepting, as I understand you to say they should, for certain purposes teaching certificates or intermediate examinations, and then crowning the whole edifice with a final degree, of course there would be nothing to prevent those who held the degree from indicating to the public, by information such as one sees in the titles of books frequently, where they had the advantage of obtaining such education?—There is no objection to that at all, and, in fact, in University examinations themselves that equivalence is a principle. For instance, three branches in the M.A. degree at the University of London are supposed to be equivalent; therefore, that is practically applied in some cases.

16,091. And so in the case of the B.Sc. degree, out of no less than nine subjects, you may take any three?—Certainly; and it is a principle which is gaining

ground as a matter of fact, owing to the necessity of sub-dividing the acquirement of knowledge.

16,092. And, of course, if any man had a desire to add to the weight of his title by stating the fact that he had been educated at King's College or University College, there would be nothing to prevent the saying so to the public?—No, I do not think it would be necessary.

16,093. The University gives the degree, and that degree no doubt, may mean various things, according to people's estimate of where a man was educated, whether at Trinity College, Cambridge, or at some other colleges which I will not mention?—Anyone can indicate it if they think proper.

16,094. And if the college were of that reputation to add value to the degree by its course of teaching, that value could be represented by a man's describing himself as belonging to it?—He might do so.

16,095. And it would be sufficient if he did so describe himself?—Yes.

16,096. If the college had that reputation he would get the benefit of it?—He would get the value of it.

16,097. (*Mr. Palmer.*) I understood you to say that to avoid the duplication of examinations you would recommend that the results of the examination for professional purposes should be accepted by the University, and I think you used the word "reciprocal"?—Yes.

16,098. Has it occurred to you, (it certainly has occurred to us in the way of evidence with regard to the medical profession,) that, the difficulty having arisen of professional and academic instruction, the difficulty of duplication of examinations might be avoided by the same examination being conducted by a conjoint board to a certain extent, with further requirements by the University for University purposes, and further requirements by the professional body for professional purposes?—That would be another expedient to the same end.

16,099. I am very anxious to know which, in your udgment, you would prefer?—I think I should prefer the former: but that you suggest is another mode of doing something to achieve the same object.

16,100. I think you said that the Incorporated Law Society, as a professional body, would be very unwilling to accept the degree or test of a purely academic body?—I think that is so.

16,101. And, that being so, would it not be more likely, as a matter of compromise, perhaps, and expediency, to meet the views of an academic body and a professional body, if to a certain extent, and as far as possible, the examination were conjoint?—The President expressed an opinion, I think, upon that subject. He is a better judge of the views of the Council than I could be.

16,102. It is a mere matter of convenience. I am very anxious to get your opinion, because the weight of the opinion of the medical profession is in the way I have indicated?—I should not dissent, at any rate, personally from the view you have put before me.

16,103. You have studied this matter of a University very much, und no doubt you have made in your own mind the limit that must be set to a University as such. I think you have expressed the view that a teaching University is not necessarily a University for teaching?—Of teachers.

16,104. That brings me to the point of Faculties. The creation of a Faculty of Engineering, for instance, lays open the door to a great many Faculties which are or might be considered as subordinate parts of general science?—Yes.

16,105. Would it altogether offend your views if, for example, the instance you have quoted, engineering, should be dealt with in some special way under the general Faculty of Science. For instance, that those branches of applied science should be dealt with under pure science?—Of course, the term "science" covers it.

16,106. But assuming there was a Board of Studies to deal with it, or some particular department, or committee?—I think the tendency of University work is towards taking a professional and practical form, especially in Germany, and for that reason I should prefer, I think, to indicate the particular branch of instruction which has been obtained. Certainly what you say is true, that "science" does cover such a case as engineering, but still there is the tendency to specialization, and personally I think it has advantages.

16,107. I do not know whether you are an agriculturist. That is a branch of applied science, and a specific Faculty of Agriculture would frighten some of us?—I should not be frightened at it. On the contrary, it is one subject in which every possible inducement to instruction and training ought to be given.

16,108. Do you not think that might be done without its being a specific Faculty?—I think there would be advantages in making it a specific Faculty in certain Universities and colleges. At the same time I recognise the objection which there would be to a great multiplication of Faculties.

16,109. A Faculty is supposed to be expressed by a degree, and a degree connotes general culture?—Yes, but one is an ancient idea, and the other is a more modern idea. I think we have to regard both. The present limitation to the Faculties is, to some extent, an anachronism.

16,110. (*Professor Ramsay.*) On that point, and on this particular question of an agricultural degree, whether under that name or under some other name, do you mean to say that you think it is the function of a University to undertake the teaching of every branch of knowledge which ought to be included in an agricultural qualification, if it is to be worth anything professionally?—As it has been put to me, there are limitations upon University work; but I should say that a modern University in an agricultural part of England, say, in the north of England or the Midlands, ought to teach most of those things which are essential to the agricultural industry.

16,111. That is a very wide definition?—What is essential to the agricultural industry will be a knowledge of the sciences.

16,112. The sciences that lie at the base of it?—Yes.

16,113. Do you think it is a proper thing for a University to issue a certificate of a competent knowledge of liquid manures?—There are limitations. It is a question of degree. For instance, there have been some who have thought that a knowledge of astronomy, sun spots, and so on might be useful as bearing on harvests, but that would be an extreme view.

16,114. That is a scientific matter, the other is a matter of practice, which can only be learnt upon the farm by a man engaged in the trade or calling of a farmer. Do you not think the University would be altogether injuring its position even with the practical classes by entering the domain of practical life in certifying what as a University itself it can know nothing about?—That proposition is true, with certain limitations, and the difficulty is to draw the line. All I can say is that, I think, from what I know of German Universities that the tendency is towards practical professional life, and the result there has successful in increasing the number of students, and giving strength to the Universities.

16,115. And in the Department of Law—one of the most scientific studies—you have yourself laid it down that no University diploma would be accepted for a moment by the professional body?—No, I have not. I carefully guarded my answer on that point, because I have not presumed to express the views of the Council upon the matter.

16,116. So far as that view is held by the solicitors, do you think it would be held by a farmer or an architect and people in similar professions?—No doubt, and the difficulty we have to deal with is where to draw the line. I should mention at once that my remnarks with regard to commerce and with regard to agriculture were really suggestive, rather than anything more.

Sir A. K. Rollit, M.P., LL.D., B.A.

24 Nov. 1892.

16,117. I was not speaking entirely in the air, I was speaking with reference to a scheme lately propounded?—There is a great deal to be said for both propositions, but agriculture was really suggested to me. I referred specially to commerce.

16,118. Now to go back to the law. I understood you to Mr. Anstie to distinctly lay down the proposition that you desire for the solicitors some training in scientific law?—I do.

16,119. You acknowledge that it is an art which depends upon scientific principles?—Certainly.

16,120. Is there any reason why the two branches of the profession should not to some extent be educated together?—I see no obstacle or objection to that.

16,121. It is the fact now, is it not, that solicitors or articled clerks are not allowed to attend the lectures appointed by the Council of Legal Education?—They are not, though the funds were originally intended for their benefit as well as for the benefit of members of the Bar.

16,122. And you would desire to raise the status of members of the profession by admitting solicitors to take so much of the course of scientific law necessary for the barrister as would be useful to them for their profession?—I should.

16,123. Have you thought out how the Faculty of Law should be constituted?—I cannot say I have thought it out, because I recognise that it is a matter of important detail, and one of great difficulty. My own idea upon that subject would be that the various bodies which have been mentioned, the respective Inns of Court, the Council of Legal Education, the Council of the Incorporated Law Society, and the teachers of the various institutions, including the University, should themselves elect the Faculty of Law. That would be a mode of dealing with the question.

16,124. You will understand that we have a certain difficulty upon this subject, because it would be rather difficult in framing a new University to put one Faculty upon an essentially different footing from the other Faculties?—That difficulty was discussed with Mr. Crackanthorpe I noticed, and certainly personally I could not accept the idea that the Inns of Court, the Council of Legal Education, was to be the Faculty of Law. I think it would have to be a part of that Faculty, but only a part.

16,125. I quite understand what you mean, but I do not think Mr. Crackanthorpe went so far as that. That is not quite the point I am aiming at. The point is this. In all the schemes that have been presented to us whether in the Gresham Charter or the Senate's scheme, the idea of the teaching University is that there should be constituted a general assembly of the Faculties, and that the Faculties should be something wholly apart from the institutions and the various colleges affiliated with or forming part of the University; the Faculties should be composed solely of teachers. The whole body of teachers are to elect in the general assembly a certain number of teachers, who are to be in the Faculty, and the combined Faculties shall settle questions of pure education, subject always to the supreme control of the Senate. Is there any possibility in the Faculty of Law of forming any body corresponding to the Faculties in the other departments of knowledge?—If you limit the word "Faculty" to teachers, that would not be impossible, but the area of choice would be more limited. I do not myself see why those who are forming the Council of the Incorporated Law Society, and teaching their articled clerks in their offices (because they must be practising their profession) would not come within the domain of teachers.

16,126. Yes, but they would hardly be teachers in the same sense as the other teachers would, that is to say, the men who are actually carrying on the University teaching of London?—They are in fact. They stand in the relation, with regard to legal education, of teachers to the articled clerks.

16,127. You mean the whole body of solicitors?—The individual solicitors; and, inasmuch as the Council of the Incorporated Law Society must be formed of practising solicitors, all of whom, again, probably without exception, have articled clerks, they are really doing or ought to do the work of teaching by day.

16,128. In the same way you would be representing the whole of the profession, whether engaged in practical teaching of the schools or not?—I think so. There would be a large contribution of property in this particular case of the Legal Faculty. The Governing Body of the Inns of Court, the Council of the Incorporated Law Society, and the Council of Legal Education itself, might well claim to be represented on the Faculty of Law.

16,129. As well as to be represented on the Senate?—I think so. Provided they were adequately represented on the Senate, I attach less importance to their being represented on the Faculty.

16,130. And your opinion is that the representation upon the Senate should be formed out of the Governing Bodies of the two branches of the legal profession?—Yes, and providing that were adequate I think that might serve for the purpose.

16,131. If your teaching staff were permanent you would see no objection to their also finding a place in the Faculty in the same way as others?—No.

16,132. I think you said distinctly that you prefer one University to two?—Yes, I do entertain that view.

16,133. You have said, with a view to the provinces, you would think it quite out of the question that the University of London, supposing it became the teaching University of London, should give up its examining function?—Yes. I should prefer to retain the University as it is rather than sacrifice or curtail those functions.

16,134. Do you also look upon it as undesirable that the provincial colleges should be represented in the Governing Body of the London University?—I think there are great practical difficulties in dealing with that matter, and I cannot say that I have though it out sufficiently to express a competent opinion.

16,135. You do not consider that, as a matter of justice, it is required?—I do not feel in a position to express an opinion upon a point which I regard as of importance. I have not thought it out sufficiently. I may mention that I have not continued to direct my mind to it because I thought it was accepted that the re-organised University should be distinctly a University for London; therefore I have not pursued the subject.

16,136. You are a member of the Senate of the University of London, and also of the Governing Body of King's College?—Yes, but in neither capacity do I give my evidence to-day.

16,137. What I wished to understand in your plan was this. What power did you contemplate that the London University should have over King's College, or other colleges that should form part of the new University?—I consider that the Senate of the University should ultimately be supreme, and, provided the representation of those colleges was adequate, I do not think there could be any objection to that condition of things.

16,138. Do you contemplate the Senate having nothing to do with the appointments inside King's College?—It would be so, except possibly for the co-examinational purposes which have been referred to—the conjoint examinational purposes.

16,139. Should the Senate have the power of approving or disapproving the professors appointed in the college for University purposes?—If there were to be a case of such interference internally in the colleges, it would be a very extreme one, in my opinion.

16,140. But you think that, theoretically, the Senate should be understood as consenting to the appointments made by the college?—I cannot say that I have thought that out, and I will not say that my opinion on the point would be worth having, at the moment.

16,141. You would not consider it reasonable that any college should have it in its power to raise objections to founding other professorships for external work?—My opinion is that no such objection could reasonably be raised; in other words, that the University should do supplemental work.

16,142. Would you explain this expression which you used? You said, "The University of a great "city should not be too academic"?—My meaning is that it should not partake too exclusively of the character of the older Universities, or even of the Universities which require systematic attendance. In other words, that it should deal with an element with which they do not deal at all, and that it should contemplate a large body of outside students; that it should encourage and afford facilities for individual as distinguished from collective training; and that it should supervise and superintend the whole higher educational work of such a city as London. In other words, I regarded "academic" as indicating the constitution of the older Universities, and as being much more limited than what I thought should be the character of the University of a great city, which, as I said, should be many sided.

16,143. What you said just now, I think, implies that you did not refer to the constitution of the University, but to its mode of working?—Quite so.

16,144. When you spoke about encouraging outside students did you mean that the University was not to lay down a curriculum, and was to have no attendance obligatory?—Certainly it should.

16,145. Then what do you mean by "outside students"?—I think a University may well seize every opportunity of utilising and giving a value to real educational work of a University character which is being done in the city, and in that way that such a University may be of very great value, I will take as one instance the University extension work. Where that has been systematically pursued and where it is guaranteed by the undoubted certificates of University teachers, I think that a city University ought to give a value to it, and encourage it in every possible way.

16,146. You also used the words just now, "encourage individuals." Are not individuals sufficiently encouraged by the outside work of the University—the examining part of the University?—In the case of individuals I meant ready access to the University, no matter how or where their knowledge has been obtained.

16,147. You mean that the University should take a broad view of University equivalents?—Yes; that expresses in very admirable terms what I have endeavoured to convey.

16,148. (*Mr. Anstie.*) Supposing an arrangement could be come to of the kind that has been indicated to you for a joint action of the London University and the licensing bodies, would you see any objection to a similar arrangement being come to between the licensing bodies and other Universities, such as Oxford, Cambridge, and Victoria?—I really have not thought that out; it is taking me further than my thoughts upon the subject have gone.

16,149. (*Lord Reay.*) There is one point upon which it is important that your opinion should be made quite clear. What I understand you to say with regard to engineering and to agriculture (and it applies to law) is that the University should not attempt to deal with the practical bearings of education in any of those instances, but that the University should supply the theoretical groundwork on which practical work will thrive?—I quite agree, but I think it may itself do practical work at any rate in examinations in subjects such as Chemistry, Botany, Physiology, and so on in the University of London. We want more first-rate practical scientists in England in industrial and agricultural pursuits.

16,150. There you have laboratories; but I am now alluding to those sciences which cannot have workshops. In the case of Agriculture you could not have a farm, and you could not do practical work. In Agriculture you would have the science of agricultural chemistry with a laboratory, but we know that agricultural chemists are very rare. If an eminent agricultural chemist could be obtained for London you would like to see him employed and courses of agricultural chemistry given in London, which a good many agriculturists might attend in the winter. Your view is that the principles should be applied and taught in laboratories, but not in workshops?—A great deal of practice might be taught in relation even to Agriculture. For instance, I was recently in Denmark, and I was astonished at the development of collective agriculture which I saw there. A great deal may be learnt from other nations. I have seen a farm attached to a national school in Ireland where the collective system is making such progress.

16,151. But in London you could only attempt theory?—Quite so.

16,152. And the University would only give theoretical education?—Yes, to a great extent.

16,153. Of course the parallel of the Medical Faculty is deceptive, because in the case of the Medical Faculty we have hospital work, and the feature of hospital work is in every other Faculty unattainable?—Yes. The idea of Agriculture was not mine. It was put to me. Commerce was my idea. I think much would be possible with Commerce as with Agriculture.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Thirty-seventh Day.

Friday, November 25th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.D.
Professor GEORGE G. RAMSAY, M.A.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

Sir FREDERICK POLLOCK, Bart., M.A., Hon. LL.D. Edin. and Dublin, examined.

16,154. (*Chairman.*) You are Professor of Law at Oxford?—Corpus Christi Professor of Jurisprudence is the official title.

16,155. You are a member of Lincoln's Inn?—I was called to the Bar at Lincoln's Inn in 1871.

16,156. You have been connected with the Council of Legal Education?—I was Professor of Common Law under the scheme which came to an end three years ago, from 1884 to 1889 inclusive—for six years.

16,157. You have turned your attention naturally to a considerable extent to the question of the advantages of a good legal degree being granted by a University?—Yes. I think I may say I have had it pretty constantly in my thoughts for about 10 years.

16,158. And any new University, or modification of the old University which we may recommend, ought to contain a good legal Faculty, and ought to be able to give a degree which would be valuable?—Certainly.

16,159. Would you propose that this degree should give any qualification for practice, or that all that part should be left as it is now to the Inns of Court and to the Incorporated Law Society?—I do not know whether I should propose it or not if the ground were clear, but I should regard it as quite certain that the Inns of Court would not consent to anything of the kind, and it is at least doubtful whether the Incorporated Law Society would consent. Therefore I should not regard the proposal as practical unless there were to be a revolution in the whole constitution of the legal profession.

16,160. Both those bodies seem to be very tenacious in keeping their powers of admitting to their respective branches of the profession in their own hands. That, I think, there can be no doubt of from the evidence we have heard?—That has always been so, I believe.

16,161. But they seem willing to co-operate, as far as possible, in assisting in order that there shall be a real valuable degree given by the London teaching University?—I have, of course, no direct knowledge at all of the disposition of the Inns of Court. I wish it to be understood that I am here simply as a private member of the Bar. The Junior Bar have no voice whatever in the governing bodies of their Inns, and know no more of the proceedings of the respective Benches than any Bencher may be pleased to tell them in confidence.

16,162. Could you give us your view of how the legal part of the proposed new University should be constituted and how it should be conducted. With regard to the Faculty of Law, which, of course, there would be in a new University, have you looked at the draft Charter of the Gresham Scheme?—I have not seen it lately. I believe I did see it some time ago, but if I am to be asked what I think of it I should like to refresh my memory. I really cannot give an opinion upon that scheme without seeing it again (*a copy of the Charter was handed to the witness*).

16,163. The Faculties in that consisted entirely of the teachers of the different institutions which were affiliated to the new University and therefore the Law Faculty would really have been the law teachers in King's College and University College to start with and afterwards any other college which would be joined to it?—No, I do not think that would do for a Faculty of Law in London.

16,164. I suppose those teachers ought to belong to the Faculty though there would be others?—They ought to have a voice in some way, certainly.

16,165. And you think the Inns of Court ought to form part of the Faculty or have weight and influence?—I think they ought to be the principal part of the Faculty if they can be got to consent.

16,166. Would they be represented through their Council, or through their teachers, or how would they be brought in. Have you thought of that? Supposing they agreed that the Inns of Court were to be the principal part of the Faculty, how would it be worked?—It might be worked by giving the Inns of Court a certain number of representatives on the Faculty, and that would probably be done by sending a Committee of the Council of Legal Education to represent them. I do not know that the whole of the Council of Legal Education would be too many, but that would depend upon the ultimate decision as to how large the Board of the Faculty was to be. I think it would be a great pity to confine such a Board, whatever its name was, to persons actually engaged in teaching, because in the legal profession we have a good many people whose opinion would be very valuable and whom I think it would be absurd to exclude from consultations of this kind. Of course in the Universities it is different, because practically at Oxford and Cambridge almost everybody who is likely to have a serious opinion on the conduct of any particular department is engaged in teaching, though there is nothing in the constitution of those Boards at Oxford and Cambridge to prevent persons being on them who are not actually engaged in teaching.

16,167. The chief function of the Faculties would be to elect Board of Studies out of their own number?—I beg your pardon. I was not thinking for the moment of that system of double election. I was thinking of the working of the Board. If you are to have a large body to elect Boards of Studies, for anything I know, you might have to make it considerably larger.

16,168. According to the Gresham scheme it would be merely consultative and the real work would be done by the Senate or by a committee of the Senate?—I think the real work ought to be done

by the Board of Studies itself, subject to the University statutes. I do not see the necessity of having all this machinery of indirect election and consulting backwards and forwards. If you get a competent Board of Studies in the department you had better trust them to do their own work. It is so done at Oxford and Cambridge. I speak from my own knowledge with respect to Oxford. It works there with practically no friction.

16,169. How is the Law Department managed at Oxford? How is the examination settled, and the curricula of the examination?—At Oxford we have in the first place a body of statutes regulating the studies and examinations which are called the Examination Statutes. I am sorry I have not been able to find my own copy, but it is quite easily got. There are bodies called Boards of Faculty, and there are similar bodies at Cambridge which are called Boards of Studies. They practically do the same work. The Board of Faculty has power within the limits of the statutes to prescribe books, or rather to recommend books for study, and to arrange examinations, to settle the details of set subjects from time to time, and generally to look after the details. The examiners are appointed by the University, I think at Oxford nominally by the Vice-Chancellor and Proctors, on the recommendation of the Board of Faculty. The Board of Faculty consists of a certain number of ex-officio members and a certain number of co-öpted members. Practically it includes the whole body of law teachers.

16,170. And practically they manage the examinations?—Practically all the working members of the Oxford Board of Faculty are teachers, because all the competent persons there happen to be teachers. We have one or two extraneous members. Mr. Cohen was co-öpted as a member of the Board of Faculty some years ago. Of course he seldom attends the meetings, but if there was a serious question to be debated we should try to get him to come. Then we have my learned friend the Warden of All Souls, Sir William Anson, who is not in any way bound to teach, but who does teach; but even if he did not teach I have no doubt we should still think it proper to have him as a member. What practically happens is that the Board does its own business with very little interference, and I should say with not much curiosity on the part of anybody else. If we wanted to alter the statutes we should have to go to the University for it. If it does not relate to anything fundamental, it is passed with very little discussion, on the understanding that the Board of Faculty is practically agreed. Your Lordship knows that University legislation is not a thing that can be started by any private member of the University at Oxford. It has to go through the deliberative body called the Council. What practically happens if we want a statute passed for our own purposes is that some member of the Council, if possible a member of our own body who is also on the Council, introduces the statute; and then if it is passed by the Council it is brought before Congregation in the regular way. If there is no general principle of University administration involved, there is as a rule very little discussion. If it is a question of incurring new expense, or anything which can fairly be considered a question of general principle affecting the University administration beyond the limits of the special Faculty, then, of course, Congregation does rightly and properly discuss it, and makes up its own mind. But I should say there is very little friction indeed between the Board of Faculty and the University.

16,171. It is practically left very much in the hands of the Board of Faculty?—Yes.

16,172. And, of course, until the new University is constituted and in work, it is impossible to say how that kind of thing will go. There might be friction in one case and not in another. It depends upon how it settles down?—A great deal depends upon the men.

16,173. Is the degree in law much sought after at Oxford by professional men?—We have to distinguish, because we have two quite different examinations at Oxford, one of which is technically not in the Faculty of Law at all, but in the Faculty of Arts. An undergraduate can in the second year take up the special study of law, and then he goes in for what is called the Honour School of Jurisprudence, but that does not give a degree in law. It is only one of the ways of getting the degree in Arts. Still that examination is conducted under regulations which are, to a considerable extent, made by the Legal Board of Faculty. Of course it is conducted by lawyers. It is an examination in law, but it does not give a law degree. Then we have another and more advanced examination for the degree of Civil Law. That is the old degree of Civil Law, which used to be a rather insignificant degree, merely in Roman Law, but which has been turned into a very fairly high examination in both English and Roman Law. That is an honour examination. It is open to men of any standing, but after a certain standing a candidate cannot be classed. He can only get the degree with a statement that his standing prevents him being classed. As far as I know, the Oxford examination for the Civil Law degree is the best legal examination there is in England. That is taken by men of standing enough to have really seen something of law. Very often the best men who go in for it have had a year's reading in London. That is taken by a smaller number of men than the other. At Cambridge there is nothing corresponding to the B.C.L. degree. The History School has now became a distinct school. I think they have one or two papers with a slightly legal aspect. I think they have an optional paper of International Law, and they have, or used to have, an historical paper in the English Law of Real Property.

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

16,174. Some of the witnesses have drawn a distinction for convenience, which, I suppose, is a real one between what may be called the professional part of law, and the non-professional. I suppose, chiefly, it is the non-professional that would be taught in a degree course, that part which would include Civil Law, and anything else which would be useful to outsiders as well as lawyers?—Do you mean at Oxford?

16,175. Yes?—No, that is not the aim of the Law School as it exists. My learned friend, Mr. Dicey, for instance, does his best to teach law practically, so far as it can be taught practically to men of undergraduate age, and without the opportunity of seeing actual legal business. Such English law as is taught at Oxford and Cambridge is taught practically, so far as the conditions admit.

16,176. And does anybody go up for it who does not intend to follow the law as a profession?—That is a very difficult question to answer, because it would require an intimate knowledge of the habits of 60 or 70 undergraduates passing through the School every year, whom, in fact, one has never seen before, most of them, and probably will never see again. I believe a large proportion of the men who go in for the Law School at Oxford and the Law Tripos at Cambridge do so with some intention of qualifying for the profession. But there will always be a certain number of men in any University school who will think not so much of the scientific or practical utility of going in for this or that line, as of which school is the easier to make a creditable show in, and sometimes the Law School gets the reputation of being the easiest to pass through, and sometimes the History School. We have a class of rather feeble candidates, sometimes, who, I am sure, are guided simply by that consideration. Those who take it seriously do, I think, oftener than not, intend to make the law their profession. I fear I have not the means of giving a more decided answer; but it would be impossible to give an answer except after minute inquiries from the teachers of every college.

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

16,177. There is an idea that in London it might be taken advantage of very much by commercial men and others to whom it would be very useful indeed to have a knowledge of law?—I think that is possible, but the Universities afford no materials in the way of analogy, because that kind of man is not to be found at Oxford and Cambridge.

16,178. The degree might be so formed as to be useful to them as well as to mere professional people?—I think so, certainly. There are persons intending to go into the public service, I should think, and persons intending to go into the Foreign Office or into the Diplomatic Service.

16,179. I believe you have read Mr. Crackanthorpe's evidence?—I have had a proof of it.

16,180. Do you approve of the whole of his suggestions, and do you take the same view as he does?—I think I may say that I generally take the same view.

16,181. Is there any remark in what he said which you wish to speak upon either in the way of differing or enlarging?—There seems to have been some little difficulty in his evidence about the relations between the University and the Faculty. I have already tried to explain how the thing works at Oxford and Cambridge. I think there would really be no difficulty with any sort of rational arrangements. A suggestion was made by Mr. Rendall that the Inns of Court might adopt low standards for a degree, or might revert to a stage of inertia. It is quite easy to keep up the standard by seeing that fit persons are appointed examiners so far as examinations go; and as regards the standard of teaching I think the appointment of teachers might very well be subject to some sort of ratification in the same way. The people who have been appointed by the Inns of Court on their own authority to teach their own students might, for instance, be appointed also by the University to teach all persons qualified to attend the University lectures. In the same way the appointment of examiners might be made by the University on the nomination of the special board as it is at Oxford and I believe at Cambridge. Professor Sidgwick is perfectly familiar with the arrangements at Cambridge, and he will be able to inform the Commission better than I can. In that way anything like a relapse into mere formalism and inaction could be easily prevented if the occasion arose. It ought not to arise. Perhaps I may say that I assume the lectures to be thrown open to everybody who is qualified to attend the lectures of the University in general. It seems to me quite clear that the Inns of Court can come into a scheme of a real teaching University for London only on condition of giving up their present system of excluding everybody from the lectures, except members of the Bar and students of the Inns. If the lectures are to be University lectures they must be open to all generally qualified members of the University.

16,182. The University lectures would partly then consist of the lectures that are now given by the Inns of Court, and would be supplemented by others given by the University professors?—That would be a matter for the University to decide.

16,183. Supposing the Inns of Court to be represented on the Council, and also to be largely represented on the Faculty, the Inns of Court and the University together might be able to make arrangements in order that there should not be unnecessary duplication of examinations in the case of those who wish to qualify and at the same time to take a degree?—If you get a working alliance of that sort established, I think it would follow as a matter of course that the examination for the degree and the examination for the Bar would be identical, possibly with optional variations on one side or the other. For myself, I should like to see the Inns of Court accept the examinations of Oxford and Cambridge as sufficient for call to the Bar. As a matter of fact, I think they are very much better than the existing Bar examinations, but I think there should be some kind of security for the men called to the Bar having seen something of practical work in London. I am sorry myself, that the existing and the recent schemes of the Inns of Court have dropped even the pretence of taking any security of that sort. At present there is no reason why a man should not just eat his stated number of dinners in the Inns of Court, read books in any part of the country, come up to the examination, pass it, and get called to the Bar, without ever having seen the inside of a barrister's chambers or a solicitor's office, or having been inside a court of justice. In the old days there was an understanding that a man should go and read in chambers for at least a year before he was called to the Bar. It is quite true that the reading in chambers was allowed to become a mere form, but the intention was laudable in its origin, and I should like to see it reverted to. But that, again, would be a matter for the Inns of Court and not for the University.

16,184. And in the same way with everything connected with the Incorporated Law Society, and the admission of solicitors. Perhaps that is a matter you would rather not speak about?—I know nothing about the disposition of the Incorporated Law Society, or what kind of arrangement it would probably consent to, and I would rather leave that to persons qualified to speak about it. I believe they have just made a sort of revolution in their arrangements.

16,185. They have given up lectures and have established a staff of tutors. However, that is a matter which you will not speak about?—No; I do know as a matter of general knowledge that there is great reason to apprehend jealousy on the part of the Inns of Court of allowing the Incorporated Law Society to have any sort of conjoint standing with them on the proposed new Faculty, but that is a difficulty which obviously must be faced.

16,186. We must leave those bodies very much as they are, but make what use of them we can, I suppose?—Yes, if they are willing to be used.

16,187. I believe you are prepared to give us some information about the American Universities, and the Faculty of Law in them?—Before I leave the English Universities I should like to hand in this supplement to the "Oxford University Gazette" which shows what kind of law teaching is actually done at Oxford, and the Commission then will be able to compare it with what is done at the Inns of Court (*A copy of the "Oxford University Gazette" was handed in*). It is difficult to say what is the actual number of persons attending the law lectures at Oxford, but the number who pass through the Honour School of Jurisprudence (for a degree in Arts) annually is from 60 to 70, I think rather tending to increase, and the number who pass the B.C.L. examination annually I think may be taken at from 15 to 20. I think they are both tending on the whole to increase, though not rapidly. This is a statement of the lectures delivered in the various Faculties which is officially published in this term, and that will show in a summary way the amount of teaching power there is. These lectures are many of them what are called at Cambridge Inter-Collegiate lectures, that is, lectures recognised by the Faculty and attended by men from all the colleges.

16,188. There is a better attendance now compared with past years, is there?—Are you speaking of Oxford and Cambridge?

16,189. Oxford?—At Oxford and Cambridge anything like an efficient School of Law is such a recent thing that you can hardly speak of comparison with any past term.

16,190. When do you date it?—15 years at the most I should say—there or thereabouts. I should say that during the 10 or 12 years that I have known something about it the standard has been rising, not very rapidly, but I should say pretty steadily, and I think the attendance has been increasing. It is rather difficult to say about the attendance. One can only judge as a non-resident not familiar intimately with the working of the colleges from

the number of men passing through the school. You may take it that every man who passes through the law school has been attending the law lectures, and I think the attendance on the whole is rather tending to increase.

16,191. Is the attendance compulsory at all, or is it entirely optional?—I think one may say as regards the law lectures it is practically optional. You doubtless know that as a matter of college discipline every undergraduate is expected to attend some lectures. If he does not go to the ordinary lectures of his own college he must give reasons to his college tutor for wanting to go to other lectures. The college authorities must be satisfied that he does go to some.

16,192. It is the same at all the colleges, is it?—Yes. As regards a special subject like law a man would tell his college tutor that he wanted to study law, or a college tutor would notice something about him which would make him think that the law school would suit him.

16,193. That is a mere college arrangement? The degree is given to all residents, whether they attend lectures or not, if they can pass it?—The examiners do not require any certificates of having attended lectures. A man has to get his application for the degree certified by his college tutor. As regards the B.C.L. degree, which is taken by those who have already taken a degree in Arts, there is no question at all as to how a man spends his time. If he prefers to read law in London he may. As regards America, I believe the Commissioners have had a good deal of information already, so that I should rather prefer not to volunteer anything until I know that I am not saying anything which is superfluous.

16,194. (*Lord Reay.*) I conclude from your evidence that you attach most importance to a thoroughly competent Board of Studies?—I think that is very important. I think the first thing is to get a sufficient staff of really competent teachers, and I think the next thing is to have a Board of Studies which would be able to make reasonable arrangements as to details, and know what things are best regulated, and what are best left to the individual teacher.

16,195. That Board of Studies would control both the teaching and the examinations?—It would control the examination, subject, of course, to the University Statutes.

16,196. The difference between a Board of Studies of a Law Faculty in London, and the Board of Studies of the Law Faculties in Universities like Oxford and Cambridge would, if I understand you rightly, be this, that in the Universities they are mainly composed of the teachers?—Yes.

16,197. But in London, you would add to the Board of Studies a certain number of representatives of the profession?—Certainly, I would.

16,198. So that in the London Board of Studies two spheres of influence would be represented, Science on the one hand, and that of professional experience on the other?—Yes; but I should not like to separate them quite so sharply. For instance, it would be quite absurd for me to let it be supposed that I think Lord Justice Lindley, who taught me most of the law that I know, is not a scientific lawyer, or that Lord Justice Bowen is not a scientific lawyer, and I humbly think that, although I have been very little in Court for the last 10 years, I am not wholly ignorant of practice. I do not think they are antagonistic things at all.

16,199. The assumption of antagonism was not involved; what I meant was that the London Board of Studies would have exceptional advantages through the combination of scientific professors and scientific lawyers?—Yes.

16,200. Are you prepared to leave the appointment of University professors to the Inns of Court?—I was going to say that the professors do not exist yet. No, I do not see how that could be left quite as it is.

16,201. You contemplate appointment of the professors by the University?—In some form. It might be done in this way. At Oxford and Cambridge each professor is appointed—at least it is certainly so at Oxford—by a separate electing body. Some of these electing bodies are constituted in rather odd ways. Some of them are practically composed of the other professors in the same Faculty with one or two extraneous persons, to put it rather coarsely, as a safe-guard against jobs. But generally it is a committee of not more than five or seven people, which works very well, I believe. The difficulty might be got over by allowing the Committee of the Inns of Court to appoint the Inns of Court professors, and having other committees to appoint the others. It might or might not be made subject to the ratification of the University as an additional safeguard. At Oxford and Cambridge there is no further ratification. The Board of Electors actually elects the professors or deputy-professors, as the case may be, and reports to the Vice-Chancellor, and the thing is done; no further formality is necessary. Sometimes the Vice-Chancellor writes a letter to the newly-elected professor and informs him of his election. Sometimes there is no other official act of notification.

16,202. Which system do you prefer; one Board to appoint all the professors in the Faculty, or for separate Chairs separate Boards of Electors?—Separate Boards, decidedly. I do not say it is necessary for every Chair. I think it would be a needless refinement to have one board to appoint a Professor of Constitutional Law, and another board to appoint a Professor of Commercial Law, but on the whole I would have small committees, certainly.

16,203. A variety of committees?—There is one advantage that a small committee really discusses and a large committee does not.

16,204. We might have a small committee for all?—But not the same small committee for all. A small committee of say five or six people would hardly be the right committee for both the Chair of Roman Law and the Chair of Commercial Law.

16,205. You contemplate the appointment of professors by experts?—That is what I should like, subject or not subject to the ratification by the general governing body of the University as might be thought best. I do not care much about that. A sensible governing body would always ratify a good appointment.

16,206. You look forward to recognition by the Inns of Court of the law degree granted by the University for admission to the Bar?—I do not say I look forward to it. I am not at all sanguine about the action of the Inns of Court, but it is what I should like to see.

16,207. The alternative course would be for the University to have its own degrees, and the Inns of Court to give their own examination, as well as other conditions for admission to the Bar?—I think the Inns of Court would in any case retain the power of admission to the Bar in their own hands. That is not a University function.

16,208. Of course not. My question merely related to the legal knowledge of candidates for admission to the Bar. The requirements for degrees and for admission to the Bar would be different?—Yes.

16,209. Would you advise the University to grant two degrees, a lower degree of B.C.L. involving the amount of legal knowledge required to enter the profession, and a higher degree of LL.D. [or D.C.L., representing a higher range of knowledge?—I should see no harm in having a doctor's degree.

16,210. Granted after some evidence of original research?—That is what we have at the Universities now. Of late years a doctor's degree at Oxford has been made a reality. It used to be a matter of the candidate merely presenting a formal thesis, and the Regius Professor was bound to accept the thesis if it held together at all, if it was apparently on a legal subject, and not nonsense, but now we expect more than that; we expect a serious dissertation. I see no reason

Sir F. Pollock Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

why the University should not have such a degree. It would not matter if there were not many candidates for it. There are not many candidates for the doctorate at Oxford and Cambridge.

16,211. Would you give the lower degree for the same group of studies, or, would you differentiate the courses of studies, for which it might be granted to candidates for the Civil Service on one side to barristers on the other?—I do not like the name of B.C.L. Our calling it a degree of Civil Law at Oxford is a pure accident.

16,212. What name do you think more appropriate?—Bachelor of Laws.

16,213. What conditions would you require?—I see no reason why it should not be managed by means of optional subjects.

16,214. I see that the subjects of preliminary examination at Oxford are the Institutes of Justinian, Constitutional History, and Logic. Do you approve this programme?—That is a very local institution at Oxford. It is a substitute for the classical Moderations. I mean that is an examination intermediate between the Little-Go and the degree. There is no such thing at Cambridge, and there never has been. I do not know that there has been in any other University.

16,215. At all events, you do not recommend these subjects?—I do not think they are bad subjects if you are to have a special preliminary examination before the examination for the degree. I do not like early specialising myself. If it must be, it must.

16,216. Would you make Roman Law compulsory or optional?—I would not make it compulsory at all. I think a good knowledge of Roman Law is an excellent thing. A smattering of Roman Law is worthless, and I think the kind of compulsory Roman Law which they have at the Inns of Court merely prevents men of ordinary ability from devoting as much attention as they ought to the laws of their own country. It may be a rather frivolous anecdote, but there is a story told in the Inns of Court of a certain man who set out from Earl's Court Station not having read any Roman Law whatever. He took the Institutes in his pocket, and, being a fair scholar, he had read enough of them before he got to the Temple to pass in his Roman Law.

16,217. You have mentioned barristers' chambers. Would you lay stress on the students in the London Faculty of Law attending barristers' chambers at the same time as they were reading for their degree, or do you think they ought to give their whole time to the theoretical study of law?—I do not think that is a thing that would concern the University at all. As regards the individual man it is a question he must settle for himself.

16,218. But do you think it is advisable?—I should not say that the average Law Student could give serious attention to both lectures, and attending in chambers at the same time. Of course there are men who can contrive to put in a great deal of work in a certain time.

16,219. But the average student would take the practical part afterwards?—I should say so.

16,220. I suppose you contemplate a large addition of Chairs to the Law Faculty?—Yes, I should say so.

16,221. Judging from the number of lectures which are given in Oxford, there would be room for considerable increase in London?—Yes.

16,222. And that increase should be undertaken by the University unless the Inns of Court declared their readiness to endow Chairs, in which case naturally the Inns of Court would claim some influence over the appointments?—The proportion of teachers to students in the Inns of Court is quite absurdly below what it is in a good American Law School. Even without leaving the British possessions, at Halifax, Nova Scotia, they have about 6 teachers to about 60 students.

16,223. In America the profession attaches greater importance to the study of law than it does in England, does it not?—Yes, I think I may say that as a certain fact.

16,224. American lawyers have as a rule attended lectures on law before they join the profession?—"America" is a large word, but I think that is generally true of the Eastern States at any rate, and I think I may safely add the Central States.

16,225. Then with regard to the Faculty of Law of an Eastern University, I think you are prepared to give some evidence. How is it constituted? Take Harvard, or any other University?—I cannot give you any detailed evidence about their constitution, but as a teaching body they have a very strong staff of teachers. At Harvard they regard it as a post-graduate course; they do not encourage men to specialise very early in law, and they expect serious attendance at lectures for three years, and endeavour to teach law quite practically, and I believe to a considerable extent they succeed.

16,226. Are the professors generally men who have formerly been in the profession?—I think so. I think some of them are men who are in the profession. I do not know that they refuse practice when it comes. I suppose as a matter of fact they give most of their time and attention to the teaching.

16,227. Would you contemplate members of the profession giving lectures in the Law Faculty of the new University, men who were actually engaged in practice?—I would certainly not forbid them to practise, if you mean that.

16,228. There would be some difficulty in combining both, would there not?—In doing both to any large extent, certainly. No man with a large practice could give proper time and attention to teaching.

16,229. Then the lawyers in America to whom you refer are men generally not in very large practice?—I think it very probable that they have little or no practice. A man who is teaching at a great law school like Harvard must give his time and attention to his academical work.

16,230. When you say post-graduate do you mean that he has generally attained the degree of B.A.?—Yes, that or something equivalent.

16,231. In what other respects do you think the experience of America would be useful to us?—I think it is useful as showing that law can be taught, which a large number of the profession here in both branches seem not to believe.

16,232. I suppose you would say that in that respect there is a change for the better. Although a large number do not believe in it, still there is a growing number of those who do recognise its importance?—I should like to see it. I cannot say that I see any improvement at all in the general feeling of the profession in that respect in the last 10 years. It seems to me that the vast majority of both branches of the profession in this country remain absolutely indifferent to the whole thing.

16,233. Then are you afraid that after we have established this Law Faculty the number of those students whose attendance we should think most desirable—the future barrister—would be limited?—I think the University would have to be prepared for a rather limited attendance at first. I should not be at all surprised if for some years the extra-professional attendance at lectures of this kind—I mean men of business and men going into public service, or something of that sort—outnumbered the professional almost. One thing that rather makes against the establishment of a teaching Faculty of law in London is that students have got to believe enormously in coaching for examinations. The average student does not think of learning law; he thinks of getting through the examination. He goes to the man who says he will get him through the examination, and if you tell him that if he learns law seriously he will pass better examinations and be a competent lawyer, whereas, if he simply scrambles through the law so as to pass the examination, he will have to learn it over again, he simply does not believe it.

16,234. The character of the examinations ought to be modified?—I should not like to say that the existing examinations are bad examinations. They are conducted by competent people, and under the new scheme of the Inns of Court the teachers have a share in the conduct of the examinations which they had not before.

16,235. On that you lay stress?—Yes.

16,236. You think that the teacher should take part in the examination and counteract what you call scrambling through the examination. If a pupil is examined by his own teacher you think there is less danger that he should be crammed than if he is examined by outsiders?—I should say not exactly his teacher, but somebody who has taught, and who knows what the difficulties are, and how the minds of the pupils work. I think a teacher makes a much fairer examiner than a man who has never taught.

16,237. The problem we have to solve is, how to make the examinations of value to those who enter the profession, and closely connected with good teaching?—Yes.

16,238. And that is done in America?—Yes; I think the American Law Schools have convinced the profession there that they do teach law in an efficient way, in a way which makes a man not only a better instructed lawyer, but a better practical lawyer.

16,239. What are the means which you think ought to be adopted by the University to attract the students and to convince the profession of the necessity of legal studies?—I know no means but example. I think that if a really good law school were set up a certain number of men would come to it, and gradually it would be found that the people who came out of that law school were good lawyers. I do not know any shorter way of doing it.

16,240. Are you at all acquainted with the École Libre des Sciences politiques in Paris?—Yes, the school founded by M. Boutmy. He is a friend of mine, and I know, in a general way, what his work has been. In fact I published some time ago in the "Law Quarterly Review" an account of it by one of his pupils.

16,241. Many of the subjects taught at that school might be properly taught at our new University?—Yes, I think some might be properly taught by the University, though they would not come within the lines of the Inns of Court.

16,242. (*Chairman.*) With regard to the American plan what is the general system of qualification for entering the profession of law in America. There is nothing of course answering to our Inns of Court; but is there any professional body that admits?—I forget exactly how many independent States there are in the United States. Every one of them has its own regulations for admission to the Bar, and I believe they are all different. I happen to have here the Report of a Committee on Legal Education appointed by the American Bar Association, and there is in it a summary sort of analysis of regulations of the various States. Some of the States require attendance at lectures or a definite period of study, and some do not. Some have examinations, and some have not. I fear no general statement is possible.

16,243. Is it the case in any of the States that the University degree gives a qualification?—I really cannot answer that off-hand. It would be quite easy to get the information of the United States Legation.

16,244. There is no doubt that if the University degree could give a qualification it would increase the demand for it?—Here is a statement I see in this book:—"The diplomas of three of the schools having "three-year courses admit to the Bar without further "examination; the diplomas of four do not; and as "to the others it is not stated. Of the schools having "two-year courses, the diplomas of 17 admit to the "Bar without further examination; 10 do not; and "it is not stated with regard to four whether they do "or not. Of the schools having one-year courses, "the diplomas of four admit to the Bar without "further examination; it is not stated with regard to "the other." So that in several of the States the diplomas of the Law School are accepted as a title to practice at the Bar.

16,245. And, I suppose, that in those that are accepted the students show a greater wish to take a degree in law than in those in which it is merely ornamental?—No doubt we may assume that is so.

16,246. But there is nothing in your experience or that you have read that bears upon that point?—No.

16,247. (*Professor Sidgwick.*) There is one question that the perusal of that report suggested to me, viz., how far in America, what in the conclusion of that report is called the Law School is in connexion with the University. The report recommends a course of study, and that there should be at least one law school in every State; but, as far as I have heard, they do not use the word "University," and they might mean a school quite independent of any University, not forming a part of a University system?—There is such a thing as a University having only one Faculty. I believe some of the mediæval Universities had only the Faculty of Law, but, as you know, the terms "University" and "College" are used in America are in a much looser way than they are here.

16,248. I understand that you have a decided opinion that there is an advantage in having a law school Faculty in a University and not a purely independent professional school?—Yes, I think so.

16,249. I suppose one may say that the Inns of Court, if left alone, are tentatively struggling for an independent law school; therefore, the question to them when this new University is founded—I mean for those who recognise the need of improvement—is rather as to whether the improvement should take the line of making this independent school completer and better, or should allow it to be absorbed in a University. Would you state what in your view would be the advantage of the latter course, from the point of view of the education of lawyers?—I think you would have a good deal more security as to keeping up the general standard of the work. I think if you have a University working in several Faculties you have a great deal of practical security that the standard of one Faculty does not fall much behind the standard of the others. If, for example, at Oxford we were to let men through the School of Jurisprudence on absurdly cheap terms I am quite sure we should hear of it from our colleagues on the other boards and from the University generally.

16,250. Do you think we may also say that a completely independent school would be likely to have too restricted a view of the preparation required—a too purely professional view?—I should think that is quite a possible danger. I am speaking, of course, now, not of the very imperfect law school, such as it is, but of what an independent law school might be, assuming a great many conditions which do not exist at present.

16,251. How far do you think a University training in law should aim at giving complete preparation—so far as such preparation can be given or ought to be attempted, apart from what I may perhaps call the workshop of students, the actual experience in chambers. Do you think the University should undertake all that can be done by means of lectures, or should there be anything left besides the mere experience of practice?—That is a very difficult question. I think it would be worked out in this way: the University would have to make its law school, and then the professional bodies would have to consider whether they thought any other more purely professional teaching desirable, and that they could still provide for themselves if they chose.

16,252. I understand that in America where there is an effective law school in connexion with the University, say at Harvard, it does aim at giving all the preparation that can be given?—Yes, it does.

16,253. Can you tell me how far in that school, or in any other American Law School with which you

Sir F. Pollock, Bart., M.A. Hon. LL.D. Edin. and Dublin.

25 Nov. 1892

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

are acquainted, securities are taken of the kind on which you have laid stress?—My impression is that there is very little security.

16,254. They leave that to take care of itself?—Except this: I ought to say that in several American Law Schools they carry practical teaching very far. They not only make the students argue cases, but they actually make them go through all the forms of conducting an action.

16,255. Do you think that is a desirable thing to include in the University training?—I rather doubt it. I am not sure that we have the materials here, and I am not sure that we should get men to give the time to it. It is a thing that I think will have to grow at any rate. It would not do to try to introduce it ready made, with that extreme particularity which they practise in some American Law Schools. I would certainly let them discuss and argue cases.

16,256. Do you think that such discussion and arguing of cases would be a substitute for what I may call apprenticeship in barristers' chambers?—No, not a substitute; but I think it goes very far in enabling a man to make the right use of the workshop when he gets there. If you give a man merely theoretical lectures, and merely let him hear and take notes, when he gets to an office or chambers he does not know what anything looks like, and he is as much at sea as if he had learnt nothing. If you make him discuss and argue cases he has some sort of notion of the way in which lawyers do their work.

16,257. You think this argument of cases should form a part of the University training, but still over and above that there should be some security that he has had a certain period of, what shall I say, apprenticeship, or what?—Practical work of some sort, reading in chambers or working in a solicitor's office. But I do not think that is University work at all. It seems to me that that is a thing which concerns professional bodies.

16,258. But, still, it may come into the question in considering in any debate with the Inns of Court how far a University ought to aim at a complete policy of instruction. One objection that has been presented to us against making this preparation in barristers' chambers compulsory is the economical objection—that the fee charged is high, and that it is a little difficult to impose that as an absolute condition of being called to the Bar. Do you think there is any force in that objection?—I think there is some. I do not say that it would be practicable to make actual working in chambers or solicitors' offices a necessary condition of admission to his profession.

16,259. Is there not also a difficulty in this, that as you are obliged to admit work in any office you cannot effectively prevent its being a mere form?—As to preventing its being a form, that, of course, must be left to the honour of the professional man. No doubt the understanding at the Bar has always been that the barrister is not bound to give any definite amount of time and attention to his pupil. All he is bound to do is to let them see what goes on; give them some means of knowing what it is about. But, as a matter of fact, conscientious barristers do take a great deal of pains with their pupils, and if they see that a man means business they try to do their best for him. No doubt 20 or 30 years ago men got a certificate which meant that they had paid their fee and put in an appearance now and then. If it were meant to be a serious condition for call to the Bar or for admission to the solicitors' profession, there would have to be something much stricter than there is now. There are difficulties in the way of making that a condition of admission to practice. I put it rather as an idea than anything else.

16,260. To return to the proper function of the University, you think that it should aim at giving complete preparation, as far as that could be given, apart from this work in chambers?—Yes, I think so.

16,261. Therefore, it would not leave room for professional teaching outside the University teaching?—Not much; it might leave some. There are various subjects one can think of which are of a rather technical kind, Conveyancing, for instance. You could hardly say that a University was bound to have a Chair of Conveyancing, which is a very technical affair. On the other hand, I believe Conveyancing could be taught with proper materials.

16,262. (*Lord Reay.*) It is taught in Scotch Universities?—Yes. The Inns of Court are trying to teach it now to a certain extent.

16,263. (*Professor Sidgwick.*) Your view is that the Inns of Court would find it the best way of fulfilling the duties—which, I understand, they do not dispute—to delegate to this new University a large part of their teaching, securing a proper degree of control by the appointments on the Board of Studies. That is what, in your view, would be the best way in which the duties of the Inns of Court could be carried out, would it?—Yes, I think so; assuming, of course, that you get your University in working order.

16,264. You have made it clear in replying to the Chairman that in your view a system of University instruction would admit future solicitors and laymen preparing for political and commercial careers as well as those preparing for the Bar, and that it would be to a certain extent inevitable that the University classroom must be open to all?—Yes.

16,265. How far do you think it possible or convenient to adapt the same course of instruction to the needs of future barristers and of future solicitors? Would the same lectures be entirely or to a great extent adapted to the means of all?—As a matter of fact, I do not think they would go to precisely the same lectures.

16,266. But they would all go to some lectures which the University ought to provide?—Yes. I do not see why the same lectures should not be useful to both so far as the subject was useful. For instance, if a man of business wanted to know commercial law he would certainly learn it better from actual discussion of cases than merely sitting to hear a lecture, just in the same way that a person intending to become a practical commercial lawyer would.

16,267. You see no difficulty arising from the fact that there would be these various elements?—No; of course the law lectures would have to be law lectures. You could not make them popular lectures in the elements of politics under the pretence of being law, but, as far as I know, there might be other lectures in the elements of politics or lectures which were on the border line of law and politics. Those, of course, would not be so much frequented by purely professional students.

16,268. Is not one reason why students go to coaches rather than to the professional teachers, that the professor gives them matter which as it is in no book, the outside examiner is not likely to ask them questions upon?—That may be.

16,269. Wherever there is a growing subject, a good teacher will be in advance of the books, and because he is in advance of the books the teaching will be less useful from the examination point of view?—That, you see, depends upon the examiner. I should say that an examiner in law who examines out of a book is not fit for his place.

16,270. Even if he does not examine out of a book but has his own ideas, they may not be sufficiently in accord with the ideas of the lecturer, and the student naturally feels that on that ground the lectures, just as far as they contain an original element, are likely to be of less use. Do you not think that in view of that danger it is desirable that the teachers should themselves take a share in the examination along with outside examiners?—Most certainly. I think it is very desirable that the teachers and examiners should be interchangeable classes. I would have a certain proportion of extraneous examiners as we have at Oxford, with, I think, very good results, and as there are at Cambridge.

16,271. With regard to the Gresham Charter I should like to ask you, with reference to the opinion you expressed in reply to the Chairman, as to the

relation of the Boards of Studies and the Council. May I direct your attention to chapter 10 which deals with the powers of the Council. In the last clause it is provided, "That the Council in determining the curriculum of each Faculty, and making regulations respecting the examinations or degrees of the Faculty, shall proceed on the recommendation of, or after submitting the proposal for consideration and report to, the Board or Boards of Study of the Faculty." Do you think that that is not giving sufficient control to the Boards of Studies?—I should not object to that, assuming that the people concerned are fairly competent and reasonable. I think it would probably work.

16,272. I think the view of those who drew this Charter was that it would throw all the practical power into the hands of the Board of Studies?—I do not think that would differ substantially in working from the state of things we have at Oxford and Cambridge.

16,273. Will you look at clause 13. There you see that each Board of Studies shall have powers to consider, report, represent, deliberate, and so forth. I presume you would add power to exercise any administrative functions which the Council may from time to time confer upon it?—Yes, that would save trouble.

16,274. That would be exactly what the Boards of Studies at Oxford and Cambridge have?—Yes.

16,275. Their power of selecting books is conferred by the Ordinances of the University is it not?—It is conferred at Oxford by the Statutes.

16,276. In Cambridge it is a matter of the University Ordinance which is changeable from time to time, so it is not within the independent authority of the Board of Studies. Do you not think that would be a working system?—Yes, I think it would work, assuming, of course, good will and competence on the part of the people concerned.

16,277. (*Professor Sanderson.*) In answer to Lord Reay you spoke of a Board of Studies, and I understood that you contemplate a Board of Studies, having the power of regulating courses of study and regulating the curricula?—Yes, within limits. Well, I contemplated the same kind of arrangement that I certainly find works well in our Faculty at Oxford.

16,278. In the Faculty I have to do with there is no control whatever by the Board?—I am really not familiar with the examination Statutes except those which concern my own department.

16,279. But practically does the Board of the Faculty interfere in the slightest degree with lectures or anything relating to the course of study?—Our Board certainly has the power. As a matter of fact, being, I hope, sensible people in the main, we seldom interfere with a man's choice of his own subjects.

16,280. So a man is left entirely free to chose any lectures he likes to attend or not to attend?—Are you speaking now of the students of science?

16,281. That is the case with regard to science. I wanted to know whether it was the case with regard to law?—A man is free in this sense that no particular law lecture is compulsory, so far as I know, except possibly so far as it is a collegiate lecture. The college might conceivably make it compulsory upon certain men to attend it, but as a University lecture it works in this way, as I said to the Chairman: when a man determines to read law his college tutor generally advises him what lectures to go to and expects him to satisfy the college that he really is pursuing the special line.

16,282. The point I want to bring out is that the University practically takes no charge whatever of the curriculum. There is no document that I know of which lays down the course of study either in law or medicine or any other subject. I ask you whether that freedom is not advantageous rather than otherwise?—I do not know that it does any harm. No, there is no curriculum laid down except so far as the Examination Statutes say that men will be expected to satisfy the examiners on certain subjects. The order of study on these subjects is left to the men and to such advice as they may get from the college tutors or their private tutors if they go to them. I have not understood any former question that I have answered to be addressed to the manner of prescribing the curriculum.

Sir F. Pollock Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

16,283. Would you think it desirable that a change should be introduced at Oxford or that that liberty should be interfered with?—Not as a matter of compulsion, I think.

16,284. In a London medical school a man is compelled to attend a certain series of lectures, and he is obliged to attend them regularly. Would you think it at all desirable that that sort of regulation should be confided to any board or to any University authority?—I think that in a complete law school, considering the complexity of the subject and the very little a man knows of it before he begins to attend lectures, it would be desirable to recommend some orderly course, otherwise you might have a man going to a lecture in an advanced subject without knowing that it was advanced. But I should not like to make it compulsory without seeing how it worked by way of advice. I think if students were officially advised to follow the lectures in a certain order they would probably do so.

16,285. You think it desirable that that sort of advice should be given officially?—Yes, I think it should be.

16,286. That the University should lay down a curriculum of study in each subject?—I think it would be desirable, especially in London where there would be nobody corresponding to the College tutor.

16,287. More necessary in London than at Oxford?—I should be sorry to say that it is necessary in Oxford. I think in Oxford men really get competent advice in one way or another, but I think in London a student not having competent advice might well find himself very much at sea as to how to begin special studies, and I think a certain amount of official advice would not be superfluous.

16,288. Is it the case that the Inns of Court do not accept in any form the certificates of examination of any University?—No, that is not the case; they do accept them to a limited extent.

16,289. But I mean as part of the course of legal education?—They accept the certificates of the Universities of Oxford and Cambridge as equivalent to examinations in certain subjects, but they do not accept the result of any Oxford or Cambridge examination as a whole.

16,290. They accept our examinations or the examinations of other Universities as exempting candidates from certain parts of their own examination. Is not that so?—Yes, that is so; they do accept them to that extent.

16,291. (*Mr. Anstie.*) I should like to revert for a moment to the history of this question, which is perhaps a little important in the practical consideration of the object we have in view. You are familiar with Lord Selborne's School of Law Bill, 1875?—I remember it in a general way, but I am not familiar with the details.

16,292. Amongst other things it provides in clause 15:—"That it shall be lawful for the Senate of the said School of Law from time to time to agree with any one or more of the Honourable Societies of the Inner Temple, the Middle Temple, Lincoln's Inn, and Gray's Inn respectively, or with the Incorporated Law Society (which Societies respectively are hereby empowered to enter into any such agreements), or with any other societies or persons having lawful power or authority in that behalf for the foundation or endowment in such said General School of Law, upon such terms as may be agreed upon, of any professorship or lectureship," and so forth. As a matter of fact, I suppose, we must contemplate that the funds required for the creation of a law school must, practically speaking, come from the Inns of Court?—I suppose so.

16,293. That of course makes it very important to see what possibilities there are of gaining the support

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

or the adhesion of the Inns of Court to any University project?—Yes.

16,294. Do not you think that it would be probable that the Inns of Court would require to be strongly represented upon any body which they were prepared to endow?—Certainly, and quite rightly so.

16,295. One may assume that their special powers of licensing must remain entirely in their own hands?—Yes, I think so.

16,296. And it must remain in their hands, I suppose, to determine at any time whether they will, or will not, take as the fulfilment of their conditions compliance with the regulations of any other body?—I think so, as matter of form.

16,297. But you, perhaps, agree with Mr. Crackanthorpe, whom I understand you to say, speaking generally, you do agree with, that it will be very desirable with respect to professional studies to establish such relation between the licensing bodies, that is in the Inns of Court say and the University, as would as far as possible harmonise the requirements of the University with that of those bodies, and avoid a needless repetition and multiplication of examinations?—Yes. In other words, I think that ultimately, if not immediately, the examinations for the law degree of the new University should coincide with the examinations for the Bar, and, I suppose, for admission as a solicitor.

16,298. But that would only be, I suppose, on the condition of those bodies being effectually represented on the University, and having a very large share in the control of the Legal Department?—Certainly.

16,299. Assuming the University and the Inns of Court to enter into any such arrangement, one may assume, perhaps, that the school which they must endow must be, and could only be, in London?—Yes.

16,300. But might it not be very desirable also that arrangements should be made by the Inns of Court similar to those which were likely to be accepted by the licensing authorities in Medicine for acting in conjunction also with other Universities, whether on the terms of having joint examiners or otherwise, and taking their examinations as equivalent to those of the London School?—I see no reason why that should not be done.

16,301. You see no reason why they should not enter into arrangements with all the Universities in fact, subject to their own approval, of course, within the limits of their jurisdiction and adopt a joint arrangement of that kind?—So far as I know anything about Oxford and Cambridge, I think there would be no difficulty raised on the part of Oxford and Cambridge if the Inns of Court were willing to enter into such an arrangement.

16,302. You think they would accept an arrangement whereby the Inns of Court should take part in the conduct of the examination?—I think so.

16,303. On the condition of the result of the examination being accepted?—I think so.

16,304. (*Mr. Palmer.*) Following out Mr. Anstie's question as to the position of the Inns of Court, when a student intends to become a barrister or solicitor, of course he would go for his teaching to a master of practice in the sense of the best practising barrister in chambers, or be articled to the best firm of solicitors that he could go to?—I wish I could believe that he generally does. I think a very large number of Bar students now get called without having seen anything of practice at all.

16,305. The students, as I think has been described, are those who attend for professional purposes, those who attend the University for Jurisprudence purposes, and those who attend the University for Commercial Law and general purposes, but I am speaking of the professional students proper, those who come with the intention of becoming practising barristers or solicitors. Could they by any possibility do better, having regard to the other professions, than go to the chambers of the best master of Applied Science that they could get in the shape of a working barrister or firm of solicitors?—No, they could not, and that is what the best men do.

16,306. And that is the particular necessity which is so strongly represented by the Inns of Court?—Yes.

16,307. I am only bringing this out to show that the Inns of Court do represent the working profession of students as the facts now exist?—Do you mean by the Inns of Court the existing governing bodies of the Inns of Court?

16,308. I mean the feeling that limits the teaching, as far as possible, to the practising barrister's chambers, and the jealousy it may be of anything else is founded upon the absolute truth that practical teaching is only got in working barristers' chambers up to now?—I should rather put it in this way, that the majority of the profession have had to pick up their law in chambers and offices as best they could, and they never heard of any other way of learning law, and therefore do not believe there is any other way.

16,309. For a practical man to learn law, would not that be the most practical way?—Without any previous theoretical teaching?

16,310. No doubt that would be desirable; but I was only putting it in this way to show that what the Inns of Court do really represent is the desire of the student to attain the application of his science as fast as he can, and as well as he can?—I am going now to say rather more than I intended to say here, but I must do so in order to make myself clear. I do not believe that the attitude of the governing bodies of the Inns of Court at any time in the last 50 years has represented anything but a desire to do as little as possible, consistently with not flying in the face of public opinion.

16,311. But, still, as has been said, the Inns of Court must be most carefully represented upon any Faculty or the Senate of any school of law?—Certainly.

16,312. Would you bring in any other bodies outside the Incorporated Law Society who could possibly be represented in London?—I do not know what other body there is that would have any claim.

16,313. Therefore, it would seem that the Faculty, as it is, would have to consist of the Inns of Court and the Incorporated Law Society?—Practically. I do not mean to say that University College and King's College might not be entitled to some representation, but I do not know of any other body that could claim to have any professional standing in the matter other than the Inns of Court and the Incorporated Law Society.

16,314. And teaching which would be given might be given through the direction of Boards of Studies which would be subject to a Faculty?—Yes. I do not myself clearly understand this large body called a Faculty, and the smaller body called a Board of Studies. I do not know why you want this rather ornamental body called a Faculty, and also a working Board of Studies in the University. But assuming it to be so, that would be so, no doubt.

16,315. Whether it is called a Faculty or a Board of Studies with regard to the chief teaching or directing power of a Board of Studies, would you have it alone by itself or united with the other Faculties, say Arts and Science in a common assembly?—It might be desirable to have such a common assembly now and then. I do not think it would be desirable or useful to have it often.

16,316. Would you think it desirable to have a single Faculty by itself?—I think I understood you to say just now that if that were so the degree or mark given might not be of the same standard as the others?—I did not mean that each Faculty was not to be trusted to do its own business by itself.

16,317. You think it should be trusted to do its own business by itself?—It must be, but there would be a certain amount of ratification by the general authority of the University, and a certain amount of

control by the Statutes of the University which would prevent things being done in a corner.

16,318. (*Professor Ramsay.*) I quite agree that it is not necessary to make any distinction at this stage between Faculties and Boards of Studies. What I understand you to say is that there must be the two bodies in all schemes; the large general governing body of the Senate and the special bodies relating to the different departments of study called Faculties?—Yes.

16,319. Your point is that the Faculty of Law, however constituted, shall be practically supreme in the arrangement of a course of study, and in the arrangement of examinations, and in suggesting the names of examiners, but that they would be theoretically subject to the ultimate control of the whole University acting through the Senate?—Yes. Excuse me, I do not mean to say that there would be no occasions on which the governing body of the University as a whole ought not to have a real effective voice and to deliberate the matter. On a question of creating a new Chair, for instance, I do not think that is a thing which the Faculty ought to expect the general governing body to do without consideration and discussion. Or such a thing as we did at Oxford the other day; we made certain arrangements for the adjustment of some of the duties of my learned friend Mr. Bryce consequent on his becoming one of Her Majesty's advisers, and not being able to give so much time to his Oxford work. That was a thing quite reasonably and properly brought forward and discussed in Congregation, because it affected the interests of the University to some extent.

16,320. You spoke as if there was a sort of complication in that idea as contrasted with the greater simplicity at Oxford where there is no friction. At Oxford you act under a Statute, and the moment you do anything which has a University complexion about it that must be done by the University, and the Faculty is the executive body which carries out the Statutes of the University on the subject of examinations and courses of study?—Yes, that is so. The difference is that at Oxford and Cambridge there is no such thing as a larger body called a Faculty, and a small body called a Board of Studies. There are Boards of Faculties at Oxford, and there are Boards of Studies at Cambridge, and there is nothing between them and the general governing body of the University.

16,321. Now, with regard to the other body. There is a double system of representation suggested, that is to say, that the Senate is to contain a certain representation of the bodies taken into the University. The bodies in this case to be taken into the Faculty would be according to your view only the Council of Legal Education and the Incorporated Law Society. They would be represented in the Senate also?—Yes.

16,322. I suppose the Inns of Court may be taken as being the same thing as the Council of Legal Education?—Yes, practically.

16,323. Then the Faculty would consist of the Council of Legal Education?—Yes, I suppose so, and some Committee of the Incorporated Law Society.

16,324. Do you think it is at all possible that a mixture or an amalgamation of those two bodies for educational purposes could be made? Looking at the state of feeling in the profession is it at all likely that the Council of Legal Education would undertake a joint responsibility along with the Incorporated Law Society?—I think they might if they saw some decided advantage to the Inns of Court in it; otherwise not.

16,325. I think you proposed that the Law Faculty should not merely consist of the members of the Council of Legal Education, but should choose members of the Board who might not be upon the Council at all?—What I am rather contemplating is an enlarged and reformed Council of Legal Education. I mean to say frankly that I think it would be quite impossible to carry on any such scheme as is now contemplated with the existing Council of Legal Education. The constitution of the Council of Legal Education would have to be materially altered in some way.

16,326. You mean to say even to carry out a system of education with relation to itself only? You mean that without touching upon the question of amalgamation with other bodies as it is at present constituted it could not carry out a satisfactory system of legal education?—I do not know whether it could or could not; I only know that it does not.

16,327. In any system it has been suggested to us that there might be, and probably would be, professorships in King's College and other colleges of law. Would the Council of Legal Education be able to permit professors of law subjects in those colleges to act along with committees so as to form one single body in a Faculty?—It would have to if the scheme worked at all.

16,328. It would be essential that it should be done?—Yes; but those professors are almost invariably members of the Bar. There would be no reason why they should not work harmoniously with other lawyers.

16,329. Mr. Crackanthorpe's evidence the other day was rather to this effect, that the Council of Legal Education should bodily, as it now is, be made the Faculty of Law for the University, subject at the very most to the control, which he declared should be rather of a theoretical than of a really practical character, of the Senate of the University. Now considering what you have said to-day about the nature of the Council of Legal Education, and the motives which have actuated the Inns of Court in their arrangements with regard to education, would it be a satisfactory thing for the University to entrust the whole interests of legal education to that body, and make it its sole organ for dealing with teaching and examining in law?—It would not be the Council of Legal Education, because you must bring in the Incorporated Law Society somewhere. The fact is, that we are postulating a revolution in the Inns of Court. No doubt it will have to be a revolution under pressure. The Inns of Court will not come into a teaching University for London unless and until they are convinced that failing to do so they will be somehow or other left out in the cold. In fact the sort of thing which will compel the Inns of Court to come into such a scheme as this, if they do come, will be the expectation that there may be another Royal Commission appointed to overhaul the Inns of Court generally, and Parliament will take away their place. I am not at all saying anything derogatory to the Inns of Court, because I am quite sure that that is what the majority of the Benchers will tell you themselves.

16,330. But there is another way in which it might come in. As I understand Mr. Crackanthorpe's scheme it came to this, that the Council of Legal Education would come in if they were made practically absolute in the domain of law, that is to say, the University might have the chance of an offer from the Council of Legal Education to endow certain law professorships provided it gave over the whole control of legal education to that body. I want to know if such an offer were made to the University, if that were made a condition, would you consider that a safe offer for the University in the interests of scientific legal education to adopt?—Certainly not. I would not take the offer on those terms.

16,331. (*Chairman.*) I suppose you would bring in the teachers of law in University College on the Faculty?—Yes, I have said so already, but that is rather a small question of detail.

16,332. (*Professor Ramsay.*) That is a very important question, but it merely touches the politics of the question as to what is practical in the present state of things. Without regarding the claims of the Inns of Court, the substance of your evidence to-day is clearly to this effect, that assuming a desire to co-operate on the part of the legal profession there is no difficulty in constituting a course of study which

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

would at once serve the purpose of those who desire a legal degree, and of those also who are only anxious to get the necessary amount of legal training for joining the profession?—I see no serious difficulty. I do not recognise any difference between scientific law and practical law. The difference is between knowing law and not knowing it.

16,333. Do you contemplate that every candidate should first have been a B.A. of the University or have some other degree?—I should like it, but I do not know whether it is practicable or not. I do not express a decided opinion.

16,334. If there was one class of students who came in with a University B.A., and another class less educated who came in without a degree that might create a complication?—I do not know that it would lead to much.

16,335. You think it would not make any difference to have two classes, one of less culture than the other?—When I was lecturing at the Inns of Court I never knew how much or how little culture my students had. At that time there was no difference between advanced and elementary teaching.

16,336. In London if you are going to combine the teaching of articled clerks, many of whom are extremely deficient in culture with that of barristers, might there not be a practical difficulty in admitting them to classes which are fitted for a reasonably high law degree?—That would be the articled clerks' lookout; it would not do to lower the teaching to the level of the most generally ignorant articled clerk.

16,337. You do not mean that a professor in teaching a subject is to conduct his whole teaching, and carry out a course of study without the slightest regard to the qualifications or needs of the men he is teaching?—The lectures and teaching should be adapted to those who are to be taught, but, on the other hand, they ought to be able to say, "There are certain things which you must know before you come here." For instance in Roman Law, if a student says he does not know Latin the teacher must say, "Go back and learn Latin."

16,338. I wanted to know whether there was to be a difference between persons in the position of articled clerks and people who have, say, taken a degree in Law, in the University of Oxford?—There would have to be elementary lectures and advanced lectures. The Inns of Court are trying to provide that.

16,339. Now we come to the point of the extent to which the examinations of the kind which you have described to-day might be accepted by the Inns of Court with a view to professional qualification. Is it quite clear that the course of instruction which you recommend for a University degree, could be to a sufficient extent accepted as the necessary qualification for the profession?—I do not see why it should not be accepted altogether. After all it would be an examination which the Inns of Court substantially had made. It would be rather odd if they did not accept it.

16,340. And the students should attend not upon any obligation to attend, but upon their discovering that it would be to their interest to attend?—That would be the best way to do it, no doubt. I do not know whether it would be sufficient or not.

16,341. Would you think it necessary upon the part of the University or the Faculty to prescribe the lectures that a professor gives, the number of lectures, or the length of the course?—There would be some regulations of course.

16,342. Is it definitely prescribed at Oxford?—Yes.

16,343. Has inconvenience not been caused at Oxford by the fact that some professors being engaged in practice in London are not able to give their time to a sufficient extent for the purpose of teaching. Has it been possible for men engaged like Mr. Bryce and Mr. Dicey to give the amount of time and attention to their students, which is necessary for their proper teaching?—In Mr. Dicey's case certainly. Mr. Bryce's case was very peculiar, because he was appointed under the old Statutes, and he was really not bound to lecture except to a small extent.

16,344. And there is no power to enforce regulations upon that point?—Mr. Bryce gave an increased number of lectures under an arrangement with the University which has now come to an end. It has not been renewed, Mr. Bryce intimating that he would rather not renew it at present. But with regard to Mr. Dicey I should say that a professor of law being in practice to a certain extent was an excellent thing, and even if it caused him to miss a lecture now and again, the gain on the whole would be greater than the loss.

16,345. Complaints have been made of lectures being got in between Saturday evening and Monday morning in order to suit the necessities of work in London?—I know they have, but at the same time I think the gentlemen who make those complaints forget that Mr. Bryce's predecessors never lectured at all.

16,346. (*Professor Sidgwick.*) As Sir Frederick Pollock has kindly handed in the Report of the Committee of the American Bar Association I think it would be interesting to have that recorded. They say:—"We heartily approve of the employment of "instructors whose business it is to devote themselves "exclusively to the study and teaching of law. "Teaching in itself is an art and requires in those "who undertake it peculiar talents. Those talents "may or may not be possessed by a successful practitioner in law. The fact that a man succeeds "admirably in the practice of law does not necessarily "imply that he possesses those qualifications which "are necessary to fit one for the discharge of the "duties of a judge. We may affirm the same thing "in an equal degree in respect of the teaching of the "law. The qualities which make a man a successful "practitioner are not necessarily qualities which "would enable him to be a succesful teacher of the "law. Besides, the lawyer of ability in active practice has imperative demands on his time which may "often interfere with his methodical attention to the "duties of instruction. In the case of a man so "engaged the matter of teaching is liable to be "treated by him as a matter of secondary importance. "When it becomes a question whether a client's "interests or students are to be sacrificed it is evident "that the students' interests will, and should be, "subordinated to those of the client. Moreover, it is "necessary that some more direct supervision over "the studies of the students should be had than can be "afforded by one who is only temporarily engaged in "giving instruction, and who, when he leaves the "class-room, dismisses from his mind all thought as "to the conduct and progress of his student. It is "desirable that the course of study in a law school "should be so arranged that the prescribed study "should be pursued at regular times which would not "be interfered with by the professional engagements "in court or elsewhere of the instructors, nor should "unreasonable or irregular hours be selected for the "exercises of the schools in order to avoid these "difficulties. But we do not wish to be understood "as advancing the idea that instruction in law schools "should be imparted exclusively by those who are "not engaged in the active practice of the profession. "We should regard it as exceedingly unwise not to "have in the corps of instructors some persons who "are actively engaged in the practice of the profession. We recommend a combination of the two. "Teaching will be most effectively done in those "schools where there is a combination of the two "classes of instructors above referred to." May I ask if that is your view also?—Yes; I quite agree.

16,347. (*Professor Ramsay.*) The object of my asking the question was this; would it be much more likely that, having got your University in London, the kind of practical teaching and the amount of it which you have described to-day, the whole profession at large would regard with greater favour

the University degree than they do at present?—Much more likely.

16,348. (*Lord Reay.*) May I ask whether you could explain how it is we find that in America, in 1887 and 1888, there were 49 Law Schools with 293 professors and instructors, and 3,667 students, at least 662 of whom had received degrees in Letters and Science. Therefore, we find in America distinct recognition of Law Schools. We have the same phenomenon in Scotland. There the profession does not shirk attending at University lectures, but appreciates them. Can you give any reason why things are different in England?—It is very difficult. I can only say that, as a matter of fact and history, law teaching became quite disorganised in England for a century and more after the Restoration. I suppose the old-fashioned readings of the Inns of Court fell out of favour, partly because they had become antiquated. At any rate, one knows that the whole machinery fell into utter decay in the course of the 18th century, and I suppose people forgot that there had ever been such a thing as systematic teaching of law.

16,349. (*Chairman.*) Is there anything more you wish to say?—There is just one small point of divergence from Mr. Crackanthorpe that I might mention. When he says that the new teaching University would be very glad to avail itself of the ancient halls of the four Inns of Court which furnish lecture rooms, I should regard it as a very unfortunate thing if the giving of lectures in the four separate halls of the Inns of Court was kept up. In the first place, they are not good lecture rooms. I have lectured in two of them myself. I have given a great number of lectures in the Inner Temple Hall; I have delivered a lecture in the Middle Temple Hall for a colleague; I have attended meetings where people spoke in the Hall of Lincoln's Inn; and I have also sat in the Hall of Gray's Inn, to preside over a meeting held by a private society in the Inn; so I know something of the qualities of all those halls. In the first place, with the exception to some extent of the halls of Gray's Inn and the Middle Temple, which are of a convenient size, they are not convenient rooms, a man cannot sit in them as a man ought to sit to take notes conveniently.

16,350. Were they built for lecture rooms?—Certainly not. In the next place there ought to be a central hall and library for the students of the Inns of Court, a place where the lecturers could find the books they want, instead of having to carry them about, and where the students could go for reference. The Inns of Court libraries ought to be places for research instead of being crowded with elementary students. Then an important matter is that the keeping up of lectures in those places would perpetuate the existing jealousies of the four Inns of Court. So long as the four Inns of Court are supposed to be separate societies, each going their own way and only bound together by a slight voluntary thread, it is impossible that you should have a real effective law school in England. The best way is absolutely to forbid the giving of any University lectures in the hall of any Inn of Court. There is a convenient hall for the purpose—the old Court of Appeal in Lincoln's Inn, which now stands empty, and which is, on very few occasions, used by permission for some special meeting. With very little trouble that could be turned into an efficient lecture room. There it is, doing nothing. It is pointed out, as it were, by Providence as the place for a central legal Faculty's lecture room and law library, a place men could go to from chambers, and where practical teachers could easily attend to give lectures. I should say that the suppression of that parochiality of the four Inns of Court is one of the first things to be aimed at, and, although this is a small thing, it is one of those things which are symbolic. The distribution of teaching power in the Inns of Court was for many years guided, not by any consideration of the fitness of the thing in itself, but by the necessity of an equal number of lectures being given in each of the halls, and an equal contribution being made to the foundation of those lectures by each of the four Inns. It seems to me that that is exactly one of the things which ought to be abolished, and that until it is abolished both in fact and in symbol, there can be no such thing as real efficient law teaching in England.

16,351. (*Lord Reay.*) You mean that there should be unity of control and unity of purpose?—Yes, and at present there is not. I have spoken more plainly than I intended.

Sir F. Pollock, Bart., M.A., Hon. LL.D. Edin. and Dublin.

25 Nov. 1892.

The witness withdrew.

Adjourned to Friday the 2nd of December at 12 o'clock.

Thirty-eighth Day.

Friday, December 2nd, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD PLAYFAIR, K.C.B., LL.D.
Sir WM. SAVORY, Bart., M.B.
Sir GEO. M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

JAMES RICHARD UPTON, Esq., examined.

J. R. Upton, Esq.

2 Dec. 1892.

16,352. (*Chairman.*) You have been kind enough to furnish me with some notes of the subjects you propose to be examined upon. In the first place I see you say that you are in favour of facilities to be given for obtaining a medical degree under the provisions of the proposed Charter. You have read the Gresham Charter. Are you on the whole in favour of it?—Yes, I am entirely in favour of it subject to the observation I have to make presently as to the Apothecaries' Society being represented on the Council. Otherwise I am entirely in favour of the terms of the Charter.

J. R. Upton, Esq.

2 Dec. 1892.

16,353. And you would prefer that to the London University being remodelled and enabled to perform the duties of a teaching University?—Yes.

16,354. One of your reasons for being in favour of it is that you wish facilities to be given for obtaining a medical degree without interfering with the degree of the present University of London?—Quite so.

16,355. You think it would not be possible for the University of London to give two degrees, and if it gave a degree of the kind you wish it would interfere with its present degrees?—I think so. I think it would be altogether a different class of degree.

16,356. You have no fear of the degree that would be given by the Gresham Charter as it now stands being of too little value or too easy to take?—Certainly not. If I may be allowed to say so, if the Charter were to stand as drawn no one can apply for that medical degree at all until they have obtained a qualification for registration under the Medical Acts, and, therefore, they must be men who have had a certain amount of education and training as medical men before they can compete for the degree at all.

16,357. The degree would not qualify them?—They would be qualified already before they competed for the degree.

16,358. But they are allowed to take the degree without having passed the examination of the Royal Colleges?—I should have said not under the 2nd Clause of Section III.

16,359. You do not wish Section III. to be altered?—Not altered but preserved intact.

16,360. As a safeguard against the degree being too easy?—Yes.

16,361. You wish to be represented on the Council of the University?—Yes. The Charter provides for the Council being able to give the Society representation on the Council, but we ask that we may be put on now and not wait for the Council to put us on.

16,362. Did you make the same application before Lord Selborne's Commission?—We made that application before the Privy Council, not before Lord Selborne's Commission. In the proceedings before the Privy Council we were represented and made that application.

16,363. Did they give any reason for not granting the application?—That is the whole point that I wish to explain. I do not know whether you have a copy of the notes of the proceedings that took place before the Privy Council.

16,364. Yes, we have got it?—I think if the Commission would refer to pages 138 and 139, you would see a discussion took place between Lord Selborne and Mr. Rigby, who was representing King's College and University College. Lord Selborne says, "Do you say "nothing about the Society of Apothecaries?" Without reading it at length to your Lordship you will see that really the difficulty was as was at that time said by Mr. Rigby, "I doubt whether we could get "upon the same governing board the two Royal "Colleges and the Society of Apothecaries." That sums up, if I may say so, the difficulty which then arose as to placing us on.

16,365. The Royal Colleges would object to your being represented?—Yes. Mr. Rigby says, "I can- "not conceal from myself the possibility that an "inclusion of the Society of Apothecaries might "render it not less difficult, but it may be rather more "difficult, the association with the Royal Colleges." Then at page 143 the matter is summed up by Lord Selborne. That is with respect to the opposition.

16,366. You wish that it should be put into the Charter that you will have representation from the beginning?—Quite so, and as I read the words of the reference to this present Commission it is that the Commission are authorised to alter, amend, and extend, the proposed Charter.

16,367. What representation would you wish to have? Would you wish to have one member on the Council?—We should be quite content with representation, leaving it to the Commission to fix the number. Only we say it is absolutely inconsistent, our diploma qualifying a person to come up for examination for the medical degree of this new University, to allow our licentiates, to come up for that examination, and yet not allow us to be represented on the Council.

16,368. And that would be the whole of your demand?—Quite so.

16,369. Such representation as we might think fair?—Yes. And if I might be allowed to add, as I state in the paper I have handed in, a large proportion certainly, in the first instance, of persons who would come up for this new medical degree would be licentiates. Our diploma costs very much less than the diploma of the Royal Colleges, so that men would come and take our diploma in the first instance, pay the fee, which is much less, and would then probably go in for the medical degree of this new University.

16,370. (*Lord Playfair.*) When you say the diploma is much less do you mean it is much less in cash payment or in qualification?—In cost.

16,371. (*Chairman.*) Not in qualification?—Oh, dear no. We contend that our diploma is quite equal to that of the two Royal Colleges. It is exactly the same thing, except that we are the only body that alone grant a diploma in all three branches—medicine, surgery, and midwifery.

16,372. (*Lord Playfair.*) Are you the only body that grants a diploma in the three branches?—Yes, at present.

16,373. They do it by a conjoint scheme?—Yes, but we do it singly.

16,374. (*Chairman.*) Do you give one for each?—We give one diploma that embraces the whole. They grant two diplomas after a conjoint examination. Our diploma includes midwifery as well.

16,375. They do all that, but it requires a conjoint examination?—Yes.

16,376. And you maintain that your examination is just as good as theirs?—Yes. Upon that point, if the Commission would allow me, I should very much wish to put in the evidence which was given by the late Mr. Marshall, the eminent surgeon, the President of the Medical Council, and myself before what is known as Lord Camperdown's Committee, which sat upon the question of medical titles in the Army. I should like to put that in as part of my evidence. (*For this document, see Appendix No.* 39.) It was after hearing the evidence of Mr. Marshall and myself that Lord Camperdown's Committee arranged that our licentiates should be entitled to compete for the Army appointments, and that was immediately afterwards conceded by the Navy and by the India Office too.

16,377. You are content with putting that in?—Yes, I should not like to trouble the Commission by reading it. It is complete in itself.

16,378. And you would not like to repeat any of the evidence in a short space that was given then?—I should like to rely upon the result of that evidence, which was that it was fully established to the satisfaction of Lord Camperdown's Committee that our diploma was equal to that of the two Royal Colleges, and that they have allowed our licentiates ever since to compete for those appointments. I think that sums up the whole of the evidence of Mr. Marshall and myself.

16,379. You say that your claim has exactly as good a foundation as the claim of the Royal Colleges. Then you say that the representation of the society is a *sequitur* of the 2nd paragraph of section III. of the proposed Charter which we have already referred to of the Medical Act of 1858 as to representation on the Medical Council, and of the Medical Act of 1886, as enabling the society to grant a full registrable diploma; and of such diploma enabling the holder to compete for the army, navy, and Indian services. In fact you say that you are in exactly the same position as the Royal Colleges, and if they have a representation you ought to have one?—Yes. I think if I may be allowed to say so, we are a co-ordinate licensing authority. The Royal Colleges have really never

claimed representation as a direct teaching body. They are no more direct teaching bodies than the Society is. Indirectly they are teaching bodies I understand through their teachers in the schools, these schools forming part of the new University. We do not grudge them that double representation. They are quite welcome to have it both directly and indirectly; but we say we ought to have the same representation directly.

16,380. You would not get any representation through teachers. You do not profess to teach?—No. Again I think it is a remarkable fact that on the Medical Council, which is the body charged with the supervision of medical education, we have, and always have had since 1858, exactly the same amount of representation as the Royal Colleges, and that is repeated in the Act of 1886.

16,381. Then you say that further the Society possesses special titles for representation. First with regard to the number of licentiates. Is the number of your licentiates greater than that of the Royal Colleges?—Much greater.

16,382. How do you account for that? It is not because it is an easier examination, is it?—No; because up to 1858 you must bear in mind that the College of Physicians did not examine persons for an ordinary license. It is only since 1858 that such an examination has been created, so to speak. They had licentiates before, but not licentiates of the same type as they are now. Their present licentiates are practically the same as our licentiates. They are what are called ordinary practitioners.

16,383. Still the greater number go to you?—We have 10,000 licentiates.

16,384. And they would constitute the bulk of those who would apply for the medical degree?—That is what I have endeavoured to explain, because they would pay only 15 guineas for our diploma, and then afterwards when they were better off they would undoubtedly try and get the degree of the new University.

16,385. And you are the only one of the bodies that admits women?—The only one of the three bodies in London. That also seems a little in our favour. I see by the Charter, Section II., that the London School of Medicine for Women is one of the proposed colleges of the University; so if they are allowed to be represented, we think the licensing body that admits woman in London also should be represented.

16,386. You want representation on the Council?—Yes.

16,387. There are no further reasons you wish to give?—No.

16,388. And nothing you wish to say on the general scheme?—Nothing at all. That is my sole point.

16,389. (*Professor Sidgwick.*) If I understand you rightly, your demand to be represented on the Council is based upon the representation that the Charter gives to the Royal Colleges. I mean it is rather that you do not wish to be placed in any position inferior to that of the Royal Colleges?—You are quite right. Putting it shortly, my point is this. Either do not let any of those bodies be represented; exclude the licensing authorities altogether, for which there would be some reason, or let us be represented the same as the Royal Colleges.

16,390. Your Society would not raise any protest if it should seem better to the Commission not to put the licensing bodies on the Council at all?—No, certainly not. I can understand a very good reason for not putting the licensing authorities on, but we say if you put the other two on their claim as made out in the Privy Council, is exactly the same as ours, as being the great licensing authorities.

16,391. With regard to the evidence you have referred to just now of yourself and Mr. Marshall, I have only had time to glance at it, but from the glance I gave to it it appeared to me that Mr. Marshall's evidence did not go the length of saying that your examinations were on a par with those of the Royal Colleges, but only that they were sufficient with regard to the end in view?—I think when you have read it a little more carefully you will find he says ours is better.

16,392. The words that occur are these. This is the question that is asked:—"The Apothecaries' "Society have complained of the present practice in "the Army examinations that I have spoken of, and "they represent that candidates holding their license "are really as well qualified as those who have passed "the joint examinations of the Royal College of "Surgeons and of the Royal College of Physicians, "should you agree in that view?"; and the answer of Mr. Marshall is:—"It is very difficult for me to "express an opinion on that. I think we are apt "to attach too much importance to examinations "altogether. They are a test of a candidate's know-"ledge and ability at the moment; and I believe that "a man who has passed the Apothecaries' examina-"tion might really be a better man than one who had "passed the examination of the two conjoint bodies." The impression produced upon my mind would be not so much that the examination would show him to be a better man but that it would not show him not to be a better man, which is not quite the same thing?—With great deference, I think, when you have read the whole thing, you will find that he eventually draws no distinction whatever between the two.

16,393. The plan of the examination is framed in order to attain the same qualification, the desire of the Apothecaries' Society is to maintain the same standard?—And not only their desire, but it is a necessity that it should be so, because their examinations are inspected as appears in that evidence by the same inspectors from the Medical Council with the examinations of the Conjoint Board; and they must be all up to the same standard and all equally satisfy the Medical Council.

16,394. If I understand you rightly, you are in favour of the scheme of the Gresham Charter rather than of an amalgamation with the University of London, on the ground that it is desirable to have a degree with a less exacting—or, as some say, a less perplexing and embarrassing—mode of obtaining it, than that which the London University provides. As I understand you, you think if there are to be two degrees it is much easier and better to distinguish them by having them given by two distinct bodies?—That is certainly my opinion.

16,395. But it would be hard to carry out the distinction, if they both were given by the University of London?—I think it would be almost impossible.

16,396. How would you describe the standard of the degree that you think it desirable that the new University should give?—I had better leave that to Mr. Brudenell Carter. I am a lawyer, not a medical man.

16,397. (*Sir George Humphry.*) Why should a greater number of the licentiates of the Apothecaries' Society seek the degree than of licentiates of the Conjoint Board?—They are a poorer class of men, men of smaller means, who take up our diploma, and a young man might at the time he came to us find it difficult to get more than the 15 guineas that we charge. Afterwards, at a later date he might be able in some way or another to get the means of applying for or competing for his degree. I only think so. I do not say so. Of course it is only a conjecture.

16,398. You do not suppose that the degree would be granted simply on the ground of their having obtained a license?—Certainly not.

16,399. So that there would be some further requirements?—Certainly.

16,400. Requirements probably in earlier education, and requirements also probably in extended medical education?—Quite so.

16,401. And those requirements need money; they are expensive?—Yes.

16,402. So that the poorer men would probably not have quite the same opportunity of applying as those

J. R. Upton, Esq.

2 Dec. 1892.

who are somewhat more wealthy?—That may be so. I would only say that certainly a very large number of our licentiates, I think, would apply for it.

16,403. You desire that the degree should indicate something considerably more than a license?—Certainly.

16,404. And that it should require greater preliminary education and greater general medical education?—Yes.

16,405. Wherein then would the degree so given by the Gresham University differ from the degree given by the University of London?—Well, I certainly should assume that the degree granted by the Gresham University would not be quite of such a high standard as the present degree of the University of London.

16,406. The difference need not be very great?—It need not be very great; but I should certainly have thought there would have been a difference.

16,407. We learn that the examination of the University of London is not so very much higher or more difficult than the examination by the present corporate bodies, but that there are a good many embarrassments and difficulties in the way other than those of merely superior knowledge?—Yes.

16,408. Supposing those removed, then the University degree might perhaps be not on such terms as you would propose for the Gresham degree?—With great respect, I should have thought that if the University of London were to grant a degree, it would be very difficult to prevent the two merging in some way.

16,409. What two?—The present degree and the new form of degree.

16,410. Quite so, but that is on the supposition that there would be two degrees?—Yes.

16,411. I mean at present the degree of the University of London. I was not suggesting the idea of two degrees, but that the degree of the Gresham University upon the terms you have suggested would probably come up in difficulty to the London degree?—If so, our licentiates would accept it. I should still hope that that provision should remain in the Charter, that nobody should compete for the degree who had not got the full medical qualification.

16,412. That is required by the Gresham Charter, because the Gresham will not be able to give a qualification itself. That is the only ground I apprehend of that clause being introduced?—I think myself great difficulties would ensue.

16,413. I apprehend that that is the real cause of that clause being inserted; that the Gresham University would have no power to grant a license to practise, and that therefore they would not give their degrees to those who had not already obtained that qualification?—I have never read that proviso before in that way.

16,414. I should have thought it could not be read in any other way?—I had read it as a condition in point of standard, that it was to ensure that the men who came up really had shown some previously sufficient knowledge of their profession. I have no doubt you are right, but I had not read it in that way.

16,415. You said that the number of your licentiates exceeded those of the licentiates of the College of Surgeons. Is that really the case?—Yes; that is the case. That was stated by Mr. Rigby.

16,416. You say 10,000. I really do not know what is the number of the members of the College of Surgeons, but I should have thought it was at least that? — Mr. Rigby says, "I apprehend that the "Society of Apothecaries in their licensing power "numerically are more important than the Royal "Colleges."

16,417. I suppose those who now obtain the licentiateship of the Apothecaries do not equal those who obtain the licentiateship of the College of Surgeons?—No. We have only obtained this new license since 1886.

16,418. A complete license?—Yes. Previously to that our licentiates always took up the licentiateship of the College of Surgeons.

16,419. What is about the number annually of those who get your license?—About 200.

16,420. Is that number increasing?—Yes.

16,421. Increasing annually?—Yes. So much so that we have been compelled to build new examination rooms.

16,422. The attractions to it are, in the first place, the money attraction?—Certainly.

16,423. Is that the only attraction that induces men to go? Of course a greater number of men would prefer having the other qualification? — I think I should like to put it in this way. It is the money attraction, because they get for about half the sum they pay to the Conjoint Board an equally good registrable qualification.

16,424. Suppose that the qualification and the examinations at the Apothecaries' Society are not held in such high repute among members of the profession as those of the Colleges of Physicians and Surgeons? The supposition is that the examination is not so good?—That is simply on account of our title, because men prefer to be called licentiates of the Royal College of Physicians and licentiates of the Royal College of Surgeons to being called licentiates of the Apothecaries' Society. But that is the only distinction.

16,425. You are aware that that is the impression?—Simply because of the title. If I may be allowed to repeat it, if we were called licentiates of medicine, surgery, and midwifery, I think you would find a very large increase in the number of our candidates.

16,426. Supposing a student to feel that he would have a difficulty in passing an examination, the examination which he would probably lean to would be the examination of the Society of Apothecaries?—That I must join issue with you on. I cannot agree with that.

16,427. Do you not think that is the impression?—It may be the impression, but I should say it was an exceedingly wrong impression.

16,428. I admit that it may be a wrong impression, but it is the impression; and that impression, right or wrong, is one of the attractions to the Society?—I cannot understand it existing. I should particularly wish to refer to our examination in surgery. That is conducted by Fellows of the College of Surgeons, not appointed by ourselves but appointed by the Medical Council.

16,429. Nominated by yourselves?—We are allowed to name them, but the actual appointment is by the Medical Council.

16,430. You nominate, and the Medical Council appoints?—Yes, but they would have the absolute right to reject.

16,431. Do you know what the proportion of rejection of candidates for your diploma is?—I am afraid I cannot tell you that. That is not in my province.

16,432. Does the Society gain money by these examinations?—No.

16,433. It rather loses, perhaps?—The expense is immense.

16,434. The examinations have been improved and enlarged of late?—Yes, very much so.

16,435. You now give a very full examination in anatomy?—Yes.

16,436. A pretty full examination in surgery?—Certainly.

16,437. I think you are enlarging your scheme for anatomical examinations at the present time?—Yes, we are.

16,438. You endeavour to appoint first rate men to conduct the examinations, and you do not fetter those men. They confer with the Court of Assistants?—There is a joint committee sits every month composed of members of the Court of Assistants and members of the Court of Examiners; and the affairs with regard to the examinations are discussed every month.

16,439. And the Court of Assistants pays due deference to the Court of Examiners?—They always yield to them if they are right.

16,440. The Society has no pecuniary benefit in it. What is the object of the Society maintaining the examinations?—They are exceedingly proud of them.

16,441. They are doing good work?—Yes. I should like to say that they are certainly not losing by them. I rather understood your question to be are they making a considerable profit out of them? should not say they are making a considerable profit out of them, but they are not losing.

16,442. Do you remember a conference at the College of Surgeons at which there were many meetings years ago? Were you present at it at all?—No.

16,443. You know what I am alluding to?—You mean with regard to amalgamating the three bodies and forming a Conjoint Board of the three.

16,444. Not a Conjoint Board of the three, but a Conjoint Board of the Universities and the three Corporations?—That must have been nearly 18 years ago.

16,445. The Apothecaries' Society were represented on that Board?—Yes.

16,446. And they came to a conclusion and formed a plan?—Yes.

16,447. Which was acceded to by the Universities—I believe both of them—but at any rate by Cambridge. Do you know why it fell through?—Because of the Royal Colleges.

16,448. Was it simply that?—That is what I have always understood. I have always understood that it was simply because of the Royal Colleges it fell through.

16,449. You are probably aware of the scheme founded by the Senate of the University of London for a combination of the University with the Royal Colleges?—I have heard of it.

16,450. But you have not read it?—I have not read it.

16,451. There was such a plan proposed by them?—I am quite aware of that.

16,452. Would the Society of Apothecaries object to the carrying out of such a plan as that?—They would certainly object if they were left out.

16,453. They were left out on that occasion?—They would object most strongly if they were left out.

16,454. Supposing they were admitted into it, would the Society give up its independent power of licensing for the medical profession?—That is a serious question which I do not think I could answer offhand.

16,455. Would they give it up if the other bodies did not give up the same privilege, do you suppose?—I think they would very much insist, especially after the Medical Act of 1886, and the position they have been placed in by that Act upon having practically the same privileges as the Royal Colleges.

16,456. The Medical Act has placed them in a better position than they were in before?—In a very much better position. They are rendered perfectly independent of the Royal Colleges now.

16,457. So it was a mistake of the Colleges of Physicians and Surgeons withdrawing from that scheme?—A very great mistake. I do not wish to say anything against the Royal Colleges, but they have made a series of mistakes with regard to us the whole of the way through. They have made nothing but mistakes. I do not say it hostilely, but I say it as a fact that they have made a series of mistakes. Our position now is absolutely different from what it was before 1886.

16,458. Do you think the difficulty of association with the colleges, which you have already mentioned as one of the objections made by Mr. Rigby, is less now than it was, or greater?—Only so far as I read in a medical newspaper the other day that Sir Andrew Clark had stated that the Royal Colleges had withdrawn their opposition. That is the only thing.

16,459. I do not think he stated that?—I say the newspaper stated it.

16,460. (*Lord Playfair.*) Withdrawn his opposition to what?—To the Society being represented on the Council.

16,461. (*Sir George Humphry.*) It was in answer to a question from myself. I think he expressly stated that he had no authority?—I did not wish to put any words into Sir Andrew Clark's mouth. I merely quoted from the newspaper.

16,462. The paper certainly a little misrepresents what Sir Andrew Clark has said?—Perhaps so.

16,463. (*Lord Playfair.*) Before the Act of 1886 you, like various other bodies, only gave examinations in certain subjects in medicine?—Medicine and midwifery.

16,464. You gave nothing then in surgery?—We could not. We had no power.

16,465. The College of Surgeons and the College of Physicians each in the same way gave partial examinations and not complete examinations in the three subjects?—Quite so.

16,466. At least they were not obliged to do it?—I believe the College of Physicians claims to examine in both if they like, but they do not.

16,467. The object of the Act of 1886 was, was it not, to make it a condition for the license that all the licensees should be examined in all the three divisions, Medicine, Surgery, and Midwifery?—Quite so; that nobody should be put on the Register unless they possessed those three qualifications.

16,468. And that condition was imposed on the Society of Apothecaries?—Certainly.

16,469. Had you any difficulty before Parliament in 1886 in getting the Society of Apothecaries included?—Certainly not. Your Lordship drew the clause as it is now in the Act of 1886. It was drawn without our interference at all. It was brought in without any assistance from us.

16,470. But, as you are aware, there was considerable opposition to your being put into the Medical Act of 1886?—I have heard so. I had to see you on one point, and I remember you said: "I will not "allow this Bill to be interfered with in any way. "I have drawn it, or had it drawn, and I absolutely "decline to let it be touched."

16,471. By that Act you are obliged to have a certain number of external examiners. How many?—The Medical Council would determine the number of assistant examiners. We began with three when the Act came into operation first, in June 1887 subsequently, we increased that number to five.

16,472. Can you mention the names of those examiners you have now?—Mr. Makins, Mr. Walsham, Mr. Arbuthnot Lane, Mr. Adams Frost, and Sir Andrew Clark.

16,473. All these are well recognised and eminent members of the medical profession, are they not?—I believe them to be most eminent.

16,474. How many examiners have you besides those?—Besides those we have 12 of our own.

16,475. Do they vote by majority?—I cannot quite tell you that. They have a Chairman, but whether they vote by majority I cannot tell. I believe it is so. You mean upon the question of whether a candidate should pass or not?

16,476. Yes?—I think it is by majority.

16,477. But very probably, as the experience of other Boards shows, the division is very seldom. It is almost always unanimous?—Not being an examiner I am afraid I cannot answer the question.

16,478. You said that now you pass about 200 per annum of licenses. How does that compare with the annual passes before 1886?—It is not a large increase.

16,479. Is it a large decrease?—Certainly not a decrease.

16,480. (*Sir George Humphry.*) You said that since 1886 the numbers were increasing annually?—Yes.

16,481. Do you know at all to what amount?—I could not give you the amount, but they have increased.

16,482. (*Lord Playfair.*) Perhaps you will let us have it?—Yes.

16,483. Will you let us have the number for five years before 1886 and five years afterwards?—Yes. They have certainly very much increased this last year. I know that.

J. R. Upton, Esq.

2 Dec. 1892.

16,484. Has it occurred to you that if there were a new Gresham University upon the conditions of the Charter it would be in an anomalous position as being the only University in the kingdom that does not grant medical licenses?—I see your point, I think. Of course it would be in a peculiar position.

16,485. And in an inferior position to the other Universities, all of which have the power of granting medical licenses?—I never thought it would take the position of the older Universities.

16,486. But why should the Gresham University not have as exalted a position as the Victoria University, Manchester, for instance?—I do not think myself, except with regard to the medical faculty, it would ever be a very successful University.

16,487. But supposing that it is to be chiefly as a medical University would it not be anomalous that it should be the only University that could not grant licenses for medical practice?—Yes, I suppose it would be an anomaly.

16,488. And do you think it would long continue to be satisfied with that condition? Take the case of Victoria University. It received its charter without that power, but it was found so inconvenient and anomalous that it applied for a new charter to give it the power. Would the Gresham University not do the same thing?—I think if there were any risk of that it had better not be established.

16,489. You would rather, each of you, have your separate license?—Quite so. I am not here at all as a great advocate for the Gresham University. There has been a great cry, as I understand, from the medical schools for it, but I am not here as an advocate for the Gresham University.

16,490. What is understood by the Gresham University is not a medical University but a University that will promote the study of literature, science, and medicine in its higher branches?—I am quite aware of that.

16,491. Because of any difficulty that might arise on account of the Gresham University, which would, probably, almost inevitably, go in for a license for degrees, and because of the interference in that respect with the Conjoint Scheme of the Colleges of Physicians and Surgeons, and the separate scheme of the Apothecaries' Society, would you object to a great University for London being formed?—No, I certainly would not.

16,492. Supposing another view prevailed, and that a separate University was not formed, but that the old London University was modified so as to include the influence upon the teaching bodies of London, do you see any great difference then between the London University and a new Gresham University?—No, I do not.

16,493. (*Professor Sidgwick.*) With regard to your last answer, in reply to me, I understood you to say that you thought if there was a degree of a somewhat different standard from that of the present London University to be instituted at all, you saw an advantage in its being given by a separate body, because it would be difficult to maintain two distinct standards in one University?—Quite so. In answer to Lord Playfair's question, I was assuming but one standard.

16,494. (*Mr. Anstie.*) With reference to the proposals that have been before the Commissioners for union of action in this matter with the Royal Colleges it has been pointed out that they have not only great power as licensing bodies, and great experience as examining bodies, but they also have valuable collections, libraries, museums, and property which would be made serviceable to the advancement of learning in medicine and surgery. Could you state whether there is anything of that nature belonging to the Apothecaries' Society which could be utilised for the purposes of higher education?—No, I cannot say that we possess such a museum or library. We have a botanic garden.

16,495. That seems to me to be very much in the same line. You have a botanic garden; in this neighbourhood, is it not?—It is in the neighbourhood of Chelsea.

16,496. I suppose that admits of being utilised for the purpose of medical education?—That admits of being utilised, and I should further like to state (only I am speaking with considerable reserve at this moment) that we have in contemplation the foundation of scholarships or studentship connected with research which will very much help the cause of education. I cannot say more than that at the present moment, but there is no question about it that within the next two years it will be completely formed.

16,497. I suppose we may take it that if the Apothecaries' Society be connected in some way with the Royal Colleges and the reformed and reconstituted University, you would be willing to make those resources available in the same sort of way as that in which the Royal Colleges would make their resources available?—Most certainly.

16,498. There are funds connected with the Garden, I suppose?—No, it is entirely maintained by the Society out of its own income.

16,499. Then the Society has an income?—Yes.

16,500. Is it derived from fees?—It is derived from various sources. It has a considerable income out of which it maintains this garden. But I should like to state that it is not a fund in connexion with our examinations. Our examination fund is kept absolutely distinct.

16,501. Regarding the Apothecaries' Society from this point of view, I suppose we may assume that it is, as the Royal Colleges are, an educational body?—I should call it quite as much educational as the Royal Colleges.

16,502. Then if we take the Royal Colleges as a measure we should call its functions pretty exclusively educational?—Quite so.

16,503. And you think we might fairly take that view of the Apothecaries' Society, and reckon on that view being correct?—Yes. As I say I am obliged to speak under reserve now, but within the next two years probably very considerable funds will be forthcoming for the endowment of research.

16,504. (*Sir George Humphry.*) The Apothecaries' Society has the funds?—Yes, or will have.

16,505. Are they large funds?—Yes, considerable.

16,506. One must not ask what they are?—No.

16,507. Is there a probability of those funds, irrespective of what may be derived from examinations, being applied for these purposes?—Yes.

16,508. And probably through the relations with the Botanic Garden?—Yes.

16,509. Has there not been some proposal for parting with the Botanic Garden?—There we are trenching on what I am not at liberty to state at present.

16,510. They have not parted with it at present?—Certainly not.

16,511. It is a lease, is it not?—It is a lease in perpetuity at a nominal rent paid to Lord Cadogan. It is what I should call a fee simple grant in consideration of a payment of 5*l.* a year.

16,512. Which means practically that they have complete control of it for all time?—Yes.

16,513. And that they could do what they liked with it?—Yes, except sell or make a profit of it.

16,514. Has not the College of Physicians some kind of interest in it?—It has a reversion if we give it up, and so has the Royal Society. The Royal Society comes first, and the College of Physicians next; but they certainly would not like to pay what we have paid every year for keeping it up.

16,515. The point is that the Apothecaries' Society are contemplating in some way the establishment there of a scientific teaching, we will suppose of subjects of Botany and Materia Medica, and research which would in some way correspond with the research of the Colleges of Physicians and Surgeons on the Thames Embankment?—With one exception I

should say yes. It is not necessarily in connexion with Chelsea.

16,516. (*Mr. Anstie.*) In London?—Yes, in London, out of our own funds.

16,517. (*Sir George Humphry.*) Which would correspond with the research of the Colleges of Physicians and Surgeons?—Yes, which would correspond with the educational advantages possessed by the two Royal Colleges.

The witness withdrew.

RICHARD BRUDENELL CARTER, Esq., F.R.C.S., M. and L.S.A., examined.

R. B. Carter, Esq., F.R.C.S., M. and L.S.A.

2 Dec. 1892.

16,518. (*Chairman.*) You have heard the evidence of the last witness. Do you agree with what he says and what he desires?—I think entirely.

16,519. You are anxious that the Society of Apothecaries should be represented on the Council of the University?—If the other licensing bodies are so represented, most certainly.

16,520. And you would be content to leave the amount of representation to the Commission?—Quite. I think the fact of representation and not the number is the essential point.

16,521. Have you any other reasons to give beyond those that were given by the last witness, Mr. Upton?—No, I think not. I have merely to say that, looking at the weight and importance of the Society as a licensing body, and as a body that is especially helpful to many of the less well endowed class of students, I think it is deserving of consideration from the Legislature and the Government, and that it should certainly be placed in a similar position to that of the other licensing bodies in the kingdom.

16,522. I see you gave evidence before Lord Selborne's Commission?—I did.

16,523. And that was chiefly against the proposition which we have had among others before this Commission that the Royal Colleges should have power to give a degree?—It was; my object then was to show that any power of that kind might be as reasonably claimed by the Society as by the Royal Colleges; that they were on precisely the same level as licensing bodies.

16,524. Has your attention been called at all to the scheme which in consequence of Lord Selborne's Commission was presented by the Senate of the University of London to Convocation and rejected by them?—No, I cannot say that it has.

16,525. You do not know that in a clause of that there was power given to the University to arrange with the Royal Colleges for conducting M.B. examinations for medicine conjointly?—No, I was not aware of the details of the scheme at all.

16,526. Then it is no use asking whether you would object to the Royal Colleges having this power of arranging with the University for examination?—I think that any power given to the Royal Colleges ought to be given equally to the Society.

16,527. But you have not looked into it?—I have not looked into it.

16,528. In a general way you wish to be on the same footing as the Royal Colleges and you wish to be represented on the Council?—Precisely.

16,529. That is all you desire and all you have to say?—Yes.

16,530. Is there any other point?—No; except that I am very glad that reference has been made to my evidence which was given two or three years ago, because that went into considerable detail with regard to the position and status of the Society as a licensing body. With regard to the character and position of its examiners they are all men of high attainments, who hold offices at the great London hospitals with perhaps one or two exceptions, one exception being Dr. Klein, who is of world-wide reputation as a physiologist. In that evidence will be found a fair statement of the grounds upon which the Society of Apothecaries claim equal privileges with the Royal Colleges.

16,531. We would consider that evidence to be before us?—Thank you, my Lord.

16,532. (*Lord Playfair.*) Have you any official connexion with the Society of Apothecaries?—I am their representative in the Medical Council. I am a member of the Society of Apothecaries as well as a licentiate.

16,533. You probably have personal knowledge of their examinations?—I have been present at them.

16,534. And from your knowledge of other examinations are you satisfied with their fulness and efficiency?—I am quite satisfied with them. I have been present at them and thought they were exceedingly well conducted, with great consideration for the candidates, and in a way to show what they knew and what they did not know. And I may say that the report of the inspectors of the Medical Council was entirely favourable to them.

16,535. When was the last report of the Medical Council?—I think about a year and a half ago.

16,536. Do you recollect who were the inspectors?—The same gentlemen who inspected the other examinations. Dr. Finlay inspected in Medicine. I am afraid I cannot recall the names of the other two at this moment. I can send you the names. I think they were the same gentlemen who had inspected all the other licensing bodies.

16,537. You say the report was favourable?—Yes; the formal report was that the examination was entirely satisfactory, or words to that effect.

16,538. And are you in favour of a clause in the draft Charter of the Gresham University that it should take in no persons for medical degrees unless they are licentiates of existing bodies?—Yes; I am in favour of that. I think we have medical licensing bodies enough. We have 19 in the United Kingdom. I think we have quite enough licensing bodies. At the same time I think a degree conferring body would be a very great advantage to members of the profession who labour under the disadvantage of not being able to get the title of Dr. easily, although it is given in Scotland and Ireland on lower qualifications. I think men in English general practice would be benefited by being able to get the title of Dr. more easily than at present, without residence, and merely on a basis of ascertained knowledge.

16,539. You do not object to a large teaching University in the metropolis of this country being in an inferior position to other Universities in the provinces?—I cannot say I have considered the question. I have never looked at it from this point of view. I can only say that I have known many instances in which it would be of very great advantage to men to have the title of Dr., and I think any scheme which would give that would be valuable and useful to the profession.

16,540. You think that the London University plan is not sufficient for that purpose?—At whatever age a man may be a London degree involves matriculation, and subsequent examination at two year intervals with successive steps. If a man is 40 years of age he does not want to enter upon a six years' pupilage.

16,541. Even for the Apothecaries' Society, I suppose, you have a qualifying examination in general knowledge before a candidate can be examined?—Yes, before he is entered as a medical student at all.

16,542. Has the Medical Council been raising that qualification in recent years?—No, the Medical Council has never interfered at all with the standard of that examination. It has never inspected the examinations. But the Medical Council has been endeavouring for some years past to induce the licensing bodies to surrender that examination. Thus, although they conduct an examination in arts as preliminary to medical education, the Medical Council

R. B. Carter, Esq., F.R.C.S., M. and L.S.A.

2 Dec. 1892.

has been putting pressure upon them to induce them to abandon the practice, and to leave that examination entirely to the general education authorities of the country, but there are two bodies, the Society of Apothecaries in London and the Conjoint Board of the Colleges of Physicians and Surgeons in Dublin, which have not yet seen their way to abandon the examination. Whether they they will do so or not I cannot tell, the matter is under consideration.

16,543. With regard to your preliminary examination for medical students carried on by the Apothecaries' Society, what do you enforce? For instance, do you require a knowledge of Latin?—I am speaking from memory, and I cannot be quite certain that I am precise. Three examiners, who are all of them Oxford and Cambridge graduates, and men of high attainments, are nominated to conduct the examination. I think Latin is obligatory, and I think the student might take up either Greek, French, or German at his pleasure. There is some knowledge of literature required—English literature as well, I think, and mechanics. Then I think Elementary Physics, Chemistry, and some other matters of that kind, but I speak under correction. I can furnish the details: I have not them in my mind at this moment.

16,544. Have you any reason to think that your preliminary examination is more easy than that of any of the other licensing bodies?—I have no reason to think so. I have heard it stated, but I never heard any foundation for the statement, and I do not believe it.

16,545. (*Sir George Humphry.*) You have spoken of obtaining a degree easier?—Yes.

16,546. What do you mean by that?—On a basis of knowledge only, without reference to locality of study or effluxion of time after a man has qualified.

16,547. Do you think it desirable that the degree should indicate a higher standard of general culture?—I am not quite clear on the point for this reason: The whole question has arisen from the fact that examining bodies in the northern part of the kingdom have been accustomed to give a degree on the basis of an examination not superior to that for the diploma given in England or by the Apothecaries' Society, so that a man passing his examination in one part of the kingdom calls himself Dr., and a man passing a precisely equivalent examination in another part of the kingdom is only entitled to call himself Mr. The public in England attach to the title of Dr. the traditions that cluster round the College of Physicians, and that clustered round it in the days when the Harveian oration was given in Latin, and they associate it with ideas of culture which in a great many cases is not there. Whether it should be so in all cases is a matter which I do not propose to discuss, but it seems to me that what is most wanted is to place the licentiates in the different divisions of the kingdom upon an equality, so that men who have passed an examination which, in England only entitles them to call themselves Mr. should be placed on an equality with men in the northern part of the kingdom who call themselves Dr.

16,548. You do not think that the giving of a degree which is supposed to indicate a higher status should be taken advantage of to attain some higher education in general literature and scientific knowledge than appertains to the mere license?—It appears to me that while that is abundantly secured by the degrees of the older Universities and of the University of London, and while the possession of their degrees is indicated by the letters which the graduates attach to their names, what is most wanted for the medical profession is a medical degree which should not necessarily rest upon any basis but professional knowledge.

16,549. In fact a medical degree which would indicate nothing at all?—Which would indicate a high standard of medical knowledge.

16,550. That the degree should indicate nothing special, nothing peculiar?—Nothing peculiar.

16,551. Then you rather favour the view that all persons who obtain a qualification should obtain with it the title of Dr.?—Yes. The public call them so in a great many cases. I think that would be a valuable reform.

16,552. So as to obliterate the value of the title?—No, to let it be a title indicating considerable medical knowledge.

16,553. (*Lord Playfair.*) Higher medical knowledge than the licensee?—No. It now deceptively implies something. There are about one third of the profession who call themselves Dr., and perhaps two thirds who do not call themselves Dr. They represent precisely the same thing in the way of culture and in the way of medical knowledge as the others, and it seems to me that that distinction is one which it would be well to obliterate.

16,554. (*Sir George Humphry.*) And not that one should take advantage of the desire for obtaining this degree to gain something for it?—I should leave that to the older Universities. That would be my feeling. The object is to get the title of "Dr." I think a man who is in medical practice should without any undue difficulty be enabled to call himself "Dr."

16,555. It would reduce his title to something that was valueless?—Any value which attaches to it now is deceptive. It does not represent anything at present in the great majority of cases.

16,556. (*Sir William Savory.*) Are you speaking here for yourself or the Society which you represent? Do you express the views of the Society?—Not that I am aware of. I have had no communication with the Society with regard to them.

16,557. There have been no instructions in that direction?—Absolutely none.

16,558. Are you in favour of a second University or a modification of the London University?—I really have not considered the question, and I would not give an opinion upon it.

16,559. Do you not think it is a very important point?—It may be, but its importance lies outside my province.

16,560. You would rather not give an opinion upon it?—I had rather not give an opinion upon it, because I have not considered it with sufficient care.

16,561. Did I understand you to say, in answer to Sir George Humphry, that in your opinion the title of "Dr." should not necessarily imply higher or more advanced knowledge?—I do not think it should. I think we have a very large proportion of medical men with no higher knowledge who call themselves Dr., and who thereby possibly obtain an unfair advantage.

16,562. Then the object you have in view would be to facilitate the acquisition of the degree of Doctor of Medicine by those men whom you consider sufficiently educated who do not at present enjoy it?—Quite so.

16,563. But of course there might be another view, you know there is another view; that those who obtain the degree of Doctor of Medicine should show some additional culture, some more advanced education?—Yes. I should be quite in accord with that view if it were possible to do away with the right to use the title of "Dr." now enjoyed by vast numbers of persons who have no such higher education. That is the difficulty that I see.

16,564. The two objects might be represented in this way. One would be the advancement of medical education, including all the subjects which are accessory to it, and the other is facilitating the acquisition of the degree by the profession in general?—Quite so.

16,565. You draw the distinction pretty plainly that it should mean the acquisition of the degree?—I do.

16,566. Do you consider the present education which a medical man gets is good enough? Would you advance it if you could?—I would.

16,567. In what direction?—In one direction in which it has been already advanced quite lately, commencing this year, in the extension of time. More time should be devoted to professional education.

16,568. Would you devote that extra time to clinical work or preliminary work, or both?—If possible I would devote it to both. I would divide it amongst them; I would like to see modern languages obligatory. There is a great deal of valuable literature in French and German. They are now optional. I think Latin is obligatory, and of Greek, German, or French one of them has to be taken.

16,569. I quite follow your answer, but when I said "preliminary subjects" my question was rather in relation to anatomy, physiology, and chemistry, before medicine and surgery. Do you think they should be more fully studied than they are at present?—No, I do not think so; so far as I am in a position to judge. I think the man who studied them practically would continue to work at them after obtaining the qualification.

16,570. You think the clinical subjects, obstetrics, medicine, surgery, and so on, should be further studied?—I do.

16,571. Still with that in view you would not make the granting of a degree in any way a step to that. You would not make the granting of a degree involve the further study of those subjects?—No, not here, whatever may be done by the University of London. It seems to me that what we have here is an opportunity of doing away with an invidious and fallacious distinction.

16,572. You used two expressions with regard to what you advanced as the claims of the Apothecaries' Society, that they should have a similar position, and be upon the same level as the two Royal Colleges?—Yes.

16,573. Should you regard those institutions, the two Royal Colleges and the Apothecaries' Society, as upon the same level in other respects?—They have their differences and their respective characteristics, but they are co-ordinate licensing bodies.

16,574. Yes, but co-ordinate hardly implies that they are upon the same level, and that their claims should be the same?—I think so in a case of this kind.

16,575. Should you say that the Apothecaries' Society held the same professional rank as that of the two Royal Colleges in the estimation of the profession?—I could hardly tell. You see for a great many years of my life the license of the Society of Apothecaries was the only medical qualification obtainable by general practitioners. I took it myself as a young man. It is my only medical qualification now. The license of the College of Physicians as a qualification for general practitioners did not exist. What relative positions the two may hold at the present moment I am hardly enough in touch with the very young members of the profession to be able to tell. I could not give an opinion upon the subject.

16,576. But may I assume that you do know enough of what goes on in the profession to be able to state an opinion as to the relative estimation in which those bodies are held in the profession?—I hardly could say. I think the precedence would be given to the College of Physicians, the College of Surgeons next, and the Society of Apothecaries third. I think so, but that would be expressive of their duties, charter, and so forth.

16,577. The College of Surgeons would occupy an intermediate place between the College of Physicians and the Apothecaries' Society?—I think so in the public estimation and professional estimation generally.

16,578. Then the Apothecaries' Society would be obviously two degrees below the College of Physicians?—Yes, but I say nothing about the magnitude of the degree.

16,579. A very slight degree?—I should think a very slight degree.

16,580. Would you place the College of Surgeons below the College of Physicians?—I should.

16,581. In what respect?—If I am right it is a younger body, and the College of Physicians always takes precedence of it. I know of no other reasons.

16,582. No other reason than that the College of Surgeons is a younger body, and of two one must go first. There is no other reason?—No.

16,583. Then practically those two bodies would be upon the same level?—Yes, practically.

16,584. Would the Apothecaries' Society take the same rank as those two bodies?—I think so, if you remember that for a great number of years the College of Surgeons and the Society of Apothecaries occupied precisely the same relative positions that the Colleges of Physicans and Surgeons do now. They were the two licensing bodies through which the whole of the general practitioners of England filtered. They took the license of the College of Surgeons first as being the easier to obtain; then they went to Blackfriars to get the license of the Apothecaries' Society.

16,585. So far as I am concerned you need not trouble yourself to demonstrate the past. One would concede to the Apothecaries' Society a great deal of excellent work in the past, but I am speaking now of modern times?—I think their work is as good as ever it was.

16,586. Do you think the diploma is held of the same value in the profession as the diploma of the Royal Colleges?—I cannot tell. I value my own license quite as much as I should value that of the College of Physicians.

16,587. The answer would be that you could not tell whether in the profession the diploma of the Apothecaries' Society ranks upon the same level as the diploma of the Royal Colleges?—No, I cannot tell. They are placed officially upon a footing of equality. Lord Camperdown's Committee reported them as being upon a footing of equality with regard to the public service, and I do not know what other standard to take.

16,588. If it were asserted that the diploma of the Apothecaries' Society were considered an inferior diploma to that of the two Royal Colleges, would you contradict that?—Yes. I should say that whatever was asserted that was not the case. It is given after the same course of study, and after an equivalent examination.

16,589. Do you think that the examination at the Royal Colleges and at the Apothecaries' Society are upon the same level?—I do.

16,590. You think the reputation of the professional examiners of the Apothecaries' Society quite equal to the reputation of those of the two Colleges?—Yes, the examiners of the Society of Apothecaries are all of them men, I think, who hold offices in the great London Hospitals. The examiners in Surgery are all of them Fellows of the College of Surgeons, and most of the examiners in other subjects are Doctors of Oxford, Cambridge, or London. There are one or two exceptions. One exception is furnished by Dr. Klein, an examiner in Physiology—a man of European reputation—all the others hold office in some one of the great London Hospitals.

16,591. But even among the group you have just sketched there would be considerable differences of repute?—Clearly.

16,592. So that this would be hardly satisfactory evidence that the gentlemen who examined at the Apothecaries' Society are as a rule—— ?—But I do not think the differences of repute necessarily imply a difference of attainment or difference of power of conducting an examination. We take a man who is at present, perhaps, senior assistant surgeon at St. Thomas's Hospital, and who, in course of time, will become full surgeon at St. Thomas's Hospital. His position must be as good as that of any other man on the staff of St. Thomas's Hospital. I do not even know whether there is a difference of repute.

16,593. Your answer would be that if there were a difference of repute it would not imply that there was a difference in power as examiners?—Yes, because all the men who are examiners either are in possession of or in prospective possession of the higher offices.

R. B. Carter, Esq., F.R.C.S., M. and L.S.A.

2 Dec. 1892.

R. B. Carter, Esq., F.R.C.S., M. and L.S.A

2 Dec. 1892.

16,594. There is some difference between prospective position and fulfilment?—Not when a man is senior assistant surgeon, for instance.

16,595. Can you tell me what the functions of the Apothecaries' Society are?—No, I cannot tell at all. I am not a member of the Livery, and therefore I do not know anything about the inner life of the Company.

16,596. They supply drugs largely, do they not?—No, I believe not. The supply of drugs is done by a subsidiary company, which consists of members of the Society of Apothecaries. The Society of Apothecaries in the strict sense has nothing to do with the supply of drugs.

16,597. Would it be right to say that the Society of Apothecaries has nothing at all to do with the sale of drugs?—As a Society I believe it would. I speak subject to correction.

16,598. Do you know who sells the drugs?—I believe the drugs are sold by another society, a society incorporated for the purpose. I think what happened was this. In the first place members of the Society of Apothecaries who were general practitioners combined together and subscribed capital for the purpose of obtaining drugs for their own use of better quality than they could then get them through other channels. Having done this they were ultimately applied to, I think on the part of the Navy, to supply the Royal Navy with drugs. In consequence of that a second company, or something analogous to a limited company nowadays, was formed out of the members of the Society of Apothecaries for doing this drug business. But as far as I believe (I speak as I say under correction) the Society of Apothecaries as such has no more to do with the sale of drugs than the College of Surgeons or the College of Physicians.

16,599. After your explanation I may put the question a little more plainly, and say that the Society of Apothecaries is in no sense to be regarded as a trading Society?—I believe not.

16,600. (*Mr. Anstie.*) At any rate we may say that with regard to any Union such as is contemplated and desired by the Apothecaries' Society with the University, they would have no difficulty in making a clear severance if such severance should be necessary between the functions?—I should think not at all, but all these questions could be better answered by Mr. Upton.

16,601. Speaking for yourself, you say that is a term that it would be proper to accept?—I think so.

16,602. Am I right in thinking that you expressed yourself as of opinion that every duly licensed medical man should have the title of "Doctor"?—I think it would be a great advantage in view of the existing condition of things.

16,603. Is not that a matter to be determined rather by a short Act of Parliament annexing the title of Doctor (if that is the right thing to do) to the license to practise, than for the creation of a new University to do in a cumbrous manner, and by really deceptive means what might be done by Act of Parliament?—I should be delighted to see such an Act of Parliament passed.

16,604. That is really your view of it?—That is really my view of it.

16,605. I have a little difficulty in understanding how it is you come to regard the main and important point at issue here and in question here, the opportunity of doing away with an invidious distinction. Would not the proper way of doing away with that invidious distinction, if such it is, and if it ought to be done away with, be by Act of Parliament, and not a sham charter and a sham University?—I should say that this invidious distinction has been going on now ever since 1858; that efforts have been made in all manner of ways to get rid of it on the part of the profession; but all those efforts have been in vain. I do not for a moment say that this proposed University offers the best way of getting rid of it, but it seems to me to offer a way, and as offering a way I should welcome it.

16,606. That is really the measure of your view of the importance of this University question at this time?—That is the point to which my attention has been directed. I cannot say that it is the measure of my view of the importance of this University question, because I have not considered it.

16,607. The only interest that you take in the University question at this moment is to get rid of an invidious distinction?—Yes.

16,608. Do you know whether any University or any charter has ever been proposed which would really have the effect which you seem to think would be secured by this? Of course the Gresham Charter does not. It has never professed to do anything of the kind. Do you know of any scheme put forward by any responsible and accredited person which has had that object in view?—It has been proposed again and again that licensing bodies, especially the Colleges of Physicians both of London and Edinburgh, should be entitled to confer the doctorate on particular licentiates. That scheme has been proposed.

16,609. That would answer what I was suggesting to you at first; that there should be a short Act of Parliament giving the title of doctor to——?—To everybody who was on the Medical Register.

16,610. But I am asking whether there was ever any University scheme propounded which had for its basis and object the giving of the title of doctor to every licentiate to practise?—Not that I am aware of.

16,611. You would not differ from the view expressed by Mr. Upton as to the willingness of the Society to come in and unite with the University and to bring the educational contribution which might justly be expected from a partner in a work of that kind?—I am not, as I said, a member of the Livery of the Society, and I know nothing of its inner life, and I am really not entitled to speak upon it.

16,612. Would you dissent from Mr. Upton's views?—Not at all. I have no knowledge of the subject whatever.

16,613. (*Sir William Savory.*) May I clear up one point with regard to this question of "the same position?" For instance, in examinations conducted by the University you would claim for the Apothecaries' Society the same number of examiners in each of the subjects as the two Royal Colleges possess?—I am not prepared to go into questions of detail of that kind at all.

16,614. But would not your phrase "the same position" and "the same level" imply that?—No, I think the number of examiners required would depend upon the number of persons seeking the license, or whatever it might be, of the individual body. A body that had say 600 licentiates or candidates would require more examiners than a body with 100.

16,615. With regard to the examiners of the two Royal Colleges, you are probably aware that there is a scheme by which there is a perfect equality of appointment as to number?—I was not aware of that scheme at all.

16,616. You must have some arrangement of that sort, must you not, in order that the scheme should work?—I am not quite clear what scheme you are speaking of.

16,617. I am speaking of the conjoint scheme of the two colleges, and what I am asking your opinion upon is whether you mean to say that the Apothecaries' Company should claim in the appointment of the examiners and the appointment of the examinations a third place just as the two colleges claim a half?—If the Society of Apothecaries had been added to the conjoint scheme I should say so certainly.

16,618. Was that the scheme they put forward when it was in contemplation?—I do not know. I was not concerned in those negotiations at all.

16,619. May I put the question a little more in detail? Do you think the Society of Apothecaries should take the same part in the examinations in medicine as the College of Physicians?—I think if there were a Conjoint Board there would in all pro-

bability be a division of labour in which, I think, anatomy and surgery would fall to the College of Surgeons; matters of medicine would fall to the College of Physicians, and pharmacy, chemistry, and so forth to the Society of Apothecaries.

16,620. That is how you divide it?—That seems to me a suitable division of labour. I cannot say I have given any consideration to the question. I have answered on the spur of the moment.

16,621. The Society of Apothecaries to deal with *materia medica*, pharmacy, chemistry and physics?—If they form a third element in the Conjoint Board.

16,622. (*Professor Sanderson.*) I think we understand that, irrespective of the difficult question of medical representation, you are anxious that there should be an efficient teaching University in London?—I really have not given an opinion upon that point, and I do not know that I have formed any. The question of a teaching University is one that has lain rather outside my work and thoughts, and I cannot say that I have studied it or formed any opinion about it.

16,623. You have not come to any conclusion in your own mind as to the necessity of such a thing?—No.

16,624. And supposing the Royal Colleges and the Society of Apothecaries were placed upon the same footing, would you be content with representation, not merely in the Faculties, but in the Governing Body of the University?—The representation here talked of is in the Council.

16,625. You think it would be absolutely necessary for your purpose, considering the interests of the Apothecaries' Society, that it should be represented in the Governing Body and not merely in the Faculties or Boards of Study?—I should think so. It would be indirectly represented in the Faculty, no doubt, because one of the proposals, for instance, is that St. George's Hospital Medical School should be a college in the University. I am a teacher in St. George's School, and, therefore, it would have a representation in that way.

16,626. But you would not think that sufficient?—I should think not. I should follow Mr. Upton in saying that I think that whatever representation was accorded to the Royal Colleges should be accorded to the Society.

16,627. Supposing they were contented with that sort of representation, you would be contented just the same?—Yes. My object is to maintain the claim of the Society to equality of privilege.

16,628. Then is it your view that the examinations of the Apothecaries' Society should form part of a system of examination which would lead on to the degree?—What is proposed by this Charter is, as I understand, that any medical man will be eligible for the degree of this University, on submitting himself to such a course of examination as the authorities of the University may determine, or such a course of studies as the authorities may determine, and on such conditions as the authorities may determine. I think it ought to be immaterial whether a man's license, and his position on the Medical Register came from the Conjoint Board or from the Society of Apothecaries.

16,629. Do you think it is desirable that qualifying examinations should be repeated. I mean by a qualifying examination, a qualifying examination in the sense of the Medical Act. Do you think it is desirable that a man should be twice examined in those subjects?—Not necessarily. I think it is very likely that by the time a man wanted a degree in medicine he would have settled himself down in one department of practice, and I think it would be unnecessary to examine him in midwifery if he were practising as a physician.

16,630. Have you any distinct view as to the way in which you would get rid of what may be called the title grievance? Do you conceive that it would be possible even by Act of Parliament to confer the title of "Doctor" as a professional title without involving the untruth of academical status?—I believe it is said that everything is possible by Act of Parliament.

16,631. I mean could you yourself suggest any way in which such an Act of Parliament could be drawn, or the terms on which it could be drawn?—The terms would be simply in three lines, that every person who is registered as a legally qualified medical practitioner upon the Medical Register should be entitled to call himself, or assume the title of "Doctor." You would not allow him to sign himself M.D. because he would not be one.

16,632. And in that way you think you would avoid any untruth with regard to his academical status?—I think so. I only throw that out as a suggestion.

16,633. Now, with reference to the relation between the two colleges and the Society of Apothecaries and the relative position which they occupy, I think your point was that they enjoy at present equal privileges and that they have used those privileges with equal efficiency?—Yes.

16,634. But you do not take into account the great difference which has hitherto existed between the two as regards the position which they have taken in relation to the advancement of medical science. Can it be maintained that the Society of Apothecaries has either the means of advancing medical science or that it has actually taken a part in the advancement of medical science at all comparable to the part that has been taken by the Royal Colleges?—The only part that the Society has taken that I know of in the advancement of medical science has been by the use that it has made of the garden at Chelsea; by the lectures that have been given; the prizes that have been awarded; and the prizes that have been given for *materia medica*. When I was a medical student many years ago the late Professor Lindley lectured on botany at the garden, especially with reference to the medical aspects of botany. As a registered student of the Society I was entitled to go and attend those lectures, and I did go and attend them. Many of my fellow students did the same, and we all, I think, derived great instruction from them. In the same way the Society has had, I am not sure about lectures, but certainly examinations in *materia medica* for students; and in those two ways it has unquestionably promoted those two branches of medical science. With regard to whether we stand on an equality with the Royal Colleges I should put it in this way. My own impression is that the action of the Royal Colleges in the advancement of medical science has been until lately not very considerable. There have been lectures at the College of Physicians; there have been lectures at the College of Surgeons, and there have been opportunities afforded by the museum and the library. It seems to me that the Royal Colleges have made a great start of late years and have got a little ahead, and I think it is quite likely from what we have heard to-day from Mr. Upton that the Society of Apothecaries in a degree commensurate with its means and opportunities will do quite as well.

16,635. Is what you have referred to with regard to the Botanical Garden now going on in a systematic way?—I cannot tell. I know there is a Professor of Botany who does lecture, but I do not know at what hours or at what times.

16,636. But at the same time it is quite obvious that it is not comparable to the influence which the Royal Colleges exercise by their museum, library, and other ways in promoting the advance of education?—As far as I know the action of the Society of Apothecaries has been rather in promoting the education of medical students, whereas the action of the Royal Colleges is rather in promoting the higher education of practitioners.

16,637. With regard to the education of medical students you maintain that they discharge their functions as well as the Royal Colleges?—My comparison is with regard to their size and to their

R. B. Carter, Esq., F.R.C.S., M. and L.S. A

2 Dec. 1892.

opportunities. One cannot compare a small corporation to a larger one.

16,638. (*Professor Sidgwick.*) I should like to get your view of the standard of the degree somewhat more clearly, and perhaps I may do that by referring to evidence which was given before the last Commission before which you also gave evidence. I do not know whether you have read the evidence of Sir Jas. Paget which was given at that time?—It is not in my memory at the present moment.

16,639. It seems to me that his view might be in harmony with yours, and as he was Vice-Chancellor of the University of London, as well as being a distinguished member of the College of Surgeons, he was able to contemplate the matter, both from an academical and from a professional point of view. The question was asked him by Sir Wm. Thomson: "Then the degree of doctor of medicine as given by "the Universities of Edinburgh and Glasgow, for "example, is perhaps comparable, it may be involving "about the same qualification as the licentiateship of "the London Colleges," to which Sir Jas. Paget answered "Yes." I understand you would make the same claim for the examination of the Apothecaries?—Yes.

16,640. That it represents a qualification equal to that of the Scottish Universities?—About that, I believe. I may say that I have very little knowledge of what the examination in Scotland is now, but I know that when I was a student we all of us placed the M.B. of St. Andrew and Aberdeen just a little below the level of the Society of Apothecaries.

16,641. Then Sir Wm. Thomson put this point: "It is desirable, either that the Scottish Universities "should not be allowed to give the degree of doctor "of medicine without a still higher qualification, or "that somehow, in London, there should be the means "of obtaining the degree of doctor of medicine for "that qualification," and Sir James Paget answered, "I can say that for the degree of doctor of medicine "of Edinburgh, Glasgow, and also Aberdeen." You would take the same position with regard to your examination, that Sir James Paget takes with regard to the examination of the College of Surgeons?—I should.

16,642. You put the same claim, either that these Universities should raise their qualification or that there should be similar opportunities given in London?—Yes.

16,643. I suppose you would not conceive it to be within the range of practical politics that the power of giving the degree on the lower qualification should be withdrawn from the Scottish Universities?—I think it is because they confer no other license to practise, and they are bound practically to confer their medical degree for a pass examination in medicine, surgery, and midwifery.

16,644. With regard to the relative standard of your examinations, and those of the Royal Colleges of Physicians and Surgeons, during your examination by Sir Wm. Savory, I thought that perhaps I might suggest the answer that Mr. Marshall gave in the paper that Mr. Upton handed in as representing your view. The passage I allude to is in the evidence before Lord Camperdown's Committee. Mr. Marshall's answer to the question with regard to the qualifications of examiners is this:—"Personally "we have the highest testimonials of the qualifica- "tion of these gentlemen. Many of them I know, "in fact all of them I know personally; they are "younger than the examiners at the Royal College "of Surgeons, but comparative youth is not always "a disqualification. If earnest and faithful in the "performance of his duty, a young examiner is not a "bad examiner. I might say from what I know "myself of the examiners in surgery at the Apothe- "caries' Society that they are very good men." He admits they are comparatively younger, but he says that a young examiner is not necessarily a bad examiner. Would that represent your view?—Yes.

16,645. We may take it as your view that youth is not a disqualification, and that the examiners are practically equal with the admission that they are younger?—Yes, with that admission; and I would suggest that sometimes their youthfulness may rather tend to make them better examiners—more able to maintain a modern standard of attainment in surgical knowledge. When gentlemen get old they sometimes fossilise a little.

16,646. Now, one word with regard to the degree given by the Gresham University. We have received from the London Medical Schools a unanimous statement that a good general training in Arts and Sciences should be required from candidates for a degree in medicine, and that the arrangements for preliminary examinations in Arts and Sciences should be made by conference between the Board of Studies for Medicine and those for Arts and Sciences. Would you be in favour of that arrangement?—As far as I follow it completely.

16,647. It would probably lead to raising the standard of scientific acquirements?—Yes.

16,648. That would not seem to be at all objectionable?—Not at all. I have seen the standard steadily raised for many years.

16,649. Your view before expressed with regard to the examinations of your Society relates rather to medical examinations than to preliminary scientific?—Yes.

16,650. (*Lord Playfair.*) Was your reference to northern examinations when you were yourself a pupil, or was it when you were becoming a licentiate?—I have no northern degree myself, but I am speaking of the time when I was a medical student.

16,651. You are not speaking of the present position of the examinations in those Universities?—I do not know it except in the way that I know that the northern Universities could not raise their standard above what is called the qualifying standard for a pass examination in medicine, surgery, and midwifery, because the degree of doctor is the only license they give, and, therefore, as they have to provide for the daily wants of their own country, they are obliged to give the only degree in medicine which they can confer to men who come up to the pass standard of knowledge.

16,652. I beg your pardon. Is it not the case that in Scotland, exactly as in the case of London here, there are qualifying examinations by three examining boards, the College of Surgeons of Edinburgh, the College of Physicians of Edinburgh, and the College of Surgeons and Physicians of Glasgow?—I believe that is so; but at the same time I believe there is a very active competition amongst the bodies.

16,653. Do you say that of your own knowledge, or is that your general belief?—It is my general belief.

16,654. Are you aware that there have been two statutory Commissions within the last 20 years in Scotland revising these matters?—I was not.

16,655. And you are not aware that the conditions have been raised considerably by these statutory Commissions?—I am not aware of that. The only knowledge I have is from the reports of the General Medical Council, and those reports place all the examinations on the same level.

16,656. I am speaking without a knowledge of the recent reports, but when I was a professor at the University of Edinburgh I recollect that the report was exceedingly favourable?—Yes.

16,657. You mentioned the University of St. Andrew's?—I believe there has been within recent years a considerable change in St. Andrew's. In former times, when I was a student, anybody could go to St. Andrew's and offer himself for examination and obtain a degree; but, if I am not mistaken, a period of residence is enforced.

16,658. No, no period of residence is enforced. Ten men of over 40 are allowed to go up and no more. Supposing even that that was not superior to

other examinations, 10 men would not have greatly influenced the number in the profession ?—No.

16,659. (*Sir George Humphry.*) I think your great object is that all who obtain a qualification to practise should be able to style themselves doctor ?—I think they should all be on the same level when they get only a pass examination.

16,660. Is it not open to any one of them now to sign himself "doctor" ?—No. I could not sign myself "doctor." *R. B. Carter, Esq., F.R.C.S. M. and L.S.A.*

16,661. Why not?—Well, I could style myself a baronet, but I should not be one.

16,662. It is perfectly open to you to put "Dr. Brudenell Carter" on your door, is not it ?—If I did so, I should be telling a falsehood. 2 Dec. 1892.

The witness withdrew.

PERCY ARTHUR BARNETT, Esq., M.A., examined. *P. A. Barnett, Esq., M.A.*

16,663. (*Chairman.*) You are the Principal of the British and Foreign School Society's Central Training College, Isleworth ("Borough Road"), and Vice-Chairman of the Council of the Teachers' Guild of Great Britain and Ireland ?—Yes.

16,664. Perhaps you will tell us shortly what the British and Foreign School Society is ?—The British and Foreign School Society is a society which was founded nearly 100 years ago for the purpose of providing for elementary education, but its operations are now almost entirely directed to the training of teachers for elementary schools. The General Committee suggested that I should apply for permission to give evidence to this Commission which I had already determined to ask on behalf of our college as a Metropolitan Training College, for this reason: the Metropolitan Training Colleges for men already present a very large number of their students for the examinations of the existing London University in Arts, and they feel that in the very near future their students will probably occupy a very large space indeed of the Arts Class lists.

16,665. Are the great Metropolitan Training Colleges connected with the British and Foreign School Society ?—No. The British and Foreign School Society has in London two colleges only, the Borough Road College, of which I am Principal, and the Stockwell College for Women. But there are, I think, five other colleges for men which are more or less directly concerned in making representations to the Commission.

16,666. What is the connexion of those training colleges with Government ?—It is a very intimate one. The colleges are not technically Government colleges. The Government, however, contributes a very large share to the sum required for their maintenance.

16,667. Does it interfere with their management?—The Government inspects them and holds examinations. I wanted, if I might be permitted, to point out to the Commission that the Education Department is gradually giving up a great deal of such examinations as it conducts in general subjects, and the place of this is being taken by examinations conducted by the London University for the London colleges, and, as I say, in a very few years there is no doubt that most of the students in training will pass through this course, most of the men at all events. There are 1,254 students altogether in the London colleges, and I think of these 530 are men. That represents a very large number of candidates.

16,668. Your object in appearing before us is to advocate that these residential training colleges should be affiliated to the teaching University for London ?—Certainly.

16,669. I see you remark that while the present University of London does very well for certain purposes, any scheme providing for University Constituent Colleges cannot justly leave the residential training Colleges in the metropolis without powers of affiliation ?—That is so.

16,670. Are you in favour of the principle that a teaching University ought to have colleges affiliated to it ?—Yes, undoubtedly, for the reason that I have stated in the notes that lie before your Lordship, which are to this effect: that affiliation does give a certain prestige; and as we do so very much of the work, we think that if there are any colleges affiliated and enjoying the special privileges which attach to affiliation, we certainly have equal claims considering the importance of the work we do, and, if I may say so with all diffidence, the high quality of it.

16,671. Have you turned your attention at all to whether any new scheme ought to take in the present University of London, and work through that, remodelled, if necessary, or whether there ought to be a new University established ?—No, we have not. As I have said, for purposes of examination the present University does very well. We recognise the value of the examinations and their fairness. Our only reason for wishing to make representations to the Commission is that if there is a teaching University, and a University made out of constituent colleges, we should value the opportunity of being affiliated, and should regard that on the whole as preferable to our present position outside affiliation.

16,672. Does that mean you would wish to have representation on the Council ?—Certainly.

16,673. And that your teachers should form part of the different Faculties ?—Yes.

16,674. The Faculties with regard to which you would be affiliated would be what, Arts alone ?—To Science also, and if there were a faculty of pedagogy, to that certainly. We do not suppose that the whole of the staffs of three colleges can be recognised on the faculties, but we suppose that there may be representatives of the staffs on the faculties.

16,675. Supposing it only to consist of four—arts, science, medicine, and law—you would be represented on arts and science ?—Yes, exactly.

16,676. These colleges are sufficiently autonomous, sufficiently independent of Government, to enable this to be done without difficulty ?—I see no reason for supposing otherwise. In point of regulation of our studies the Government does less and less. It certainly prescribes what subjects shall be studied, but it leaves as much as possible (and it is likely to do so more in the future) the examination and testing of the more "liberal" subjects to the University.

16,677. To the present University of London ?—To the present University of London practically, and I have not the least doubt that the Education Department would welcome any extension of that principle. They would be glad I am sure to get rid of the very great burden of examining, which they labour under at present.

16,678. When you say the Education Department has shown a marked willingness to leave the academical appraising of its teachers to the Universities, that means that they go in for the degree ?—Yes.

16,679. Do they find that suitable to their requirement? Are they satisfied with the degree of the present University ?—Yes; of course the Government insists upon testing the professional capacity of the students, and providing examinations for teaching and so on.

16,680. But they accept the examinations of the University in lieu of certain parts ?—Yes, they do.

16,681. And you think this should be the case with the new University or the altered University ?—Yes.

16,682. The Government provide examinations for what you say is the more technical part of a master's instruction ?—Yes, they do that.

16,683. And will continue to do that ?—Yes, they will continue to do that unless the new University

P. A. Barnett, Esq., M.A.

2 Dec. 1892.

had a faculty of education or pedagogy, in which case I can hardly doubt that the Education Department would accept those certificates as they now accept the academical certificates.

16,684. What would the actual examination in pedagogy—what sort of subjects?—It is known by a rather narrow name—school management—which includes a certain amount of mental science, the technique of school management, logic, and practically covers a certain amount of the college year in schools under observation, subject to a final practical examination before Her Majesty's Inspector.

16,685. An examination as to whether the candidates are fit to have the management of a large number of boys?—Or to teach to *any* extent. It is a necessary condition of their having any sort of certificate that they should teach, and teach up to or beyond a certain standard.

16,686. Can their powers of teaching be tested, except practically?—As regards the power of teaching, no, but the practical test applied by Her Majesty's Inspector, together with paper work in the usual way, supplies a sufficient test.

16,687. Then you say a central Government Department would also prescribe what subjects its teachers should master, but it would no doubt accept the academical test of a University in all cases available. You could hardly expect a new University to accommodate its degrees to meet the views of the Government department, could you?—No; I do not at all expect that, but if the examination of the new University were on pretty much the same lines in Arts and Science as the examinations of the present London University, I conceive that the Education Department would accept them, and willingly accept them, in lieu of its own examinations.

16,688. But only in lieu of part. The technical part would remain in the hands of the Government?—Yes; unless, of course, the new University had technical examinations which the Government would accept in the same way. Perhaps I may say, if your Lordship would permit me, in addition to that, that the Teachers' Guild, of the Council of which I am Vice-Chairman, is agitating and hoping for some general insistence that teachers shall have a technical certificate; and I am sure that they would welcome very gladly indeed a faculty of pedagogy in the projected University.

16,689. I should like to get to know a little more clearly what this technical education test does consist of. First of all, logic, you say?—And mental and moral science; and the history of education, of course.

16,690. That would come in in existing faculties?—Yes; that would no doubt. That might be a branch of Arts.

16,691. But there are some things which you think would have to be in a class by themselves?—No doubt the purely practical part would have to be in a class by itself. You would hardly include that in mental or moral science. It is more technical.

16,692. This exhausts the heads that I have here. Is there anything more you would wish to add?—No. I think I have said all that I wish to say. I have some statistics before me to show that the colleges, or certainly three of the greater typical colleges in London, have increasing numbers of students ready for University degrees; and that the increase in the number has been very rapid during the past few years in which the Education Department has accepted the University examination in lieu of its own.

16,693. Will you give us the numbers in all the London training institutions?—That I cannot, because I have only been able in the short time that I gave myself to get trustworthy statistics of three of the largest.

16,694. How many are there?—There are six for men and seven for women. I think those are the figures.

16,695. You have given us the numbers that were in residence?—Yes, 1,254.

16,696. That is the number in residence in 1891 in all the training colleges?—In the training colleges in London.

16,697. Are there many others?—There is a very great number up and down the country—about 40 or 50, I should say.

16,698. These seven for women and six for men are in London?—Yes.

16,699. So that we may take it that there are more than twice this number throughout the country?—Yes.

16,700. It is only the London ones with which we are concerned?—That is so.

16,701. (*Professor Sidgwick.*) I should like to know the number of those in the training colleges who have obtained degrees in the University of London so far?—I am not able to give you statistics for all of them.

16,702. But of the three colleges?—In the Borough Road College 140 have actually graduated.

16,703. During how many years?—The statistics cover an indefinite period—since their foundation; but I may point out that the great majority have been of recent years. I have the figures for 1892.

16,704. In 1892 how large a number of students graduated?—In the Borough Road College, where the students in residence are 133, of resident students only two have taken degrees in this year. The number is 11, including some ex-students.

16,705. I suppose that those whom you call ex-students cannot be said to have been completely prepared for their degree at the college. They may be supposed to have supplemented what they learnt there?—That no doubt they have, but in most cases they proceed with the remaining stages towards their degree very soon after they leave college, putting in the necessary extra work in the intervals that their professional duty allows them, so that practically they are prepared for the greater part by us.

16,706. What degree?—The Arts degree principally.

16,707. Would you say that the teaching in the training college is a complete preparation for the degree in Arts, including all the teaching that is required?—In the Borough Road, Battersea, Chelsea, and some others absolutely.

16,708. For the ordinary degree, but not for the honours degree?—Yes, for the honours degree. Speaking for my own college, I can say that we do not as a matter of fact, but we can prepare. The staff is adequate to prepare students for honours in classics, and at this moment one of our students is a candidate for English honours.

16,709. So you consider that a portion of the candidates would be prepared for honours?—Certainly.

16,710. And that the proportion of 11 out of 133 represents the portion who have been prepared for degrees at all?—No. If I may give you the numbers showing how many Borough Road students have respectively passed the various stages this year it may be clearer to you. Of students who are still in residence, 26 have passed the matriculation examination, 10 have passed the intermediate Arts examination, and two have passed the B.A. examination.

16,711. Would you say that the 26 are probably going on for the regular degree?—I have no doubt.

16,712. So that the proportion may be taken as 26 out of 133?—Yes, and the proportion will be much larger in a few years.

16,713. You would not, I suppose, in claiming to be a constituent college, compare your position to that of University College or King's College? You would not claim, I presume, to have a complete equipment in science?—By no means.

16,714. Have you read the report of the former Commission?—I cannot remember having read it all; of course I have read parts of it.

16,715. I was only going to refer to a suggestion there made, that there should be a distinction made between constituent colleges, which were intended to

be limited to institutions of completely academic rank, and associated colleges which might have a different connexion with the University. It appeared to me as probably more in harmony with the place which you claim for your institutions that they should be in some way associated than that they should claim the position of constituent colleges?—Yes, obviously. We cannot claim to have a sufficiently large staff, or indeed a sufficiently highly qualified staff, although the quality is extremely good in the greater training colleges now, and improving always.

16,716. You claim that some members of your staff are engaged in giving academic teaching, or is it that they are all engaged to some degree?—All the permanent staff. We have a certain number on probation, younger junior tutors, but at least five of us are giving education of University rank.

16,717. It would be very important in instituting a new University which we desire to take a good position among Universities, that it should not be open to the objection of in any way lowering the standard of academic teaching, but that it should be even rather jealous with regard to the inclusion of teachers whose work is in the main that of instruction of the non-academic kind, even though they may give some academic instruction. So it would perhaps be rather a certain part of your work that you would wish to have recognised in some way as being academic?—Assuredly; I should probably as much as anybody regret the lowering of a high standard or a standard that promised to be high. Of course in that case the degree would cease to be valuable, and I should be extremely sorry.

16,718. Then what exactly would affiliation mean?—It would mean that we should be one of a certain number of institutions, education at which gave privileges for being presented at an examination which students in colleges not so associated would not have. That is the first point. The next point is that we should expect if associated or affiliated to have some voice on the Boards of Studies and the Boards of Examination.

16,719. Do you represent the whole body of training colleges?—I am not technically authorised, but I think I may say I express the general feeling of the training colleges and certainly of all those which are doing University work.

16,720. You spoke of a faculty of pedagogy. I do not quite think that the constitution of a separate faculty of pedagogy would be in accordance with the plan of organisation of German and other Universities. But you would claim that the subjects should be treated in the training colleges in an academic way?—Yes, certainly.

16,721. Can you give me an idea of the amount of study in psychology and logic that the students do there, the books used, and the amount of time they give to it? The question of its being of an academic character would mostly turn upon that?—Most of the teaching is given by lectures. Students are referred to the books, but they are mere text books of no great value. I am bound to say that. There is a tendency, however, to increase the amount done, and I should rejoice at an association or affiliation for the very reason that it would raise the standard.

16,722. Might I ask whether the lecturers in psychology and logic are persons known for their writings on the subject, or in what way are they qualified?—No, they are not. For the most part the masters of method in training colleges are men who have themselves passed through the course and supplemented the ordinary work by a wider reading, in many cases, having attended lectures. I cannot remember many cases where they have taken considerable academic work.

16,723. Would you yourself be prepared to hold that the teaching of psychology and logic, placed in the hands of masters of method in training colleges, can be said to be of an academic character?—No, certainly not so at present.

16,724. Then you look forward to a rise in the standard?—I am certain of it.

16,725. You think association or affiliation with a University would tend in that way?—I am quite sure it would.

16,726. Would you think it desirable if your students were in any way connected with a University that they should attend lectures elsewhere, or would you wish to keep the teaching entirely in your own hands?—I should be willing to send students to any place where they could get the best teaching.

16,727. It would not interfere with your organisation?—Except so far as we are at some distance from any considerable centre. We happen to be some 8 or 9 miles from London. But it would ultimately, no doubt, lead to our providing ourselves with the necessary staff, and it is partly in the interests of the future training colleges that I am anxious to see some association with the University.

16,728. It is not merely that you would gain in position, but you would also elevate the quality of the teaching?—That is exactly the case.

16,729. (*Mr. Anstie.*) I am not quite sure that I understand your position with regard to the answers you have given to Professor Sidgwick. Your training colleges are colleges for training teachers for elementary schools?—Yes.

16,730. The graduates of Universities to a large extent occupy themselves or their graduates are occupied in school teaching of some kind?—Yes; a very large proportion.

16,731. We have been informed that in Scotland until lately, and still to a large extent, and again quite lately in an increasing degree, elementary school teachers, parish school teachers, are graduates of Universities there?—Yes; but graduation in Scotland does not quite mean as much as it means in England.

16,732. You say it does not mean the same. In what respect is it different?—The honours course in English Universities are reputed to be, and are generally understood to be, of a rather different character. Of course, I am hardly speaking of the mere pass.

16,733. But why not speak of the pass?—Because my own knowledge of the quality of the work of an English University done by a pass man rather prevents my taking that course.

16,734. When you speak of honour degrees, you would hardly anticipate, would you, that to any considerable extent, men who take honours at a University would busy themselves with elementary education?—I do not think to any great degree, but there have been cases, and I am sure I see a tendency for it to become much more common.

16,735. Are you speaking of Scotland?—I am speaking of England. I have no considerable knowledge of Scotland.

16,736. You think it is a thing to be looked forward to, that men should take high degrees while themselves busy with elementary teaching?—I think so.

16,737. To any large extent?—Well, it is very difficult to prophesy, of course. It is impossible to foresee, but the general tendency is for men of that social standing which provides for most of the teaching in elementary schools certainly to take degrees of higher and higher rank; and I have no doubt that a scheme of secondary teaching, or secondary schools, will make a great call upon the University for the provision of such teachers for those schools.

16,738. There are two points attractive in that career as to others. There is the pecuniary value of a man for services rendered, and there is the intellectual interest to himself of the business which he undertakes?—Yes.

16,739. In respect of those points do you conceive that a large number of honour graduates would devote themselves to elementary education?—I should say in fair proportion both. The openings for men of good social standing of the older Universities are not

P. A. Barnett, Esq., M.A.

2 Dec. 1892.

so many that they can afford to despise opportunities that may occur in the public elementary system.

16,740. I was not speaking of the question of social standing. I was speaking of pecuniary inducements on the one hand and intellectual interest on the other?—I think the question of social standing is associated very closely with pecuniary inducements. A man of good standing will not despise the opportunity of making a start with something like 100*l.* a year even in a public elementary school, so that the two questions seem to me to be connected.

16,741. You seem now to say that they both come to the same thing. But they are two things: the pecuniary inducement to do the work and the intellectual interest?—Yes.

16,742. Which of those two is it you rely upon?—The first mostly.

16,743. Respecting the second, would it not be always rather a deterrent? If a man had gone into the higher regions of literature and science would he not find a difficulty in putting himself into the work —To some extent that must be so.

16,744. The tendency would be, rather to discourage any very intimate connexion between the teaching and high-class attainments?—I think that may be true. I think it is possible, on the other hand, to make too much of it.

16,745. But still it is true?—It is true, undoubtedly.

16,746. Is not that a reason why there is some difficulty in allowing the colleges to come in on terms of equality with those who do that kind of work?—There may be if you could prevent men from receiving that cultivation and education which you suppose might unfit them for the work of the elementary school; but, as a matter of fact, they are encouraged to take the higher literary and scientific training, and the men who are worth anything amongst them will always get as much of it as they can.

16,747. You say you would encourage elementary schoolmasters to obtain as much of the higher training as they reasonably can. Would not one of the best methods for doing that be to bring them into close association with other persons who are engaged in also pursuing the higher training?—No doubt: but that would hardly seem to be a reason for not permitting them at the colleges which are now doing so much of this work to have such privileges as ought to attach to excellent teaching and hard work.

16,748. The question is, what is best to be done, and the question is, whether it might not be better for those who are engaged in this pursuit to have the opportunity of associating with those who are engaged in the higher pursuits in those places where those higher pursuits are the chief object?—For certain purposes, no doubt, it is better, but the question is one between the residential colleges and the non-residential colleges, that is to say, the "day training colleges" as they are called. The residential colleges have very many great advantages over mere non-residential affiliated classes.

16,749. Then in training colleges for elementary teachers do you distinguish between what you call residential and non-residential colleges?—Yes.

16,750. What is the distinction?—Residential colleges are the colleges where the men or women are gathered together with the object solely of going into the teaching profession, whereas at the day training colleges they are associated (I think the association is an exceedingly small one) with persons who are not proceeding to the same profession. There are, as you are no doubt well aware, colleges attached to King's College and University College.

16,751. What do you say are the advantages of the residential colleges over the day colleges attached to University College and King's College?—The men in the residential colleges have at present infinitely more help, more careful supervision, more sympathy; they are better known, and their general cultivation and education are promoted much more effectually.

16,752. Then you would prefer to have a man as a schoolmaster who came out of a residential college?—I should not hesitate for a moment.

16,753. You would prefer them to the men from the day college?—I should prefer them. I started with the other prejudice. I confess that at one time I was inclined to think that the residential colleges were not so good as colleges not then in existence might be, as colleges which would be connected with University Colleges; but a close acquaintance with some of these residential colleges conducted in what I think is the most efficient way, proves to my entire satisfaction that there can be no doubt that the close personal association of the men in residential colleges with their teachers, the social training, and the active sympathy are invaluable; and it cannot be the same in colleges where the teachers and the students are non-resident.

16,754. Would it be just to say that that is perhaps more particularly valuable having regard to the class and the associations from which the students mostly come?—I say that undoubtedly. You are perfectly right.

16,755. Then would it also be true to say that there are training schools connected with those colleges. Is that also the fact?—Of which are you now speaking?

16,756. The residential colleges?—Yes, they all have practising schools.

16,757. Not the day schools?—The day colleges have permission to practise in certain schools belonging to the school boards. For instance, in London, King's College and University College students go to such schools for practice, but in none of these cases can the supervision be so close, careful, or constant as it is in the residential colleges.

16,758. And to that you attach very great weight?—Very great weight indeed. For instance, I know most intimately the work, character, and a very great deal of the antecedents and the prospects of a great number of my 133 students, and I have no doubt that is the case with other principals of other training colleges.

16,759. Of course a great many of the things you are referring to are not things which could or would leave their mark on a degree?—No, but I understood you to be raising a question between the two systems.

16,760. It was the difference between the two systems in a University aspect?—Yes.

16,761. A great deal of that you say is not a matter which would appear in any University qualification, and would not be furnished, in fact, by the colleges which are the petitioning colleges in this Charter?—Quite so. Perhaps, however, you would allow me to emphasize the answer I have given you already with regard to the advantages of residence being all the greater considering the social status of the men originally. Residence in a great institution, together with social opportunities, corporate institutions, and constant companionship, has in itself a very good effect, as those familiar with Oxford and Cambridge must be aware.

16,762. To bring it to a definite test let me ask you this. How far would you think that the courses of instruction given at these colleges could or ought to be accepted as equivalent to courses taken at, say, University College and King's College? Supposing the University were to accept for certain purposes (I do not say for the final examination, but for intermediate purposes) the courses taken at University College or King's College in that subject as qualifying the student to enter as a candidate for the final degree, would you say that the lectures at your college should be taken on the same footing?—I have not the least doubt. The best proof of that, I think, is that in this year, having sent in some half dozen or so of men for that examination, two of those failed, but neither of them failed in Latin as far as I can recollect.

16,763. And would you say the same with respect to science?—Our science of course is tested at South Kensington. I have not the least doubt that those who read for the advanced course at South Kensington could also take the intermediate science examination of the University.

16,764. If any such recognition were given would you be prepared to subject the examination upon the course to the University authorities?—Undoubtedly without any hesitation, and I should much rejoice at the change. This is a matter of individual opinion, and perhaps hardly one that would be generally acceptable, but I should be glad to be relieved from the South Kensington examinations, and I should be glad to substitute the University examination for those wherever I could.

16,765. Then you think you could substitute the academical examination for the South Kensington examination?—I think so, with this proviso; the South Kensington examinations have a certain pecuniary value to the men because they enable them to teach and to earn grants in certain subjects; but, on the other hand, if a man has passed in the University science examination in subjects which are recognised as subjects at South Kensington they do, I believe, allow him if he is accredited, to earn grants.

16,766. You mean, subject to the pecuniary difficulty, you would prefer the academic examination?—Yes; and the pecuniary difficulty is not one I am thinking very much of. I was thinking more of the intellectual needs and the ultimate intellectual advantage of the men.

16,767. (*Sir George Humphry.*) You said that you would desire affiliation. What advantage do you expect to accrue from affiliation?—Affiliation or association as Professor Sidgwick suggested to me, perhaps, comes to the same thing. My idea is that if constituent or associated colleges have special privileges, we ought to enjoy them in common with others, in so far as we do academical work and do it well. *P. A. Barnett, Esq., M.A.* 2 Dec. 1892.

16,768. What privileges would you expect to accrue?—The exclusive privilege of presenting ourselves for examination, privileges which would not be given to non-associated or non-affiliated institutions. That is one.

16,769. Would it not be sufficient if your teaching was recognised by the University, and your body represented in some way or other either in the Senate or in the Faculties? Would not that be sufficient?—That, of course, would be a very great deal, but the question for us being between the present London University and the projected University, presumably one of constituent colleges, the matter becomes somewhat different. That is to say, that if there are constituent colleges, we think we should have greater prestige if we were associated with such an institution.

16,770. But really in the form of such a University and its relation to various teaching institutions there is no very special object in styling them constituent colleges or affiliated colleges, or anything of that sort?—No. The styling of them is a matter of no great moment.

16,771. Provided there be a relation to the University, or a representation in some way or another, the term "constituent colleges" had better be omitted, inasmuch as it creates so much difficulty as to which are to be created constituent colleges and which are not?—Yes, as I say, I conceive that there are reasons why colleges should not be strictly constituent colleges, but associated colleges, I think, they ought to be.

16,772. The University would avoid a considerable difficulty if it does not use the term "constituent colleges?"—Yes, I see that.

The witness withdrew.

Adjourned to Thursday, the 8th December 1892, at 12 o'clock.

Thirty-ninth Day.

Thursday, December 8th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
The Right Hon. the Lord PLAYFAIR, K.C.B., LL.D.
Sir GEORGE HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICH, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B. *Secretary.*

The Right Hon. JAMES BRYCE, D.C.L., M.P., examined. *The Right Hon. J. Bryce, D.C.L., M.P.* 8 Dec. 1892.

16,773. (*Chairman.*) With regard to the general question of a teaching University, you have for some time been decidedly of opinion that there ought to be a teaching University for London?—Yes; I remember advocating it, I think, 10 or 12 years ago, in an article I published then upon the subject.

16,774. You appeared and gave evidence before the last Royal Commission?—Yes.

16,775. On that occasion I think the evidence you gave was chiefly with regard to the law part of the question, and you did not say much upon the general subject?—That is so.

16,776. On the whole, with regard to the question of whether there was to be one University for London, or two, you were of opinion that, if possible, there should be only one?—I think so.

16,777. And you are still of that opinion?—Yes; I should still be of that opinion, but I should not sacrifice what I consider the essentials of a true University for the sake of having only one.

16,778. You still think that though the University of London declined to agree to any scheme they might reconsider their resolution, and that something might be done to bring them in?—I think so, cer-

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

tainly. I do not think that the expression of their opinion, given under the circumstances under which it was given, ought for a moment to be taken as final.

16,779. Do you think there would be any hope of Convocation reconsidering their decision?—I am not sufficiently familiar with Convocation to say so; but I do not think that the opinion of Convocation ought in any case to be final in such a matter.

16,780. You think they might be overridden by an Act of Parliament?—Yes, on a sufficiently strong case being made out.

16,781. The great thing is that there should be good teaching in London leading up directly to the examinations, and that the teaching should be done by eminent men?—Yes.

16,782. I suppose the only way to get eminent men is that the position should be well paid, and that the University should also be a place where distinction should be earned by being a professor?—Yes. I think you might easily attach a good deal of dignity and importance to the post. I should think that before very long it would become such.

16,783. You say the great thing to avoid is having a small Examining Board like there is at present. Would you still wish the London University to continue to give degrees to all comers, or would you wish to change that in any way?—I think, on the whole, it would be better to go back to the original condition of the University before the change which Mr. Grote's influence brought about, and not to give degrees to all comers. I speak with great diffidence on the subject, because I am not very familiar with the way in which the thing has quite recently worked; but it seems to me that the grounds which existed then for giving degrees to all comers do not exist now. A large number of new Universities have sprung up, not only in our own country, but also in the Colonies; and I think experience has also shown us, since the time when Mr. Grote made those changes, the dangers incident to a purely examining system, which were probably not present to his mind and the minds of his coadjutors.

16,784. The number of people who come up from all over the kingdom would become less in the process of time, even if it was left alone, on account of the other Universities that are arising?—I think so, and I should think that applied also to the Colonies and to India. I fancy that the necessity of providing degrees was one element which was formerly considered, but now that there are Universities there, probably this would be a less vital element than it was formerly.

16,785. Your idea would be to remodel the existing University of London and make it into a teaching University, leaving the outside people to take care of themselves; to come in if they like, but not to make an especial provision for them?—I cannot express a positive opinion as to whether there might not be some provision needed for persons who have no opportunity of obtaining instruction at any existing University or at any college duly affiliated to any existing University. That is a point one would like to reserve one's opinion upon. But, speaking generally, I should say there is no occasion for having the examination open to all comers.

16,786. You consider the degree to be rather a secondary thing, and the teaching to be the really important matter?—Yes. I think the degree entirely secondary. The use of the degree is to test the teaching; it has no other use. I do not (except as respects the medical profession) attach much value to what is called the degree stamp.

16,787. Has your attention been called at all to the advantages of what is called a professorial system of University in contradistinction to a conglomeration of colleges, each of them having its own Government. Do you attach much importance to that? There is an association which is advocating that system. Have you seen or heard anything about it?—I have seen some correspondence in the papers about it, but I am not sure if I fully apprehend their precise plan.

16,788. The idea seems to be that eventually the colleges, though they might not for the first moment be drawn in, should eventually be absorbed in the new University, and should cease, in fact, to exist, giving up their buildings, their revenues, and everything else to the central body; and that the central body should carry the whole thing on by a staff of professors in the way that it is done in Germany and other places, in contradistinction to the way in which it is done at Oxford and Cambridge. That seems to me to have been the idea of most of the witnesses we have heard. They made an exception with regard to the Medical Schools, which were to be treated differently; to have their own autonomy, and be distinct institutions?—I should hardly have thought it necessary to make so great a change as that. I conceive that the University ought to provide in some way or another—whether at the colleges or by an independent staff of professors—the best available instruction. I should say that was the line for the University to take, and it does not seem to me to be necessary to begin by absorbing or destroying all the colleges, and building something else in their room. If in course of time the colleges were found to dissolve themselves in the greater body of the University, and the whole thing were managed by a central authority, that might be the most symmetrical plan; but, in the first instance, one would hardly think it necessary; I can fancy the main object being adequately attained without so great a change in the existing conditions.

16,789. Then to begin with, you would work through existing institutions?—I think I should approach it in this way. I should first of all start by ascertaining what London needed; what were the subjects that ought to be taught, what kind of teachers we wanted to teach these subjects, and what provision should be made for different classes of students. Then having got one's ideal or theoretical University for London, one would proceed to examine into the question of how far the existing institutions could be worked in and made to subserve the purpose. If it turned out that the existing institutions would not come in on the terms which the University thought proper to impose, then I should disregard them, and proceed to build up a University independently of them. But they have the buildings, they have the staff, they have a certain kind of association connected with them, a certain amount of corporate spirit, and a certain amount of support from particular classes of the community, and one would be loth to lose those advantages if one could preserve them.

16,790. You would lay down what you wanted, and leave them to come in or not, instead of trying to coax them in by making compromises and arrangements of that kind?—I should be sorry to make any compromise which would interfere with the general lines of the scheme that is requisite; but, subject to that, one would be willing to persuade them to come in if one could. It would be a pity to have any more waste or friction than is necessary.

16,791. Is it necessary for a real teaching University in which the teaching should lead up to the examinations, and in which there should be thorough harmony between the two, that the teachers should have a dominant voice in fixing the curriculum of the examination?—Yes, I think they should fix the curriculum of the examination. I am not sure I would leave them to conduct the examinations entirely alone. I think the Scotch plan, in which an external assessor is associated with the teacher for the purpose of examination, is a good plan, and has been found to work well in Scotland.

16,792. But the teaching body, by forming a Faculty and electing Boards of Studies out of their own body, or having a dominant representation on the Senate—one way or the other, or a combination of both—should really have the power of determining the curriculum of the examination?—Yes, but it would be well to have some external element associated with them. It is always valuable to such a

body as a Senate or a Board of Studies to have a few outsiders to represent elements that are not purely professorial, and which can sometimes correct or enlarge their views.

16,793. The Board of Studies being merely a consultative body, and the Senate doing the real work. Would that meet your views?—I should say that the Boards ought to be largely represented in the Senate.

16,794. Is there anything more about the general subject you would wish to say?—I should just like to express my feeling that the University ought to start out by saying that it was going to find room within its scheme for every kind of intellectual activity or pursuit which demanded a serious study and regular study in London. I would include a good many things which are not included in the existing colleges. I should like, for instance, to see if we could not work in the British Museum in some way—whether we could not have lectures given there on some subjects connecting themselves with the subjects pursued there.

16,795. For instance, antiquarianism?—Yes, and history, so far as it is illustrated by art—such as branches of Greek or Oriental archæology, Egyptology, and such like subjects.

16,796. And the School of Science?—Yes. For instance, we have in England nothing which corresponds to what they call in France the École de Chartes, where ancient charters and manuscripts, and everything connected with history, so far as it is expressed in documents, is dealt with. They have an excellent training school there, which is connected with their Record Office, and in which people are prepared for all the work that has to be done in manuscripts and in history, so far as it is contained by manuscripts and official documents. We might do something in this country which might be connected with our Record Office, and that, it seems to me, might be brought into the general scheme of the University.

16,797. With regard to the evening classes of the University Extension movement, I suppose you are interested in them to a certain degree, like other people?—Yes, I am very much interested in them.

16,798. Can you tell us how far you think the University ought to undertake that duty, or be concerned in it?—I should think the University might very well appoint a certain number of lecturers, of whose capacity it was satisfied, and it might under its authority grant certificates of attendance to those who had attended the classes, and undergone an examination on the subject dealt with in the class. That would be a stimulus to the University extension movement.

16,799. You think they might allow a certain amount of attendance—four years constant attendance—to count instead of a regular attendance at college lectures, or what might be called, roughly speaking, "residence," though they do not actually live there?—I should think so, assuming that the results of attending the lectures were tested by an examination. I think it would hardly do to give certificates upon mere attendance, unless there was some proof that the pupil had substantially profited by himself the instruction the lectures gave.

16,800. It might count for something, in the same way that it does at Cambridge?—Yes.

16,801. You think the University ought to undertake that, and might do that through a standing committee of the Senate, or something of that sort?—Yes. Cambridge and Oxford are already doing the work to some extent. I do not say that it advisable to try to cut them out; but the University of London would have some advantages which they from their distance would not have.

16,802. Then I go to the question of the teaching of law. Of course there is a very great need for the theoretical and scientific teaching of law. I gather from your evidence given before Lord Selborne's Commission that you are of opinion that a real study of law is useful to others besides those who go in for the Bar as a profession?—To some extent that is true. It is useful, I think, to people who are going to be justices of the peace, for instance. It is useful to persons who are going to enter political life; and it is useful to people who are going to be diplomatists or consuls.

16,803. You are Regius Professor at Oxford, are you not, or have you had to give it up?—I have not yet actually resigned, but I have announced my intention to give it up.

16,804. Were the people who attended your lectures there, entirely men who intended to take up law as a profession?—It is not possible to tell, because at that stage they have not always determined what their future life would be; but I should say that the bulk of the students in our Oxford Law School intended to take up law as a profession. They do not always persevere; many men come to London meaning to take up law as a profession and become discouraged, and do not ultimately pursue it.

16,805. But even for those who are going to take it as a profession, it is a great thing that before they begin to study the more technical part, and the part that refers more to their actual work, they should have a large and comprehensive view of things, and should have had a general study of law first in its wider sense and the way it is mixed up with history, civil law, and other subjects?—Yes.

16,806. That would come as a rule before their more practical work?—I think that a proper law course ought to include instruction in all the principal branches of English law, and that this knowledge would be best acquired when a student is devoting his whole mind to his lectures and his reading, and before he goes into the Chambers of a practising counsel, to see papers. At the present the custom seems to be for those students who attend lectures at the Inns of Court to do it at the same time that they are reading in Chambers, and I do not feel sure that that is the best plan. The average man profits more by devoting his whole time to his lectures and reading, and acquiring a good general knowledge of the field of law before he goes into Chambers, because then he is far more fit to take up and deal with the cases which his instructor set before him. The Commissioners are doubtless familiar with the methods of reading in Chambers in London, so I need not go into that question in detail.

16,807. Now at Oxford a degree can be taken in law?—Yes, we have a large and increasing number of candidates.

16,808. Does this require any general knowledge of history and constitutional law?—Constitutional law is one of the subjects required, and besides English law we require Roman law and international law.

16,809. And that you would recommend in the teaching University for London also?—Yes, but I should not exclude a man from hearing a lecture upon one subject only, merely because he had not heard lectures in others. Although a man might not have attended lectures on international law and Roman law, I would not prevent him from attending lectures; it would be better to make the thing absolutely free.

16,810. I was speaking rather of the degree?—Yes, for the degree you certainly ought to require what would represent a good all-round knowledge of the principal branches of law, including Roman.

16,811. The classes of subjects taught would be what you have just told us?—The classes of subjects to be taught in law really fall into three. In the first place there is English law proper, which, of course, is the most important thing, because it is the strictly professional subject; the law of real property, contracts, torts, evidence, crimes, procedure, and so forth. Besides that, you have subjects which are not quite so essential, but which are of great educational value, such as Roman law. You might, perhaps, add what is called jurisprudence, but for my part I do not much believe in so-called theoretical jurisprudence; when you squeeze it down it comes to

The Right Hon. J. Bryec, D.C.L., M.P.

8 Dec. 1892.

very little; Roman law, on the other hand, has great educational value and some practical value. Then there is International law, which a man ought to know in order to be a properly equipped lawyer. That would make the second class of subjects. The third class are less directly connected with law, and yet perhaps best studied in connexion with it, I mean, for instance, what may be called scientific politics, the theory of constitutions, the constitutional history of our own country, and the constitutional history or systems of other countries. Subjects of that sort seem to connect themselves naturally with the legal Faculty, and yet a man may be a lawyer without knowing anything about them. I may refer, for instance, to the establishment in Paris which gives instruction in all subjects of that kind. It is not a law school, but it is called the School of Political Sciences. It is an admirable institution, which seems to have done a great deal of good in France, and which I mention with not less emphasis than the German Universities, because it is very practical in its methods. It does not undertake so much to give a man a theoretical mastery of the learning connected with the subject, as the schools belonging to the German Universities do, but it undertakes to fit him for various practical careers. It gives instruction in a great many subjects of that kind. I have brought with me some of the papers relating to it, and, if the Commissioners would like to hear them, I will mention some of the subjects. It includes, for instance, courses upon comparative civil legislation; upon the organisation and practice of administrative system of of government in France and other countries, with full treatment of the various systems of local government, and the relation of local government to the central government; the whole system of the commune, and its taxation; the departmental organisation of the highways; treatment of the poor; *octroi;* communal property; and so forth. Then there are courses upon the doctrine and practice of finance both in France and in foreign countries, conducted by several professors; courses upon different branches of political economy; upon different branches of commercial and statistical geography; upon commerce and the doctrine of customs and tariffs; upon the theory and practice of banking; upon International law; upon political geography; upon the diplomatic history of modern Europe; upon the constitutional history of modern Europe; upon the history of political ideas and public opinion; upon military organisation; upon systems of colonial government; and even upon some of the laws of the French colonies.

16,812. That is combined under the name of "political science"?—The political sciences.

16,813. Is that a separate Faculty?—No, it is an independent institution, called *École Libre des Sciences Politiques*, which is controlled by the shareholders in it, who, however, receive no dividends. It was founded for purely public objects, and the shareholders do not receive dividends, although their organisation is a sort of company. It is supported by fees paid by the students. The professors are men of the very highest eminence, and M. Boutmy, who presides over and directs it, is a writer of the highest distinction upon political and constitutional subjects.

16,814. Is the institution largely taken advantage of?—I believe so. They have quite a considerable number of students, and the professors are supported by the fees which the students pay.

16,815. It would be valuable to anybody who proposed going into public life, and also to the commercial classes?—Yes; it is very valuable for training for public life. Diplomatists and persons training for the consular service and things of that kind seem to go there for the training, and men who are offering themselves for the administrative service, which is a very large branch in France, and which is more directly connected with the central Government than is the case in England.

16,816. You think these are subjects which the new University, or the newly-organised University might usefully take up?—Yes. There is no regular instruction obtainable in London at present upon nearly all these topics, except to a slight extent at University College.

16,817. Do you think it might be part of the business of the Faculty of Law?—Well, it would connect itself to some extent with the Faculty of Law. It would stand in an intermediate position between the Faculty of Law and the Faculty in which history and economics are dealt with. I think in one way and another it would be the business of the University to examine in subjects of this kind, and to try how far it could find support for courses started in them. The process, of course, would be to some extent tentative. You must sometimes have the supply before you get the demand. I refer to the plan for the reason that it has had great practical success in France.

16,818. There is nothing of the sort in England. These are subjects which people are left to pick up as they can?—There is a little in Oxford and Cambridge. Here in London there are one or two professors of political economy. But the thing is not organised on anything like the large and systematic scale that it is in France.

16,819. With regard to the position of the Inns of Court, they have established a system of teaching, as we know, and I suppose as far as the legal education necessary for a man to start in his profession goes, the education given now by the Inns of Court is pretty satisfactory, is it not?—They have some very good lecturers, and I should think the course would be good. I have not the data enabling me to say how far it is at this moment a completely satisfactory preparation.

16,820. We should have great opposition if we attempted to take away from them the monopoly of admission to the Bar. I suppose we may take for granted that that should remain with them?—I should not touch that for a moment as far as regards the teaching question which the Commission is dealing with. It would be unwise, in this connexion, to interfere in any way with the right of admission to the Bar, or with the jurisdiction. As your Lordship knows, the Inns of Court exercise a jurisdiction over the Bar, and that, I think, ought to be left untouched so far as the University is concerned.

16,821. There should be no question of the University giving a qualification to practice as a barrister?—No. You might make it one of the qualifications if you thought fit, but one would not enact that a person who took the degree should therewith immediately acquire the right to practise. It seems to me to be a different question, and therefore whatever the merits may be it is a question with which the teaching University need not have anything to do.

16,822. You are of opinion that with regard to giving law degrees in the new University, and having regard to legal education, it would be very advantageous to work in connection and in harmony with the Inns of Court?—If possible.

16,823. In fact, to associate them, and to give them great weight or great representation on the Legal Faculty?—That would depend upon how they were represented. I should not give a commanding weight to the Council of Legal Education as at present constituted.

16,824. It has been suggested that they should be the Legal Faculty in the new University?—Then I think they would require to be considerably reformed for that purpose.

16,825. Have you at all thought how they might be associated with the University?—It would evidently be desirable that they should be largely represented; perhaps that they should be the majority upon the Legal Faculty or the Legal Board of Studies; but then one would establish a better method than there is at present of choosing the best men in the profession to constitute the Council of Legal Education. I do not think that now the Council of Legal Education is really representative of the best knowledge and ability, and practical judgment on the part of members of the

Bench and Bar. There are some very eminent members on it, but looking at its conduct as a whole, and at the educational questions that come before it, I do not feel that it is organised in such a way as to make it fit to step at once into the position of a Legal Faculty.

16,826. We should not have anything to do with re-organising the Inns of Court. That would be outside our province?—Yes.

16,827. The question is whether we can take them as they are, as we find them, and associate them with us, and in what way?—I think if it were simply a question of that or not having their co-operation at all, probably it would be better to take them in even as they are, because I think that very soon the influence of public opinion and co-operation with the University, would induce them to reform themselves, and to make the Council of Legal Education a more satisfactory body than it now is.

16,828. You would give them larger representation on the Senate, would you?—Yes, certainly.

16,829. And if possible give them representation on the Faculty. According to the Gresham scheme, the Faculty is to consist of all the teachers in the different affiliated colleges, chiefly King's College and University College. We might in the same way give the Inns of Court representation also?—I think the teachers clearly ought to be represented. I think the University would have a right to make rules with regard to the appointment of the teachers, the method of appointment of the teachers, the time for which they were appointed, and so forth; and I should have said that the University ought to have a voice in the appointment of the teachers. It would not be desirable to let the Council of Legal Education be the sole appointing authority for the teachers. I think it would be right that the University should be represented upon the body which appointed the legal teachers.

16,830. The legal teachers in the University?—Yes, it would be only fair.

16,831. That would be done by the Senate, taking the advice of the Faculty?—It might be so, or it might be that the Senate was represented on the Faculty. You might leave the appointment to the Faculty.

16,832. Would you give the Incorporated Law Society representation on the Senate, and influence in deciding upon the examinations?—It would be very desirable to bring them in, for it seems clear that the law lectures given under the authority of the University ought to be open to all persons. At present the lectures of the Council of Legal Education are only open to students of the Bar. Even now those lectures ought to be open also to those who are going to become attorneys, and to the world. What in the world is gained by confining them to students for the Bar? It would be desirable, no doubt, to associate the Incorporated Law Society, both for the purpose of teaching and examination. They have examinations now which have been instituted with very good intentions, but are by no means satisfactory. It has often seemed to me that those papers were drawn up by people who had not much experience of teaching. Examination is almost as much an art as teaching, and it is quite impossible for a man to be a good examiner merely because he knows the subject in a practical way. A man must be or have been a teacher, and indeed teacher who has given some thought to the methods and difficulties of examining. A hard examination is not necessarily a good examination, and the rejection of a large number of candidates does not necessarily mean that an examination is really good; that is, effective for the purpose of discriminating those who have studied profitably from those who have not. I have seen examination papers which were calculated to pluck a large number of candidates, and yet which would not have the effect of testing who were really good candidates. It would be a great gain both for students of the Bar and those who were entering the other branch of the profession if the examinations were conducted by men who knew teaching, and what it amounted to.

16,833. Now the examiners are not always teachers?—The examiners for the Council of Legal Education, I think, either are or have been mostly teachers. I think they have nearly all had experience in teaching—not perhaps all, but most of them. When I was an examiner for the Council of Legal Education my colleague was a man who had had a large experience of teaching, and I know that the examiners in Roman law, jurisprudence, and international law have usually been teachers. That is not quite so much the case in the English law branches.

16,834. As a rule, in all branches of Science and Arts, and other branches, the examiners are teachers, are they not?—In Medicine, of course, they pretty nearly always are. My impression is that a man might be a very brilliant counsel and even a very sound lawyer, but yet he might not be a good examiner. So too a man might be an extremely experienced attorney and skilful practitioner, and yet not be able to examine. The art is one that is rather by itself.

16,835. You do not object to teachers taking a part in the examination of their own pupils, so long as there is an outside examiner connected with them?—Yes, I think it is proper that there should be an outsider.

16,836. Do you think a teacher is likely to be partial when examining his own pupils?—It depends so much upon the men. Some would be, and some would be provoked at finding their own students did not know the things they had been taught, and they might be all the harder upon them.

16,837. Supposing the pupils were mixed, would he favour his own?—I do not think a capable and honest examiner favours his own pupils, but he may ask questions which his own men would know, and which the other men would not know; and if he has special proclivities for special branches of subjects—if he has what undergraduates call "tips"—the man who attended his lectures would have an unfair advantage. The presence of an outside examiner in addition to the professor is necessary to secure an allroundness in the treatment of the subject, and not so much because there is a danger of partiality.

16,838. You think it is a good thing that students should be examined in things that they have been taught?—Yes, but not necessarily in those only.

16,839. They would have an opportunity of getting knowledge outside?—I think they would read some books. In any examination a man would not trust entirely to lectures. He also would be guided by the books he had read. Then the professor is apt sometimes to send him to his own book. That, again, may do mischief, and the Board of Studies ought to guard against it.

16,840. But, on the whole, the object of establishing a teaching University is that the men should be examined in what they have been taught?—I think it is rather that all the profit that they have derived from the teaching should be tested; that the teaching should be thoroughly tested; but I would not go so far to say that a man is only to be asked questions on subjects which have actually been handled in the lecture room. If he has been taught some parts of the subjects well, he will know how to get up other parts for himself.

16,841. The fault of the present system of the University of London, as it has been represented to us, is that the examinations are too distinct from the teaching, and do not correspond to it, particularly in medicine?—I do not know how it may be in medical matters. I have no doubt it is so in Arts, and I think it is so in Law. Certainly when I examined for the University of London in Law, I thought that although their men had got up their books exceedingly carefully, yet, as compared with the Oxford men, they showed very distinctly the want of having attended courses of lectures.

16,842. You say the lectures on law should be open to all, and that they should precede practical work in

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

Chambers; that is, that a man should have received a University training before he begins practical work in Chambers?—That is my decided view.

16,843. Could they go on concurrently?—I do not say they could not go on concurrently, but I think a man will profit much more by his work in Chambers if he brings a competent knowledge to bear upon it. When I went into a pleader's Chambers, the first six months were practically wasted because I had not enough knowledge of law to deal with the cases which come into the pupil room. If I had had more knowledge of law before I went in, I should have gained immensely by working at them.

16,844. You think a man might more than make up the time that he lost by not being called so soon?—Yes, even if he spent possibly two years on the preliminary study. But I am not sure that the man who began in Chambers without instruction at all will ever acquire as good an allround knowledge as the man who has been thoroughly instructed at first. At present, such is the unsystematic character of the form of our English law, a man rolls himself about in a heap of cases in the hope that some may stick to him. In the end he picks up a sort of instinct which tells him what the law is, and what sort of books to read, without acquiring any clear grasp of general principles. I believe the use of preliminary general instruction would be to get him into the habit of mastering principles and doing his work with a constant perception of the principles involved. I would not venture to express so positive an opinion upon this if it were not that the plan of systematic teaching has proved so successful in the United States. There they are in the habit of sending their young men to law schools which are closely connected with the Universities, and making them spend generally two years, at any rate 18 months, in the law schools, getting the general preliminary instruction before they take up the actual work of the profession; and the experience there is that that is the best and shortest way to become a sound lawyer.

16,845. Does that give admission to the Bar in America?—The rules of different States vary very much, but I do not think that the law school certificate or degree generally does. My impression is that in most if not in all States the power is vested in the judges, and the judges either exercise it themselves or commit it to certain persons, generally members of the Bar, whom they choose. They often hold examinations, but the examinations are very perfunctory and practically of no value in most places. The law schools in America stand entirely upon their own merits. They are not aided by the adventitious rules of the State. The teaching given in the best of them, for, of course, it is of the best that I speak—some are poor enough—is solid teaching of great practical worth.

16,846. And that, you think, ought to be and might be the same in England?—I do not see why it should not be, considering that our law is the same as theirs.

16,847. Except that the examination of the Inns of Court is really a substantial thing?—Yes; the examination of the Inns of Court is a more substantial thing, I should think, than the examination for the Bar in any State in America.

16,848. Of course in England there would be the double examination. If a man got a degree he would still have to go through the other examination, would he not?—I do not think so. I should think the proper course for the authority admitting to the Bar would be if a man presented his degree, and they knew it was a proper degree, they should be satisfied. One does not want to drive a man through another examination if it can possibly be helped.

16,849. They do it to some extent?—Yes; they do it to some extent, but we at Oxford have never been able to induce them to do it to the extent they ought. The majority among them do not, if I may venture to say, understand either teaching or examining as the Faculty of a Law School do; it is not their business; they are practising lawyers.

16,850. Would a man having taken an Oxford degree be qualified to begin practice at once?—No, I think he ought to have some experience in Chambers. One cannot teach them at Oxford how to handle papers as they come before a practising counsel. I think a man would require a year in Chambers at least before he would be fit to practise on his own account. No theoretical training can dispense with the need for practical training. The best theoretical training you could give a man would not fit him for practice until he had actually seen the form in which cases come up, and been in the habit of dealing with them under the eye of a man accustomed to do them. It is like a medical man learning in a hospital. Obviously a man who had received the most complete theoretical medical instruction without being in a hospital would not be fit to deal with cases.

16,851. At what age do you think they ought to begin?—Speaking of Oxford and Cambridge men, of course they usually take their degree at 22 or 23 on an average, and I think they usually come up at once to London and begin to read. Say, perhaps, 23 or 24.

16,852. Do many others begin much earlier?—Yes. I should think the man who has not gone to a University probably begins a year or two earlier.

16,853. But the University training enables the other to catch him up?—It altogether depends upon the man. There are some men whom a literary University training positively injures for a career at the Bar. I have known very eminent University men tell me that they have had to forget and unlearn a good deal that they had learnt at the University, in order to assimilate English law. I do not mean to say that they were not the better for their University training in the long run, but the habits they acquired at the University of always philosophising about the reasons of things were rather against them in dealing with the law practically. I am now speaking not of University training in law, but of the literary and metaphysical training.

16,854. (*Lord Reay.*) I understand that you consider that the main end this Commission should have in view is to start a corporation having for its object the promotion of science in every Faculty?—Yes; including in the word "science" every branch of literary and intellectual activity—the whole of learning in fact.

16,855. Scientific teaching, scientific research, and scientific method, by which a student will in after life be able to grasp quicker and better any professional or other problem?—Yes, understanding, of course, that a very large part of the object is really to fit a man for his professional work. That, I understand, to be included in your question.

16,856. The preparation for professional work might, at all events, in the earlier stages of the curriculum, be carried on *pari passu* with preparation for scientific purposes?—I do not think the two are inconsistent. It seems to me that the preparation which fits a man to deal with a subject in a scientific way is also that which fits him to deal with it in a practical way. I should like the University to have a very considerable regard in its own interest, as well as in the interest of the men, to the practical work in life they were going to do. This seems quite compatible with the scientific aim, and I should like the University to feel that it was making it worth the while of men who wanted success in life to come there and get the best possible preparation for dealing with their subsequent occupation.

16,857. At the same time you would be careful not to place the University under the preponderant influence of representatives of the various professions in London?—I would give them the opportunity of being represented and heard, but I would not commit the University entirely to their charge.

16,858. Would you be satisfied with a mixed council partly representative of pure science, partly of the professions, taking from them the most scientific members?—Yes. Of course you include the teachers.

16,859. They form the first category in my previous question. What amount of control should the University exercise over the teaching of the various bodies with which it will be associated? — The University would control their teaching so far as it was necessary for its own purposes. I can quite understand that the University might say "We re- "quire such and such teaching from those to whom "we give the title of our professors, and we require "it to have been given to those whom we admit to our "examinations, but if you as an independent college "choose to give other teaching, that is your concern."

16,860. You think the two things are quite compatible?—Yes.

16,861. The colleges retain their absolute freedom, and the University for its purposes only takes so much as it considers useful for its purposes. That is the practical solution?—I do.

16,862. The University will be responsible for systematic teaching in all the Faculties in London and for guidance to students?—Yes, as I said to the Chairman, it seems to me that the business of the University is to see that there shall be in London the best attainable teaching in all subjects for the man who wants to have it, and naturally enough the man who wants the teaching will go to the headquarters of the University, and there he will find that in some one or more of the institutions connected with the University he can obtain the teaching.

16,863. The main function of the new University is not to control teaching indirectly by means of a syllabus and of examinations, but to assume direct responsibility for the teaching itself?—Yes.

16,864. That is, in your opinion, the difference between the old and the new systems?—Certainly.

16,865. The old system comes to this: "We will "examine you; we do not care where you were "taught." The new system will be, "We accept "responsibility for your training as well as for your examination for the men who teach"?—Yes; the University guarantees the quality of the teaching.

16,866. And this is compatible with the utmost freedom of the teachers?—In what sense do you mean "the utmost freedom"?

16,867. The teacher should not be hampered in any way by the University in his methods. If the University gets an eminent man to teach, he must be left to do it in his own way very much?—Very much; but I do not think he ought to be allowed to devote himself entirely to some small particular corner of the subject which happens to take his own fancy. I am bound to say that I think the University has a right to some amount of oversight.

16,868. Oversight, certainly, but not the right, for instance, to prescribe books; he would be left to choose his own method of teaching?—If he is a man of eminence he must be left to choose his own method, but not without some measure of such oversight as just referred to.

16,869. The greater the variety of methods the better?—Yes.

16,870. Then the difficulty, of course, which the new University will have to deal with in arranging with the professional bodies will be this, that the University will not be under their control, and at the same time the professional bodies will have a right to find in the University all the education they want for their professional purposes?—Yes; I think that would be a fair way of putting it.

16,871. Are you aware of the solution arrived at in Scotland in the case of the Writers to the Signet?—No, it is not in my mind.

16,872. Writers to the Signet oblige their students to "produce certificates of his having attended at the "University at least two separate winter sessions, four "courses of law classes in a Scottish University, viz., one "of Civil Law, one of Scots Law, one of Conveyancing, "and a second course of any one of these; and of "his having taken part in at least two thirds of the "ordinary examinations in each of the said classes, "unless for reasons satisfactory to the professors." They oblige him to go through some of the examinations of the University. That is the scientific part of the legal teaching he gets. Then at the end, before they admit him to their own body, they have a special examination of their own. What do you think of this solution?—If the University does not provide in its examination for all that they want to examine the students upon, that would be so; but I do not at all see why the University could not provide sufficient examination to entitle them to admit him without any further examination. I suppose it means that, with the Writers to the Signet corresponding to solicitors in this country, there are certain things, matters of practical concern to them, which the University examination would naturally not cover, in which they think it necessary to ascertain the competence of the candidate. That would be very reasonable, no doubt.

16,873. You see no objection to that?—No.

16,874. Now with regard to law schools. The Americans have come to the conclusion that their system of legal education requires considerable reform, more scientific teaching, and more teaching of principles. When you say the Americans have come to the conclusion, may I ask to whom in particular you refer?

16,875. I refer to the Standing Committee on Legal Education, which I take to be a very representative body?—The Standing Committee of the Bar Association?

16,876. Yes. Would you call that a representative body?—Yes. I think it would be a body entitled to respect.

16,877. I find that one of their most apt quotations is a quotation which they derive from Ihering. I will read it, and venture to ask whether your view would correspond to that:—"The scientific completeness of "the Roman Law, and much, if not all, of its value "at the present day, depend on the fact that it has "gone through the schools (meaning by this, as previously set out at length, that it has been from the "sixteenth century employed in forms adapted for "instruction in the schools). How greatly even its "practical use has been facilitated by this anyone "may convince himself who compares the English "lawyer with the continental. The latter, in a comparatively brief University course of jurisprudence, "obtains a firm mastery of the entire law; the English lawyers are specialists; not one is able to grasp "the whole system. The reason is that the Roman "Law has gone through the schools; the English has "not. It is now making the first essays to do so, "and English jurisprudence has yet labour without "end before it to raise its science to the level in this "respect of the Roman Law, and the continental "systems that have grown out of it. The law school "demands its price of natural life"?—I think there is a great deal of truth in the statement, but I should attach a good many qualifications to parts of it.

16,878. To which parts?—I do not think the codification has improved them abroad at all. I think the Roman Law was better uncodified, on the whole. I think the laws of Prussia and Austria, and the other States whose law has been codified were probably more satisfactory in point of substance, though less accessible in point of form, before they were codified.

16,879. What I mean is that when he speaks of not being able to grasp the whole system, it is more easy to grasp the whole system when it is codified?—I should rather agree with the point that Ihering himself puts there, that practical teaching has in a sense codified it. That is to say, teaching has brought it into a compendious and systematic form. But I think a great deal must be allowed for the character of the Roman Law itself. The old Roman Law was, and the modern Roman Law is, a system which better lends itself to compendious and systematic treatment than the English law does. The Germans had an advantage there. But Ihering is right in saying that the way in which jurists and teachers have dealt with the Roman Law, and the number of manuals, sometimes founded on lectures

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

and sometimes intended for students that have been introduced into the Universities, have made the modern Roman Law into a thing which is more easy to learn than our English law. I do not think it is altogether an objection to the English law; taking it for all, I think the English law is superior in flexibility, variety, and subtlety to the modern Roman Law in any country where Roman Law prevails. Still it is true that it is far easier to learn the modern Roman Law than the English law. I do not think it is remarkable that the best books for students are nearly always written by teachers, because the teacher is the man who knows best in what way he must frame and digest the subject in order to make it intelligible to the learner's mind. One of the reasons for wishing a good law school is that we should produce a better crop of text-books.

16,880. Do you think the teacher should be a man not in practice, so as to be able to devote the whole of his time to the University?—I think he should, as a rule, devote the whole of his time to his teaching, but I am bound to say that I think it is a great advantage to a professor of English and even of Roman law that he should have had some experience of practice. I think it gives a concreteness, a power of illustration, and a sense of the actual way in which the system works. I should not like to appoint any man a professor of English Law who had not seen something of actual work. Judge Story's admirable treatises were delivered as lectures while he was a judge in full work.

16,881. Perhaps you would concur in the conclusion to which the American Committee have come, that it wants a mixture of the two elements. For instance, men who devote themselves to International Law and Constitutional Law might very well be non-professional?—I do not think a man for International Law need have had much practice.

16,882. You would not exclude a man who was in practice?—Certainly not, for a subject like International Law. Take even Roman Law, which is not a practical system among us in England: I am sure that a man can teach Roman Law incomparably better for having had some practice.

16,883. You would not make it a rule that he ought not to be in practice?—No. I agree that he ought not, except in special instances, to be in practice at the time. I do not think he can give, as a rule, quite sufficient attention, in fact the whole of his mind, to teaching work if he is carrying on practice.

16,884. Perhaps the most desirable thing would be to get a man who had had practice, and then wished to devote the rest of his years to teaching?—Yes. You might have an occasional course from a man in practice, but a man who has to bear the burden and weight of legal teaching ought to be a man who has nothing else to do, and who can give his whole time and thought to it.

16,885. We have had evidence from a professor of the Johns Hopkins University on the branches of law which he wants to introduce. Perhaps you will tell us what you think of the programme. A thorough course of History of Roman Law and Roman institutions?—Yes, I think so. For the purposes of the practical English lawyer I should not attach quite so much importance to the History of Roman Law and Roman institutions as I should to dealing with Roman Law as a concrete system. I think it is very desirable, on general grounds, that an English lawyer should know Roman Law and the history of Roman Law, but I think the working of the thing as an actual concrete system applied to actual cases is still more important.

16,886. The history of English private law?—Yes; unfortunately there is no book on the subject, or, at any rate, no satisfactory book on the subject. There are good books on particular branches of the subject, like Mr. Digby's book on Real Property, but there is no satisfactory book for the whole of it.

16,887. Then the professor says he encourages every student to take a course on the History and Principles of Roman Law and the History and Principles of English Law. Would you do the same?—I should encourage them to take it, but I should not make it a *sine quâ non*.

16,888. A course which he says has proved attractive is one on Comparative Jurisprudence?—Yes, that might be made interesting and instructive.

16,889. English Constitutional Law and History?—Yes.

16,890. Public International Law and Private International Law?—Private International Law is really a branch of English law. It is a difficult branch; I cannot say that I think it is a very important branch. It seems to me that an exaggerated importance has been attached to it, but it is no doubt a difficult subject, and for that reason perhaps it deserves to be lectured upon.

16,891. Then a subject which in France would be of the first importance is the subject of Administrative law. Would you say it is of equal importance here?—No, it is not of equal importance here, but it seems a pity that we pay no attention to it at all in England.

16,892. It would require a good deal of development?—It would, but we are creating the conditions for the development now. You see we are recreating by legislation a system of local institutions in England.

16,893. Criminal Law and Procedure?—Yes, it is a comparatively small subject.

16,894. According to Professor Emmott the present day law ought to be crystallized as far as possible round three centres. He says, "I think one topic "ought to be the law of real and personal property "as at present existing, and the theory and practice "of conveyancing." Then he adds:—"I think there "ought to be another professor who would deal "with the origin and growth of the principles of "Equity, both in England and the United States, "and the practice of the Equity Courts. In this "country it would be the procedure of the Chancery "Division; we in the United States have a number "of courts still existing which are somewhat "anomalous, but which one might group under the "collective name of Equity Courts. They are "courts which administer equity in some shape or "other. Then I would have a professor who was "charged with the work of teaching Common Law "as it at present exists, including not only such "subjects as Torts and Contracts, but also such "subjects as the Law of Domestic Relation, Guardian "and Ward, Parent and Child, and so on. And I "should think that the same man whose special "work it was to deal with the Common Law might "also be fairly charged with the work of teaching "Common Law procedure. Those, it seems to me, "are the three great branches of existing law, first, "the law of real and personal property and theory "and practice of conveyancing; secondly, the growth "and extension of the principles of Equity, and the "procedure of the Equity Courts; thirdly, the "principles of the Common Law and the subject of "Common Law Procedure"?—I do not care for those three centres particularly. I think he might easily suggest a better distribution.

16,895. You would not adopt it?—No, I would not adopt that. I am not sure that I should tie a man down to any particular branch. I should appoint professors of the Legal Faculty, and I should merely then secure that there was always instruction going on in all the main departments of English law, but I would not tie a man down to lecture all his life on contracts, and another man to lecture on conveyancing. I think a man would lecture better on contracts if he sometimes lectured on torts, or something else. Nothing whatever is gained by subdividing subjects to that extent.

16,896. Then I understand that with regard to degrees, you would open up many avenues. The degree LL.B. would mean different things; it would mean one thing for a man entering on the career of a lawyer, and it would mean another thing for a man entering for the Civil Service?—You might have

several avenues to the degree if you think the degree is of importance. The really important thing is the teaching. It would not be going too far to say that degrees have done more harm to the Universities than anything else, except perhaps the mismanagement of endowments. Degrees and ill-managed endowments have been the two banes of Universities.

16,897. Still you will probably be of opinion that the new University must confer degrees and will have to accept endowments?—I think that at present, the predominance the degree has is a great misfortune to education, and also to some extent a fraud upon the public. Of course I do not refer to purely professional degrees, such as those of medicine. They stand on a different footing.

16,898. But you do not object to a degree given to those who have qualified for it by giving evidence that that they have derived benefit from their University course?—Yes, and I think an examination to test the teaching is very desirable. No doubt, if it is thought that that should take the form of enabling a man to write some letters after his name, perhaps it may be kept within bounds so as to do no great harm, but at present I think our degree system at most of the Universities, even as of late years reformed, does rather more harm than good.

16,899. The only difference is that you would have examinations without giving degrees?—I would have examinations, but I do not even care so much about examinations, I care about the teaching. I think if the teaching is thoroughly good, stimulating, and profitable, it will stand on its own bottom, and neither degrees nor examinations will be necessary. I do not wish to object to the examination, but it is, in the view I seek to present, quite a secondary affair.

16,900. Do you take the view the Germans take, that for scientific purposes one examination at the end is sufficient?—I would not go so far as that. Sometimes it is a very good plan to have an examination at the end of the course. But that is not the only plan. In many Universities they have a different scheme. They give certificates as the result of a number of examinations passed every year in a number of subjects actually taught, and the man who produces a certain number of these gets his degree. There is no one tremendous effort such as is made at Oxford and Cambridge, but the man accumulates his certificates and attains the degree thereby.

16,901. You would give a degree as the result of a series of examinations on different subjects?—I would try that as an experiment. Education like some other things is an experimental science. I should try a number of experiments to see which answered best. There is something to be said for the Oxford and Cambridge system, and also there is something to be said for the American system. I would not like to say that I am convinced that one system of University is best, any more than I would say that one system of government is best for all countries.

16,902. Would you leave the student free to choose which lectures he would attend?—If you do give a degree you are entitled to prescribe the course or courses for it, probably a variety of courses. But apart from that, if a man did not seek the degree, I would give him absolute freedom in attending any lectures he pleased.

16,903. Would you have an entrance examination as a guarantee against the danger of lowering the education by admitting students who had not been well prepared?—Well, that is a very difficult question. I am really not quite sure that I would. There is a great deal to be said for and against entrance examinations. I am not sure that the evil of shutting out the man of ability and industry who has not been able to acquire certain parts of the preliminary training is not a considerable argument against having an entrance examination for lectures.

16,904. What I meant was that you would not give any lectures of a more rudimentary character which would trench upon the domain of the University?—No, certainly not.

16,905. (*Professor Sidgwick.*) If I understand you rightly, your view with regard to the examination for the degree is this; assuming, as I am afraid we must assume, that for some time to come a University in London would have to give degrees, you think the examinations, if I may say so, should be the servant rather than the master of the teaching?—Yes. I ought perhaps to take this opportunity of qualifying what I said in answer to Lord Reay about it. I do not mean to say that either degrees or endowments are bad things in themselves, but I should say that it is the undue reliance on them and the abuse of them which have produced great evils. Both degrees and endowments if you use them rightly may be very valuable, and I think I should adopt your phrase that examination may be a good servant but a bad master.

16,906. You think the University should give the one and receive the other—give the degree and receive the endowment?—I would try to get the endowment by all means, if we can, in the hope that, having profited by past experience, we should make a good use of it.

16,907. If I understand you, you think, on the one hand, that teachers should largely control and take part in the examination, in order that it may follow the teaching; and, on the other hand, that there should be an external element in the examination to prevent any caprice in the line taken?—Precisely.

16,908. Do you think it desirable that University students who receive a degree in Law should have taken a previous course in Arts, or that the law training should come almost immediately after the school course?—I should prefer that they had taken a degree in Arts. That is our rule at Oxford. At Cambridge, at present, is it not the case that, if they have not taken a degree in Arts, they must have passed some examination in Arts?

16,909. I have to admit that in Cambridge, though we give the students a degree in Arts, yet, during almost the whole of their time they are studying law. You do not in Oxford adopt that practice?—We do not go so far as that at Oxford We have approximated to it, but we have not got so far as Cambridge.

16,910. You would prefer a previous course in Arts, but you would not impose it?—I should prefer it in any case. All I mean is I would not exclude a man from listening to the law lectures because he had not taken a degree in Arts. I would admit him whether he had taken a degree in Arts or not. But I can quite believe that it would be well to make it a condition for going in for a Law degree that a man should have an Arts degree. I think that is the practice at the present University of London.

16,911. You think the Inns of Court should still retain the power of admitting a man to professional work?—Would you like to see the institution of certificates that would show that he had gone through a particular course of study which might be accepted by the Inns of Court, though it might not be sufficient to justify a degree?—That would be a matter to be arranged with the Inns of Court. I think it would be quite a fair solution of the problem.

16,912. How far do you think the University Law Faculty should undertake the whole of the teaching which in your view should precede the seeing of papers in Chambers? Or do you think it desirable that any particular professional part of the teaching should be undertaken by the Inns of Court?—I should think that everything might perfectly well be done by the University Law Faculty up to the time when a man actually goes into Chambers. I see no occasion for any intermediate lecturing system.

16,913. It has been suggested to us that the preparation in Chambers is costly, and I understand that it is not insisted upon by the Inns of Court in giving admission to the Faculties?—I believe it is now not insisted upon, but I think it was at one time.

16,914. How far should you conceive that a system of teaching like the one recommended in the report of the American Bar Committee would supply the place of preparation in Chambers, or reduce the need of it?—

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

I think it might go a good way, I do not at all deny that you might have a sort of imitation Chamber work conducted in a University, which would go a pretty long way towards doing the same thing which now is done in Chambers. The Moot Court used to be found very useful in America.

16,915. Do you think there is an advantage in a school of law forming a branch of the University, instead of being an independent school?—I think so. In the first place it ought not to be considered as being merely for those who are going to follow the profession, but as a branch of study which some people might be interested in, though they were not going into the profession. In the next place, I think its horizon would be a little wider; its methods a little more philosophic, and its whole treatment of the subject somewhat more large and liberal if it were connected with the University.

16,916. Do you think that all the classes for those who are preparing to be barristers, for those who are preparing to be solicitors, and for those who are not preparing for either, but who are preparing for other careers, can be dealt with by the same teachers pursuing the same methods?—I think so. Of course they might not all want to go to so many courses, or, if you had an honour course they might not all want to go in for honours. I should go upon the hypothesis that the lectures were always to be addressed to the best men, and the men who wished to go in for the most complete instruction, and the others must try to get up to the same level.

16,917. Do you know what the class of students is, or what are the various components of the class who attend the *École Libre*?—To a considerable extent they are those who are going in for the public services, and I think some of the public departments give a certain advantage or recognition to those who have taken classes at the *École Libre*. I do not wish you to take that as certain from me, but I believe there is a recognition given. The students are composed mainly of the classes I have mentioned, but there are a good many others who are attracted to the institution; for instance, young journalists, who are fitting themselves for some form of public life. I have seen some students of the *École Libre* who have come here usually to study English institutions, or some branch of administration. Others, I happen to know, go for similar purposes to America. They are generally very bright and intelligent fellows, who have a considerable outlook over the whole field of comparative legislation and constitutional law; and I think a good many of them are not going into the branches of public service, but are merely pursuing their own studies, intending to turn their knowledge to use in some other way.

16,918. Do you think that if the teaching University in London should endeavour to imitate the course of the *École Libre*, the subjects would entirely belong to the Law Faculty, or should there be some combination of the Faculties of Law and Arts?—They would certainly not necessarily belong to the Law Faculty. There is a great deal in the programme of the *École Libre* which does not naturally belong to the Law Faculty. I rather mention them as subjects which might in certain aspects be thought to connect themselves with the Law Faculty. Political Economy has a side turned towards law, because it is the basis of legislation, but its other side is turned away from law.

16,919. You would not desire to throw the management of the teaching and the examination in the subjects comprised in the *École Libre* entirely into hands of the Law Faculty?—No, certainly not.

16,920. It would have to be managed by some board or other, but in your opinion it should not be by the Board of Legal Studies?—No, I think some of these subjects, such as political economy, for instance, would not fall within the jurisdiction of the Board of Legal Studies.

16,921. Suppose it should be found difficult to make an arrangement with Inns of Court satisfactory to those bodies, do you think it would be desirable still to institute a Law Faculty, and endeavour to compete with the teaching provided by the Inns of Court, or would it be better to wait and leave the question open in the hope that a change of opinion might be produced upon those bodies?—Yes, only I should take active steps to bring about that change of opinion.

16,922. (*Professor Sanderson.*) In medicine, of course, there is no difficulty in distinguishing between technical studies and what are called scientific studies, and I judge from what you have said that there is really no difficulty as regards legal education in making the same kind of distinction. Is there a difficulty in Law in making a distinction between technical studies and the knowledge preparatory to technical studies?—I think in practice there is no great difference. Of course, to some extent they shade off into one another.

16,923. And under present circumstances you do not think it is desirable that the new University should profess to attempt any teaching or examination in technical subjects?—Yes, I should say certainly that it should examine and teach in technical law. All I meant to say was that I do not think it could (except to some extent, in the way suggested by Professor Sidgwick) undertake to give a man everything that he would require in order to be at once competent to enter into practice. A man would require a certain amount of familiarity with papers and the concrete cases presented in Chambers before he would be fit to undertake a case on his own account. But, apart from that practical experience, the University might give him technical education.

16,924. It would be a fit subject for the degree?—Yes, I think so.

16,925. I think you meant us to understand that you did not think it desirable that the curriculum of study for Law should blend with the curriculum of study for the degree in Arts?—No, I think you had better keep it a distinct curriculum.

16,926. And you think the curriculum of study for law should be framed with a view to professional purposes, but not as a part of a system of qualifying study?—As a system of professional study qualifying, so far as regards the fitting a man to practise, but not necessarily qualifying for admission to the Bar. That is vested in the Inns of Court now, and I would not disturb that arrangement.

16,927. Would it not be possible so to arrange a course of preparatory study for the legal profession that it would answer all the purposes of an ordinary University education?—You might, perhaps, but then you would have to take in a good many other subjects. I should not like to give a man an Arts degree merely for the professional and legal studies. I do not know that they would give him all that a University ought to give for the general enlargement and training of his mind.

16,928. Do you see the possibility of giving an Arts degree which would include the subjects of special importance to the lawyer, and which at the same time would serve to him as a suitable educational training?—Such, for instant, as a certain measure of history, political economy and logic.

16,929. Yes?—I think you might very well have, in fact, you must necessarily have, in the Arts course, a certain number of subjects of that nature.

16,930. The serious difficulty in the other direction seems to be that of time. I should like to ask how many years a legal student could be expected to devote to his University preparation?—Do you mean to his purely legal studies, or to his general preparation?

16,931. To his general and legal together. I mean the scientific part?—I suppose, taking it practically, we should say in England that from four to five years would be sufficient. In America, as a rule, their University course is four years, and their law school course two years, sometimes even three. I should say that on an average they give them six to seven years there. They enter college about 17 to 18, and they begin practice at about 24. That does not vary very much from our Oxford system. At Oxford, as a rule, the man who reads for honours takes four years to do it;

then he comes up, and he is two or three years before he is called to the Bar.

16,932. You do not think that is longer than it is reasonable to expect that men would be able to give?—They do give it now. Of course more would come if you shortened the time, no doubt. My remedy for that would be to bring the men up younger. I think it is a mistake that the men do not come up till 19. I think they ought to come up at 17, some even at 16.

16,933. That is the best way of getting out of the difficulty?—Yes; the late age is a great misfortune in other ways also.

16,934. With reference to ulterior studies—what are often called mature studies—studies with a view to the advancement of knowledge, do you think that all that is necessary to be done could be done by the University without creating any new machinery for the purpose?—Do you mean by the existing University of London?

16,935. Yes. Would all that is necessary be accomplished by merely the appointment of professors perhaps in special subjects. Do we possess sufficient materials and sufficient apparatus in London in the way of libraries and other subsidiary means for the purpose of enabling them to pursue the higher studies relating to law?—I should think hardly, of course the first question would be one of buildings. There are no satisfactory lecture rooms at present in which you could carry on legal studies. I always thought it was a great pity that Sergeants Inn, when it was dissolved and the buildings disposed of, was not taken for that purpose. At present the lecture halls and the rooms are not very convenient, though they are fine rooms. I should think a central lecture room would be very desirable. Then there ought to be a central law library. At present students have to go to the library of their own Inn of Court. These libraries are not in some respects well fitted for the purposes of academical study, though they are convenient for professional men. They are not so convenient as a central law library would be. For the study of history I think something else than the library of the British Museum would be needed. I think it would be a great thing that the University should have a good historical library there in which men could work. If you were to appoint a number of professors irrespective of those in the existing institutions, who were only professors in the University, you would have to provide lecture rooms for them, and you would know better than I could tell you whether additional laboratories, physical, biological, and chemical, would be obtained. South Kensington, I suppose, does not provide all that is wanted.

16,936. I wanted to ask the question only with regard to legal studies. We recognise that laboratories would be required for other studies, but I wanted to know whether as regards legal studies, any expenditure, excepting the provision of lecture rooms and libraries, would be necessary?—No, I do not think so.

16,937. And particularly whether the present resources of London would be favourable or sufficient for such studies?—I do not know where you would get the money for the purpose unless from the Inns of Court.

16,938. (*Mr. Anstie.*) I should like to ask one question with regard to the relation you contemplate as likely to exist between the professional bodies and the law school. Do you contemplate it as a practical thing that any law school should be founded which was not in conjunction with them, or that any law school could have success which was not founded in conjunction with them?—It would be very difficult, no doubt, for it to make its way. I do not think it would be impossible, but it would be difficult, and it would be accomplished at a great waste in some respects.

16,939. You are acquainted, no doubt, with the history of very praiseworthy attempts of that kind that have been made so long as 50 or 60 years ago, and the result which had ensued even so early as 1846?—Yes.

16,940. You are aware that since 1846, when the Committee on this subject sat, the progress has been rather downwards than upwards?—I am not sure that I should put it quite so strongly as that.

16,941. In the non-professional schools?—Yes, in the non-professional schools. I did not know you were referring only to them, I should think that was so.

16,942. On the other hand, there has been considerable progress, though it has not been so satisfactory as one would desire in the professional schools?—Yes.

16,943. Then is not the only practical way of solving the question to come to an arrangement with the bodies who have the control of the funds, and who have the clientèle who would very largely form the audience to the lectures?—It would be very desirable if it could be accomplished.

16,944. For that purpose of course it would be necessary to give them a very considerable weight in the body to which they would contribute practically the whole of the resources in this branch?—Yes; but it must be remembered, of course, that one does not look upon them as persons contributing out of their own pockets. They are in the position of administrators of funds—it is hard to define exactly what they are, but they are quasi public funds.

16,945. Still, looking at the matter from a practical point of view, although not private owners of their funds, they are persons who would naturally have, and with respect to whom other people would think it right that they should have, a large share in the management of a school founded in relation to their profession?—I should say that the leading men of the legal profession were entitled to have a large share and a large control. Of course I mean the heads of the profession.

16,946. How do you mean "leading men"?—I wish to distinguish my answer from admitting that the present Inns of Court, or the Council of Legal Education as now constituted, is the only body, or the only constituted body, to which we could look in these matters.

16,947. What other bodies would you suggest?—I can imagine the legal profession being better represented than it is at present by the Council of Legal Education.

16,948. What would you suggest?—That would lead me into points of detail. I am only saying that at the present moment I do not think the present system is the best I can imagine.

16,949. Have you any suggestion to make?—I should have a system of direct election or direct nomination of members of the Bar, and members of the other branches of the profession, who were best fitted by their own attainments to direct legal studies.

16,950. Do you mean what I may call a popular election?—Not necessarily.

16,951. What kind of election would you suggest?—I should take some plan which would secure that the best men who would accept the work would be placed upon the governing body.

16,952. What plan would you suggest to secure that object?—I think that probably the best plan would be to combine a certain measure of nomination with a certain number of members selected by the profession.

16,953. (*Lord Playfair.*) As in the Medical Council?—Yes, somewhat as in the Medical Council.

16,954. (*Mr. Anstie.*) Then you would have a body nominated as to part by whom—by the Crown?—That would depend upon the constitution you gave the University. You might have it nominated by the Senate of the University. I do not look upon the details of such a choice as a matter of great importance. I will only repeat that in answering your question with regard to the desirability of associating the profession, I do not mean to imply that the present method of representing the profession by the Council of Legal Education is the best that could be devised.

16,955. But, whether it is the best or not, supposing that organisation to have in fact the power over the funds required, and the disposition to use them for

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

educational purposes, in that event what are we to do? Are we to pass them by, and wait for the creation of some new body?—No, on the contrary, wait for them to come in, or rather see to it that they do come in.

16,956. And persuade them to come in by giving them adequate representation on the Governing Body of the University?—Some representation on the Governing Body of the University in general, and, no doubt, a special authority over the Faculty and teachers of law.

16,957. You would give them both?—I would give them a larger share in the control of purely legal studies than I would in the General Council or the General Senate of the University.

16,958. Then your view would be first that they should contribute some element to the General Council of the University, and, secondly, that they should have some peculiar privileges in the management of affairs relating to the law school?—Yes.

16,959. (*Lord Playfair.*) In reference to your last answers, do you see any danger in large professional bodies dominating the Senate by too large a representation upon it? I allude, for instance, to such as the medical profession?—I should think it might be a real danger. Of course, if there were other professional bodies outside the medical one, for instance, they would to some extent counterbalance one another. But I should think it was advisable to have another element which was not so strictly professional upon the governing body.

16,960. Do you think that could be somewhat prevented by making the professions powerful in their own Faculties, and having only representation by their most distinguished men in the Senate?—I should think that might be a very good way.

16,961. You spoke of giving the Senate a large power over the teaching bodies. Do you not see practical difficulties in the way now with reference to such bodies as University College and King's College, which are automatic in their government and independent in their endowment?—I do. I rather meant to convey that one's duty would be that, the University having started with laying down a scheme of what it considered to be the teaching it ought to provide, the terms on which it ought to give the title of a University professor to any teachers, and the terms on which it would institute examinations and degrees, it should then require its subordinate colleges to conform to its regulations for those purposes, but outside those purposes if it thought necessary it could leave them perfectly free I should not think it necessary that it should take over the whole control and management of such a body as University College, but merely that it should turn University College to account so far as it can for the purpose of the University scheme.

16,962. We find that in the professions which are well organised—take, for instance, medicine, the strongest in London—that they have very different views as to the value of degrees from the views which the University may hold, especially the London University, whose medical degree is a very high one—higher than is necessary for the licentiates. Take a further illustration that recently the examinations in London for licensing medical men may be assumed to be as efficient as the examinations in the Scotch Universities, the Scotch Universities granting degrees and the licensing bodies none. Do you not think it would have a very wholesome effect upon a University to have a professional Faculty able to make its representation one way in the University, and the Senate being independent enough not to allow it to place its degrees too low?—Yes, I think it would be a very proper check on any disposition that might exist on the part of a Faculty to lower its degree unduly. I know, of course, that that danger has been suggested.

16,963. Do you not think it would be positively advantageous that the Faculty might be able to say to the University, whatever University it is that exists, the Gresham, or the single University, or the double University, "You are not supplying the number of "professional men that are required absolutely by the "country, and we tell you what are the conditions "which are necessary for that purpose." Then the Senate should have the responsibility of carrying out those views, with a full regard also to no too great lowering of the qualifications?—I should think that would be so, but I should have thought that the General Medical Council with its control over the University examination might to some extent correct any danger of that kind. I understand that it inspects from time to time the different examinations conducted by the different licensing bodies, and considers the results of them, and finds it its duty to bring up any that are a little lagging behind.

16,964. But the power of the Medical Council is that the examinations shall not go below a minimum; it cannot interfere with any examinations which are at a maximum, which excludes the men from them?—In that case I suppose they consider the remedy is for the men to go to some other examining place.

16,965. Yes, to go to another licensing body. But we are trying to see whether we cannot reconcile both—by representation of the Faculty in one case, and the Senate being representative but independent of too much professional representation upon it, in the other?—Such a body as you may fairly assume your Senate to be would be a body that would have a good deal of moral weight in a case of that kind, and would be able to correct any undue tendency in the direction you indicate, on the part of the Faculty.

15,966. And the profession being organised into a Faculty would have a useful operation, and prevent too high a scale for the purposes of the country?—Yes, I should think so, certainly.

16,967. Are you aware that in Germany they obtain that in another way by the State going to the Universities in Germany and joining with the professors of the University, the State looking to the practical character of the examination, and the University to the scientific?—I knew that the State co-operated in Germany, though I was not aware of the precise form. I suppose here we might say that the Medical Council was the organ of the State for the purpose of supervising the profession.

16,968. Formerly in Germany the State's examination was quite independent of the University. That was found to be objectionable. Now the State examiners go down to the University and associate themselves with the University professors by seeing that the license to practise is both scientific and practical?—I should think that was a good combination, and ought to work well.

16,969. Unfortunately I was not here when you began to give your evidence. Before I came in I fancy that you recommended that there should be various kinds of Arts degrees, so as to show different professions?—I think there should be various kinds of Arts degree so as to suit the different tastes and talents of different sorts of students, I do not know that I should frame the Arts degrees with special reference to professions, because the theory of an Arts degree seems to me rather to be that it is the education which is needed to make a good citizen, and train the different faculties of the mind properly. Therefore, it would be rather a pity to draw it up with a special view to such professions. But I should think naturally there would be different courses, some with a considerable scientific element, some with a considerable literary element, which would be respectively followed by those who were going to take a scientific or literary career, as the case might be.

16,970. Do you know that is the view taken by the Scotch colleges, that there should be adaptations of different training for those who are going to different professions in after life? For instance, legal men might have logic and political economy?—Certainly, so long as the subjects are all subjects which legitimately belong to general education, I do not think there is any harm in that; but one would have always to bear in mind the danger of allowing any essential element of literary education to slip out.

The Right Hon. J. Bryce, D.C.L., M.P.

8 Dec. 1892.

16,971. There are very few of our Universities that give any degrees not in Arts, but in Art. Do you not think that a University with a desire for large knowledge, if there were any organisation or endowment, should be allowed to include Art as a Faculty as well as other branches of human knowledge?—I feel rather a distaste to multiplying degrees, or to giving them very much importance, except so far as regards the case of medicine where you must have an examination in order to test a man's fitness to enter a practical profession where the lives of men depend upon the exercise of his skill. I think when you begin to multiply examinations you develop cram. I do not think a degree in letters, or a degree in English literature would be of any use, because it does not seem to me a fit subject for examination. I should have said the same of Art.

16,972. I am afraid we do not understand each other?—All I meant to say is that I think you would require considerable care in constructing your examination to see that it did not degenerate into cram. If you could make a *bonâ fide* examination, one would not object to a degree. I think a Faculty of that kind, which would include a certain element of history in it, and a certain element of perhaps even natural science, and the other precognoscenda which are or may be serviceable for the purposes of art would be very useful.

16,973. You think it might be extended as a subject of knowledge and instruction if it was desirable?—Yes. It would be just one of those subjects which the existing institutions (unless you include the Royal Academy), are not constituted to deal with, and which the University ought to consider within its purview.

16,974. (*Lord Reay.*) With regard to the question which my noble friend has raised with regard to the State examinations, I suppose you know that there is a great objection felt in Germany against State examinations which are not chiefly under the control of the Professors of the University. I have heard that in the Law Faculty, for instance, great objection was entertained, because the State examination in some parts of Germany was conducted by gentlemen who were too far removed from the recent progress in legal science, and, therefore, not in sufficient touch with the legal teaching. There are other Faculties to which what Lord Playfair said applied, and in which the professors would have a preponderant influence in the "Staatsexamen." Then with regard to the important question which was raised by Professor Burdon Sanderson about law students having obtained a degree in Arts, it is rather interesting to see what the American Bar Committee have reported upon that:—"Admission to the school not to be restricted to the "graduates of colleges, as has sometimes been proposed, but should be open to all who have a good "English education. Every teacher will be glad to "see the requirement higher than this; at least so "far as to include a very considerable amount of "general information as well as the study of Latin. "But every teacher knows from practical experience "that the students who have less than this are the "ones who need most the disciplinary methods of "the schools, while the graduates of colleges, after "four or more years of similar methods of instruction, "can far easier dispense with these, and learn the "law either by private reading or by office practice. "We do not mean by this to underrate the value of "school study to any class, but only to point out that "with the less educated it is an imperative necessity, "since it is their only method of obtaining that "thorough drill and mental discipline which are "almost indispensable to the student of law. To "shut the doors of the law school against all but "college graduates would turn away the very class "who need its benefits most, without preventing or "even delaying their admission to the Bar. For this, "reason, we hold it to be in the best interests of the "profession that the schools should be open to all "who have sufficient education and intelligence to go "through their course without delaying or embarrassing their fellow students. It must be left to the "gradual influence of time to extend among aspirants "for the Bar, a higher conviction of the amount of "general education requisite for its successful practice; "and that can be best done by admitting them to the "schools where they will come in daily contact with "their better trained fellows than by excluding them "from it." Their conclusion is that for those who have obtained the degree of Bachelor of Arts, as they have been used to scientific methods, the legal education is less necessary than for those who have not gone through the preliminary literary curriculum, and that it is very important to keep open an avenue to them?—I have no doubt that would be true; if a man has had a good general education, he would be able to get on with less of aspecial legal education than a man who has not. My remark only went to this. I think there is the greatest difference in these cases between giving a degree and admitting to practice on the one hand and admitting to hear lectures on the other. I think whatever restrictions you may impose, as regards general education, upon obtaining a degree or admitting to practise, ought not to be applied to admission to attend lectures. Although a man may profit more from the lectures he attends if he has had a previous arts course, that does not seem to me to be a sufficient reason for shutting him out from the opportunity of attending them.

The witness withdrew.

JOHN V. LONGBOURNE, Esq., examined.

J. V. Longbourne, Esq.

16,975. (*Chairman.*) You were formerly one of the Secretaries of the Legal Education Association?—Yes.

16,976. Will you give us a general statement of your views. I think your evidence is chiefly with regard to the Law Faculty?—Yes. The Legal Education Association was constituted formally at a meeting held in Lincoln's Inn Hall on the 6th July 1870 under the presidency of Lord Selborne. On the Council of the Association were many of the leading members of both branches of the legal profession, of whom 34 were then, or became subsequently, judges, among them being Lord Herschell, Lord Justice Baggallay, Lord Justice Bowen, Lord Justice Fry, Lord Hobhouse, Lord Justice Holker, Lord Justice Kay, Lord Justice Lindley, Mr. Justice Mathew, Sir Edward Ryan, Mr. Justice Stephen, and Lord Justice Thesiger; Solicitors being represented on the Council by (amongst others) Messrs. Cookson; Dees (of Newcastle) Du Cane; Farrer; Frere; Freshfield; Fry (of Bristol); Jevons (of Liverpool) Lake; Lowndes (of Liverpool); Ryland (of Birmingham) Walters; Williams and Bateson Wood (of Manchester). Mr. Justice Quain was Chairman of the Executive Committee of the Council. The objects of the Association were (as stated by Lord Selborne in his address), "The establishment of "a Law University for the education of students "intended for the profession of the Law." The placing of the education of both branches of the profession on the basis of "a combined test of a "colleagiate education, and examination by a public "board of examiners." At the outset there was hesitation on the part of a majority of the Council of the Incorporated Law Society to support the proposals of the Association; they preferred to retain in their own hand the examination of students desiring to become solicitors. A minority of the Council were of a different opinion, and appealed from the decision of the majority to a special general meeting

J. V. Longbourne, Esq.

8 Dec. 1892.

of the members of the Society. The Society then consisted of about 3,000 members (out of nearly 11,000 solicitors then practising in England and Wales), three-fifths of the members being London practitioners. Nearly 400 members (by far the largest number on record) attended the meeting; the subject was discussed for two days, and in the result resolutions in favour of the objects of the Association were carried by a majority of 101, the numbers voting being 233 in favour and 132 against the resolutions. On the 11th July 1871 Sir Roundell Palmer moved the following resolution in the House of Commons:—"That in the opinion of this House it is desirable "that a general School of Law should be established "in the Metropolis, in the government of which the "different bodies of the legal profession in England "may be suitably represented, and that after the "establishment thereof no person should be admitted "to practice in any branch of the legal profession "without a certificate of proficiency in the study of "the Law granted after proper examination by such "general School of Law." The motion was seconded by Mr. Osborne Morgan and adjourned; and the subject was not proceeded with further during that Session. Reasons in favour of the motion were circulated, by the Association, among members of Parliament and others. Would it be convenient to the Commission if I stated the reasons?

16,977. Yes?—"Sir Roundell Palmer has given "notice of his intention to move a resolution in the "House of Commons on the 11th of July in favour "of the formation of a General School or University "of Law in the Metropolis, and for an address to the "Crown praying that a charter may be granted for that "purpose. The Executive Committee of the Council "of the Legal Education Association, which comprises "both barristers and solicitors, and which has been "established for the purpose of promoting such an "organization, think it desirable to indicate some of "the advantages it would afford to the public and "the profession. (1.) It would substitute, in the "place of the two distinct and inadequate courses of "preparation for professional practice, which are "now offered by the Inns of Court and the Incorpo-"rated Law Society, one well-organized school sup-"plied with permanent and highly qualified teachers. "This school would afford systematic legal instruction "to all classes of students, whether as a preparation "for practising law, or as a preparation for the dis-"charge of public duties. (2.) It could conduct, "through a board of competent and independent "examiners, suitable examinations, as an indispens-"able test of fitness for the practice of the law in "any of its branches. At present no one can be "admitted to practise as an attorney who does not "pass two examinations in law, but it is possible "for a student to be called to the English Bar "without undergoing any examination as to his pro-"ficiency in legal knowledge, although those who "are thus called are alone entitled to plead in our "superior courts, without being responsible for negli-"gence or incapacity, and are alone eligible, not only "for all our higher judicial offices, but for almost all "our minor, judicial, and quasi-judicial appointments "at home and in the colonies. (3.) The creation of "an efficient School of Law in London, and the "institution of a proper system of final examination, "would give a more definite and appreciable value "to the study of Jurisprudence at our Universities, "and would assist them very materially in the efforts "they are making to raise the character of their "respective law schools. (4.) It would, moreover, "develop the study of jurisprudence not merely as a "preparation for professional practice, but as a science "which has an important bearing upon the improve-"ment of legislation, and upon the reduction into a "more consistent system of the body of our existing "law, upon the administration of justice and gene-"rally upon all the interests of the State, and it "would, in time, raise up a valuable body of compe-"tent teachers and writers. The movement has "obtained the general approval of the Lord Chan-"cellor, ex-Chancellor Lord Cairns, and the following "Judges and ex-Judges." There are 17 judges and ex-judges mentioned. "The Council of the Asso-"ciation has been joined by the Law Officers of the "Crown, and by a large number of leading members "of both branches of the profession as well as by "most of the professors of jurisprudence at Oxford "and Cambridge. The Incorporated Law Society, "the Metropolitan and Provincial Law Society, and "many provincial law societies have passed resolu-"tions generally approving of the scheme. The "association has also received from many leading "laymen assurances of hearty approval and support. "The Executive Committee earnestly trusts that the "resolution proposed by Sir Roundell Palmer for "the advancement of a scientific study of the law in "England may receive the sanction of the House." That is signed by Sir Richard Quain. On the 1st February 1872 a deputation, appointed by the Executive Committee of the Association, waited upon Mr. Gladstone, then Prime Minister, to endeavour to obtain the support of the then Government to a motion in favour of the objects of the association which it was proposed to make in the then ensuing session. The deputation, which, at the request of Mr. Gladstone, was limited to 24 members of the Association, consisted (among others) of the following:—Lord Selborne, Sir Edward Ryan, Vice-Chancellor Wickens, Mr. Justice Quain, Lord Hobhouse, Mr. Justice Mathew, Baron Pollock, Mr. Amphlett, Q.C., M.P., Sir Henry Maine, Professor Abdy, Professor Bryce, and Messrs. Clabon, Farrar, Freshfield, Hollams, Jevons, and Ryland. At the conclusion of the statement of the President (Lord Selborne) Mr. Gladstone expressed his sense of the importance of the subject, and spoke of it as entitled to serious consideration in the future, but expressed a doubt whether the work which the Government were pledged to undertake during the then coming session, would render it possible for them to spare the time for the inquiry which must be made before they could commit themselves to any decided course of action. On the 1st March 1872 Sir Roundell Palmer moved in the House of Commons as follows:—"That it is "desirable that a general School of Law should be "established in the metropolis, by public authority, "for the instruction of students intending to practise "in any branch of the legal profession, and of all "other subjects of Her Majesty who may desire to "resort thereto. That it is desirable, on the esta-"blishment of such school, to provide for examina-"tions, to be held by examiners impartially chosen, "and to require certificates of the passing of such "examinations as may respectively be deemed proper "for the several branches of the legal profession as "necessary qualifications (after a time to be limited) "for admission to practise in those branches respec-"tively." In support of these resolutions a petition was presented, which was signed by about 400 members of the Bar. Eighteen of these were Queen's Counsel and Benchers of their respective Inns. A large number of barristers had signed a similar petition in the preceding year. Steps were also taken for ascertaining the views of the other branch of the profession on the subject. The result was that of about 10,000 solicitors practising in England and Wales, nearly 7,000 signed petitions in favour of the resolutions. These petitions, as was justly observed by the President in his speech in the House of Commons, "were not like petitions got up among persons who do "not understand the matters about which they petition. "The petitioners were all intelligent men, all practi-"cally interested in the question, and they were all "of opinion that the establishment of a School of Law "on the conditions described would tend to elevate the "dignity of their own branch of the profession with-"out causing any confusion of one branch of the "profession of law with another." It should be added that similar petitions were also presented by the Incorporated Law Society, the Metropolitan and Pro-

vincial Law Society, and by various provincial law societies (including those of Liverpool, Manchester, Leeds, Birmingham, Bristol, and Plymouth) in their corporate character, and that resolutions in favour of the objects of the association were passed by the Congress of law students held at Birmingham in June last. On the 1st of March the motion for adopting the resolutions was introduced by the President in a speech in which he made a statement of all the arguments in their favour. The motion was supported by leading members of the profession on both sides of the House. Many of those who spoke against the motion accepted the general principle involved in the resolutions, and only objected to them either on the grounds of expediency or because they submitted no definite scheme for the consideration of the House. The Attorney General, while agreeing with the mover in principle, and "perhaps even going further than "he did in matters of detail," urged that the action proposed to be taken would be premature unless time was allowed to ascertain the effect of the debate upon the Inns of Court. The Solicitor General, while opposing the motion, said that "the Government "wanted no urging from the honourable and learned "member, to whom the House was so much indebted "for his exertions and his endeavours to promote "the progress of legal education. They had no desire "to throw impediments in his way, and whenever "opinions were so so far formed and decided that a "definite course could be marked out, not by universal "assent, but indicated by so much general assent as "would show that another system was earnestly "desired and wished for by those who were the most "able to consider the subject and decide what was "most likely to accomplish the greatest good that "could be effected by education, the Government "would adopt it.' Mr. Gladstone pointed out that, though the Government did not think it convenient or expedient for the House at that moment to affirm the matter contained in the resolutions, it would be a mistake to suppose that "they were about to meet "with rejection at the hands of the Government. "It had," he said, "so far as they knew, fully mort-"gaged the time of the House. They had intro-"duced measures which it would require great exer-"tions on the part of honourable members to deal "with and dispose of; and under those circumstances "could they hold out a hope that they could at once "proceed to throw the matter into shape? There "was," he continued, "one man in the House more "competent than the Government to throw the "matter into shape, and that was the mover of the "resolution—his honourable and learned friend, the "the member for Richmond himself." For the purposes of a division this, in effect, was an intimation that the Government would not support the adoption of the resolutions at that time. Sir Roundell Palmer, however, determined to take the sense of the House, and, in spite of the opposition of the Government, 103 votes were recorded in favour of the motion, which was only rejected by a majority of 13 in a House of 219 members."

16,978. Did the Government vote against it in a body?—Yes. In January 1872 the Executive Committee of the Association submitted a report for adoption at a general meeting of the Association held in Lincoln's Inn Hall. The report, after criticising the scheme then recently adopted by the Inns of Court, proceeds as follows:—"In their preceding observa-"tions, the Committee have pointed out some of the "more prominent defects in the proposed scheme "considered as a purely Bar scheme. They need "scarcely add that an organisation which is confined "to students of one branch of the legal profession "only, which excludes the general public altogether, "which keeps its administration practically in the "hands of self-electing bodies claiming to be irre-"sponsible, and which may at any moment be "modified or abandoned by those bodies, entirely "fails to meet the requirements of a general School "of Law, open to all who wish to study law as a "science, as well as to those who wish to study it "with a view to professional practice, and adminis-"tered by a public and responsible governing body. "The Committee feel that, under these circumstances, "it has now become the duty of the Association to "preserve not less earnestly than before in its en-"deavours to accomplish the objects for which it was "formed." The meeting was attended by many members of both branches of the profession; at it Mr. Amphlett, Q.C., M.P., was elected President of the Association in succession to Sir Roundell Palmer, who had been compelled to resign the office, owing to his having been appointed Lord Chancellor. The report was adopted and ordered to be printed and circulated. And a resolution was passed that the scheme of the Inns of Court was wholly inadequate to supply an efficient School of Law. Owing to the death of Mr. Justice Quain and the elevation to the Bench of its President (Mr. Amphlett) and of so many other members of the Council and Executive Committee the Legal Education Association lost its vitality and ceased to hold meetings, but Lord Selborne having, on a change of Ministry, ceased to be Lord Chancellor introduced in, I think, 1874, a Bill in the House of Lords for incorporating the Inns of Court and establishing a general School of Law. The Bill was read a second time, but was afterwards withdrawn and the subject remained in abeyance until revived on the occasion which has given rise to the present inquiry.

16,979. I do not quite understand the expression incorporating the Inns of Court?—That by Act of Parliament they should be a body corporate instead of bearing the character they do now.

16,980. (*Mr. Anstie.*) The idea would be a single incorporation of the four Inns, would it?—No, I think not. I think that was not the idea.

16,981. (*Chairman.*) They are not incorporated now?—No; they are not incorporated now. Before closing the history of the Legal Education Association, I must mention that Mr. Justice Quain who died in, I think, 1875, manifested by his will the deep interest he continued to take in the subject of Legal Education. The will, which was proved in 1876, contains the following bequest. "I bequeath the "pecuniary legacies following namely. To my ex-"ecutors herein-after named the sum of ten thousand "pounds upon trust to invest the same in their names "upon any of the investments or securities herein "after authorized and to pay the income thereof to "my said brother Richard Quain for his life and "after his decease upon trust to pay over and transfer "the said legacy of ten thousand pounds and the "investments and securities on which the same may "be invested unto the Right Honourable Hugh "McCalmond Baron Cairns Lord High Chancellor "the Right Honourable Roundell Baron Selborne "Joseph W. Chitty of Lincoln's Inn Esquire Q.C. "and William Alfred Jevons of Liverpool in the "County of Lancaster Gentleman upon trust that "they the said trustees or the survivors or survivor "of them his executors or administrators shall apply "the principal or income of the same in their or his "absolute discretion for the promotion of legal edu-"cation in England but so that such education shall "not be confined to any branch or branches of the "legal profession but shall be open to the public on "the same terms and I recommend but so that this "recommendation shall not amount to a binding "direction or control the discretion of my said trustees "or trustee that the same should be applied in the "foundation or endowment of a professorship either "in connection with some University College School "or public Institution or otherwise for instruction in "Comparative Law and I declare that it shall be "lawful for my said trustees or trustee in case they "or he shall deem it expedient so to do to transfer or "pay over the said legacy or the interest thereof or "any part thereof respectively to any University "College School Body Corporate Society or public "Institution whatsoever in England or to anybody

J. V. Longbourne, Esq.

8 Dec. 1892.

"of trustees to be nominated by my said trustees or "trustee upon trust for the purposes aforesaid and "subject to such directions or on such terms and "conditions and with such powers and directions as "may appear desirable to my said trustees or trustee "for carrying out the objects of this bequest and as "shall be consistent with the terms thereof," and so forth. Perhaps I may be allowed to hand that in. I think the fact of that bequest having been made is not generally known.

16,982. (*Lord Playfair.*) Is it applied?—No, it is not applied. It is waiting for the University to spring up to receive it.

16,983. (*Chairman.*) Then you have some information to give us with regard to the examination of students desiring to be solicitors. What are the requirements by statute of the Incorporated Law Society?—The Incorporated Law Society does not admit to practice. The Society act as Registrar of Solicitors and have the custody of the books containing the Roll. Articles of clerkship are registered with them. These powers are given them by sections 5 to 9 inclusive of the Solicitors Act, 1888. The registration of articles and the admission of solicitors are governed by rules made by the Master of the Rolls (with the concurrence of the Lord Chancellor and the Lord Chief Justice) pursuant to section 15 of the Solicitors Act, 1888. Then as to Articles of Clerkship—Service of Clerkship under articles for five years is required before admission (see section 3 of the Solicitors Act, 1843) but the clerk may serve one year with a barrister or special pleader, and one year with the London agent of the solicitor to whom he is articled (see section 6 of the Act, 1843) except that only three years' service under articles is required of persons who have taken degrees at certain Universities, and one year of the three may be passed with the London agent (see section 2 of the Act, 1860) three year's service under articles is required of persons who have been called to the Bar (see section 3 of the Act, 1860), and of persons who have been for 10 years managing clerks of solicitors (see section 14 of the Act, 1860). Four years' service under articles is necessary in the case of persons who have passed the examinations mentioned in the rules made by certain of the judges (the Master of the Rolls being one) in December 1877 under powers vested in them by section 13 of the Solicitors Act, 1877. Of these four years, one may be passed in the Chambers of a barrister, and one in the offices of a London agent. The Master of the Rolls has power to admit, although service under articles is irregular (see section 15 of the Solicitors Act, 1877). I may here mention that at a general meeting of the Incorporated Law Society held in 1873, a resolution was passed, on the motion of Mr. Hollams, that service under articles was undesirable and should be abolished.—A premium of from 300 to 500 guineas is usually paid by the articled clerk to the solicitor to whom he is articled.

16,984. Then that would abolish one qualification which there is now?—Yes, but they would substitute a certificate of attendance at lectures or at the Chambers of a barrister or a solicitor. They would not tie an articled student to one particular man who may or may not have practice or may or may not know anything about law. Under the present system an articled clerk is absolutely tied to one man who may be perfectly unable to educate him and whose office may not afford the means of seeing practice.

16,985. And they would be subject to a mixture of examinations and attendance?—A mixture of examinations and attendance leaving it free to the articled clerk if he finds he is reading with a man who cannot teach him to go to some one else. That is the effect of the resolution. It has never been acted upon.

16,986. Everybody now is obliged to be articled with the exception you have mentioned?—Yes, for five years with certain exceptions.

16,987. Then these examinations have absolutely nothing to do with the admission. They are merely voluntary, and people submit themselves to them who like to do so?—The examinations are compulsory by statute. The Master of the Rolls relaxes them in certain cases, but very seldom.

16,988. He may relax them?—Yes, he may relax them.

16,989. They entirely depend upon him do they?—Yes, they entirely depend upon his will. That applies merely to the preliminary examination. The final examination is absolute. That is regulated by statute. The examinations are regulated by the Solicitors Act, 1877, section 5 to 22 inclusive. Section 5 provides that, subject to exemptions allowed by the Act, no one shall be admitted without a certificate from the Society that he has passed a preliminary, an intermediate, and a final examination. Section 6 provides that examinations shall be held under the control of the Incorporated Law Society who shall have power to make regulations with respect to all or any of the matters mentioned in the section, namely: (1.) Subjects and mode of examination; (2.) Times and places and notices of examination; (3.) The certificates to be given; (4.) The appointment and removal of examiners and their renumeration; (5.) Any other matter or things to which the Society think it expedient to make regulations for the purpose of carrying this section into execution. A copy of the regulations has to be sent to certain judges (the Master of the Rolls being one) and the regulations are not to be of any force or effect if dissented from in writing by any one of the judges (the Master of the Rolls being one) within 28 days. Then section 8 provides that the fees to be paid to the Society in respect of the examinations be fixed by regulations to be made by certain judges or any one of them (the Master of the Rolls being one).

16,990. It is now the Lord Chief Justice and the Master of the Rolls?—Yes. Section 9 gives an appeal to the Master of the Rolls against the refusal to grant a certificate of having passed an intermediate or final examination. Section 10 exempts persons who have passed certain examinations from the preliminary examination and empowers the same judges to make, alter, and revoke regulations extending the exemption. Section 11 empowers the same judges or any one of them to grant exemption from preliminary examination under special circumstances. And section 12 exempts barristers of five years' standing from intermediate examination. The examinations are conducted under regulations made by the judges on the 5th of December 1887, and by the Society on the 27th of November 1877. They provide that 30 days' notice of the preliminary examination shall be given to the Registrar, the Registrar being the Society. The fee payable is 2*l.*, which is to be paid on giving notice. After passing the examination, articles of clerkship may be entered into, and the articles must be registered within six months, the fee payable on registration being 5*s.* Then for the intermediate examination 30 days' notice of the intention of a student to submit himself to examination must be given to the Registrar. Candidates are in no case to present themselves before the expiration of half the term of service. Articles and certificates of having passed the preliminary examination are to be left with the Registrar; also (and this is important) answers to questions as to due service and conduct. These are questions that emanate from the Society themselves. They may be called preliminary to a license to practise. They have nothing to do with an examination. The fee payable on giving notice is 3*l.* As to the final examination—42 days' notice is to be given to the Registrar. Then the articles are to be left and answers to questions as to service and conduct, the fee payable on giving notice being 5*l.* The certificate of having passed, enables the candidate to apply for admission. Six months' notice of the intention to apply for admission must be given to the Registrar. I have mentioned before that the admission is by the Master of the Rolls. There are about 3,000 students at present under articles; 626 students passed the final examination during the year ending 1st November 1891, 639 students passed during the

year ending 1st November 1892, 694 articles of clerkship were registered between 1st November 1891, and the 30th November 1892. 237 being London articles, and 437 being country articles. There are at present nearly 15,000 practising solicitors in England and Wales, of whom nearly 7,000 practise in London. It will be seen that the substantial power in all the foregoing matters is vested in the Lord Chief Justice and the Master of the Rolls—principally in the latter—also that if the new University is to be substituted for the Incorporated Law Society as the examining body, an Act of Parliament will be necessary, and that a fresh set of regulations with respect to the examinations must be made by the Judges, but that it will not be necessary to interfere with any other of the duties discharged by the Society as Registrar of Solicitors. The examinations are at present conducted by paid examiners appointed by the Examination Committee of the Council of the Society. In the case of the intermediate and final examinations the examiners are practising solicitors. With regard to education. In the supplement to their Calendar published by the Society in 1891 is the following paragraph:—"Up to the year 1833 "there appears to have been no means by which an "articled clerk could acquire a knowledge of the "laws which he was subsequently to assist in adminis- "tering, except what he could learn in his master's "office. In order to remedy this evil, the Law "Society instituted lectures in 1833 in the various "branches of the law, which have been continued up "to the present time." The same supplement contains a reference to the report of the Select Committee of the House of Commons on Legal Education, the report having been made, as the Commission know very well, in August 1846. "It recommended that "a stringent examination should be required in general "knowledge previous to apprenticeship; that this "examination should embrace, in addition to the "so-called commercial education, a competent know- "ledge of at least Latin, Geography, History, and "the elements of Arithmetic and Ethics, and one "or more of the modern languages. The Committee "also recommended that, for the further education of "solicitors, it would be highly desirable that they "should attend lectures and classes in the Inns of "Court, and also others of a nature more special to "their own branch of the profession in the law "societies of which they might happen to be "members, and that the final examination should "be conducted more in reference to general principles "than the technicalities of the law." Subsequently the Incorporated Law Society introduced their system of examination, which is now legalised, but nothing was done in the way of education beyond the lectures mentioned in the paragraph to which I referred previously. In the report issued in July last by the Council of the Society to the members, it is admitted that the lectures and classes had proved a failure, and were about to be abandoned; the result being that, so far as education is concerned, students are in the same position as they were in in 1883, for the system of tuition by correspondence which the Society have embarked upon within the last few months will recommend itself to hardly anyone except its promoters. The fact is that the constitution of the Council of the Incorporated Law Society does not qualify it to act as an examining nor as a teaching body. The Council are hard worked men in full practice, besides which, the other duties undertaken by the Council, such as the discipline of the profession, matters affecting professional interests, the criticism of Bills introduced into Parliament, and other similar matters, occupy all the spare time at their command. The onerous nature of these duties is evidenced by the fact that they occupy 113 (out of) pages of their report—I have no doubt that solicitors are as alive as they were in 1872 to the importance of the examination of law students, being conducted by a public examining body, and of the establishment of a School of Law, and that the substitution of examination by the proposed University, for the existing examinations, would be approved of by the great majority of solicitors, provided that the Incorporated Law Society were duly represented on the Senate, on the Faculty of Law, and on the Board of Legal Studies of the University, and that in other respects the lines of the Bill introduced by Lord Selborne in 1874 were followed.

16,991. That is, you look to the new University to conduct the whole of the examinations necessary for the qualification of a solicitor?—Quite so.

16,992. And that you think would be the wish of the Incorporated Law Society?—That would be the wish of the majority of the members, but whether there would be any hesitation on the part of the majority of the Council I cannot say. It may be there would be a hesitation, but there would certainly be a minority of the Council who would appeal again to the general body of the members of the profession in the same way that they appealed in 1872.

16,993. On the other hand the Council of Legal Education cling very tenaciously to their right of monopoly of admission to the Bar, and if the Incorporated Law Society wish to give over their functions to us, the University would be in the position that they could give the qualification for solicitors, but not for barristers?—Looking at what has taken place of late—the alteration in practice—the solicitors being now called upon to discharge much more onerous duties than they were formerly called upon to discharge (so much of the business of the Chancery Division being conducted in Chambers and by solicitors in most cases), there is a greater necessity than ever for the solicitors' branch being educated in the theory and science of the law. It is equally as necessary as in the case of a barrister. There should be the same examination for both branches. That is the view of solicitors.

16,994. Just the same examination and the same qualification?—Yes.

16,995. (*Mr. Anstie.*) I understood you to say that the Incorporated Law Society were willing to give up their examinational function?—I cannot speak for the council of the Society. I say it would be the wish of solicitors that the examinations should be conducted by such a body as this University should it be constituted.

16,996. Then if it is the wish of the solicitors it should be the wish of their representative body?—No doubt.

16,997. But in giving up those examinations they would not, I suppose, give up any part of their jurisdiction?—There would be no necessity for their doing so.

16,998. What they would give up is simply the educational part?—Quite so.

16,999. Reserving still to themselves what by statute they cannot part with?—What may be called the discipline.

17,000. Do you think that what you say now expresses the opinion of your profession as a body?—I have no doubt it does.

17,001. We have not as yet had very exactly described to us the reasons for the abandonment of the lecture system of the Incorporated Law Society?—I suppose that the students did not find the lectures adapted to their requirements.

17,002. Would it not also be partly due to the fact that the Incorporated Law Society represent the solicitors of the whole of the kingdom, and the lectures which are available in London are of course only available to those students in London?—No. Nearly all the students spend their last year in London.

17,003. The law lectures of course would cover a period, the last year for practice?—There was only one course of lectures. There was not a series of courses. The course was completed in the year.

17,004. The year the articled clerks spend in London is the last year you say?—Generally.

J. V. Longbourne, Esq.

8 Dec. 1892.

17,005. And that is the year which he desires particularly to devote to practice and the learning of his professional duties?—Well, he learns his way about the Courts, sees what is going on in the Courts. He has abundant time to attend classes as a rule.

17,006. Those classes gave him no assistance during the earlier period?—No, not to the country students.

17,007. Whereas the London students would have that opportunity earlier?—I cannot say that, as a rule, they attended during the early period.

17,008. Do you agree with the opinion that the lectures ceased to be beneficial?—I judge from the result. I think if they had been beneficial the students would have availed themselves of them.

17,009. Is that always a test?—I think so. I remember once when Sir Richard Garth lectured his lectures were very popular indeed. He lectured on Common Law, and his lectures drew a large attendance. That is some little time ago, as I need not say.

17,010. You would be prepared to enter into co-operation with the University for educational purposes?—I have no doubt that the profession would.

17,011. Can you tell me whether the profession would be prepared to contribute any funds for the purpose?—There would be the fees arising from the examination.

17,012. Would they be prepared to contribute any other funds?—I do not think they have any other funds.

17,013. They have no funds available or which might be made available for educational purposes at all?—No, none whatever.

17,014. Then all that they could contribute would be the weight of their position and their influence?—And the fees which they now receive from the students who are examined.

17,015. Their custom in fact?—Yes.

17,016. What fees are they now statutorily entitled to receive?—They receive 2*l.* for the preliminary examination, 3*l.* for the intermediate, and 5*l.* for the final. It is 10*l.* in all.

17,017. Examination fees?—Yes.

17,018. It would be, I suppose, an essential part of any such co-operation that the lectures should be open generally?—Certainly, to both branches of the profession and to the public.

17,019. (*Mr. Palmer.*) The Incorporated Law Society appeared before the Privy Council on the occasion of the Gresham Charter being promoted?—So I understand.

17,020. And it was objected to you then, I understand, that you were, strictly speaking, not a teaching body?—I believe so.

17,021. It was also objected that the Inns of Court, or rather the Council of Legal Education, were not represented. May I take it that you had no particular predilection for any particular form of University, but for any University which would give a sufficient and satisfactory Law Faculty?—Certainly.

17,022. I think you said that the articled clerks were 694 in number?—The articles registered between the 1st of November last year and the 30th of November this year, the new articles—there are about 3,000 articled clerks at the present time.

17,023. That means those who would be solicitors?—Yes.

17,024. That was for the country and London too?—Yes.

17,025. You told us there were 457 for the country and something like 234 for London?—Yes.

17,026. Does that give the average number per annum of those of the articled clerks who are going to become solicitors?—Yes, I think that is a fair average. You observe that there is a month in excess of the year; it is from the 1st of November last year to the 30th of November this year. The number who pass the final examination would be a good test. You see 639 passed the final examination last year, and 626 in the previous year.

17,027. I think you spoke of 10,000 being the number of the solicitors in London and the country together?—No, that was in 1870. Now there are nearly 15,000 and nearly 7,000 in London. The proportion has changed altogether.

17,028. Of course, you would be willing in any Faculty to co-operate with the other branches of the profession and with the public generally, so far as law was taught as a subject of general culture and education?—Certainly, provided that the Society as representing solicitors was adequately represented on the Senate.

17,029. So far as your branch, as a practical and applied science, was well cared for?—Yes.

17,030. (*Mr. Rendall.*) Did I understand you to say that the Incorporated Law Society has no funds to devote to educational purposes?—No, none specially.

17,031. But they are able to vote funds to such application?—Directly the lectures practically ceased to be self-supporting they were discontinued.

17,032. But there is a scheme of legal education at Liverpool with which I am well acquainted, and we receive every year a certain grant from the Incorporated Law Society?—It comes out of the examination fees.

17,033. And those funds they are able to devote to educational purposes?—Yes.

17,034. Do they do it at all widely?—I cannot say. I should think not widely. There are very few societies throughout the country who would be in a position to ask them.

17,035. Can you tell me at all the number or the percentage of articled clerks who take a degree?—About one in ten, I should say.

17,036. That would generally be an Oxford or Cambridge degree?—Yes, or London University.

17,037. Is the number increasing or remaining stationary, the percentage I ought rather to say?—I think it is rather on the increase.

17,038. Is that on the ground of abbreviation of the term of articles, or on account of the superior knowledge and status given by the degree?—A student who has had an University education has a greater amount of general culture than a mere boy.

17,039. And the articled clerk who has taken a degree is thought to be better?—Yes, he is better.

17,040. Is that generally held in the profession?—Yes.

17,041. Is there any demand for a local London degree that would increase facilities for articled clerks taking degrees before entering offices?—I cannot say.

17,042. They are at present content with things as they are, accepting the Oxford and Cambridge degree? Yes, or the London University.

17,043. There is no strong feeling in the profession for a metropolitan University?—I cannot say.

17,044. Can you tell me whether in regard to the degree itself there is an opinion favourable or unfavourable to the introduction of the legal element into the degree course? I mean whether those who are proceeding to a law career more favourably or less favourably upon a law degree as compared with an Arts or Science degree?—I cannot say.

17,045. Are you aware that the law schools are increasing both at Cambridge and at Oxford?—Yes.

17,046. And I suppose very largely from those who are entering the profession?—I cannot say how that is. I should think it difficult to say what the intention was.

17,047. Supposing a law school were established with the legal element introduced into the curriculum, do you think a considerable number would resort to it?—A certain number would undoubtedly, but I should hope to see attendance at the lectures for a certain period made compulsory in due course.

17,048. You have spoken of the attendance and recent failure of attendance upon the lectures organised by the Incorporated Law Society. Does not attendance at lectures practically depend mainly upon the co-operation of heads of offices, managing partners, and

so forth, with articled clerks?—I never heard of facilities not being given.

17,049. Elsewhere there are difficulties in arranging the time of lectures. Even if the lectures are fixed at 5 o'clock, heads of offices have to go out of their way to encourage the attendance of clerks. Is there anything of that sort in London?—No, not now.

17,050. Do you think a law school would have that kind of support from heads of offices?—Yes, I do think so. I am quite sure that every facility will be given to an articled clerk who is a student.

17,051. Can you speak at all to whether the opinion in the profession is favourable to the student completing his degree before entering articles or taking the whole or part of it concurrently with the term of articles?—In every case or nearly every case the degree will come before the articles. The degree gives the right of three years' service in lieu of five.

17,052. And that will be the best way you think—that in all cases it should be completed before the Articles?—I do not quite follow you, do you mean a degree in Arts?

17,053. I mean a degree in Arts, but a degree in Arts may very often be taken in law subjects. What I was thinking of would be the degree in Arts parallel to the degree at Cambridge or the degree at Oxford into which a considerable, perhaps a predominant, legal element was introduced?—A degree in Arts is not essential now.

17,054. It must be a degree?—Passing the Matriculation or Little-Go is sufficient.

17,055. That remits one year? For the remission of two years you must have actually taken the degree before entering into Articles?—Yes.

17,056. I am thinking of degree in London which should have a large legal element in it, and that persons who are actually in their Articles, and have not obtained the remission, should be training for that law degree?—Concurrently with articles certainly. Undoubtedly that should be so.

17,057. Do you think that would have the support of many of the profession?—Yes, certainly. I would not make a degree essential to practice but a certificate of having passed an examination in the necessary subjects. A degree would be voluntary. The certificate of having passed the examination should be the essential qualification.

17,058. You spoke of the migration to London for the last year of Articles as a very common practice. Is that so in the case of other large towns. What is the arrangement in respect of that?—The clerk articled in the country is assigned for the last year to the London agent of the country solicitor. Every country solicitor has a London agent. It is the premium which introduces the unsatisfactory element. An arrangement is made of a private nature. Possibly there is no division at all.

17,059. To such migratory students of course a degree concurrently with articles would be out of the question?—Not necessarily so.

17,060. (*Professor Sidgwick.*) If I understand you rightly, you are of opinion that it would be desirable that the Incorporated Law Society should hand over the qualification for determining admission to the profession so far as it is a purely intellectual qualification entirely to the University?—I think so. I think that is the feeling of the profession with regard to a school of law.

17,061. But you are not prepared to say that the Incorporated Law Society would agree to hand it over?—I think the majority of the profession would, undoubedly.

17,062. Would they leave it to the University to determine what subjects should be required for the qualification?—No; the Incorporated Law Society would be represented on the Faculty and the Board of Studies.

17,063. Still they would leave it to the Board on which they were represented to say how much and what kind of law a solictor should learn?—I think they might safely do so.

17,064. I suppose they would retain the examinations still for those articled clerks who are not able to come?—No. All articled clerks pass their final examination in London now.

17,065. Then do you mean that the whole of the final examination should be handed over to the University?—Certainly.

17,066. Then would it be expedient and fair to require attendance at lectures, because that would compel the articled clerks to come to London?—I am not sure. You must set the benefit to the community at large against the personal inconvenience.

17,067. You are inclined to think that it would be on the whole a good thing if all articled clerks were compelled to come to London and attend courses of lectures there?—Yes, certainly I am.

17,068. And that would be in fact a part of the scheme which you would prefer?—Yes.

17,069. How long a time do you think the course should consist of?—Two years.

17,070. Two years' attendance at lectures in London might be required of persons preparing?—I think it would be an advantage to the profession and to the public.

17,071. Do you not think that might meet with opposition in the Universities in the large towns?—I think the large towns are quite as alive to the necessity for good sound legal education as we are in London.

17,072. Then with regard to Liverpool, Manchester, and Leeds, which have themselves University Colleges, would not they prefer to give the legal education themselves?—I cannot say, but I should suppose that there would not be the means of giving sufficient training in the country colleges in a subject like law. The number of students would be limited.

17,073. Do you see any objection to a system by which the certificates of the University were accepted as a complete qualification for practice, but at the same time the Incorporated Law Society kept up an independent examination for the sake of students who might come from other parts of the country, or is the coercion to come to London an important thing?—I think there must be the same examination for all students. I am speaking of the final examination.

17,074. It would perhaps be difficult to have the same examination for all students consistently with an examination adopted to the particular teaching given in London?—There is no special teaching in London.

17,075. Under the new system would it not be desirable that the University should institute a body of teachers, and that their lectures should be attended by these students, and then it should be desirable that the examinations should be in harmony with the teaching, because if it were not you would have the danger again, that if the examination were an external thing, it would be found, as is so frequently found, that the crammer is a more efficient guide to an external examination, than a most distinguished professor can be. The crammer makes the examination the sole object of his work; the professor imparts knowledge, and the crammer wins. It would be rather an essential point in your scheme, would it not, that there should be this attendance at lectures in London?—Yes, I think it would be a great advantage.

17,076. (*Mr. Rendall.*) Do I understand that all the articled clerks would serve their last two years in this case in London?—I should abolish articles. I think articles are a bane.

17,077. Would not the opposition on the part of solicitors who require the services of articled clerks be overwhelming to such a scheme?—I do not think so. The Incorporated Law Society on the motion of one of the most eminent men in the profession, Mr. Hollams, passed a resolution in favour of the abolition of articles. It requires some one to take the matter up. If anyone were to take it up thoroughly, articles would be abolished before long. Articles do not exist in other professions.

17,078. The question is one of retaining articles in the case of articled clerks who have come up to London for the last two years. Would you not meet with

J. V. Longbourne, Esq.

8 Dec. 1892.

opposition on the part of solicitors, because they would miss their clerks at the most valuable stage of their service.—I do not think so.

17,079. You advocate the abolition of articles?—Most strongly.

17,080. (*Lord Reay.*) If I understand you rightly, what you desire is that a solicitor should have a proper knowledge of the principles of legal science?—Quite so.

17,081. Surely if that can be done at Oxford, Cambridge, or Liverpool, where I believe a law school has been started, you would not object to Liverpool, Oxford, and Cambridge students obtaining it there so long as they did obtain it?—If they can obtain as good an education elsewhere, there must be a system of equivalents.

17,082. What you want is that the London solicitor should have in London a University training tested by regular examinations?—Yes, and the same examinations for all persons entering the profession—the same final examination.

17,083. You would not recognise the degree of LL.B. as given in Oxford and Cambridge for admission to the profession?—Certainly not.

17,084. Why should their degrees not be recognised?—I have never heard it suggested before that the LL.B. degree should be accepted as a certificate of a sufficient knowledge of law to practice.

17,085. You will only accept the LL.B. of the new University, and not the LL.B. of any other?—Quite so. You must have one uniform standard.

17,086. (*Chairman.*) It is only on the condition that you are largely represented on the Senate, which you would not be at Oxford and Cambridge?—Yes.

17,087. (*Lord Reay.*) If Oxford and Cambridge were to say, "A member of the Incorporated Law Society will be admitted to our examinations," would not that satisfy you?—I think it would be inconvenient.

17,088. Therefore what you propose is that the new London University should be the only educational body in the country controlling admission to the profession?—The sole examining body for admission to the profession.

17,089. And the only teaching body as well?—No, I should like to see all students brought up to London for two years, but I am afraid we are some distance from that.

17,090. Then do you claim that the Oxford and Cambridge students should be examined by the authorities of the new University?—Certainly. They should obtain their certificate of having an adequate knowledge of law from the new University.

17,091. Would you add a professional examination to the London University examination or will the latter be final?—The only one. Practice is merely the application of theory to certain cases.

17,092. You would give this London University a monopoly of examinations, and virtually a monopoly of teaching for your profession, provided you have representation on the University Council?—A monopoly of examination—I will not say a monopoly of teaching.

17,093. Would not the one very soon follow the other?—Perhaps so.

17,094. (*Mr. Anstie.*) With reference to the question Lord Reay put to you, allow me to draw your attention to the 47th clause of the Scheme which was some time ago framed by the Senate of the University of London. The clause which I refer to is one relating to medicine. You will at once understand the nature of its application to the question we are now upon. It is provided that "The Senate shall "have power to enter into arrangements with the "Royal Colleges for conducting the examinations in "Anatomy, Physiology, Medicine, Surgery, and Mid-"wifery for the pass M.B. degree by a Board of "Examiners, consisting of the examiners appointed "by the University and examiners to be appointed "by the Royal Colleges, who shall join in the reports "to the Senate on such examinations. The examiners "appointed by the University may be called upon, if "the Senate so think fit, to make in addition separate "reports. These examinations may, if so agreed on, "be conducted in combination with examinations for "the Royal Colleges. The arrangements for giving "effect to this clause shall be carried out under the "direction of a committee to be appointed in equal "numbers by the Standing Committee for the Faculty "of Medicine and a committee to be appointed by the "two Royal Colleges. Such arrangements to be "subject to the approval of the Senate and of the "two Royal Colleges. This arrangement for joint "examination shall not lessen or interfere with the "duty of the Senate to be satisfied as to the adequacy "of the examinations in all respects." What I want to suggest to you is this. Do you see any objection in the first place to a co-operation on the part of the licensing bodies in Law, say the Inns of Court and the Incorporated Law Society, with the London University for the purpose of conducting joint examinations on which, on the one hand a degree may be given, and on the other hand a license to practise, subject, of course, to the disciplinary conditions. Do you see any objection to that?—That is substantially the same thing as the Society being represented on the Faculty and on the Board of Studies by whom the examinations would be conducted.

17,095. And at the same time you observe it does this. It reserves to those bodies which have statutory or customary powers which they cannot part with an independent position, and at the same time it provides a co-operation between them and the University authorities?—I think the other plan would be simpler and would preserve to the Incorporated Law Society, for example, its disciplinary powers.

17,096. Whichever of those plans you prefer would it not be equally applicable to any other University. Supposing the Inns of Court and the Incorporated Law Society were to concur in the mode indicated by this clause with the University in conducting a common examination, why should not the same principle be applied to other Universities, Oxford Cambridge, Victoria, to any University within the jurisdiction over which the licensing authority extends?—That is a question I have not thought of.

17,097. You have not considered that?—No, I have not considered it.

17,098. Do you see any objection to it?—I think it would be inconvenient in practice.

17,099. Why?—I think it desirable that, the final examination should be conducted by one body; that there should be one certificate; one standard.

17,100. If you had a competent body to deal with the more scientific branches, and a competent body to see that the practical branches are not neglected, what more do you want?—It is hypothetical, is it not?

17,101. No, it is not hypothetical except in this sense; that it is a matter which does not now exist; it is a matter for consideration. Everything which we are inquiring into now is hypothetical in that sense. What is suggested is that the licensing bodies should by co-operating with the Universities save their students and candidates unnecessary courses of instruction and unnecessary examinations, and combine to hold the common examination?—It would be practically impossible for the Incorporated Law Society to be holding examinations all over the country in conjunction with all the Universities.

17,102. You say all over the country. All over the country, so far as appears at present, means four places, London, Oxford, Cambridge, Liverpool; perhaps Wales may come hereafter, and perhaps Birmingham may come hereafter. Let us add, then, some place in Wales, and Birmingham. Why would it be impracticable?—Because the men composing the Council are men in full practice in London.

17,103. But it is not suggested that the men on the Council should themselves conduct the examinations, is it. Is that your practice?—The practising solicitors conduct the examinations now.

17,104. But is not that a practice which might be improved upon?—Yes.

17,105. Then suppose it were improved upon and the examinations put rather into the hands of teachers than of practitioners, the objection which you are now making would fail?—You are speaking of a joint examination?

17,106. Yes, but a joint examination, not by solicitors themselves, but by persons deputed by the Incorporated Law Society, who would be responsible to the Incorporated Law Society for the proper performance of their functions?—I think it is an elaboration of the scheme upon which I had rather not express an opinion.

17,107. Do I understand you to express an adverse opinion or no opinion?—No opinion.

17,108. (*Lord Reay.*) I gather from your evidence and your interesting review of the failure of previous attempts to reform legal teaching in London, that your main object is the establishment of a Law Faculty in a teaching University?—Yes.

17,109. (*Lord Playfair.*) And you do not think that the law may benefit by the experience of other professions of having different licensing authorities in various parts of the kingdom?—I will not say that. I would prefer not to express an opinion upon it.

17,110. But at the present moment you think that London should have an opportunity?—I think so. I look upon this as a substitute for the school of law which we were seeking to establish in 1872.

J. V. Longbourne, Esq.

8 Dec. 1892.

17,111. (*Mr. Palmer.*) Solicitors have all to come to London to get upon the Roll of Solicitors?—Yes, and to be examined.

17,112. To get upon the Roll and become members of the Incorporated Law Society?—Yes, and they have to lodge their articles and do a variety of things which renders attendance in London necessary.

17,113. And does it render a year's residence in London necessary?—It is almost universal. It was contemplated as far back as 1843 that a student should spend two years in London, one with a barrister and the other with a London agent.

17,114. Then he ought to be in London when he is put upon the roll, whatever might happen afterwards?—Yes, I think so.

17,115. (*Lord Playfair.*) Are you aware that the medical men who qualify in various parts of the kingdom must all go upon one roll in London called the Medical Register?—Yes.

17,116. Is there anything to prevent the same thing taking place, even if the education and examination were in different parts of the kingdom?—I should think that a practical detail which might be easily arranged, if it were desirable.

The witness withdrew.

Adjourned to to-morrow morning at 12 o'clock.

Fortieth Day.

Friday, December 9th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
The Right Hon. the Lord PLAYFAIR, K.C.B., LL.D., M.P.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

JOHN V. LONGBOURNE, Esq., recalled, further examined.

J. V. Longbourne, Esq.

9 Dec. 1892.

17,117. (*Chairman.*) I think you wish to correct something you said in your evidence yesterday?—I do. In the evidence which I gave yesterday, I stated that I had no doubt that the substitution of examinations by the Faculty of Law of the proposed University for the examination at present conducted by a Committee of the Council of the Incorporated Law Society would be approved of by solicitors, provided that the Society were adequately represented on the Senate, on the Faculty of Law, and on the Board of Legal Studies of the University, and that in all other respects the lines of the Bill introduced by Lord Selborne in 1874 were followed. As a question asked respecting the incorporation of the Inns of Court, may lead to misapprehension as to my meaning when referring to the lines of the Lord Selborne's Bill, I desire to be allowed to explain that I referred only to Part II. of that Bill, and specially to sections 17 to 32 inclusive, which, with the permission of the Commission, I wish to put in as part of my evidence:—

"(17.) In order to test by proper examinations the proficiency of all such persons as may seek to be admitted to the practice of the law in any of its branches in England, and of such other persons as may be desirous of submitting themselves thereto, and also (as and when sufficient funds may be obtained for that purpose) to provide for the instruction in law and jurisprudence of all such of Her Majesty's subjects as may desire to avail themselves of such instruction, there shall be established in London one body politic and corporate, under the name, style, and title of 'The Queen's General School of Law,' with perpetual succession and a common seal, and with power to acquire, take, and hold, by purchase, gift, grant, or otherwise, lands or hereditaments of any tenure: Provided that the total value of the lands and hereditaments to be so acquired and held by the General School of Law shall not exceed *l.* per annum; such value to be computed with reference to the time or respective times of the first acquisition thereof, irrespectively of any subsequent increase in such value.

"(18.) The said body politic or corporate called Her Majesty's General School of Law, shall consist of a president (who shall be the Lord Chancellor for the time being) and of 38 other persons who, with the

J. V. Longbourne, Esq.

9 Dec. 1892.

President, shall constitute the Governing Body or Senate of the said General School of Law, and of such other members as herein-after mentioned. All barristers-at-law of not less than three years' standing in England, who are members for the time being of any one of the several Corporations of the Honourable Societies of Lincoln's Inn, the Inner Temple, the Middle Temple, and Gray's Inn, respectively herein-before incorporated, and all solicitors whose names are for the time being, and have been for not less than three years next preceding, on the Roll of Her Majesty's Supreme Court of Judicature, shall be members of the said General School of Law. During the interval between the commencement of this Act and the 2nd day of November, 1877, every attorney or solicitor who, before the 2nd day of November 1874, was upon the Roll of Attornies or Solicitors of any court, whose jurisdiction was by the Supreme Court of Judicature Act, 1873, transferred to Her Majesty's High Court of Justice, or to Her Majesty's Court of Appeal, shall be deemed (for the purposes of this Act) to have been, in respect of the same period of time, a solicitor on the Roll of Her Majesty's Supreme Court of Judicature.

"(19.) The Senate of the said General School of Law shall consist (besides the President) of 12 *ex-officio* members, of 16 members to be elected in the manner herein-after mentioned, and of 10 members to be nominated by Her Majesty, her heirs and successors.

"(20.) The *ex-officio* members of the Senate shall be the Lord Chief Justice of England, the Master of the Rolls, the Lord Chief Justice of the Common Pleas, the Lord Chief Baron of the Exchequer, Her Majesty's Attorney-General, Her Majesty's Solicitor-General, the four Treasurers for the time being of the Corporations of the Honourable Societies of Lincoln's Inn, the Inner Temple, the Middle Temple, and Gray's Inn, respectively, the President for the time being of the Incorporated Law Society, and the person who in the year immediately preceding the current year was such President as last aforesaid.

"(21.) The 16 elected members of the Senate shall be chosen as follows, that is to say: Six such elected members shall be barristers-of-law of not less than five years' standing, who shall be chosen by the majority of votes of all barristers-of-law, being members of the said General School of Law, who shall give their votes for that purpose in the manner herein-after in that behalf prescribed; and the other 10 elected members shall be solicitors of not less than five years' standing, who shall be chosen by the majority of votes of all solicitors, being members of the said General School of Law, who shall give their votes for that purpose in the manner herein-after in that behalf prescribed.

"(22.) The elections of the elected members of the Senate (except so far as relates to elections for the purpose of filling casual vacancies) shall be held on the 2nd day of February in every year after the passing of this Act, and the first of such elections shall be held on the 2nd day of February 1875. So far as relates to the six members of the Senate to be elected by barristers, the votes of the barristers belonging to the several Corporations of the Honourable Societies of Lincoln's Inn, the Inner Temple, the Middle Temple, and Gray's Inn respectively, shall be taken and received in the common halls of those respective Societies, by and under the superintendence of the treasurers of the same Corporations respectively, each of whom shall make a return to the Lord Chancellor, as President of the said School of Law, of the number of votes given by barristers duly qualified in the hall of his Society or Corporation for each of the several persons for whom any such votes may have been given; and the Lord Chancellor shall cast up the total number of votes so given in the halls of all the said four Societies for any such persons respectively, and the persons whom he shall find to have received the majority of such votes (according to the number of members of the Senate to be then chosen), shall be deemed duly elected. So far as relates to the 10 members of the Senate to be elected by solicitors, the votes of solicitors duly qualified shall be taken and received in the Common Hall of the Incorporated Law Society, by and under the superintendence of the president for the time being of that Society; who shall certify in writing to the Lord Chancellor, as President of the said School of Law, the number of votes given by solicitors duly qualified for the several persons for whom any such votes may have been given; and the persons who shall have received the majority of such votes (according to the number of members of the Senate to be chosen) shall be deemed duly elected. In any case in which there shall be an equality of votes given to two or more persons, all of whom cannot be declared to be elected, the Attorney-General (as to the members of Senate elected by barristers) and the President of the Incorporated Law Society (as to the members of senate elected by solicitors) shall have power to decide, who among the persons so receiving an equal number of votes shall be deemed elected.

"(22*a*.) The votes of barristers and of solicitors for the members of Senate to be elected by them respectively, may be given either personally or by proxy: Provided always, that every proxy to be used at any such election shall be in writing, signed by the barrister or solicitor who may be desirous of voting thereby, and shall contain, at the time of the signature thereof, in the proper handwriting of such barrister or solicitor, the names of the persons for whose election, as members of the Senate, he desires to give his vote, and also the name of the person authorised to deliver the same as proxy for such barrister or solicitor; and no such vote by proxy shall be received unless the same, at the time and place, appointed for the election, be personally delivered by the proxy so named.

"23. One half of the six members of the Senate who, at the election to be held on the 2nd day of February 1875, shall have been chosen by barristers (such half to be determined by ballot, except as to any who may desire them to retire), shall go out of office on the 2nd day of February 1876, and the other half shall go out of office on the 2nd day of February 1877. One half of the 10 members of Senate who, at the election to be held on the 2nd day of February 1875, shall have been chosen by solicitors (such half to be determined by ballot, except as to any who may desire them to retire) shall in like manner go out of office on the 2nd day of February 1876; and the other half shall go out of office on the 2nd day of February 1877. All members of the Senate who may be elected at any annual election, either by barristers or by solicitors, after the election to be held on the 2nd day of February 1875, shall hold their offices (unless they respectively either die or retire) for two years from the day of their election. Every vacancy arising by the expiration of the term of office of a member of Senate elected by barristers shall be filled up at the annual election of members of the Senate by barristers, and every vacancy arising by the expiration of the term of office of a member of Senate elected by solicitors shall be filled up at the annual election of members of the Senate by solicitors. Every member of the Senate so going out of office from time to time, shall be capable of re-election.

"24. If, during the interval between one annual election and another, any vacancy shall occur by death, resignation, or otherwise, among the members of the Senate elected by barristers, such vacancy may be supplied until the next succeeding annual election (but not for any further period) by the nomination of a duly qualified person by the votes of the greater number of the remaining members of the Senate for the time being elected by barristers; and if during any such interval any such vacancy occur among the members of the Senate elected by solicitors, such vacancy may be supplied until the next succeeding annual election (but not for any further period) by the nomination of a duly qualified person by the votes

of the greater number of the members of the Senate for the time being elected by solicitors.

"(25.) The 10 members of the Senate nominated by Her Majesty, her heirs and successors, may be such persons (other than practising barristers or practising solicitors) as Her Majesty, her heirs and successors, may think fit. Of the 10 members of the Senate to be first so nominated, one half (to be determined by ballot, except as to any one who may desire to retire,) shall go out of office on the 2nd day of February 1876; and the other half shall go out of office on the 2nd day of February 1877. All members of the Senate who may be so nominated after such first nomination (except so far as relates to nominations for the purpose of filling casual vacancies) shall hold their office (unless they respectively die or retire), for two years from day of their nomination. All such nominated members of Senate, whose term of office may expire, shall be capable of being again nominated; and all vacancies among the members of such nominated members of Senate which may happen by death, resignation, or otherwise, before the time when the term of office of each person making any such vacancy would expire, may be filled up by the nomination of a new member of the Senate, who shall hold his office, by virtue of such nomination, for the residue of the time during which the person making such vacancy would have continued in office, if such vacancy had not occurred.

"(26.) It shall be lawful for the Senate from time to time to establish in the said General School of Law such professorships or lectureships in any branches of law or jurisprudence, or in any subject connected therewith, and to appoint such professors and lecturers therein, upon such terms as to tenure of office, duties, and emoluments, and to found and establish in the said School of Law such scholarships, bursaries, exhibitions, and prizes for proficiency in legal knowledge, as, having regard to the means at their disposal, from time to time they shall think fit. And the Senate shall also have power to regulate the course of instruction to be given by any such professors or lecturers, and the terms upon which students may be admitted thereto, and the conditions of tenure of and other qualifications for any such scholarships, bursaries, exhibitions or prizes, as aforesaid: Provided always, that all instruction to be given by such professors or lecturers, and all the examinations in any branch of legal knowledge which may be from time to time conducted by or under the direction of the said Senate, shall be open to all Her Majesty's subjects, upon payment of such reasonable fees and compliance with such other reasonable regulations, as the Senate with the concurrence, as to fees herein-after required, shall from time to time determine.

"(27.) It shall be lawful for the Senate of the said School of Law from time to time to agree with any one or more of the Corporations of the Honourable Societies of Lincoln's Inn, the Inner Temple, the Middle Temple, and Gray's Inn (which corporations respectively are hereby empowered to enter into any such agreements), or with any other societies or persons having lawful power or authority in that behalf for the foundation or endowment in the said General School of Law upon such terms as may be agreed upon, of any professorship or lectureship, or of any scholarship, bursary, exhibition, or prize for proficiency in any branch of legal knowledge, and as to the stipends, duties, and emoluments of any such professors or lecturers, and the mode of their nomination and appointment: Provided always that the instruction to be given by any such professor or lecturer shall be open to all Her Majesty's subjects on the same terms as if the Senate itself had out of funds under its own control founded or established such professorship or lectureship.

"(28.) From and after the time appointed for the commencement of this Act, no person who shall not have been admitted as a student of one of the Inns of Court before the passing of this Act shall be called to the Bar, or be admitted to practise as a conveyancer or special pleader under the Bar, without receiving from the said General School of Law a certificate of proficiency in legal knowledge, sufficient to qualify him for practice as a barrister-at-law, or as a conveyancer or special pleader, as the case may be; which proficiency shall be ascertained by his having passed, to the satisfaction of the examiners, such examinations or examination as shall be appointed for that purpose by the authority herein-after mentioned; and any person who has received such certificate, (including any such person who may have been admitted as a student of one of the Inns of Court before the passing of this Act,) shall be deemed, so far as relates to proficiency in legal knowledge, to be qualified to be called to the Bar, or to be admitted to a practice as a conveyancer or special pleader (as the case may be), without being required to pass of undergo any other compulsory examination in any branch of legal knowledge: Provided, always, that such certificate shall not dispense with or render unnecessary any other qualification (save as aforesaid) which may lawfully be required for the call of any person to the Bar, or for his admission to practise as conveyancer or special pleader.

"(29.) From and after the time appointed for the commencement of this Act, no person who shall not have been articled to an attorney or solicitor before the passing of this Act shall be admitted a solicitor of Her Majesty's Supreme Court of Judicature, without receiving from the said General School of Law a certificate of proficiency in legal knowledge sufficient to qualify him for practice as a solicitor; which proficiency shall be ascertained by his having passed, to the satisfaction of the examiners, such examinations or examination as shall be appointed for that purpose by the authority herein-after mentioned; and every person who has received such certificate, (including any such person who may have been articled to an attorney or solicitor before the passing of this Act), shall be deemed, so far as relates to proficiency in legal knowledge, to be qualified to be admitted a solicitor of the said Supreme Court of Judicature, without being required to pass or undergo any other compulsory examination in any branch of legal knowledge: Provided always, that such certificate shall not dispense with or render unnecessary any other qualification (save as aforesaid) which may lawfully be required for the admission of any person to be a solicitor of the said Supreme Court.

"(30.) The examinations held in the said General School of Law for the purpose of granting certificates of proficiency in legal knowledge to persons desirous of thereby qualifying themselves to be called to the Bar, or to be admitted solicitors of Her Majesty's Supreme Court of Judicature, shall be open, on payment of such reasonable fees and compliance with such other reasonable conditions as shall be from time to time required by the Senate of the said General School of Law, to all Her Majesty's subjects who may be desirous of obtaining such certificates, whether they shall or shall not have attended the lectures of any professor or lecturer in the said General School of Law, or shall or shall not have submitted themselves to any prior or other examination therein; and no examiner by whom any examination for the purpose of granting any certificates of proficiency may be conducted, shall be at the time of such examination, or have been during any part of the three years next preceding the same, a professor or lecturer in the said General School of Law.

"(31.) The Senate shall have power to make all necessary byelaws, rules, and regulations for determining from time to time the number and course of the examinations to be holden in the said General School of Law, and the times of and manner of holding such examinations, whether for the purpose of granting any such certificates of proficiency as aforesaid, or for any other purpose relating to the advancement or encouragement of legal education; and also to make like regulations as to the form and manner of granting certificates of proficiency in legal

J. V. Longbourne, Esq.

9 Dec. 1892.

knowledge, as well to persons desirous of thereby qualifying themselves for practice as barristers or solicitors as to other persons, and also as to all such honorary and other distinctions as they may deem it expedient to grant from time to time in the said General School of Law; and the Senate shall likewise have power to appoint and remove examiners for the purpose of conducting the examinations in the said General School of Law; and to charge and take, as well for admission to any lectures of professors or lecturers in the said General School of Law, as for admission to all or any of the examinations to be holden therein, and for the grant of any such certificates of proficiency as aforesaid, such reasonable fees as the Senate, with the concurrence of the Lords Commissioners of Her Majesty's Treasury, may from time to time direct.

"(32.) No byelaw, rule, or regulation shall be made by the Senate as to any of the examinations or certificates of proficiency in legal knowledge which may be required to qualify any person to be called to the Bar, or to practise as a conveyancer or special pleader, or to be admitted a solicitor of Her Majesty's Supreme Court of Judicature, except in the manner and with the concurrence herein-after provided (that is to say): in the passing of every such byelaw, rule, or regulation relating to the examinations or certificates required to qualify any person to be called to the Bar, or to practise as a conveyancer or special pleader, the greater part of the members of the Senate present at such meeting, who are barrister-at-law, shall concur; and in the passing of every such byelaw, rule, or regulation relating to the examinations or certificates required to qualify any person to be admitted a solicitor of the Supreme Court of Judicature the greater part of the members of Senate present, who are solicitors, shall concur: Provided always, that notice in writing of every such byelaw, rule, or regulation as in this section mentioned which any member of the Senate may desire to propose, shall be given by such member to the Lord Chancellor, as President of the said General School of Law, and the Lord Chancellor shall thereupon cause a copy of such notice to be sent, through the General Post, to every member of the Senate, and shall appoint a time, (not being less than fourteen clear days from the posting such notices to all the members of the Senate,) and also a place for a special meeting of the Senate to consider such proposed byelaw, rule, or regulation; and at such meeting any amendment or modification of such proposed byelaw, rule, or regulation may be agreed to; and if at the meeting so appointed there shall be a difference of opinion between a majority in number of all the members of the Senate then present, and a majority in number of those whose special concurrence therein is by this section made necessary, such meeting shall thereupon stand adjourned until the fourteenth day next thereafter following, and the Lord Chancellor shall cause notice of such adjournment and of the cause thereof to be sent through the General Post to every member of the Senate, and if at such adjourned meeting there shall still be such difference of opinion as aforesaid, and if the greater number of those members of the Senate then present whose special concurrence therein is by this section required shall be favourable to such byelaw, rule, or regulation, or to any amendment or modification thereof which may be then proposed, it shall be lawful for any member of the Senate to appeal from the decision of the majority at such adjourned meeting to the visitor, who shall have power and authority to decide such appeal, and to order, if She shall so think fit, that such proposed byelaw, rule, or regulation, with or without any amendment or modification thereof, shall be adopted; and upon any such order being made by the Visitor, the same shall have and receive full force and effect in the same manner as if such byelaw, rule, or regulation, with or without such amendment or modification thereof (as the case may be) had been duly passed and adopted with the concurrence required by this section by the Senate of the said General School of Law."

The witness withdrew.

A. V. Dicey, Esq., Q.C., M.A.

ALBERT V. DICEY, Esq., Q.C., M.A., examined.

17,118. (*Chairman.*) I think you are professor of law at Oxford?—I am Vinerian Professor of English Law.

17,119. You have been concerned in lecturing to the Incorporated Law Society?—Yes. That is about 20 years ago, so I have no very recent experience of it. Also I have lectured at Manchester and Liverpool for the Law Associations there.

17,120. You are pretty well acquainted with the American Universities also?—I know something of them. That, again, is a long time back, but I have kept up a connexion with American teachers. I think I know the Massachusetts plan of teaching.

17,121. I will ask you first about your Oxford professorship. The degree of law at Oxford is a good deal sought after now, is it not?—Yes, a good deal. No doubt you are aware that there are two different things. There is the examination in the School of Jurisprudence which corresponds to the ordinary classical examination for the B.A. Degree, and there is also what is now a good deal sought after in its way, the B.C.L. degree. A person who has taken the degree of B.A. or M.A. in any School may take it.

17,122. The B.C.L. indicates a more general knowledge of law, does it?—It is a very thorough examination in law. You will find it covers both Roman Law and English Law.

17,123. Do many people attend your lectures who do not look forward to the Bar as a profession?—As far as I can see not many. I should think at least three-fourths intend vaguely or not to go to the Bar or into solicitors' offices—to the law in some form.

17,124. Do you think that any degree that could be founded by a University in London would be sought after by the same people who seek after it at Oxford?—I should not like to say that, because a good number of young men at Oxford simply take up law because they think it is on the whole one of the easiest courses they can pursue. Young men find that the examination in the Honour School of Literæ Humaniores gives them more work than they want, and they go into the Law School or the History School.

17,125. It is as useful a study as they can have, is it not?—Yes.

17,126. It is rather a good thing to encourage them to take it up?—We think we suffer from people taking up law without any idea of energetically working at it. I do not wish to say that I should like to have the number of such students increased. It must be said that all the best men at Oxford quite rightly go into the Classical Schools, *i.e.*, School of Literæ Humaniores. There is no doubt that the work is harder, there is a much larger number of teachers and so forth—much larger prizes also.

17,127. The degree might be so framed that it would be of immense advantage to commercial men, and men who look forward to a political career?—It might be a very considerable advantage, and is, I conceive, to anybody going to the Bar or into a Solicitor's office. The B.C.L. examination is as good a preparation as anybody can get for making effective work in Chambers.

17,128. Do you think the study of law could be enlarged and divided into different classes, some of which would be more useful to outside men, men who

do not intend to be lawyers?—I cannot say that I have considered that topic carefully enough to give an opinion upon it. My whole view has been so very much confined practically to men who I knew would go to the Bar in some form or other.

17,129. I suppose it would be of advantage to have a good degree given by a London University and it would be much sought after?—I have no doubt about the advantage of having a London University where one could study law as a separate subject. What is the worth of degrees depends upon different considerations. It is a subject about which I do not entertain any certain opinion.

17,130. Have you turned your attention at all to how, in establishing a Faculty of Law, we should act with the Inns of Court and bring them in?—I have no doubt that you would never make the Faculty a success unless you in some way or other combine with the Inns of Court, but I should think also that it is very improbable that anything but Parliamentary pressure will bring about the desired combination. No body of persons in England has ever been reformed except by a pressure of that kind.

17,131. They would cling very tightly to their right of giving the qualification to practise?—I should have been glad if you could for that reason have combined the two together so as in some way or other to connect them with the degree, and then make the degree the qualification for practice. I have seen suggestions that the two might be kept apart. If the degree was worth having I should have thought it was really good enough for the qualification for practice. Until comparatively recent times there had been no security that a person when called to the Bar should know any law whatever.

17,132. The only objection you see is that you think the Inns of Court would never be brought to acquiesce?—I think they might perhaps do it under moral pressure.

17,133. But short of that, supposing that they cling to their present monopoly and that the degree is really only an ornamental matter, and a thing which will give prestige to a man without giving qualification, even then it would give weight to the degree if the Inns of Court co-operate?—If the Inns of Court co-operate, I should think the degree would practically come to be a means of approach to the Bar. It would certainly soon get to be a *sine quâ non* for being called to the Bar.

17,134. The great thing would be to get their co-operation in the first instance?—I may add that at Oxford we should be very glad indeed if the Inns of Court would take the degree of B.C.L., for instance, as a qualification for a call to the Bar, and we should be ready to take any steps that they liked to ensure the examination being sufficient. The truth is that the B.C.L. examination is more rigid than the examination required for a call to the Bar. I think the Inns of Court should possess the means by appointing members on our boards to see that the education given at Oxford was a good legal education.

17,135. They might to co-operate in an examination which would give the qualification?—Yes. I should like them to be compelled to co-operate.

17,136. And the same with regard to the Victoria University and any other?—Yes, any University as to which they were satisfied that good legal teaching was there provided.

17,137. You think that in the new University of London the Inns of Court ought to form part of the Faculty?—I think probably it would be advisable for them to form part of the Faculty. While we are on the topic I should like to say that I think it extremely important to the teaching of law that if there is a law degree given in London which is an admission to the Bar, a law degree at any University where there is a systematic law school should also be an admission to the Bar; otherwise the existence of a Law University in London, which in itself I think an extremely good thing might produce a very injurious effect upon the study of law at Oxford. If there is a Law University in London the degrees whereof are a qualification for admission to the Bar, law degrees at other Universities ought to have the same effect.

17,138. You are speaking on behalf of Oxford?—Yes, I am speaking on behalf of Oxford; and on behalf of any other University where they have a regular Law Faculty.

17,139. You are also interested in the Incorporated Law Society. Perhaps they would be more willing than the Inns of Court to meet the new University and to transfer their powers?—I should think if they could be induced, as I think they might, to do that, it would be a gain to both parties.

17,140. You would like to see then the qualification for the profession of solicitors also given by all the well-established good high-standing Universities?—That I should like to see with such restrictions as would be necessary to insure the kind of teaching which is needed.

17,141. Some of the Incorporated Law Society wish to confine it to Universities in which they were themselves represented on the Senate, and in the Faculties, and not to give it to others?—Then I should think it not unreasonable to allow the Incorporated Law Society representation of some sort or other upon the examining body at Oxford. I think if we had at Oxford a right to admit a man to the profession of a solicitor on getting his degree, it would be reasonable that the Incorporated Law Society should have a certain number of representatives on the Board of the Faculty. I do not think there would be any difficulty made at Oxford in carrying out an arrangement of this kind. In fact one of the advantages I contemplated from this London University scheme, was that any scheme of combined examination adopted there would be followed by any other University. In the interests of Oxford we should follow it.

17,142. Have you thought of the question of establishing a London teaching University?—I have only such very general notions upon it, that I should not like to say more than this; I think it would be a very great advantage to have a Law School established in London, because I do not believe you will ever have a large law school anywhere else in England, and also because the combination of teaching, with, if not practice, at any rate the observation of practice, would be most advantageous. The difficulty of law teaching at Oxford is to give it any kind of reality. You speak to a man about a deed and about bills of exchange. He has never executed a deed and does not know what a bill of exchange is, and the whole thing seems to him to be so many words. If you could have men to teach who are either reading in Chambers or attending the Courts, it seems to me that the teaching would be very much improved. It would be a great gain to both teachers and pupils.

17,143. He might prepare for a University degree or a University course while in Chambers?—Part of a man's work for a degree might be done while in Chambers. But it is certain that a man would gain twice as much by going into Chambers if he had learnt the elements of law before.

17,144. Do you think that ought to come beforehand?—Part of the teaching might coincide, I think, with reading in Chambers.

17,145. And in the same way with solicitors?—I assume it would be as good for solicitors, but I speak with confidence only about a barrister's Chambers, because I have been in those myself.

17,146. You know a great deal about the American system?—About 20 years ago I was over in America and paid a good deal of attention to the character of legal teaching in America. I have since kept up friendly relations with many American law professors.

17,147. In America they attach a great deal of importance to the degree, do they not?—They attach a great deal of importance to a good degree, or at any rate to success in the Law School, and I believe mainly for the reason that such success is practically of great professional advantage. You thereby get

A. V. Dicey, Esq., Q.C., M.A.

9 Dec. 1892.

known among the men who are going to be solicitors throughout the States. I am told that in New York, if they wanted a young partner in a solicitor's office, they used constantly to send to a distinguished American professor there, and ask him to recommend his best man. A good deal of their teaching is carried on by discussion in the Moot Courts, and by that means a man gets a reputation. The solicitors know whether a man can argue well, whether he is supposed to be a good speaker and the like.

17,148. That has grown up by itself without any State interference?—That has grown up of itself, it is true, but it is not without State help. I mean State help in the sense of University help. The School I am thinking of is Harvard Law School.

17,149. Are they endowed?—They have the University endowments, I think, but I do not speak with knowledge upon that subject.

17,150. The qualification is really, I believe, a formal thing?—The qualification is formal. I cannot conceive that there could be a doubt about any man who had done well at the Harvard Schools, getting on well. I had a young student over a little while ago, he was still a student, but it was quite obvious that he knew a great deal more law than is generally know here by students going into a barrister's Chambers.

17,151. The reason that it assumes such a high position in America is that the men get on by having it?—I think, that is really the history of it.

17,152. It grew up of itself, I suppose. Nobody can do more than start a thing of that sort?—I think that was so. The only point that makes me speak with hesitation about it is that they had very eminent teachers a century or 60 years ago. It was then Story and Kent delivered lectures. Therefore, the Law Schools in America possess a reputation which is unlike anything which is possessed by any Law School here.

17,153. Were they at Harvard? — Story was professor at Harvard, I rather think after he ceased to be a judge, and Kent lectured at New York. Therefore, there must have been already a demand for legal teaching of a kind that did not exist in England.

17,154. They gave a value to the degree?—Yes; I may remark that Blackstone's lectures were given about 50 years earlier. In each case the teacher raised the reputation of the teaching.

17,155. Then your experience of America and your experience is that the man who begins life in America as a practising barrister has a greater knowledge of his business than an ordinary English barrister?—I should think he had a greater knowledge of law. I do not doubt that any one of these students who have gone respectably through the career at Harvard does know more law than students generally do here.

17,156. And that comes from the teaching?—Yes, I think it is more the teaching than the examination from what I hear. I doubt whether the degree (by which I mean the result of an examination, *e.g.*, at Harvard) counts for nearly so much as the fact of attending the classes, being well known among future solicitors, and also having had the teaching of very eminent professors.

17,157. Supposing a man wants a partner, he does not take necessarily the man who gets the highest honours, but the man who is thought most of?—I was told the other day that Judge Gray, who is the Massachusetts Judge, in the Supreme Court of the United States, has every year or every two years, a new secretary, and he takes him from the men who have done best at Harvard, so as to give in effect a very practical prize to eminence at Harvard. I do not think it is got by examination. I believe the best man of the year is recommended by the professor.

17,158. If we could get our judges to take their secretaries in that way from the University perhaps it would stimulate the law students?—I think so. But even as it is, our Law School at Oxford is already producing a practical effect. I have known cases where I could have recommended men to be taken as "devils" because of their knowledge of law on going up from the University.

17,159. Is there any other point on which you could give us evidence that would be useful?—No, except this. I noticed in an article by Mr. Crackanthorpe, in the "Nineteenth Century,"* there is a division into speculative, and what you may call, practical law. He divides legal teaching, I think, into four heads, two of which are suited for speculative or professorial teaching, and two of which are more or less of a practical character and only to be learnt suitable for the practice of law. I do not believe you can divide practical teaching from theoretical teaching in that way. The truth is, that when you come to work the matter practically out, legal instruction does not admit of this kind of division. Take the law of contract, you do find that there are a certain number of principles to be educed from the cases, and I think the business of the professor is to make these principles clear. But you cannot distinguish between theoretical and practical teaching, because if the principles taught are sound they are based upon actual cases, and explain the result of actual cases. I am rather anxious to protest against what seems to me to be an error, because I think it is very likely to lead to an unsatisfactory division of study. It is quite true that no professorial teaching can supply what you get in Chambers. You might as well attempt to teach medicine without the student going into a hospital as to attempt to teach law without any relation to practice. I think theory and practice cannot be divided in the way I understand to be attempted in Mr. Crackanthorpe's article.

17,160. If you were to train one man for a life of general utility and another really for the profession of the Bar you would not teach him quite the same branches of law, would you?—I should teach each of them in very nearly the same way, because I think all they can learn from the professor with advantage are general principles of law, and the general principles rightly explained would be equally useful to both. I should be very sorry to do anything else. It may be that I have no gift for vague theoretical teaching. What really confirms me in my view is that the greatest law books I have read are all of that character, *i.e.*, professorial expositions of legal principles. Story's books are perfect models of the exposition of English Law in popular language.

17,161. Do you think it is better than any book we have got?—Yes, I think it is better. The only book we have of real literary celebrity is Blackstone's Commentaries. Those have great merit, but I do not think they are really as good as Story's works.

17,162. You think we have never had any really good books since that?—Yes, and they were delivered at lectures. That is really what it comes to.

17,163. I believe there has been some report of the Standing Committee of the American Bar Association in America that is rather finding fault with the legal education there as being too practical and technical?—So I am told. I have not seen the report myself but I think that is very possible, because at Harvard, which I fancy gives the tone to American teaching, they have taken to teaching almost exclusively by what they call discussion of cases. The professor gives his class say twenty cases on some point in the law of contract. Then they discuss and argue on those cases and draw inferences. I have no doubt this teaching is valuable. But at Harvard, I think, they hold that this is the only true method of teaching law. What we should call lectures they hold to be a mistake. I think I am not misinformed about that, because lately I saw one of their most eminent students, and talked to him on the subject.

17,164. These discussions are almost unknown in England?—They are almost unknown in England. In America they are found very valuable. I have had

* 32, *Nineteenth Century*, pp. 773, 786.

small classes in which I have tried the system. It will do very well for small classes, but I have found that in a large class at Oxford the men will not ask questions.

17,165. At Harvard they manage to divide them up into small classes ?—No, at Harvard they are large classes. I have never seen the system carried on, and I think American young gentlemen who are eager to get practical work answer more easily than Englishmen. But even there there is a little difficulty in bringing the whole class into the discussion. So I am told. But I am very anxious to see how the system works.

17,166. You are trying to introduce it ?—I have tried it once or twice for small bodies. I found it very successful when you get five or six men round the table, but it is not very successful if you try it with a larger number.

17,167. (*Mr. Anstie.*) There is one point which you first touched upon, which I should like to ask your further consideration of. You suggested that the degree should be the sole avenue, and the sufficient avenue, to call to the Bar and admission to solicitors' practice. Would you desire to deprive the bodies now responsible for the Roll, if I may so call it, of their disciplinary duties ?—I am speaking mainly of the call to the Bar. I do not know enough of solicitors' practice to speak confidently upon the matter. I know of no really disciplinary duties which the Benchers exercise. What really happens is this: All the discipline I have ever been through is eating 12 dinners in the Hall of the Inner Temple at a certain expense of time and money, and attending two sets of of lectures. Of course there are more stringent examinations now than in my time, but, as far as discipline goes, I doubt whether there is any discipline involved in being called to the Bar.

17,168. But you do not doubt that there have been cases both at the Bar and in the profession of solicitors, where admission has been refused to persons on certain grounds ?—I do not doubt that there may be such, but they have been very rare.

17,169. Then there are cases of disbarring ?—I think we ought to distinguish between them and the cases of which we are speaking. I have no doubt that some body of persons ought to have the power of disbarring, and ought to exercise the power perhaps more frequently than they exercise it now. I do not object to the Inns of Court exercising this power, but I do not see any particular appropriateness in their exercising it. The judges, for instance, might disbar. But I have no objection whatever to the Inns of Court exercising that power.

17,170. Somebody must have the power ?—Yes.

17,171. The Inns of Court have it now ?—Yes; and, therefore, I should be quite willing to leave it in their hands. But is it really a practical question ? I speak merely from conjecture, but I suppose that the number of persons disbarred is very small, and that the cases of peesons being disbarred are cases of very flagrant misconduct.

17,172. Your interest is in the educational part of the matter ?—Yes, my interest is in the educational part of the matter. I was really thinking of that. If I were to make a suggestion I should suggest that the discipline of the Bar might with possible advantage be increased.

17,173. It might embarrass the question if we mingled disciplinary with educational considerations. You would not desire that we should do that ?—No; I believe as far as a call to the Bar goes, discipline, as detached from a certain amount of education, does not exist. That does not apply to solicitors.

17,174. From what you say with respect to the degree in America, I think I may assume that the degree is by no means taken by all practitioners ?—I think not, but I do not speak with certainty. I think myself they go for a certain time to Harvard or to law schools at New York, or the like. I do not think the degree itself, from the way I hear Americans talk about it, is in the United States of nearly so much consequence as the having attended law classes and the being known to have attended them.

17,175. It varies very much in the different States ?—Yes; I should not like to speak of any of the States, except Massachusetts, of which I happen to know something.

17,176. (*Chairman.*) Is Harvard confined entirely to Massachusetts men ?—No, I think not. Men go there from all parts of the United States. I think men from Massachusetts would be in a majority, but I am pretty sure there is nothing to hinder students coming from any part of the United States.

17,177. (*Mr. Anstie.*) The judges still take part in giving lectures, do they not ?—I do not know whether they take part still. I am pretty certain that there are ex-judges, at any rate, who have lectured in Harvard and other places. I do not know whether any man lectures being a judge. I am inclined to think that Story delivered some of his lectures at a time when he was a judge of the Supreme Court.

17,178. And Kent ?—The other day I was rather surprised to find that Kent's lectures were delivered after he was compelled to retire from the New York Bench by a limit of age.

17,179. We had a statement made to us by Professor Emmott, of the Johns Hopkins University, that a judge actually on the Bench gives a course of lectures there from time to time ?—I should quite have supposed so. I have no knowledge which I can put in the least against any statement of that kind. It confirms what I suppose, but I have not knowledge enough to say so.

17,180. It has a direct tendency to raise the tone ?—Yes ?—I think it would be of immense advantage, if it were possible, to get that done in England.

17,181. You refuse to accept the supposed distinction between speculative and practical. Not contesting your views on that subject in the least, might not there be with advantage certain courses laid out which would be useful to persons not intending to engage in professional work such as diplomacy and public law ?—I am glad to have been asked that question. I expressed myself too hastily. Courses of that kind might have considerable advantages. For instance, there is the amount of law which a country gentleman might want to know as a magistrate, and so forth. You might, no doubt, arrange courses with a view to particular pursuits or particular lines of career with advantage. I think that is quite true.

17,182. International law would not be sought by the ordinary practitioner, but it might be of great service to people engaged in diplomatic pursuits ?—It is, of course, true that teaching might be adapted to the wants of different classes or pursuits such as that which you instance of a diplomat.

17,183. There are other classes of subjects which perhaps more strictly belongs to pure science, such as historical jurisprudence. Might not that subject be advantageously carried to a very considerable degree of perfection and research ?—Yes, they might, no doubt.

17,184. Without expecting that those who went in for the ordinary degree, or even perhaps honours, would be able to follow it to its full extent, would it not be of advantage to have Chairs in which a subject like that could be investigated ?—I am not quite certain whether there would be a great advantage in separating off particular subjects. I think I have noticed as a matter of fact that the most eminent law professors have been really professors who, whilst teaching some special legal topic, have at their choice pursued their own method. I should have doubted whether there was any very great advantage at the present moment in separating these subjects from the ordinary teaching of the law.

17,185. Let me take the instance of Sir Henry Maine. He was one of the most distinguised writers, as we all know, and at the same he was a man who was in no sense in touch with practice ?—I think he would have been very much improved, even as an author, if he had been a little more in touch with

A. V. Dicey, Esq., Q.C., M.A.

9 Dec. 1892.

practice. I have in my mind that if you compare Maine's books, with even the very little I know of Savigny's writings, you may trace a tendency on the part of Sir Henry Maine to wander off into ideas not always sufficiently founded on practical knowledge of law. Sir Henry Maine, no doubt, in any case would have tended towards the speculative side of legal teaching, but I think it would have been a gain if the Chair had connected him with some special branch of legal teaching; he would have taught any department of law admirably, and I think his writings would have gained if they had been composed in connexion with such teaching.

17,186. You compare him with Savigny. He wrote upon current law in his best known books. Sir Henry Maine did not profess to write upon current law?—No, I think it rather a pity that he did not, because I am quite sure that he would have done it with great ability.

17,187. Is there not some advantage in bringing within the region of study matters of historical investigation and speculation, which can be hardly brought into close relation with existing law?—I think that might be done by having a legal Chair, which was distinctly meant for historical treatment of the subject.

17,188. That is the idea?—Yes. But it is fair to say that I do not myself attach so much importance to the historical method of teaching as is common to persons who are much better informed than I am. I may be wrong, but I do not attach the importance to historical teaching that is attached to it by some most competent judges. Though I see very eminent lawyers entertain an opposite opinion, I think law is not always so well known when you look at it historically as when you consider it with a view to understand English law as it exists at the present day. I am inclined to think that the benefits of the historical system are exaggerated.

17,189. At any rate you would desire to see any historical or speculative work of that kind brought, so far as possible, into connexion with living law in order that one may interpret the other?—Yes, perhaps that is the fairest way of putting it. Or to put it in another way, I have sometimes thought it would be an advantage to have every professor at a University either a professor of English law or a professor of Roman law. You might separate them to this extent, and then allow the genius of the particular teacher, and the requirements of the place to fix what particular line of teaching he adopted. I do not see that Sir Henry Maine, for instance, would have suffered anything if he had been simply appointed professor of law. Of course, he would have tended towards the line that suited his intellect or his genius best. You might create a body of law professors and leave them to distribute the subject with reference to the gifts of the particular teachers.

17,190. And there ought to be teachers who would not occupy professorial Chairs—a well organised body of readers?—Yes.

17,191. With respect to those you would require more strict division?—Yes.

17,192. Then would it be your view that the professor answerable for his subject might have himself the distribution of parts to those who assist him?—I have not really considered the topics sufficiently to discuss the subject. So much would depend upon the particular place. I think, if you gave me a University which I knew, I could judge, to a certain extent, how far the professors were a body capable of distributing the teaching of law properly. I should not like to answer the question generally.

17,193. All those questions are matters of detail which must be left?—I had rather, if I were drawing up a scheme, leave as much unsettled as I could, because I think the things of which we are speaking are best arranged when left in the hands of the teachers. Given eminent teachers they would arrange those matters among themselves, and I had rather that they were not fettered as to the mode in which they arranged them.

17,194. (*Mr. Palmer.*) I gather from what you have said that you are quite in favour of the same teaching and examination being open to solicitors as to barristers?—I never could see any reason why it should not be so.

17,195. And you are in favour of the University givings its degree at any rate to barristers and not leaving it to bodies like the Inns of Court. Bodies like the Inns of Court if they continued to call to the Bar might accept them on the examination of a University?—I quite feel that it would be very undesirable that the proposed University should assume any attitude which you might call hostile to a body which has a great historical position, and which has been doing a good deal of recent years for education. I would sacrifice a good deal at starting to keep harmony between the University and the Inns of Court. Otherwise I agree with what has been stated.

17,196. There is another very sensitive body—the profession of medicine. There the suggestion has not been unfavourably received that there should be what was called a conjoint examination between the Royal College of Physicians and Surgeons and the University, the University requiring such further examination as may be desirable for a degree, and the Royal Colleges giving such further examination as may be desirable for the license to practice. I do not hold out anything like the same analogy, but would you see any objection to one body taking the results of the examinations of the other or to some conjoint arrangement of that kind between the University and the existing licensing bodies?—I should see no objection whatever assuming, as one perhaps may assume, that both parties meant really and *bonâ fide* to carry out the new system. But whenever you deal with an established body what you find is that the established body never does want, and perhaps in its nature never can want, to carry out any new system. It is extremely difficult to get an old institution and a new institution to act together. There is a great deal more truth in the old saying with regard to not sewing together the old cloth and the new than people sometimes think. In England we are always trying to do it and we have splits. If it could be done I think a combination between the University and the Inns of Court would have a good effect. If you can get eminent practising lawyers or judges to take a really active part in the University I would sacrifice anything of a smaller kind to promote that, because I am sure it would very much improve the character of the University teaching.

17,197. For all Faculties within a University there must be some distinction taken between what I may call inside and outside the degree. With reference to what you were saying to Mr. Anstie, I quite gather that the teaching of the principles and the practice of law for what I may call inside the degree, though not differing from what may be called outside, would have to be conducted on a regular basis of education, whereas in cases outside the degree you would have to look to further research and post-graduate instruction. Chairs for those branches of the law which are not generally taught on the Common Law or Equity side, such as general jurisprudence or international law, might be established so that there would be that distinction between the inside practice and the outside which might lead to the outside practice being filled by Chairs specially endowed?—I am not quite sure that I fully understand what is meant by the inside practice and outside practice.

17,198. I meant that in all other faculties there is something special beyond the actual first attaining the University degree provided for by special Chairs and special endowments which is a valuable thing, and distinct from the teaching which ends with the degree?—That, I think, probably is so.

17,199. (*Mr. Rendall.*) Will you tell me quite broadly and generally, what is the constitution of the Law Faculty at Oxford?—What we call the Board

of the Faculty consists in substance of the professors or University readers belonging to the Faculty and teachers of law employed by the colleges. There are also some co-öpted members. Lord Justice Bowen is, I think, one. For all details I must refer the Commissioners to the University Statutes. (*See Statuta Universitatis Oxoniensis, Tit. V. Sect. i.-viii.*)

17,200. Then it is the University professors, college lecturers, or readers, and one or two co-öpted members? Are there examiners too?—An examiner is not, as such, a member of the Board. It substantially consists of the University professors and readers in law (ex-officio members) and of persons elected by the teachers of law at the colleges. The Statutes provide that the elected members shall not exceed the ex-officio members in number.

17,201. Substantially then it is teachers?—Yes.

17,202. There is no very considerable element of professional lawyers as such?—I think really none. There may be, perhaps, one or two. But I ought to add that all the law professors are as a matter of fact lawyers, and that some of them, such as Sir F. Pollock, still practise at the Bar.

17,203. I suppose the relation of the Law Faculty to the University is exactly the same as that of all the other Faculties. There is no specific monopoly in the affairs of the Faculty?—No; it is the same with the Law Faculty as with the other Faculties.

17,204. We have had one suggestion advanced for handing over the entire management of the Law Faculty practically one may say to the Inns of Court, and really letting the University accept their curriculum examination tests and conditions?—You mean of course the new University for London.

17,205. Yes; the proposed University. I suppose you would attach great importance to the professors, or readers, or lecturers of the new University having a place upon the faculty?—I certainly think they must have a place upon the faculty.

17,206. The presence of the teachers is much more important on the faculty than that of directive members not engaged in educational work, but distinguished members of the profession?—I should not like to speak very dogmatically about the degree of importance, but I think the teachers ought to form a considerable part of the faculty. If you got really eminent lawyers, especially judges, to attend, I should be very sorry to curtail the influence of such men.

17,207. Your view is that to secure harmony at the outset it would be well to make any reasonable and possible sacrifice?—Yes.

17,208 One point would be, of course, a large and generous representation of the existing Council of Legal Education or leaders of the profession on the Governing Body of the University, and possibly on the Faculty?—It is really a question merely of prudence and not of legal knowledge. My difficulty about the whole of that question is this. I think you must be careful not to get so large a representation of the Council of Legal Education or of the leaders of the profession, that people who do not look very favourably on a new system would have the power of clogging it. To determine what is the exact amount of influence which should be given to practical lawyers is a problem very difficult to solve. Assuming you did not give opponents of the new system power to hinder its working, I should be glad to have almost anything done to conciliate the support of the profession. It would be a benefit to the teachers to be brought into contact with practical lawyers of eminence.

17,209. You say we ought to sacrifice a good deal, and that almost any sacrifice would be worth making. I should like to know your judgment as to the points which it would be impossible to sacrifice. I mean what jurisdiction it is essential to reserve to the University body?—That is a question I hardly like to answer, because it wants thinking out, and I have not thought it out. I should say that one thing is clear—the appointment of good professors is the really vital thing. Any system will work well if you get good teachers, and unless you get good teachers no system is worth anything. That is quite clear.

17,210. And that should be in the hands of some University authority?—Yes, that should be in the hands of some University authority, such as eminent lawyers who are really sympathetic with the objects of the University—the best men in short you can possibly get. What I am afraid of is that you should get the appointment of professors placed in the hands of men who rightly or wrongly think there is no advantage whatever in professorial teaching. We all know that the current view of the English lawyer is that he has learnt law excellently himself without going to a professor, and he does not believe that there is any good in a professor whatever. I am quite certain that if the mass of practical lawyers were asked their opinion (some of them have often given me the opinion with more or less distinctness) they would say that the law has gone on perfectly well for centuries without professorial teaching and can go on perfectly well without it for centuries more. If this view be true, it is an argument against founding a legal Faculty; but do not found a legal Faculty and then allow it to be controlled by people who think no Faculty ought to exist. How to achieve the object of ensuring good appointments is a difficulty, but I think it would be fatal to have persons as electors to professorships when they really thought professorships ought not to exist, because it would come to this: they would give professorships to deserving men, but they would not think that the power to teach was a necessary qualification for a professor. Most English lawyers think that English law cannot be taught, but can be learnt only from practice. Of course the difficulty of at once getting the aid of practical lawyers and of avoiding the danger of putting the appointment of professors into the hands of persons who disbelieve in the value of professorial teaching sounds very great, but I do not think that it really is so, for I am convinced that if the University had the power of electing distinguished lawyers members of the Law Faculty it would be easy to obtain a number of lawyers whose aid as electors would be of the greatest advantage. Take, for example, Lord Justice Lindley or Lord Justice Bowen; everyone feels that they would be exactly the men fit for appointing good professors. I think the way in which I should meet the difficulty I have mentioned would be by giving the University the option as to what lawyers they would appoint members of the faculty or of the electing board.

17,211. Then indirectly or directly through an elective board the University ought to control in the last resort?—I think so, but I have not thought this topic out.

17,212. The curriculum of the law degree, or the law examination, should really rest with the Senate?—I think it should really rest with the Senate, but I do think it should be kept as near as possible upon the lines recommended by practical lawyers as the best course of study. I should be very sorry for the curriculum, at any rate for ordinary persons, to get far away from studies useful in the practice of the law. I do not think students would gain by the curriculum having an abstract or theoretical character, and I am quite certain the University would suffer.

17,213. Then with regard to the control of attendance, or the demand of attendance at lectures, I understand that one of the difficulties is that at present the Inns of Court in their system adhere somewhat rigidly to the rule that restricts attendance to those who are training for the Bar. Do you think there that the University should insist upon its own right to control that, namely, the necessity of opening such courses as were organised or accepted by the University to all students of the law, whether students for the profession of the Bar or that of an attorney, or students for general purposes?—I have never been able to see any reason for restricting the attendance at the lectures. The practical difficulty is to get as many persons to attend as you wish. It never occurred to me from any experience I have had

A. V. Dicey, Esq., Q.C., M.A.

9 Dec. 1892.

that I ought to restrict attendance. I should have thought there was really no object in restricting attendance.

17,214. It would be from your point of view a reasonable claim for the University to make, that at least it should have the power of regulating or restricting the attendance? — So I should have thought. I have no real doubt about this matter, though I have not considered it. Take the only lectures I have ever heard of which were likely to be crowded: Sir Henry Maine's lectures, which I used to hear in 1861, were really charming to listen to. I think it is possible that a certain number of strangers might have come in, but what loss it would have been to me, because I wanted to go to the Bar, to have a man or even a woman sitting by me who did not wish to go to the Bar, I cannot conceive. I suppose there is more in the thing than I know, because I cannot see why the Inns of Court should object to attendance being unrestricted. I suppose it has a bearing upon the connexion between the two branches of the profession.

17,215. It is only stated as a fact, and not hitherto supported as wise or right?—I think the real reason must be a further question about the connexion between the two branches of the profession. That is the only matter that occurs to me as being likely to raise the question. I should say open the classes as much and as widely as you can.

17,216. (*Lord Reay.*) Perhaps you will allow me to read a few passages from the Report of the Committee of the American Bar Association, because I should like to have your idea with regard to some of the opinions there given. They are valuable as coming from practical lawyers:—"The work of the "lawyer must always mainly be with the legal facts "or conceptions in the relations between which the "law consists. All his advice to a client, every selec- "tion of a remedy, every statement in a pleading, and, "in short, all his work of any value to others must "depend upon his accurate conception of these ulti- "mate facts and of the system of rights and duties "which they constitute. In this respect, the law "differs from no other science, since all sciences deal "with general notions and general truths only." How does that strike you?—It is not the language I should have used, but I do not undertake to say that it is not true. It is, of course, true that in any legal case you have two things to do; to get hold of the facts—to make out what the material facts are—and then to apply your rule af law. I should have said that that passage, perhaps, under-rated the skill, which you might almost call innate, which some men have in finding out the material facts. Nobody could go through a law case without finding that that to make out the facts is half the battle. Of course to know what facts are material does imply some sort of knowledge as to the legal principle to be applied to the matter in hand. I should think it clearly true that law consists of principles and their application to facts.

17,217. The next point, I think, you have already stated you agree with, "With regard to the method of "study, it must always depend upon the circum- "stances of each school and upon the teachers"?—That I entirely agree with.

17,218. "But the Committee would strongly re "commend that every teacher in a law school should "present an outline of the subject taught in a printed "form which the students may master as thoroughly "as possible"?—This is a matter as to which I have some experience. I always do as a matter of fact, or almost always, present a scheme of my lectures in a printed form so that the students may follow them. I do not know that I attach quite the importance to it that the writer seems to attach, but if he means that a lecturer ought to give a general outline of his subject in some shape or other, I think he is perfectly right.

17,219. I suppose you would agree with what follows:—"And should occupy the hours spent with "the class in such references and illustrations as "would aid them in clearly comprehending these "fundamental principles, and in sufficient examina- "tions to convince himself that they have done so"? — Yes; I quite agree with that, but I may add this. It seems easy, but it is not. It seems very easy, but it is a most difficult thing to achieve. Very few people can do it with success.

17,220. Then the report goes on:—"The use of cases "in illustration of these principles is of unquestionable "service and gives a precision to the knowledge of "the student which he hardly could obtain other- "wise, but we deprecate the use of cases alone with- "out reference to the fundamental principles of the "law of which we believe them to be in all cases the "application"?—That I quite agree with. I suppose it has reference to this American system of teaching from cases exclusively. I should be more inclined, if I were addressing a body of English law professors, to urge upon them the urgent necessity of showing that cases are illustrations of principles, and of dwelling upon the importance of the cases more emphatically than we do.

17,221. With the following passage from what you have said, I think you would hardly agree with:—"The historic growth of the law may un- "doubtedly be traced more accurately in the deci- "sions of the courts than in any other manner, but the "logical unity of the system and the harmony of one "decision with another present another and different "mode of study, which it would be very unwise to "neglect. The only real test of a rule of the common "law must be its consistency with other rules, or the "harmony of the entire system. If two rules lead "to different results in any case, they cannot both "be parts of the common law; and if both are allowed "to remain or be taught as authoritative, the only "result must be a discrepancy in the decisions de- "rived from them. For this reason we should urge "that both methods of teaching should be employed "in their proper relation in the Courts; the his- "torical method for the purpose of showing how our "present conception of the common law has come to "be what it is, the logical method for the purpose of "showing the relation of the rules of law to each "other and the mode in which they are all derived "from certain great principles"?—I have no objection to that as a general statement. The only point I wish to emphasise is that I personally should insist more upon the importance of the logical method than upon that of the historical method. My reason is this: the historical method seems to me to begin generally so far off and to continue so far off from the law with which we now have to deal that the advantage of it is less than you would expect.

17,222. Then would you concur in this view? "But we do not wish to be understood as advancing "the idea that instruction in the Law Schools should "be imparted exclusively by those who are not en- "gaged in the active practice of the profession. We "should regard it as exceedingly unwise not to have "in the corps of instructors some persons who are "actively engaged in the practice of the profession. "We recommend a combination of the two"?—I quite agree as to a "combination of the two;" by this I think the writers of the report mean that the instructors should consist both of practising lawyers who were willing to teach, and also of professors not actively engaged in the practice of the law. With this I entirely agree.

17,223. The best man you could get would be a man who had been in practice and who had for some reason or other discontinued it?—Yes. He is the best person, assuming he has powers of teaching.

17,224. As you have stated, the real practice, the art which ensures success at the Bar, of course you could not teach. No Faculty of Law could attempt to teach a man how to cross-examine a witness or how to address a jury?—There is only one practical side that they can teach in America and which they do teach in America. You can teach to a certain extent the art of arguing in Court. I have seen, for

instance, an argument carried on before Professor Dwight of New York which was as carefully and elaborately carried on as it would have been in any Court. He was a very eminent lawyer. He frequently sat on the Bench. He was asked to sit there for a temporary purpose. Then there are small technical things you can teach, as, for example, how to make notes on one's brief and so forth. Very often a young man at beginning does himself injustice and spoils the effect of his argument by ignorance as to trifling details. The risk of this is got over by the Moot Courts in America.

17,225. You are in favour of these Moot Courts?—Yes, I am very very much in favour of them when they are seriously conducted.

17,226. With regard to criminal law, I suppose you would not object to the theory of criminal law, and its philosophical side being taught?—I do not object to them, but I do not think they are a great advantage to a lawyer. Probably I am wrong. Very eminent persons disagree with me on the subject. I myself find so much difficulty in teaching young men what the law actually is that I don't feel inclined to teach them how it may possibly be improved.

17,227. You would not object to a Chair dealing with the subject?—I should not object, but the difficulty of getting a complete body of legal teachers, even if we limit the subject of their teaching rather narrowly, is very great. I do not object to such a Chair; but I have no enthusiasm for it.

17,228. Going on from the speculative side to the practical side, you are aware of the good work done by M. Boutmy in France at the École des Politique Sciences. You think that is a good institution?—It is an extraordinarily successful institution.

17,229. Letting aside the question whether such a school should be embodied in the Faculty of Law or whether the new University should create a special branch for it (which is a matter of detail) these are the things which are taught: the Diplomatic History of Europe from 1789; the Constitutional History of Europe from 1789; then the history of political ideas and the development of public opinion within the last two centuries, and comparative military organisation. Another subject is certainly not less important for us than for the French, the colonial system and the history of the relations of the Western States with the Eastern. All these subjects would be appropriate?—I think there is a great want of such teaching; but some of that which you have read out to me does not appear to me to be very closely connected with the teaching of law.

17,230. That is why I said I left it open. You admit that there is great need of some instruction in subjects of this kind?—Yes. I am very anxious myself to be able to get an opportunity of seeing the working of the École des Libres Sciences politiques. I have no doubt of the value of the teaching given there.

17,231. As there is a spontaneous demand for the institution in France, which is voluntary, there would be no lack of students here, and I believe some Englishmen have been students at the Ecole?—Yes. I should think it an admirable line for a University to promote such teaching if it can be done. But I should hope that the Commissioners will try to get more direct evidence about the École des Libres Sciences politiques. It is a remarkable phenomenon. I am very anxious that in England we should get more information about it. It is an extraordinary instance of first-class teaching raised by voluntary effort, and I suppose it has been raised by the eminence of one man, Monsr. Boutmy, who is the founder of it, though he has distinguished colleagues.

17,232. Quite so; and does this not point a moral, especially where you are starting a new University, that it all depends upon getting the best men?—Yes, that is really the vital thing. It is quite certain that there can be found in England a very large number of good teachers if you can get hold of them. To get hold of them is really the practical problem. I see no reason for supposing that you cannot get the teachers you want. But I think it may take a good deal of trouble to arrange the right way of getting them and also to arrange that the professorships shall be held on such terms as shall induce the proper people to retain them.

17,233. And when you have got them you should give them fixity of tenure?—Fixity of tenure with some mode of retirement. At Oxford we have not a very happy arrangement for pensions and things of that class, and I think this might under some circumstances produce great evils.

17,234. (*Lord Playfair.*) Does that college of political sciences give degree?

(*Lord Reay.*) No, it gives diplomas; it has no connexion whatever with the Law Faculty of the University.

(*Lord Playfair.*) I am afraid we are a long way yet from exacting such a diploma from our members of Parliament?—I see no tendency that way at all. Perhaps as we have spoken of degrees I may allude to that subject. If you get good diplomas, I attach very little importance to law degrees being given as the result of a competitive examination. A law school at an ordinary University is in rather a different position from that of a law school attended by persons reading for the Bar. If the law teaching at the new University were as good, say, as at the École des Libres Sciences politiques I should have no doubt of its value, or of its value being acknowledged. I should be very sorry at the time of life when men are reading for the Bar they should have to pass through another competitive examination. I am not an opponent of examinations to the extent to which many of my friends are, but I do not want a law University to be made mainly a place for examinations. I am quite certain that good teaching is sure to succeed of itself. I think the case of M. Boutmy shows that. I do not want the Commission to think that I have any desire to promote competitive degrees. Nobody would employ a man simply because he comes out high in a law examination. Give diplomas of attendance and nothing or little more.

17,235. It applies to almost all subjects that examinations, if they can be avoided, are rather an evil than otherwise, and the degrees are only a necessity to show that men have been studying?—I do not like to commit myself to the full extent to that statement, because, although they have great evils, I think the examinations of the University have great advantages. Young men do gain a good deal by having a course of study fixed for them. For one man who would do better by fixing a course for himself than by having a course fixed for him 10 men would do worse. I am very thankful for having been compelled to read books as an undergraduate at Oxford which I should not have read if I had been left to myself. Therefore, I draw a distinction between University education and this which is to be the education for grown-up men studying law.

17,236. (*Chairman.*) You say the great thing is to get able teachers, and the best men are men who themselves have had the practice. Is not the kind of man difficult to get—an able man?—Perhaps I should have said an able man who has tried to have practice. Assuming the professorships were adequately but not extravagantly rewarded, and that there was fixity of tenure, I do not think that the getting good men would be very difficult. There are men who find that practice is coming slowly, and there are also men who have a natural taste for teaching and for speculation. These are the men whom you could get. I suspect that there are one or two persons on the Bench who at one time in their career would very likely have taken professorships such as you propose to found—people who have made very brilliant successes since, but who would have taken a professorship 10 years ago.

17,237. There are some men whose turn of mind is rather towards imparting knowledge than towards the actual business of life?—Yes. Those are the men

A. V. Dicey, Esq., Q.C., M.A.

9 Dec. 1892.

whom you would have mainly to rely upon, but I think occasionally you might get a man who had obtained practice at the Bar.

17,238. How ought they to be appointed? By the Senate on the advice of the professors, I suppose?—I should think so. I have never found any perfectly satisfactory mode of appointment. I think, on the other hand, that the difficulty of arranging a good mode of appointment is not in practice insuperable.

17,239. (*Lord Playfair.*) I am not sure that I quite understood the caution that you rightly gave that in constituting a faculty or a Senate you are afraid that distinguished lawyers might be put on who do not see the advantage of legal education on the whole, and who might rather clog the wheel than otherwise?—That is what I am a little afraid of.

17,240. Has not that been the result in other professions which have gradually given way. Take the profession of engineers. In the case of engineers, especially those who have distinguished themselves very much in life without education, with the exception of Stephenson who was sent to Edinburgh University and always acknowledged the advantage he got from it, have you not found that they thought that engineering is best taught in their own establishments and not by any collegiate system, and that that has gradually given way?—I think this feeling would gradually give way, because I believe it to be the truth, that one side of the law is best taught in a University as it is abroad. Suppose we had a theological University, I should say be careful not to get a large body of clergymen as electors of professors. They would really not know what is wanted in a professor. I have heard statements sometimes made by lawyers about what is desirable in a teacher which make me doubtful whether they are competent to choose the best teachers of law. But after all it is really a question as to the number of practising lawyers whom you would have on the appointing board.

17,241. Then you would give a considerable prominence in the faculty to the teachers themselves?—Yes; and I would appoint eminent lawyers. It is not the eminent lawyers with whom you have any difficulty. It is with the man who does his work well, and never understood why he did it well. He does not know what is wanted. If you appointed a certain number of eminent men as electors, I think, that on the whole, all would go right.

17,242. Take the medical profession. At one time a large portion of the medical profession consisted of apprenticeships to recognised medical practitioners. Now that does not exist, and the public have learnt to appreciate the training of a medical school for the profession. Do you not think that the recognition of that will gradually come on in law as it has in the other profession?—I think it will; but the danger I meant to refer to was that of making the board which appointed the first law professors a body not very competent to appoint them. If the first professors do not discharge their duty as well as is expected of them it would be far more difficult than it was at the beginning to get the law teaching at the new University to work well. The danger which I meant to refer to was the risk lest from the constitution of the appointing board the first appointment should not be good. But I dare say I have exaggerated the risk.

The witness withdrew.

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

HENRY CUNYNGHAME, Esq., M.A., examined.

17,243. (*Chairman.*) You are a Master of Arts of Cambridge; you were formerly in the Royal Engineers; you were a member of the Institute of Electricians; you were formerly lecturer to the London Society for the Extension of University Teaching; you were employed by the Charity Commission for five years in founding Polytechnics, and you were Junior Counsel in the Gresham University petition to the Privy Council?—Yes.

17,244. You are prepared to give evidence as regards Polytechnic and kindred institutions; also as to the London Society for the Extension of University Teaching, and as to the best form of University for London. We will begin about the Polytechnics. Will you tell us something about their aims, origin, and their general character?—The aim of a Polytechnic, as intended to be created by the Charity Commission, is distinctly of a technical and wage-earning character. The education there differs from what might be properly called liberal education, in that it is knowledge pursued rather with a view to practical utility and improvement of wage-earning power than learning pursued merely for the sake of mental improvement and science, and it has been found necessary even to encourage that wage-earning desire. It is believed that if you commence by teaching an artisan the rationale of his trade, and the principles that underlie it, you would by degrees get young men to learn to go to the lectures with nobler aims.

17,245. Is it strictly technical instruction?—Yes. Therefore, if there are in these institutes young men with a feeling for more noble education it would be better to encourage them to come out of those polytechnics, and go to other institutions where they would meet with more kindred spirits, and where they would meet a course of instruction suitable for them, or to form classes in those institutions more specially designed for teaching in a liberal direction, and to convert the whole of those institutions into liberal science institutions would be likely to spoil the institutions, and to deprive them of the boys that go there, and would be without adequate result.

17,246. You do not think there is any way by which they could be brought into contact with any University?—I think from their very character they are not fitted to exercise an influence upon a University. But I do think that a University might, in certain points, exercise very beneficial influence upon them in assisting in some of their physical classes, and so on, and providing them with lectures.

17,247. Do the evening classes lead to certificates of any kind?—That is a great drawback. At present there is no regular certificate given, and what is wanted very much is that there should be for a working man the correlative of the degree for a rich man, that is to say, that you should have a certificate of proficiency for an apprentice, an artisan, and a foreman. Each of them should be taken as a simple certificate, and then, in addition there should be honours for extra merit where a man was particularly good. A man holding one of those certificates would feel that he need never starve, it would be a passport for employment everywhere. That has not been done. The only attempt that has been made was the City and Guilds, but it was not made with success, because they examined too much on paper. I am informed that it was found at the last examination that a number of school teachers went in and beat the men who had been the most successful artificers in the trade, but who could not express themselves. The men felt that they should have been examined all round by foremen, and then thought they could have beaten the schoolmasters.

17,248. The City and Guilds would be in the same position as the polytechnics. You think they ought not to have any connexion with the University?—The City and Guilds consists of two institutions. There is one at Kensington which is of distinctly University rank, and where the teachers could take rank in any University in the world. The other one at Finsbury is a very superior Polytechnic, but I hardly think that in its present condition with regard to students who attend it, it could be reckoned as a college in a University.

17,249. (*Lord Playfair.*) It has a very able Principal?—Yes, to whom its great success is due to a large extent.

17,250. (*Chairman.*) The Birkbeck Institute, I suppose, is in much the same position?—The Birkbeck is in much the same position. The Birkbeck Institute has been closely allied with the Northampton Polytechnic, which the Charity Commission has founded and endowed, and although it is true that at the Birkbeck Institute there are a certain number of students who are studying in what might be called a University direction, yet the presence of that number cannot justify the Birkbeck Institute in claiming to be a college in the University. It had better, I think, take its place in the ordinary line of polytechnics, though from what I am going to say presently about the London Society for the Extension of Evening Teaching a great work might be done there, even in connexion closely with obtaining degrees.

17,251. And the City of London College?—I think that must be reckoned as very much of the same rank as the Birkbeck Institute.

17,252. Then the Bedford College for Ladies?—If the Bedford College for Ladies were efficient I think it would be desirable in the same way to connect it with University work. There is no college properly speaking for ladies, except the branch of King's College, at present existing.

17,253. There is Queen's College. Is not that efficient?—Well, yes, but it is hardly of equal rank. You can hardly call it of University rank. It is more like the Birkbeck, only it is for women. It is very carefully conducted, and it is an excellent institution, but its work is not of such a high class character, as far as I could judge, as that of the Bedford College.

17,254. Then Holloway College?—I am afraid that is outside the London district. If you included Holloway College you would have to take in a very large number of institutions which lie outside the metropolitan area.

17,255. Is the Bedford College in the same position as those you have mentioned, the polytechnics?—No, I should put the Bedford College for women on a higher level than that. They have not got any means of income at the present, more's the pity, and the plant and appliances for teaching are not quite what one would demand and desire, but if those things could be remedied and if in some way there could be an institution for women who are going to get degrees that would seem to be at all events a nucleus.

17,256. (*Lord Playfair.*) Have they not recently got efficient laboratories?—Fairly efficient.

17,257. What was the one the Emperor of Germany went to see when he was here last?—I may be speaking from information which I obtained before that time.

17,258. I am not sure, but I think it was the Bedford?—When I was there they were studying electricity, and they had not even got a dynamo or a small gas-engine. It would have been desirable to have that before claiming to teach electricity for a degree.

17,259. (*Chairman.*) They were very anxious that their plant and their buildings should not be taken away?—They have something. They have a small amount of galvanometers, and a nice little physical school for ladies. But I hardly thought that was sufficient.

(*Mr. Anstie.*) We had evidence that a considerable sum of money had been laid out.

17,260. (*Lord Playfair.*) I think that is the institution where it was said they had a good laboratory?—That might modify one's opinion as to their plant, but as to their endowment that must remain for you. I only say it is a matter of opinion.

17,261. (*Chairman.*) Going back to the Birkbeck and the City of London, these institutions which you say ought not to have representation or power in the University, do you think the University can exercise any beneficial influence upon them?—I think if there was a body in the University, or a number of professors, or some institution, so arranged that it might be available for advising them (for instance, there might be some place to which they could go for advice when they wanted to obtain it) there might be standing committees or something organised which would be extremely useful. Further than that I do not go.

17,262. The polytechnics, I suppose, are the institutions to which the London County Council would apply the grant. It is to those institutions that it would go?—If they would provide a system of inspection they could not do better than inspect these places, and give them grants. I should recommend them strongly not to take them over, and try and work them, but to give grants on their efficiency.

17,263. Some day or other it will be the case probably?—I should think so.

17,264. Now let us go to the question with regard to the University Extension Association. We have had Professor Stuart before us. You may not have seen his evidence. He told us the general outline of the character of the teaching, and the people who attended the lectures. There are a good many artizans, are there not?—Yes; there is a fair sprinkling of artizans, and in places more than a sprinkling. In some localities there are a good many ladies and clerks.

17,265. The work is done entirely in the evening?—Yes; the work is done entirely in the evening.

17,266. There is an organised system of certificates leading on from one to another?—Yes.

17,267. Up to a four years' continuous course?—Yes; a continuous study certificate.

17,268. The University of Cambridge has recognised it, has it not, by allowing a course of four years to count instead of a certain amount of residence in a college, and instead of part of the Little-Go?—That is so.

17,269. And that you think might with advantage be adopted?—I should like to say that I think this question is fraught with very considerable difficulty with regard to what to do with these institutions, because if great care is not taken this may be a means whereby the degree may become so degraded as to be practically useless. The London Society for the Extension of University Teaching is an evening society. Its plea is a very fair one; it says, "If we "have men who can only work in the evening, and "who can only do the equivalent of the work that "your students do during the day, it is not just to "prevent men from having a degree if they can do "the work that your men can." On the other hand, it is said if you open a small door instead of going in at the main portal you may damage the teaching very much, and degrade the whole character of the degree. Therefore, I drew up a list of the safe-guards that I thought ought to be insisted upon by a University in dealing with this question. I showed this list to Dr. Roberts, and I asked him whether this would be sufficient for him, and whether he thought it fair. He told me I might say that he did consider it fair; that is was what he said.

17,270. And he spoke as representing the whole body, did he?—That I am unable to say. I do not know whether I could put him in that position, but he told me that I might say that he thought this was fair.

17,271. (*Lord Playfair.*) He is organizing secretary?—Yes.

17,272. (*Chairman.*) Did you show it to Professor Stuart?—No, it is only a day or two ago that I knew I was to be called. Therefore, I would prefer not to put it further than I have put it. The restrictions are in my opinion on the whole sufficient, and I think you will see that they are very stringent:—"In order to prevent the recognition of "University extension courses of lectures as an "avenue to a degree being a means of degrading the "degree and rendering it valueless, I think that any "University body which is asked to recognise those "courses has a right and ought to insist upon the "following guarantees. I do not suggest any par-"ticular form in which they should be inserted in

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

"the Charter, but I think that in substance they "ought to be definitely laid down in some manner. "(1.) That the name 'student of the University' "should not be permitted to be assumed by any "persons except those who were *bonâ fide* going "through such instruction as was calculated to lead "to a degree. Others who were merely attending "University extension lectures at centres for their "instruction or amusement ought not to be allowed "to take that title." If you do not provide against that, but make this a college in the University the result will be that any clerk by paying 5*s.* for a course of 10 lectures will immediately become a student of the University of London; and you will have apprentices and persons of that kind walking about claiming to be students of the London University and on the roll.

17,273. You think there ought to be some guarantee of continuous attendance?—Their names would have to put upon the roll, and ought not to continue there unless they satisfy the University authorities that they are *bonâ fide* going in for a degree.

17,274. Otherwise they could be struck off?—Yes, they could be struck off. Those who were playing with the subject ought to be struck off, and ought not to be recognised at all. Then the second is: "That the courses of lectures which were so recog- "nised ought to be methodical organised courses pre- "scribed by the University, and not merely casually "chosen by the students, but that here of course a "reasonable latitude of choice of subjects should be "permitted to the students." It would not be enough for the student merely to choose such lectures as he fancied. If he is going to use these lectures as a means to a degree he must be prepared to go through such regular courses of them as the University may prescribe. Then the third is: "That the point of view of the study and teaching "should be distinctly of a liberal character, that is to "say, with a view to knowledge, and not merely of "a technical or wage-earning type." The fourth is: "That the lectures might be given in the evening "or at such times and places within the London "district as suited the needs of the students, pro- "vided the University was satisfied" (this is very important) "that the lecture rooms were healthy, and "sufficiently commodious for the students, and also "that the plant, apparatus, and appliances were effi- "cient for the branches of study which it was pro- "posed to carry on." If you take such a subject as electricity all the polytechnics would be inefficient to carry out the higher branches of that. So far as I know, there is not one in which a really first rate Thompson's reflecting galvonometer has been properly fixed upon a stand for the students. But they might do a considerable portion of their work on other institutions being told that they might have to present themselves at some institution like the City of Guilds, which really possessed proper plant; and that the University should be the judge of what was sufficient plant, and insist on the subjects being taught in places where proper access was obtained to it. Then the fifth is: "That the lectures should be "delivered by, and the studies should be under, Uni- "versity teachers, and under such direction as the "University should think proper." That involves not merely that the lectures should University lectures, but also that the young men should be assisted somewhat in the tutorial fashion in the same way that students would be assisted in the day class. They should have exactly the same kind of guidance.

17,275. Is not every lecture preceded and followed by a class?—I meant something rather different from that. I meant not merely that there should be classes, but that the young man should from time to time have someone whom he could consult as to the course of study that it would be wise for him to take up, the number of hours, his chance of obtaining a degree, whether it was worth while, and so on.

17,276. (*Lord Playfair.*) Something like the Johns Hopkins system of advising professors?—Whatever the day students had in the regular colleges of the University it seems to me that a correlative ought to be had also for the evening students. Then the sixth is the last and most important of all, and I think the severest:—"That the amount of at "tendance at lectures, classes, laboratory work, and "private study, and examinations required of such "students should be fully and fairly equivalent to "what was required of day students in colleges in "the University, the intention being, not that they "should get their degree on any easier terms than day "students, but that they should be able to attend "their lectures, &c., at more convenient times and "places. And for this purpose, so long as they "showed reasonable diligence, the periods of time "over which their studies should be carried on "might be extended in their favour, so as to give "them a longer time during which to make up the "equivalent courses of study above alluded to." Now in illustration of that, I should like to state one or two facts that may be interesting. It is practically found as a fact that if a young man goes to University College, and does not merely attend what are called the occasional classes, but seriously begins to study for the London University degree, it is necessary that he shall do, and he actually does for the two years between matriculation and taking his final degree, attend during 33 weeks, about 15 lectures a week, making a total of 495 lectures a year; and, unless he is an extremely clever fellow, it is found practically necessary that he should read at least 500 hours more. As a rule the young men are giving more, and many of them a great deal more, than 1,000 hours a year, half about to lectures, and about half to reading in the preparation for the University of London. That is a difficulty which the London University very properly puts upon them. An ordinary young man cannot get a degree without being prepared to do that. If you put an equivalent amount of work on the University extension student to make up the 1,000 hours a year it will be very considerable. He would have to do 15 hours a week for 33 weeks, which would make up his 495 hours total in a year. But then that is only half of what the day student in University College does, and, therefore, even if he worked five nights a week for three hours he would do in two years what a day student does in one. Less than that I think ought not to be allowed at all.

17,277. (*Chairman.*) I suppose a man coming with a tired frame, after a long day's work, his nervous power having been taken out of him in other ways, he would not read nearly as hard or as well as a man who does nothing else?—It depends upon what he is doing. Where a man has been doing merely mechanical work from experience in polytechnics, I am surprised to see how fresh they are mentally. I myself, having been at the lathe for about 10 hours a day, from morning to evening for a week together, found that I was fresh to do mental work in the evenings. But in the case of clerks who have had hard mental work during the day it would be a severe strain upon them, and I am afraid they would have to give up the hope of obtaining a degree. But I think that is the least that ought to be allowed. It would be very unjust to give degrees to evening students on easier terms than to day students and lead to evasions of the statutes.

17,278. You do think it would be possible for a man to take a good valuable degree in an existing University entirely by evening work?—I do think it is possible, but I do not think the number of men who could do it would be large. The number would be small, but, though the number would be small, I think it would be an act of justice to give them the opportunity.

17,279. With regard to the Cambridge system of allowing the time spent to count for something——? Of course, if they had taken two years as a substitute —for one year, then, if they were fortunate enough to be able to afford it, they can go for the remaining year into a day University.

17,280. Would many of them be able to go into a day University?—I think partly by aid of their parents and partly by the aid of scholarships much might be done in that direction. It is quite possible that the London County Council might help the University.

17,281. By scholarships?—Yes, or by scholarships in aid.

17,282. I suppose it would be also a help to them if the University gave certificates stamped with its authority?—I should be sorry to see the useful work done by the University Extension Association put an end to. I think the granting of certificates might be done in addition (this is speaking of University Extension) to the degree.

17,283. The University do give certificates?—Yes.

17,284. And you think the new University should have the power to give them in the same way?—Yes.

17,285. Do you think the new University ought to take over this University extension work, and the classes, and organise them?—I think that is a question which would depend a good deal on the funds of the new University. The new University in any case would have to feel its feet first. If it felt strong enough to take over a large work like this then it might be a consideration whether to do so or not. I think it ought to have the power of taking it over, but that it ought not to be compelled to do so before the time came when it felt that it could stand the pecuniary strain.

17,286. It ought to be voluntary on both sides?—I think so. There has been a large loss of money on this, and it might be very injudicious to ask the University to commit itself to an expense which it might be totally unable to meet.

17,287. Is there anything more which you wish to say on the subject of evening classes?—No.

17,288. Then with regard to the general subject of a University for London, I think you are in favour of the Gresham Scheme, are you not?—Of course I drew the scheme according to instructions as counsel, but I do not commit myself to being in favour of every detail without alteration. I think it is in the main the best. The great point that I did want to bring out is that I do not think it has been sufficiently considered up to the present time whether a great opportunity has not arisen for founding two institutions really worthy of the work they are about to do. I think it will be found very difficult indeed in practice to fuse into one an examining body that lays no stress upon attendance at lectures, and a body that does lay stress upon attendance at lectures. Either you will have the same final examination, in which case the students will be apt to forego their lectures, or else you will have a different examination, and then the degree will not be the same. I think there will be friction between the two parts of the University, and it would be difficult to get them together. But I should like to say more than that. I think the time has come when the large Imperial interests of this country demand that we should have something in the nature of an Imperial degree, and it should be, I think, in close connexion with, it not carried on by the Imperial Institute. That is my opinion. That is an excellent building, and I cannot see why it should not be done there.

17,289. You mean an Imperial degree embracing all the colonies?—Yes. And on the council of the body that gave the degree there should be learned men, not alone from England, Ireland and Scotland, but from the Colonies, New Zealand, and I should not disdain to see some of the learned men of whom Max Müller speaks, some of the men of India.

17,290. The London University is fulfilling the functions of an Imperial University?—Yes, and one great drawback to its doing that thoroughly is its narrow name. I was speaking the other day to a Canadian, and he said that if the London University had a name more expressive of the work it was doing, it would be largely looked up to, and it would form another bond of union between the colonies and the mother country; I think it has got a name which, however good the work it has done, is really a misleading one, for, strictly speaking, it is not a University, and it is not connected with London. That has done no harm so long as the name did not stand in the way of creating an effective University for London.

17,291. You think turning it into a teaching University for London would interfere with its other functions?—I think the name has already cramped it, and, if I may use the expression, tying it to the tail of a local University for London would cramp it still more.

17,292. Do you think having two sides would be complicated and difficult?—Yes, for this reason; how could the Colonies and the wider parts of the British Empire be supposed to be represented merely by a set of professors who were really represented by their work in London. On the other hand, if you created the governing body out of a body of the representatives of all the Empire, London would say, "You "are sacrificing our local interests entirely to the "interests of the general body, and you are putting "us to a great disadvantage compared with Victoria "University and other Universities." I believe an Imperial Examining Board, or an Imperial University of this kind would be the only one that could really affiliate into one so far as that could be done in the case of various Universities over the world. I think that would be a bond of union between them.

17,293. You think there ought to be affiliation?—Not affiliation, except in a friendly way, and so far as they wished it. I think it is desirable that there should be the interchange of ideas regarding what should be necessary for a degree, and they might, I think, with a little more rivalry do a great deal of good. I think it would be a bond of union between them.

17,294. Then you are in favour of starting an entirely new University for this purpose of a teaching University, either the Gresham or something of that kind?—Yes.

17,295. You would take the Gresham Charter as it now stands as a starting point, but alter it?—No doubt there might be considerable modifications, principally with regard to the professors of the University, which, as your Lordship has doubtless observed, have not been there provided for.

17,296. There is very little doubt about University professors. At the end of the second clause it gives power to appoint lecturers. "The University may "appoint lecturers independently of a college to give "instruction in any subject, whether it be or be not "included in the Faculty." You would make it compulsory that they should appoint them, and make them professors instead of lecturers?—No, not compulsorily; and I would only appoint professors on one condition, and that is that no professorial Chair should be created, unless it was a *bonâ fide* one in this sense; that it was so well endowed that the person who held it might look to it as the chief source of his emolument and living. If you did not have that you would have a kind of ornamental professorships held by literary men who were really drawing their income from literary sources, and who would not have the interests of the University so much at heart.

17,297. Well endowed?—Well endowed and provided with proper means of teaching. I should be prepared to make that a condition.

17,298. Is there any other alteration in the Charter you would wish to suggest?—I would not say there is none, but I think they would fall much better from the people who drew it.

17,299. Then there is nothing you wish to add?—No, my Lord, nothing,

17,300. (*Lord Reay.*) With regard to these University extension classes, of the first class we will call them, leading up to the degree, the question I should like to ask you is, where do the students who attend them under those strict conditions which you have

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

foreshadowed get their secondary education? In the new University we are contemplating a day student who has had the benefit of such a school as St. Paul's, the best education which you can get both on the science side and the classical side, where is your equivalent for the working man?—That is the question. I quite see the immense difficulty. But, as a fact, and it is a fact, the few working men who have been educated in Board Schools have by ability succeeded in educating themselves, or in being educated up to the age of 16, even as well as many boys who have been educated at St. Paul's School, and have wasted their opportunities.

17,301. We are well aware, of course, that in Scotland the feat has often been performed, but I am asking you whether there are any secondary schools where they can get the preparatory education?—Yes, there are, fortunately, several. There are the Westminster School, the Cowper Street School, and scattered through London there are a number of schools which have been so re-modelled by the Charity Commissioners that there is no question that a boy could in them get such instruction as would enable him to enter upon a University course. I would mention the People's Palace School, which I know well. There you have a school which, as far as engineering is concerned, gives an excellent preparation.

17,302. These are day schools?—Yes, these are day schools.

17,303. But we must have secondary evening schools as a preliminary to the University evening classes?—Yes, and in that way, I think, the polytechnics could help very considerably.

17,304. Then you think the polytechnics ought to be made useful for that purpose?—Most certainly for that purpose.

17,305. And the polytechnics might do for secondary education in the evening what the University would attempt for higher education in the evening?—I understand your Lordship now. They would be the link between what you may call the evening University class and the Board School.

17,306. Then that would require adoption by these polytechnics of a well-organised system of tuition which at the present moment they have not. The programme is very elastic at present?—Yes, and that very elasticity would enable the matter to be met, because the moment the demand arose a regular preparatory class (preparatory for the evening class which led to the degree) would be formed. They would be taught with that very object.

17,307. (*Lord Playfair.*) Perhaps I might ask whether in the Regent Street Polytechnic they have any day school as well as evening instruction?—Yes, and a very excellent day school, too. When you look at it and inspect it minutely I think you will say that you would rather send your own son there, perhaps secretly, than to a more expensive gentlemen's school.

17,308. (*Lord Reay.*) Has the Regent Street Polytechnic any University classes?—Yes, there are classes there whose object is to prepare, or assist in preparing, men for the University of London degree.

17,309. Evening classes?—Yes, but they are not on a very large scale at present. They are sparsely attended.

17,310. They are not systematic?—No.

17,311. (*Lord Playfair.*) But the day school is systematic?—Yes, the day school is systematic.

17,312. (*Lord Reay.*) What I want is a curriculum of secondary education?—There would be no difficulty. Directly there was a demand for such a thing I think it would be provided for.

17,313. You would make the polytechnics useful for this purpose, and also for what you have called a utilitarian purpose—the education which leads to increase of wages. I can give an instance, I have seen the anatomy of the foot taught to boot-makers?—Yes, that is an admirable instance.

17,314. The polytechnics would have this double object in view?—Yes, but the latter of them, I think, would be by far the most important.

17,315. You do not, of course, contemplate that the University which will be fully occupied in organising its own work, should also undertake the supervision of these preparatory evening classes?—No. I should think probably it would be much better to leave that to polytechnic institutions, and let the young men pass the matriculation examinations in the ordinary way, the University not to take charge of them until they get to the matriculation point, whatever matriculation point you determine on.

17,316. And the University extension movement, which does not aim at degrees, you would maintain?—Just the same as it goes on at present.

17,317. And the certificate would be given at the end of that course as it is given now?—Yes.

17,318. And that would remain under the control of the University?—Yes.

17,319. The University might take its share?—Of course, if Oxford and Cambridge liked to give up their share of the work now, seeing that the University of London existed, that would be a mere matter of negociation.

17,320. You would not make many alterations in those courses?—I really think not not. I think they have done a great deal of good. The system is elastic. It alters itself.

17,321. Do you think that the working men, though in limited numbers, will avail themselves more than clerks, of these classes leading to a degree?—No. I think that 50 years hence it is possible that would be so, but I think the working men are at present very backward in disposition to understand the advantages of education, and they are backward socially. You see a working man earning larger wages than a clerk and living in a style of dirt in his house which a clerk would not live in. All this desire for liberal education is a great deal united with the view a man takes of his life. If he would do it the artizan has a much better chance of having a fresh brain for doing it than the clerk.

17,322. With which class do you contemplate we shall make a start?—I think, in the first place, you will have a certain number of ladies who have nothing to do during the day, and if you can really induce them to become serious students for 15 hours a week that would be a valuable addition to the University, and it is on their account it seems to me that it is important to give these lectures in places where they could return from at night without having to travel enormous distances to their homes, which is undesirable. That is one class which you have to consider. Then I think you have a large number of law clerks, because very few large firms will take a man on as a clerk at all unless he has a degree. That is becoming almost a rule in the profession. You will have a large number of those,

17,323. What are they doing during the day?—Working as solicitors. They will have to go after that work as solicitors during the day and work three hours more at night.

17,324. You mean articled clerks?—Yes. Sometimes mere managing clerks not in articles. But if their employers know that they are *bonâ fide* attending these lectures they will as a rule be found to give them a little more time. They consider it in wages no doubt; but I do not think there is any difficulty about that. Barristers' clerks could work a great deal during the day. You would get some of those.

17,325. They would not come jaded?—No.

17,326. To these clerks you would not apply what you said of the other clerks—clerks in shops, and so on?—No, I think they would not be so jaded.

17,327. The nature of their work is, fortunately, such that they are not so fatigued?—Yes. Then there are a great many young men in London who are employed during a certain portion of the day. There is not a large proportion of them, but when you come to

reckon up numbers in this enormous capital you will find a number of men who turn up at all times.

17,328. You assume that the education given in in these lectures is quite as good as the education given in the day lectures?—The whole purport of these safe-guards was to assure that it would be absolutely and in every respect as good, both in times and manner of teaching and giving it, and I earnestly hope that the University authorities will not allow a degree to be given on any easier terms, because I believe it would end in the degradation of it.

17,329. Do you think the same professor could teach both the day and the evening students?—That would depend upon the number of hours they had been spending during the day. It is a very bad system to allow a man who has been teaching all day to do the night work too. We found that at the People's Palace. It was disastrous. But if a man had been engaged in giving a couple of lectures in a classical subject in the morning he could very well do the two hours in the evening. It would be a matter of arrangement.

17,330. In scientific subjects, probably, having a separate staff, would be required for the evening work?—It would very likely be necessary to organise another staff.

17,331. To duplicate it in some way?—Yes, to duplicate it in some way, provided the money was forthcoming.

17,332. As you are a lawyer, and as we have heard a great deal of the connexion of practising lawyers with the theory of the law, might I ask you a question, whether you consider that, for a practising lawyer, and for a practising solicitor as well, some study of what may be called the science of law is decidedly necessary?—I do. I should like to say with regard to that that I think it is necessary in all things. Everything, as it seems to me, has a technical side and a scientific side. It is the difference between Aristotle's definition of a science and an art, and I deny that any man could understand the science thoroughly unless he understands a certain portion of the practice. And, on the other hand, he cannot understand the practice unless he understands a certain portion of the scientific or theoretical side. He must have both of them. But you may study a subject from the mere money-getting point of view, or you may study the subject from the point of view of a man of science who is endeavouring, if possible, to advance the boundary of science.

17,333. With regard to the Law School, you admit there is great necessity for improvement and extension?—Yes.

17,334. And that this Faculty of Law in the new University ought to be constituted?—Yes, always, with this exception, that I think it is wise when you come to professions to have some professional bodies, at all events, retaining control over the entrance of men into that profession, and their conduct while in it, so that there is a certain amount there of professional influence brought to bear upon the men as well as the more scientific influence.

17,335. With regard to scientific lawyers, of whom there are a considerable number in the profession, you would desire to have their advice and their co-operation upon the Council of the University?—As to the teaching, of course, but then there are certain professional questions that constantly arise as to what should be done by the profession in such-and-such a case, what is etiquette, and questions of that kind, and a University body, I am certain, would be quite incapable of dealing with questions of that kind, for instance, regarding the fees, and how many Queen's Counsel should be engaged in a case, and questions of that sort.

17,336. No one contemplates the University taking them up, but these eminent scientific men in the profession would be a valuable acquisition on the governing body of the University to give the profession confidence in the University?—Yes, provided they did not get too great a control.

17,337. Not a preponderant influence?—Yes.

17,338. (*Mr. Anstie.*) I understand that you desire to see some assistance given by the University to the polytechnic institutions of which you have spoken, but in such a shape that it should neither on the one hand interfere with the proper industrial character of the polytechnics, nor on the other hand tend to impair the position of the University?—Yes.

17,339. It would be desirable for that purpose if the certificates and degrees could be well marked and distinguished, and therefore it would be an advantage, would it not, if your polytechnic work could be crowned by a certificate or diploma appropriated to it and which would remove it distinctly from the University course of studies?—I would say that I do not know any more valuable provision in the whole of the schemes which govern the polytechnics than the power that was put in (I believe by yourself) to acquire means of giving a regular workman's certificate for proficiency in his trade.

17,340. Is this the provision in clause 46, sub-clause 5:—"They may apply"—that is the central governing body—"or join with any other body or "bodies in applying for a charter empowering them "to grant diplomas for proficiency in technical or "mercantile skill and knowledge"?—Yes, I think it is most valuable and the working men are beginning to feel every day more and more the need of it.

17,341. Then I see that in the fourth sub-clause is this: the central governing body "may create scholar-"ships to be competed for by the students at such "institutions and tenable at any place of higher "education." Would that on the other hand meet the other branch to which you have referred, the case of men who were desirous to complete their education on the liberal side?—Certainly, and that might be assisted by the County Council, I think, very wisely.

17,342. So that the central governing body, which has the control of the city parochial funds, and which has certain powers of control over the various polytechnics, really has in those two clauses the means both of providing for such connexion as is desirable between the polytechnics and the University, and also providing in another direction for those branches which the University ought not to deal with?—Yes, and I think the union very valuable, provided always that those institutions are not allowed to have too great control over the University. Being rather money-getting institutions we must discount that.

17,343. You rather suggest that those institutions should have at any rate so much representation upon the governing body of the University as would prevent their claims from being ignored?—I would prefer to put it that some point of contact should be established between them. I think that the word "representation" is a little strong. I should like a point of contact decidedly.

17,344. Would you let them have, say, one representative appointed by the central governing body?—I should see no harm in that, but no more.

17,345. In other respects the relation of the University towards these institutions would be one of direction?—Yes; in so far as it could direct for technical matters. I think these institutions would claim to understand, and probably would understand them even better than the University.

17,346. I only speak of those branches which are in immediate contact with the University. In those branches and on that level the position of the University would be rather one of direction than of subjection to their influence?—Yes.

17,347. In fact, it ought to be direction and not subjection?—Yes; I think so.

17,348. You said if Holloway College were taken in, various other institutions would have to be taken in. I do not know whether it is desirable to take in Holloway or not, but what other institutions were you alluding to?—It is perhaps difficult to think of for a moment, but one institution that one thinks of at once is the Crystal Palace Engineering School,

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

which is one of the best engineering schools to be found anywhere, whose pupils are quite as well taught as pupils at any engineering college that is to found. If they claim to come in and say, "We are "as efficient as the Engineering Class at King's "College," what could be said to them?

17,349. Are they of such a public character and so founded as to claim a position in a University, or are they only a private speculation?—They are a private speculation now, but a few strokes of the pen would convert them into a public institution if they thought they were going to get any benefit by it.

17,350. Those strokes of the pen are not yet made?—No; but they might be made when you get a University.

17,351. If you take any private institutions, you might say the Hanover Square School of Electricity, but no one says that they should be joined to a University?—No; but unless the University was carefully guarded, there might be all sorts of difficulties arise. I think I see what you mean. It was from no prejudice to Holloway College that I spoke, only I thought if the area was drawn so large as to include Holloway College it would become rather too big.

17,352. But do you know of other institutions, or have you other institutions in your mind, which would come for admission if and because Holloway College was let in?—No. I do not attribute much importance to my answer with regard to Holloway College. I thought the area would be too big. That was all.

17,353. You seemed to be of opinion that the degrees of the University of London are of such high merit that they deserve to rank as of an Imperial character, transcending in value and importance those of other Universities?—That is not my opinion, if I have said so. I think they ought to become so. Now, in some respects, the degrees of the University of London are generally considered to be more difficult than the degrees of other places.

17,354. Which degree? Do you mean all degrees?—I think it is considered harder to get the M.A. of the University of London than a poll degree at Cambridge.

17,355. That is quite a distinct degree from B.A.?—Then I will put it that it is harder to get the M.B. at the University of London than the M.B. degree at Cambridge. But I am rather doubtful upon that.

17,356. Do you refer to medical degrees?—I am referring to the Arts degrees.

17,357. You referred to the M.A. which is quite a different thing from the ordinary degree?—I refer to this. I took an honour degree at Cambridge in moral science, first class, but if I had taken a poll degree in moral science, an ordinary degree, I own I do not think I should have taken so good a degree as if I had taken the London University degree.

17,358. The B.A?—Yes.

17,359. Have you had any experience of that?—No, I speak of what I hear and what I see publicly reported. In the course of my investigations for you I have heard these things spoken about, and I speak from hearsay. I disclaim all personal experience.

17,360. Have you heard that the Bachelor of Arts degree of London holds a high rank?—Yes, it is generally considered difficult, coupled with the examinations which are necessary to obtain it. I think that with the examinations necessary for obtaining it it is considered to be superior to a poll degree at Cambridge.

17,361. Do you consider that the best test?—It seems to me that the examinations have their uses, and also the attendance at lectures has its use. They are different things and ought to be kept apart. Degrees founded upon examination become good when the subjects are restricted. If you had a degree in Sanscrit only you might give it by examination I think, but if you want to make the degree a test of a man's general training, then I think the examination degree does not become so good, and that a University teaching degree would be better.

17,362. You have referred to the medical degrees which are the most distinguished of the London degrees. That there is no question about, I suppose?—I should prefer some one else to speak about that who knows it better than I do.

17,363. It is the degree on which the reputation of the University has been mainly founded?—I prefer to take that from you.

17,364. After reading the evidence before the last Commission, would you not say that was so?—It does not contradict what I have heard before.

17,365. You spoke of the London University laying no stress on attending lectures of instruction. Are you aware that the most distinguished degrees of the University of London are strictly founded on that basis?—In so far as they are I should say they are excellent and good.

17,366. Then in what sense can you say that the University of London system is founded upon a total disregard of training?—I do not know that I have used the words "total disregard" which would have been neglectful of the fact that the M.B. is based upon it. But as far as Arts and Science are concerned I am informed that the degrees of the University of London are given upon examinations.

17,367. Are you aware that evidence has been given before this Commission by very responsible persons to the effect that the science degrees of the University of London now practically cannot be taken by persons who have not attended regular courses?—If that is so, I should say that the University of London is losing its Imperial character as an examining board and really drifting, as I think it is a good thing that it should drift, into a teaching University. That will leave the ground free, as it seems to me, for the formation of a really Imperial examining board.

17,368. Then would you like to see the London University allied with the present movement or with a new University of a totally different description which has not as yet been founded?—I should say that the new Imperial University or examining board which would be founded is very much like what I understood the London University was at all events some years ago before it had begun to insist more upon attendance at lectures.

17,369. You are aware that for a long time after its foundation it took only candidates from certain institutions?—Yes.

17,370. So far from that system being historically identified with the University the reverse is the case?—I think historically in its origin, it has been associated with a teaching University.

17,371. And so far as medicine is concerned it has never ceased to require attendance at the Medical Schools?—I take it from you that that it is so.

17,372. So that in fact the condition of the London University is such that if a new University on the lines you have suggested was constituted it would so far rest on an entirely different basis from that on which the present London University rests?—It would resemble the London University as it was more nearly than the present London University which is beginning to require attendance at lectures; it would be, in fact, an examining board, and give good degrees upon the results of examination only. That is more nearly what the University of London has done than anything else, I think.

17,373. Not in medicine?—Not in medicine probably.

17,374. Which is its most important function?—If I am asked to say whether strictly speaking the University of London is a purely examining board only, or really has been all along a teaching University, I should have said that it had really been in its character an examining University, but its character has been a little difficult to determine. It seems from what you have said to have been a hybrid institution all along.

17,375. Are you practically conversant with the mode in which it is carried on?—No; I am not.

17,376. (*Lord Playfair.*) In your answer just now, you said not in medicine, but is it the London University that has decided the class attendance upon medicine? Is not its power of giving a qualifying degree in medicine under the control of legislation which says that the Medical Council shall have the power to arrange what class shall be attended before degrees are given by any qualifying body?—I believe that is so, speaking from memory.

17,377. Then it is not the practice of the University of London in medical degrees in conjoint classes that has distinguished the medical degree from its other functions. It is legislation which has done that.

(*Mr. Anstie.*) Before that legislation existed, the same thing always prevailed.

(*Lord Playfair.*) It did it by qualifying bodies.

(*Mr. Anstie.*) No, by the regulations of the Univecsity, quite independently of the Act.

(*Lord Playfair.*) I do not mean the recent Act.

(*Mr. Anstie.*) The old Act?

(*Lord Playfair.*) With regard to Science, where you answered that a Science degree should not be had without a regular attendance upon classes, do you know that regular attendance upon classes is enjoined by the London University, and that the certificates of that attendance have to be presented to it?

(*Mr. Anstie.*) I distinguish that from the medical in this way: that practically of recent years it is stated that it has been impossible for anyone to take the Science degree who has not been through courses of instruction.

(*Lord Playfair.*) I mean their certificates are not presented to the University.

(*Mr. Anstie.*) Well, in some sense they are.

(*Witness.*) I venture, from my point of view, to approve of that, and wish that it was done universally. Then it would become what I want, a purely teaching University.

17,378. (*Lord Playfair.*) Let us understand a little what you want about this Imperial University. You wish an Imperial University that would extend not only over this kingdom, but over all our Colonies and the Empire of India?—Yes.

17,379. And you think that that might be better connected with an Imperial Institute than the present London University?—Yes, I do distinctly. The Imperial Institute seems to be founded under such auspices that it ought to make a great success and a great impression.

17,380. You would still continue the London University also, would you?—I should convert it into a teaching University proper, for London.

17,381. Then that teaching University would be confined to local institutions in London itself?—Roundly speaking it would.

17,382. You also expressed a very proper desire that in any degrees taken by the University extension scheme, there should be none inferior to the degrees granted by the University?—Yes.

17,383. How would you prevent a Dutch auction of degrees between what you call the Imperial University and the new local University for London which would arise. There might be completely different standards?—I should hope that the degrees of the Imperial Institute would be more difficult, than those of all local Universities which existed within the area; but with diffidence, I think that it would be wise for them to have a rather more specialised character. For instance, instead of a degree generally in Arts, they should give a degree, say for proficiency in Sanskrit, and you would have some of the great professors of the East possibly taking it who might not speak a word of English. But they would be degrees of such a character that when a man who had them, everybody would say, "That man must be a master "of his subject. Either he has passed a difficult "examination, or been given an honorary degree for "some great work."

17,384. Supposing the London University is to give degrees in medicine and the other University, the Gresham, or whatever else it may be, is to give degrees in medicine. How can you prevent a competition in standard?—I should think the Imperial University in any degree that it gave in medicine, if it gave any (and it might be a careful question whether it ought), should not give a degree qualifying to practice. That, I think, might be better dealt with by particular institutions. If it gave any degree in medicine I should think it ought to be both of a theoretical and applied character, and not taken to enable a man to practise.

17,385. Let us call the local University, for convenience, the Gresham University. Its degree in medicine would be considerably lower than the degrees now given by the London University?—That is a question on which you would be much better able to give an opinion than I am, but I understand that what is complained of at present with regard to the London degree of medicine (I only speak from hearsay) is not so much that it is really more difficult than other examinations, but it is that the arrangements for the time examinations does not harmonise well with the studies which the young men are going through at the various Medical Schools.

17,386. Two Universities existing in London would necessarily have different standards of examination?—I do not think that would matter at all if one had no power of giving a license to practise. I think according to the theory I have expressed it ought to confine itself to giving a degree in human zoology, if I may use such a word, and I do not think those degrees ought to give the right to practise. The right to practise ought to depend upon the local University. Therefore, I do not think there would be a Dutch auction. A man who wanted to become a doctor would go to the proper place, the London University or the Gresham University by whichever name it might be called. If he wished to add an additional embellishment he would take perhaps a more theoretical degree in the Imperial University. I think that would get rid of the danger of the Dutch auction.

17,387. Your Imperial University would not have anything to do with teaching?—Nothing whatever.

17,388. You are aware that the Imperial University has attempted to form a School of Oriental Literature, but it has not met with much success yet?—I do not want to cap your remark, but if it had power to give a degree of high honour as a reward of high honour in that direction I should have expected that with patience and the co-operation of our consuls abroad there would have been a different result.

17,389. With regard to polytechnics, would you give any controlling power to the University over the polytechnic bodies?—No.

17,390. Would you leave them perfectly autonomous?—Quite free; at least, in so far as they are autonomous at present under the organisation that has been provided by the Charity Commissioners, which, I think, is as good as can be. They are working very well under it now at all events.

17,391. You would not make them integral parts in the University in the manner that you would make University College or King's College?—I should strongly protest against it as a great danger.

17,392. You think it may alter altogether the features of the polytechnic?—And it might alter much for the worse the features of the University. I think it would be a great loss to both sides.

17,393. Still, there are degrees given in some Universities, for instance, degrees in engineering and degrees in chemical manufactures, and so on, which some polytechnic might desire to have?—Well, it is very doubtful (I am speaking for London) whether it is wise to have an engineering degree. It is looked upon with great jealousy, and justly so, I think, by the professional men of Great George Street, who rather prefer to have the membership of their own Institute the qualification. It is not demanded, I

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

believe, by the profession. Whether it ought to be founded or not is a matter of consideration. There is a very strong feeling against it in London, and though the University might have power to do it, I do not think it is wise to start with it at all.

17,394. Generally you do not think that one single University if the teaching professoriate were well represented in one University by faculty, and on the Senate of the Council would be sufficient for London?—I do not think one University would be sufficient for London if it was a teaching University; but if in that one University were also included an examining board for all the world, I honestly have the greatest fears that they would never succeed in making those two work together.

17,395. You think that there would not be harmony of work between them?—No. Of course things often turn out differently from what one expects, but I cannot see how it would occur.

17,396. (*Lord Reay.*) With regard to the distinctive character of an examining and teaching University, is it not, that the University which merely examines is not responsible for the teaching, even though the examining University says, "We do not "examine you unless you have been to a laboratory or "to a hospital recognised by us." Still, as the laboratory and the hospital are not under the control of the University, there is that difference?—Yes; I think there is decidedly.

17,397. The criterion is not that the examining University says, "You ought to attend courses of lectures," but the criterion is that the teaching University is directly responsible for the teaching?—Yes, and for the character of the lectures appointed. I think it is inevitable that that should be so.

17,398. With regard to the Imperial University is it not your idea that such an Imperial University might give degrees, perhaps I might use the expression post-graduate degrees?—Certainly.

17,399. That is to say, give degrees to those who have already obtained degrees at other Universities for scientific work done since they obtained the degree of what may be called the various local centres?—Certainly.

17,400. A degree given to the *élite* of the Empire in various centres. That I understood to be your idea?—Yes, that is it.

17,401. That would exclude all competition. The degrees in that case would be intended for a totally different class from that receiving those given by the local University?—I should like to say that I do not know that it would be properly necessary to compel every one who went in for the Imperial degree to have had a degree previously, but still the class aimed at would be different.

17,402. Quite so, but a great sprinkling of your graduates would be men who had already obtained comparatively high degrees?—Yes. Supposing an extremely distinguished man takes a degree at Melbourne, he finds people do not understand his Melbourne degree, and he says, "I am capable of passing an examination; "I will go in for the Imperial "degree, and I will take that." It would be a degree recognised all over the Empire from one end to the other.

17,403. Might I ask whether you would think that it would be too much to require in a graduate of the new University that he should have given evidence of some original research or some original work. That, as you are aware, is requisite in the German Universities?—I think it would be going too far unless you put it for the Honour degree. I think there are a number of very diligent, hard-working men who may be very much improved by taking the ordinary degree without original work. I think, if you made a hard and fast rule, it would be perhaps expecting too much from some men.

17,404. Then would you prefer that is done in America; require very specific or advanced knowledge in one subject which may be called the principal subject with sufficient knowledge in auxiliary subjects?—Yes, I think that is the best system.

17,405. (*Mr. Anstie.*) Your view of the Imperial University is that it should be a University of post graduate character?—Not exclusively post graduate.

17,406. Then what is it to do?—It is to give degrees solely on results of examinations to all persons.

17,407. But that is not a description of what you have proposed, if you take away the qualification which I understood you, in answer to Lord Reay, to put in—that it was to be a very high degree?—It is not to be exclusively post graduate.

17,408. Then how do you get rid of the difficulties put by Lord Playfair of a competition between degrees? If the University departing from those high functions which you originally sketched out for it is to examine all the world as you describe it, how would you avoid that competition which has often been found to produce very injurious effects flowing from a mere examination degree?—The point that was put to me about a Dutch auction for degrees referred as I understand to medical degrees. I understood it so.

17,409. (*Lord Playfair.*) I illustrated medicine?—I understood it was as far as medicine was concerned, and I endeavoured to meet that objection by the answer which I have already given, which I need not repeat. Now you come to another instance. You mean why would not there be danger of one underbidding the other. What would be the danger?

17,410. (*Mr. Anstie.*) The suggestion is that you are to have on the one hand a degree given by a University on strict collegiate conditions, as I may call them?—Yes.

17,411. That you are to have another degree given on the same spot by another body?—No, please, not on the same spot. Forgive me. The examinations will be conducted, I should hope, in Canada, India, and all over the Empire. It may be that it will have a seat and the Secretary in London, but the degree will not be considered as given in London, or as a London degree.

17,412. But you only appear to be now extending as widely as possible the area of its mischief?—It may be called mischief or not.

17,413. It is a mischief from the point of view we are discussing. You are advocating now some scheme which has not been before us yet, for a new Imperial University and one rather desires to follow it out to its end?—I am anxious to follow you. The point is that there would be a competition. You said on the spot.

17,414. Now you tell me that it is to act not only on one spot but on every other spot, that is to say, it will go down to Oxford and Cambridge?—Its area will be over the whole Empire, at present an Oxford or Cambridge man may come up and pass his examination and take a London degree to-morrow. So he would be able to take in the same way the Imperial degree.

17,415. Do you think there is any advantage in Oxford or Cambridge men taking a London degree?—No, I do not think there is, because the London degree is neither one thing nor the other. As you yourself kindly explained, it seems to me that it is a purely examination degree gradually coming round to be more of a degree given for attendance at lectures. I do think if it had an extended name its degree might then be worth taking for an Oxford or Cambridge or other University man, because then it would be respected throughout the whole of the Empire, which it is not at present.

17,416. I understand you if you mean that it would hold a very high or post-graduate position and give merely honour degrees, but I did not understand you in what you said about its being a general examining board for all the world?—It is not to limit itself entirely to giving degrees to those who have them already, certainly not.

17,417. What is the peculiar value to be attached to a degree given by this body to all the world?—It

would have the effect of providing that the degree should be given to those who pass the examiuation after private reading. If you do not believe that such a thing is useful at all, then I am with you entirely. Cut it completely out of your new University; form a teaching University for London, and I shall be satisfied.

17,418. I understand you to invest this creature of your imagination with some elevated characteristics, apparently drawn from the exalted nature of the degree examination. I asked you if you limited it to that, and you say, no. Then I say, how will the degrees retain this extraordinary character when the circumstance which gives it them is taken away?—The point, it seems to me, is this: its examinations would be rather more hard and more specialised than the Gresham University examinations would be. You can hardly say, necessarily, that it is a University giving degrees to those who have taken degrees before. It is to give degrees to all who have passed its examinations.

17,419. Do you really mean that this is to be a great University which it would be a distinction for any man of science of the post-graduate rank to belong to or do you mean it is to be a University of the common run giving ordinary degrees?—No. I should distinctly adhere to what I said, that its degrees should be more specialised than those that are given by Universities in particular places in the country.

17,420. (*Lord Reay.*) Degrees for original research and original work of high merit?—Yes. In talking over the subject one is not prepared with the whole elaborate scheme, but I should think original research should also certainly come in for such degrees as these.

17,421. (*Mr. Anstie.*) Putting out of sight this University with a rather elevated function would you give me the reason on which you ground the opinion that no degrees ought to be granted by any University except upon the regular following of a collegiate course?—I have not said so. What I have said is that it seems to me expedient that there should be local Universities scattered over the United Kingdom of Great Britain giving degrees upon examination after courses of teaching; but that in addition to that there should be, I think, a University capable of giving degrees on the results of examination. I think it is now a necessity. I am not very fond of it. I think the London University has introduced a bad principle. I must admit that. But the thing now has become such a necessity that we must, I suppose, agree to it.

17,422. Is it not a principle that has been partially introduced in Oxford?—I do not know.

17,423. Do you object to the University of Oxford having adopted that course?—Yes, I should say it is decidedly a pity for the University to do it.

17,424. Will you tell me whether you do not think it may be an advantage to a University in general that its course should be influenced and directed by the course of teaching laid down by the most important and able teachers in collegiate institutions—whether the course of education and study in the country would not be beneficially influenced if it were put to a large extent under the guidance and control of the teachers in the most accredited Universities?—You mean like the Université de France.

17,425. I would rather not speak of that?—Then I must answer that it entirely depends upon the mode in which the details are carried out.

17,426. We had a statement made to us by the Bishop of London that if all the best teaching talent in London could be united no more competent body could be found to determine the conditions on which degrees given to those who were not members of the colleges. Would you dissent from that?—You mean in case of a University being formed to give degrees by examinations as well as after attendance at lectures and examinations.

17,427. Yes, to include the giving of such degrees?—No, I cannot agree to that. I agree that they might be clever enough to do it, but I think they would be in the position of men who had two tasks and two irreconcileable interests to consult and two incompatible tasks to perform. I think they would do it much better if they were separate.

17,428. Would you point out the nature of the irreconcileability?—It seems to me that you must have in any case a final examination. That is quite clear. Either that final examination is to be the same, or I will use the word equally hard, in the two cases, or else it must be different. If it is equally hard in the two cases what is to prevent the students shirking the attendance at lectures and taking to desultory reading, which I for one deplore, and then just passing the final examination. That is the danger to which you would be exposed if it is equal. Now suppose one examination to be harder than the other. Can the amount of difficulty that is to be created in one case be so regulated as to equilibrate the conditions required of those who take the degree. That seems to me impossible; and as the judges of that equilibration will always be the University itself, they will be constantly accused of partiality in one direction or another, and you will have two parties in the University.

17,429. An obvious answer has been given by one or two of the witnesses namely to allow one examination in the final examination; the collegiate course might cover every intermediate examination, and from those who did not go to collegiate courses preliminary examinations might be required which would correspond as far as possible with those for the collegiate courses?—That I think is open to the objections above stated.

17,430. Would it not be a very desirable thing that so far as possible this intermediate and supplementary examination should be correlated with the collegiate course that is with the conditions of study which we are assuming laid down by the most competent teachers?—Then I say it seems to me that if you do get the most competent set of men together, and if you can only make them agree, you will get possibly the best results under the circumstances. I do not say that your body of men will not do as well as possible, but I do say that under the system of fusion that is proposed I do not think they will be able to apply their abilities to advantage.

17,431. Why should they not apply their abilities to advantage? They lay out their collegiate course under the direction of the Faculty of the University, acting as experts. The collegiate course must be assumed to be laid out on the best basis of known modern teaching. If it is laid out on the best basis of known modern teaching, why is it not the best basis of the course to be pursued by those who are not able to obtain the advantage of going to the Colleges?—I think those who have not had the advantage of going to the Colleges should be examined and get degrees in an Imperial University.

17,432. That is not an answer to my question. My question is this: the collegiate courses are supposed to be laid out in such a mode as to bring them most in harmony with the existing best current teaching of the day?—Yes; I grant that.

17,433. That being so, and the course being thus laid out, can you conceive any other course better for a person who is not able to easily attend that collegiate course but desires to follow the training indicated by it?—Certainly I can. I mean to say that where you have laid out most carefully a course of study depending upon particular sets of lectures, and when you have going on private study also aiming at a similar kind of degree, it by no means follows that the same course of study which you are going to pursue under the lectures of a particular professor would be the best sort to follow if you were reading in your private room. A man might say, "If you do "not come to my lectures you must read such and "such a book, but if you come to my lectures I will "supply the place of that book and you must read "something else which will be more useful to you "instead." It seems to me that private study and

H. Cunynghame, Esq., M.A.

9 Dec. 1892.

organised teaching in a University might well pursue two different paths, but it by no means follows that what is best in one case is best in another.

17,434. It might substitute an advantage for a disadvantage; good books for bad lectures. But, respecting the general course through which a man has to go educationally to reach the degree, I do not see on what ground you suggest that there should be any different method pursued?—I must adhere to the answer which I have already given you, which really does seem to me relevant and pertinent to the question.

17,435. Do you mean to say they could not construct a course which would follow out by reading or tuition the same line of education which was conducted in the college in the lecture room?—You have been assuming a body of the cleverest men in London, and I do not know what they could not do.

17,436. We are here to construct, if possible, a powerful University which shall command the allegiance of all the best teaching power in London?—Then I will answer that if you could get together such a body as that and remove all jealousy you might, I suppose, hand to them the University, Board Schools, the Polytechnics, and every institution in the metropolis, but I do not see how it would work.

17,437. Then they would perhaps have too much to do?—Very likely.

17,438. (*Lord Playfair.*) I suppose you know there is only one University in the Kingdom except the London University that gives degree examinations to external students altogether. That is Trinity College, Dublin?—I have not much knowledge of Dublin.

17,439. The degrees under these circumstances have been found efficient, at least when I examined in the subjects. Your difficulty is this: having a demand for a teaching University growing in London, and the same University (if it is the same University) having an external system of examination?—Yes.

17,440. You think if there is to be one University there must be very great care in the arrangement of degrees to externals with regard to the teaching bodies that constitute the main part of the University?—I must confess that I do not see myself how it is to be done.

17,441. Your difficulty is such that you would rather have the Examining Board for the external students altogether separate from the teaching University?—Yes, and particularly when I see, as I think I see, such a great opportunity of doing a work that I believe would be useful for the whole of Great Britain and her colonies

17,442. Through the Imperial Institute?—Yes, through the Imperial Institute. That is of weight with me.

17,443. (*Lord Reay.*) Your view is that out of fairness to the external student he should not be examined on the same lines as the student who has had the advantage of the lectures?—I think there should be a different class of examination for the external students. I think there should be different degrees, and that they should be called by different names, so that if you are engaging a professor who comes from these institutions you should know the character of man he is.

17,444. To a different method of teaching you must apply a different method of examination?—Yes.

The witness withdrew.

Adjourned to Thursday the 13th December 1892, at 12 o'clock.

Forty-first Day.

Thursday, December 15th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Right Hon. Lord PLAYFAIR, K.C.B., LL.D.
Sir GEORGE HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOUEN GODDARD, Esq., M.A., LL.B. *Secretary.*

Sir P. Magnus, B.A., B.Sc.

15 Dec. 1892.

Sir PHILIP MAGNUS, B.A., B.Sc., examined.

17,445. (*Chairman.*) You are a member of the Senate of the University of London, a life governor of University College, and a member of the late Royal Commission on Technical Instruction?—Yes.

17,446. You gave evidence before the last Commission?—I did.

17,447. That was chiefly as representing the Convocation of the University of London?—It was.

17,448. I do not think I need trouble you to go over that ground again. To-day I think you wish to give evidence with regard to the number of Faculties in the proposed University, and some additions you would like to make to them?—Yes.

17,449. At present, as the draft of the Charter stands, there are four Faculties—Arts, Science, Law, and Medicine. I need not say that you consider that these are very desirable?—Yes.

17,450. There are none of these you would wish to leave out, but you would like to add another Faculty for the application of Science to engineering and manufacturing?—Yes, I think so.

17,451. Would you wish it to be a separate Faculty, or might it be a branch of the Faculty of Science?—It might be a branch of the Faculty of Science, but I think it would be better that it should be a separate Faculty.

17,452. Would you like to enlarge upon that point and give us your reasons, either for wishing to establish it or for wishing it to be a separate Faculty of itself?—The subject of engineering, and the application of science to manufactures has assumed such prominence in the last few years that it seems to me desirable there should be a Faculty dealing with those branches of study, just in the same way as there has been for many centuries a Faculty of Medicine dealing with the application of biological Science to the practical work of Medicine. It seems to me that if the subject of engineering in its present form had existed centuries ago it is probable that there would have been a Faculty of Engineering, as there is now a Faculty of Medicine and of Law; and that the Faculty of Science, so far as regards Physical Science, would to a certain extent have grown out of the Faculty of Engineering. This is, of course, a supposition. The Faculties are differently distributed in the German Universities. There you have a Faculty of Law, a Faculty of Medicine, and a Faculty of Philosophy; and besides these there is a Faculty of Theology with which we are not at present concerned. The Faculty of Philosophy comprises all that we include under Arts and Sciences, and there are consequently three what may be called professional Faculties, and one Faculty dealing with those branches of knowledge which underlie the practice of those professions. In this country we have at present, and we propose to have in any future University, a Faculty of Arts and of Sciences, that is to say, we divide the Faculty of Philosophy into two branches, Arts, underlying the study of social questions and literature, and Science, underlying Medicine and Engineering. But there does not at present exist in London any Faculty of Engineering corresponding to the Faculty of Medicine. The Faculty of Medicine deals with the application mainly of biological science to the practical work of Medicine and Surgery, and the Faculty of Engineering in its broadest sense would deal with the application of physical science to engineering, *i.e.*, to the problems of constructive and productive work. In Germany a distinction is made between the institutions in which is given what is supposed to be purely an academic education, and those in which Science is taught in its application to certain special industries. There is in Germany the University and the polytechnic or Technical High School. In the University there are, as I have already said, the professional Faculties of Theology, of Medicine, and of Law, but the Faculty of Engineering is rigorously excluded from the jurisdiction of the University, and is confined to the polytechnic in which the instruction is divided into a great number of different branches. But a strong opinion prevails in Germany that it would be very desirable that the Faculty of Engineering should be connected with the University rather than with the polytechnic, and I have thought, as bearing upon this question, it might be interesting to give the opinions of some of the most eminent professors in Germany, which were collected at the time when I was acting as a member of the Commission of Technical Instruction to which you have referred. The Commissioners considered very carefully this question of the relation between University and polytechnic education. I am speaking, of course, of polytechnic education in the sense in which it is understood in Germany, which, I need scarcely say, is quite different from the sense in which it is understood in London if we take as examples of polytechnics those institutions which have recently been established in the metropolis. The teaching of the polytechnic in Germany overlaps, to a great extent, the teaching of the Universities.

17,453. It is entirely distinct in government, is it not?—It is entirely distinct in government, and the conditions of entrance are different.

17,454. Is there a polytechnic in every town in which there is a University?—Not in every town where there is a University; but in many towns. Sometimes the one is opposite the other.

17,455. Do none of the same professors belong to both?—I should not like to say none, but there is a distinct professorial staff for each. In some subjects or branches of knowledge it is very difficult indeed to differentiate the teaching of the one institution from that of the other.

17,456. Do they endeavour to act in harmony with one another, or are they rivals?—In certain Faculties there is a considerable amount of healthy rivalry and competition between the professors of the institutions, I have pointed out that the Faculty of Engineering is confined to the polytechnic, and does not exist in the University. Where the two institutions overlap most is in the teaching of chemistry. We endeavoured to discover the distinction between academic (if I may so call it), chemistry, and technical chemistry, but I must own that we failed to arrive at any satisfactory difference either by the examination of the institutions in which so called technical chemistry was taught, or by the examination of the professors who were teaching these subjects. In our report occur these words, "As "regards the instruction given in the polytechnics and "Universities of Germany, the opinion was very gene- "rally expressed in Berlin, that there is no essential "distinction between the methods and the results of "the teaching of these two classes of educational "institutions. Indeed, it may be fairly assumed, in "spite of some opinions to the contrary, that in the "teaching of chemistry the aims and objects of the "polytechnic overlap those of the University." Again we stated: "Where the instruction of the "University and polytechnic seems most to overlap, "is undoubtedly in the teaching of chemistry. "Although it has been admitted that for the training "of an industrial chemist, a knowledge of drawing and "of machine construction is almost indispensable; "on the other hand, as regards the remarkable dis- "coveries which have been made by German chemists "who have devoted themselves to research work in "the highest branches of the science, and which have "had so great a commercial value, and have pushed "forward to so great an extent the chemical industries "of Germany, the Universities equally with the "polytechnics have been the cradle in which technical "chemists have been reared, and the professor, "whether at the University or at the polytechnic, "who has established the greatest reputation by "virtue of his successful investigations, into the "highest branches of chemistry, has attached to his "classes the largest number of students." Having regard, therefore, to the importance of preventing if possible, an overlapping of teaching functions in the new University, it seems to me that it is not desirable to have a distinct Faculty of Chemistry for students who are to be engaged in technical work, independently of the ordinary teaching of chemistry which would be given in a University. The great distinction which we found to exist between the training given to men who were to be engaged in chemistry as applied to manufactures, and that which was given to those who were studying chemistry for its own sake only, consisted in the addition to the instruction of the teaching of engineering, including machine construction and drawing. For that reason it seemed to me that the word "engineering" might be wide enough to cover the whole range of subjects which would be studied by those who would be preparing for the highest branches of technical work. I might say that the word "chemical engineering" has itself been adopted in one or two places. It occurs in the Commissioners' report, and it has been adopted in several institutions. Then with regard to the question of the separation of the Faculty of engineering from the University, I have thought you might allow me to quote the opinions of one or two German professors on that subject. Professor Lunge of the Polytechnic at Zurich who is well known, thinks that "such a fusion or partial union would be productive "of excellent results, and he also draws attention to

Sir P. Magnus, B.A., B.Sc.

15 Dec. 1892.

"the value of the addition of an engineering Faculty "to the smaller Universities." With regard to the larger Universities he rather seems inclined to think it would be better to keep them separate. "He "points out the great economy which arises from "having the two institutions in the same town, as at "Zurich, and the great saving of teaching power "of which this arrangement is productive." Dr. Quincke, who was the Professor of Physics at the Berlin Polytechnic School, and who has since become Professor of Physics at Heidelberg thinks, "that the "addition of technical Faculties to the University "would not only bring valuable teaching power into "these institutions, but that the existing subjects of "mathematics and natural science would thus be "brought nearer to the actual requirements of the "day, so that the '*Universitas Literarum*' would "become adopted to the age of railways, steam-"engines, and telegraphs; as centuries ago, the needs "of Church and State added a fourth Faculty, that of "'philosophy' to the existing Faculties of theology, "jurisprudence, and medicine." I venture to think that this is a most important piece of evidence in favour of associating a Faculty of engineering with the University, because there can be little doubt that many of the Universities were themselves originally professional schools. The oldest Universities appear to have consisted of the special Schools of Law, Medicine, and Theology; and the Faculties of Arts and Science really arose out of the necessity of pursuing studies to elucidate the principles connected with the practical work of these professional Faculties. Therefore it seems to me that we should be only acting in the spirit of the history of the Universities if we were to add a Faculty of engineering to the three existing professional Faculties. Then there is another consideration, and that is this: most of our University colleges throughout the country started as special professional schools; they began as technical schools, small polytechnics in the German sense of the word. In Birmingham, Mason's College was originally the Mason's College of Science; the Yorkshire College at Leeds was the Yorkshire College of Science; and the Firth College, Sheffield, was at first only a Science School. Most of these institutions arose out of the necessity which was felt of giving scientific instruction bearing upon the industries which were pursued in those particular districts. To that extent they were technical schools; they were engineering Faculties of a University. Afterwards the Faculties of Arts and Laws, and in some cases that of Medicine were added on. I venture to think that the Faculties of pure Science and of Arts in our Universities have arisen, to some extent, out of the necessity of elucidating more thoroughly the principles of Science in their application to Medicine, and out of the critical study which was necessary for the complete comprehension of literature and grammar.

17,457. The polytechnics in London are by way of giving technical education now, though they do not go nearly so deep or so far, I suppose, as the German ones. Is that the case?—The polytechnics in London cannot be said to be giving anything approaching University education.

17,458. There is no resemblance to a University?—Not the slightest. The education is of a different grade and quality, and has different objects altogether.

17,459. There has been an idea of trying to get them affiliated to a certain degree with the University. I suppose you would be of opinion that they should not be brought into a University in any way?—I am of opinion that it is not desirable that they should be brought into a University. Personally, I am anxious that the teaching of the University should be maintained at the highest possible level, and that the teaching in connexion with the applied sciences or engineering should be of exactly the same level as the teaching in the other Faculties, and that it is not desirable that the University should be required to embrace teaching which is not of the highest academic character.

17,460. There would be no danger of any sort or kind of a polytechnic or any other institute of secondary education overlapping the University?—I think not. One way of preventing that, and a most successful way, is to take care that the conditions of entry into the University are strict. The difficulty of the entrance examination is one of the distinctions between the German Universities and the English Universities. A youth enters a University in Germany with a very much broader and deeper knowledge than he is expected to have obtained before he enters an English University. The consequence is that the superstructure of teaching is of a much higher kind in the German than in many of the English Universities. I think it is desirable that students before being admitted to the University should be required to have passed an adequate examination in those subjects which constitute a sound secondary education.

17,461. A tolerably severe matriculation examination?—Yes, a tolerably severe matriculation examination.

17,462. I will let you follow your own line until you have told us all you wish and reserve any question till after that. I think you are going to begin rather a new subject with regard to the representation of the professoriate on the governing body of the University. Or is there anything before that?—No; I think I have explained the reasons as fully as I can, for the addition of a Faculty of Engineering.

17,463. Perhaps I may ask with regard to one or two matters on that point. How are engineers, as a rule, educated now?—I would prefer to leave that question to be answered by Professor Unwin, who is more competent to answer it than I am. As the Commissioners are probably aware, there is an institution in South Kensington in which those who are going to be engineers can receive their preliminary training and a training of the highest order.

17,464. Then after that do they manage by private reading or by being articled to other engineers?—I believe it is usual for them to be articled to engineers, and to commence then their distinctly professional work. As regards this point I may say that I should be sorry that a degree in engineering, should carry with it any diploma certifying to the qualification of the graduate for professional work, and I should also prefer that in the Medical Faculty the University degree should be distinct from the license to practise.

17,465. Would you leave the license to practise in the hands of the professional authorities?—I think any license to practise should be in the hands of the professional authorities, and not in the hands of the University.

17,466. Is a license to practise required now for engineering?—Professor Unwin will answer that question better than I can. He tells me absolutely none.

17,467. Am I to gather from your preceding remarks that you think there ought to be a qualification for an engineer?—I think some qualification is required in order that an engineer may be a member of the Institute of Civil Engineers. I think it would be desirable that there should be some professional qualification of that sort.

17,468. And that it should not be in the hands of the University?—And that it should not be in the hands of the University.

17,469. Perhaps you could tell us briefly what the education of an engineer would consist of, what branches of science more particularly, and whether there is anything besides science that he would have to learn that would be taught by any other Faculty. The whole education would be comprised under the department of science, would it not?—Yes, it would be mainly science and drawing—practical science and work in the laboratories, but Professor Unwin will be able to give you the full details of the course of instruction.

17,470. What I want to arrive at is, how far it would be necessary to have a separate department, or

how far a general course of instruction would answer the purpose?—I think it would be found necessary to have a separate course of instruction for those who were going to be engineers, and no doubt the instruction for a degree in engineering would have to be varied according to the particular branch of the work which the engineer might be likely to take up. Under the Faculty of Engineering I should include everything that is generally understood as the applied sciences except medicine. Medicine is in itself an applied science, but I should include under Engineering all the applications of physical science, that is to say, of mechanics, of physics proper, and chemistry, to engineering problems and productive work. But the course of instruction would have to be varied according to the branch of engineering in which the candidate might wish to graduate.

17,471. Having a new Faculty would imply a new degree. Would you give a degree in engineering?—I should.

17,472. You could not, of course, give different degrees in engineering. Your object in giving a certain amount of latitude as to the instruction to be given would be provided for by having numerous questions in the examination paper, so that they might answer one or the other?—Yes, alternative papers or alternative courses of study.

17,473. And alternative questions in the examination?—Yes, alternative papers in the examination and alternative practical work.

17,474. Would you have a degree in engineering, or make it a part of the general degree of science with some little distinction?—I should be disposed to have a degree in engineering on the analogy of the degree in medicine. I think the profession of engineering is as scientific as the profession of medicine, and, at the present day, almost as important.

17,475. You would have it a fifth Faculty in fact?—Yes, corresponding with that of medicine.

17,476. Could any other profession be embraced in it such as architects?—It might be to the advantage of architects to take a degree in engineering, because much of an architect's work is of a constructive character, but in so far as the architect's work is artistic, it would not fall under the category of engineering.

17,477. I suppose you would allow a little latitude to the new University to decide upon how this new degree should be given. You would not object to its being a branch of the scientific degree, if it was more convenient, so long as it had some distinctive mark?—I should not object to it. I think the other suggestion is preferable.

17,478. I suppose there would be a sufficient demand for the degree. It is a very large profession, is it not?—A very large profession.

17,479. Not so large as the medical profession, but large enough to be worth having a special degree for?—I think so.

17,480. Then we come now to the question of the representation of the professoriate on the governing body of the University. You are leaving the engineering question now and going into the general subject?—I have no desire to go into the general subject. I do not know whether the Commission might care to ask any question with regard to it, but otherwise, as a member of the Senate, which is acting in its corporate capacity in connexion with this Commission, I have no desire to enter into the details of the proposed re-constitution of the University.

17,481. But put generally, I may ask you this. You do think the professoriate should be represented largely on the governing body of the new University?—I think it is very necessary.

17,482. They ought to be the dominant element?—I would not say the dominant element, but I think it should be largely and substantially respresented, and I may add that the experience I have gained on the Senate of the University of London has shown me the importance of having a large representation of the professors on the governing body.

17,483. And I suppose this would be done most easily, and perhaps most effectively by allowing the different Faculties to elect members of the Senate?—I am not certain how it could best be done, but if the Faculties are to be represented, I think they should be represented by professors.

17,484. They probably would, would they not?—I should say they would be. I think it is equally desirable that other interests besides those of the professors should be represented on the governing body of the University.

17,485. Then with regard to the necessity of co-ordinating teaching power so as to prevent overlapping and to secure economy and efficiency. What would that refer to?—It occurred to me that one of the great objects of the establishment of a new University in London, is to co-ordinate the teaching power which at present exists in separate institutions, and I think it very important that the governing body of the University should be endowed with sufficient authority to prevent teaching from being duplicated where such duplication is not desirable, and at the same time to be able to supplement teaching where it is found there is any want of the higher teaching in any particular branch of study.

17,486. I suppose unless you abolish all existing institutions, there must be a certain amount of overlapping, for instance, in the 10 different Medical Schools. You would hardly call it overlapping; it would be more like dividing the field among them, or is it really overlapping?—If there is a demand for the multiplication of centres for teaching the elementary science which medical students require, I think such demand should be met, but it should be met by a central authority and not by the wishes of any particular teacher or by the governing body of any particular institution. From my own experience I should say there is a very unnecessary multiplication of elementary science classes for those engaged in the medical profession in London. It would be a great advantage if the teaching could be concentrated and consequently improved. Some of the elementary science teaching at the various hospitals is certainly of a very inferior kind, and if the University could take the matter in hand, and arrange for young medical students to receive superior scientific instruction to that which they do at present, I think it would be a great advantage.

17,487. That would be by appointing a University professor for the particular sciences, would it?—I think it would be rather by the representatives of the Faculty of science determining where the instruction should be given, and the kind of instruction that is required.

17,488. It might be by a system of inter-collegiate lectures?—Yes, it might be.

17,489. Regulated by the University, and not entirely left voluntary to the different colleges?—Yes, that is what I think is desirable.

17,490. Is there any system of inter-collegiate lectures now among the different schools?—I am not aware of any.

17,491. But that would be a remedy?—Yes, it would be if it could be directed and controlled by some central authority. I think the same is true as regards the schools of Engineering. It is very important that there should be no excess in the number of laboratories in which young men do practical work. What is required is that there should be a sufficient number of well-equipped laboratories under the direction of thoroughly qualified professors.

17,492. Have you been at all interested in what is called the professorial scheme, and had any communication with the advocate of it?—Yes.

17,493. Do you approve of their views?—I approve, generally, of the views of the professorial scheme. I take exception to the paragraph referring to the constitution of the Senate. It is said, "The University shall ultimately consist of the professors and a certain number of Crown nominees." I think it is desirable that other persons besides

Sir P. Magnus, B.A., B.Sc.

15 Dec. 1892.

Crown nominees should be upon the Senate of the University; and, as I have before stated, that there should not be a preponderance of professors on the Senate of the University.

17,494. Do you approve of representations of institutions on the Senate?—Yes, some institutions; I think Convocation should be represented on the Senate.

17,495. King's College, University College, and the Medical Schools?—No, I do not think it is necesssary that separate teaching institutions should be represented on the Senate. I think it better that branches of the study should be represented rather than institutions.

17,496. They would generally have professors, would they not?—We want a certain number of business men upon the Senate, if I may say so, and I do not think we are so likely to get them from the professors as by the representation of other bodies. The Crown is very useful in providing the kind of members required upon the Senate, but I think that the County Council might also be represented on the Senate, and it is very desirable that Convocation should be duly represented on the Senate. Having regard to the fact that the University determines to some extent the preliminary education which leads up to the University, it is important that schoolmasters and those dealing with the secondary education of the country should be represented on the Senate, not in large numbers, but sufficiently, so that their views should be heard.

17,497. With regard to outside institutions, such as Royal Colleges and the Inns of Court, do you not think it is important that they should be represented?—I do not think it is important that institutions should be represented, but branches of knowledge and Faculties, and whatever way is found most convenient for representing such branches of knowledge should be adopted. I see considerable difficulty in attempting to represent institutions, because one does not know how to draw the line and say which institutions are of sufficient importance to be represented and which are not.

17,498. Would any branches of knowledge be represented by any other element besides the professorial element?—No, I think they would be represented by the professorial element.

17,499. Then there would be the professorial and the Crown members and Convocation members?—And the County Council, if the County Council gave funds towards the University. They would probably send business-like men.

17,500. Then with regard to the different institutions comprised in the University, would you, in the first instance, absorb them, or do you contemplate absorbing them eventually?—I think if they are willing to be absorbed it is desirable that they should be, and I expect if the University were once founded they would find it to their own interest to become constituent parts of the University, and so be absorbed in it.

17,501. And give up their buildings and their revenue and everything else to the common fund?—I think it would be desirable that they should do so.

17,502. Several of those who advocated that made an exception in favour of Medical Schools. They thought they were doing such good work that they were not to be absorbed?—I have a difficulty in answering that question.

17,503. That is not the point upon which you particularly wanted to give evidence to-day?—No.

17,504. That was chiefly with regard to the new Faculty of Engineering?—Yes.

17,505. Is there any other point you would like to mention?—No.

17,506. (*Lord Playfair.*) Have you given evidence as to what relation the City and Guilds Institute in which you are interested, should stand into the new University?—I have no authority from the City and Guilds Institute to give any evidence on their behalf, and therefore I have not done so.

17,507. Do you think it would be easy to surrender the government of that to a central body?—I am afraid that is a question I cannot answer.

17,508. Would not there also be some difficulty in the government of the College of Science surrendering its autonomy to a central University?—I do not see why there should be any difficulty in so far as the College is doing University work.

17,509. Do you think that the directions of a central University for the method of teaching would be willingly accepted by a government that is responsible to Parliament for the administration of the funds?—I see no reason why they should not. The University of London is itself a Government office at the present moment.

17,510. Then if you see no reason for that, do you see any reason why the City and Guilds Institute should not surrender itself in some way. It is a public body supported by funds of City Corporations having interests in the public?—It is so very difficult to say what kind of action the City and Guilds Institute might desire to take in the matter, that I feel a great difficulty, having regard to my position, in answering your question.

17,511. Do you think there would be any greater use in King's College surrendering its autonomy to a central body and becoming a truly professorial part of the central body?—I see no difficulty in King's College or University College, nor indeed in any institution giving University education merging its interests in those of the University.

17,512. You think the governors would be willing to give up their autonomy? I do not say "should," but "would"?—I do not think it would be necessary that they should give up altogether their autonomy. It would be quite impossible for the Senate of the University to manage every detail connected with the direction of each particular institution, and I take it that each of these institutions would require to have its own governing body under the new scheme as it has at the present moment. There are details of management connected with each institution which would have to be directed by a body of managers connected with that institution.

17,513. That is so, but I refer to what you said beforehand as to the intercollegiate lectures and intercollegiate laboratories. There is not a very efficient chemical laboratory in connexion with King's College. Do you think they would be prepared to allow their pupils to enter a central laboratory and have them educated there, or that they would rather prefer to make their own laboratory more efficient?—I think that after a time they would see the very great advantage of allowing their students to go to some other laboratory where they could get efficient teaching, and that in return for that the central governing body of the University would provide King's College with professors in certain branches of knowledge which would attract students from other places where the instruction might not be sufficiently good. I think it would be the duty of the Senate of the University to allocate to different parts of London the teaching which it is most desirable should be given in those parts; and, having regard to the fact that the professors would derive their revenue from the University, not from the fees of the students, and not from the funds of the institution to which they may be attached, I believe there would be very much less jealousy under a scheme of this kind than exists at the present moment.

17,514. I presume that in making these recommendations you assume that somehow or other a University of London worthy of the name must be very largely endowed either by the State or by private individuals?—I think that is absolutely necessary.

17,515. You know, for instance, that even the small town of Strasbourg has spend nearly 700,000*l.* in fitting up itself a University, and it receives upwards of 40,000*l.* a year for its annual maintenance. Have we anything in London at all comparable to that little town?—We have nothing that could be compared to

the University of Strasbourg for completeness of equipment for practical instruction.

17,516. If there is nothing that could be compared to it in London, a very large expenditure must be contemplated in order to put it into a proper position?—It is absolutely necessary.

17,517. We do not possess any of the elements for that at present, do we?—There are endowments connected with some of the colleges; there are endowments connected with University College, and I believe there are endowments connected with King's College, but the University itself possesses very little at the present moment which would enable it to discharge these functions.

17,518. The University of London at present is a self-supporting body, is it not?—It has a small annual deficit which is supplied by the Government. Its deficit used to be very much larger, but unfortunately the deficit has become less, and in consequence the University has received less and less from the Government.

17,519. It chiefly depends upon fees?—The fees paid for examinations.

17,520. There is no large grant given by Parliament or any other body to the University of London?—No.

17,521. And in order to get up a University worthy of the name, public or private munificence must come to the aid of the University of London to a very much greater extent than it does at present?—That is so; it is absolutely necessary.

17,522. (*Professor Ramsay.*) You made reference to the very interesting report of the Commission on Technical Education, of which you were a member. I may take it you agreed; there was no disagreement on the part of the members?—No, there was no practical disagreement.

17,523. It was a unanimous report?—Yes.

17,524. You brought out a point of extreme interest which you quoted to-day, that you found a feeling in Germany in favour of relegating the teaching of scientific subjects, such as engineering and chemistry particularly, to the University, and encouraging students to go to the University for their teaching in those subjects rather than to the polytechnic institutions?—I should say that was not quite the way in which I wanted what I said to be understood. It was rather that the University might be supplemented by a Faculty of Engineering, and that the University and polytechnic might be combined, than that the students of the polytechnic should be encouraged to go to the University. I hope that distinction is clear.

17,525. Quite. It was not with regard to the students I was thinking; it was with regard to the nature of the instruction they were to receive. You will remember that some years before the Technical Commission was appointed, say, 10 years before, there was a very strong movement made in Germany in the other direction. There was a great desire to increase the number of the *Realschule*, and to divert the teaching of scientific subjects from the University grooves, and to turn it more and more into the grooves specially fitted for science. After some experience the current set rather the other way, and the feeling of scientific men and persons interested in what we have called here technical education has been that the wants of scientific education should be provided for rather by the University than by the teaching of polytechnic institutions. I think the great result of the report of the Commissioners may be said, may it not, to have been to bring out the fact that the super-eminence of Germany, wherever it does exist in trade and manufacture, is due to a knowledge of Science, not especially of a technical character, but of Science as taught upon scientific principles?—That is so.

17,526. And you may say that there were two great principles which your Commission brought out in a very striking way, first, that the great superiority of Germany, so far as Germany is superior to us in trade and manufacture, is due to the initial superior education of the German in general subjects; and, secondly, with regard to scientific subjects specially, it is due to the fact that his knowledge of science is founded upon a really scientific basis, and not got up for the purpose of a particular trade?—That is so.

17,527. I think the sciences which you particularly illustrated in your report in the case of Germany were all of them sciences more or less connected with chemistry and not with engineering, because Germany is a country which has gone in heavily for chemistry, and perhaps the two most interesting illustrations of the subject were taken from the German manufacture of beet-root sugar and aniline dyes?—That is so.

17,528. And the report brought out in the most interesting way the immense pains which have been taken by the German Government and the local manufacturers to conduct the study of those subjects in the most scientific way, and the reason why the German farmers have got more sugar out of beet-root is not because they were more specially instructed in the art of extracting sugar out of beet-root, but because they were more specially instructed in chemistry, and because the whole agriculture of Germany, so far as regards growing beet-root is, as a matter of fact, under the control of scientific men?—That is so.

17,529. Experts and professors go to farms, analyse the soils, and recommend the manures, in fact, the whole process of agriculture is under the direction of scientific men. And so in the case of aniline dyes, you have, in the case of the great works upon and near the Rhine, not merely laboratories of a technical kind fitted for that industry, but laboratories which might be considered chemical laboratories pure and simple?—That is so.

17,530. The result of your report is, therefore, to a large extent, about to destroy the vulgar idea that there is something in technical science which differentiates it altogether from science generally?—As regards chemistry, distinct. In the chemical factories to which you refer, there are laboratories which are seldom found equally well equipped in this country, in which the students who have had a sound general scientific instruction at the University or at the polytechnic are able to apply the knowledge which they have gained to the particular commercial problems which have to be investigated for manufacturing purposes, and a whole staff of chemists are to be found working in those laboratories.

17,531. (*Lord Playfair.*) Instead of one chemist who would exist in factory here there are sometimes 20, 30, or 40, or 50?—Yes, and laboratories specially fitted in connexion with the industry in which they are engaged.

17,532. (*Professor Ramsay.*) The men they get to assist in these laboratories are men who are chemists as a whole, not specialistic chemists, and the students are expected to have, and are obliged to have, a knowledge of the principles of chemistry as a whole?—Yes; the additional knowledge which chemists who are going to be engaged in manufactures are required to possess, is a knowledge of engineering, of machine designing, and drawing.

17,533. In addition to their knowledge of chemistry pure and simple?—Yes, in addition to their knowledge of chemistry pure and simple.

17,534. Your report in that way did a good deal to explode the fallacy which many of us who are interested in technical education in our large towns cherished, that chemistry might be profitably studied by a young man with a view to a particular branch of trade and none other. You are quite familiar with that sort of idea?—Yes.

17,535. The idea of a young fellow coming to learn the chemistry of brewing when he knows nothing about the chemistry of dyeing and *vice versâ*?—Quite so.

17,536. The result of that has been to show that all technical education of a scientific character must repose on science, and that of the two words "technical education," the substantive is the important word and not the adjective?—That is so. Of course a distinction

Sr P. Magnus, B.A., B.Sc.

15 Dec. 1892.

must be made between the education of those who are hoping to obtain the highest scientific knowledge, and those who can only devote a very short amount of time to study and wish to obtain some insight into the principles of the industry in which they are engaged. Then, again, I must point out the distinction which exists between chemistry studied for technical purposes and other branches of science studied with the same object. Of course your own remarks have been directed almost exclusively to the training of technical chemists.

17,537. That is the branch of knowledge most illustrated by the examples of Germany to which you have alluded?—It is the branch of knowledge which Germany has been most successful in applying to manufacturing purposes.

17,538. Following up that point about chemistry, you may have heard that there was a special Chair of technical chemistry founded in Glasgow in connexion with what is now the College of Science, and you will not be surprised to hear that they have never up to this day been able to make up their minds about what things fall under the province of the two professors respectively. I suppose you could not exactly lay down any hard and fast rule with regard to what a man who is a professor of technical chemistry ought to know and teach, as compared to a professor of chemistry as a whole?—No, the only distinction between professors of chemistry at Universities and polytechnics in Germany, is the one you have named. In the polytechnics there is a professor of technical chemistry, whereas in the University there are only professors of chemistry. It was very difficult to discover any difference in the instruction given by one from the instruction given by the other. The professor of chemistry always gave lectures on the different processes of manufacture in which the application of chemistry was involved.

17,539. It was rather the end to which he went than the point from which he started, that differentiated the two?—Yes.

17,540. You have laid great stress upon a high standard with regard to University teaching, and you would expect the University to take the lead and demand a rigorous, theoretical, scientific knowledge from candidates for degrees as far as possible. But I understand you to hint just now, that you would draw a distinction between chemistry and engineering in this respect?—You mean as regards the preliminary knowledge?

17,541. Yes; would you say that what we have said about technical chemistry, would equally apply to engineering as a technical branch of study?—No, certainly not.

17,542. You think scientific engineering is a distinct thing from practical engineering?—I should not say that scientific engineering was distinct from practical engineering, but I should say that the study of engineering would require a distinct and special course of instruction different from the study, we will say, of ordinary mechanics, mathematics, and physics.

17,543. That is not quite what I meant to say. I mean to say this: that we recognise that engineering must repose on a purely scientific knowledge of mechanics, mathematics, and physics, and I presume also of chemistry precisely of the same kind that you would expect from any other candidate for a University degree?—No. I should say there was a science of engineering.

17,544. I beg your pardon; the thing must rest upon that?—Yes; but I should say there are principles of engineering, and a system of organised knowledge in connexion with it, which might be regarded as a science distinct from the science of mechanics, physics, mathematics or chemistry.

17,545. The principles of which are not to be found within the limits of those four sciences?—No.

17,546. But which are strictly of a scientific character?—Yes, strictly of a scientific character.

17,547. I am also glad to see that in speaking of the Faculty of Engineering, you did not propose that any degree of engineering given by the University should carry with it a professional qualification?—Certainly not, for the reason you have given.

17,548. But as the same time you asserted as a matter of fact that Universities were originally merely professional schools?—That was the result of my own study of the origin of Universities. I am not laying it down as an axiom.

17,549. I was not going to discuss that point. But your point was that the Universities had originally been professional schools, and that the idea of their being schools of pure knowledge was an after-growth?—Yes.

17,550. And the idea of a University would be, therefore, not that of a body which certifies to pure knowledge but that of a body which gives this very professional license which you would like to see abolished, even in the case of medicine?—No, I do not say that the idea of a University is one which gave a professional license, (although I think it gave in very early times a license to teach), but I say my idea of a University is one which started with encouraging the study of the principles of science underlying a particular profession, and that from the practical work in which the professional student was engaged, he gradually arrived at a larger and wider knowledge of science than probably he ever would have obtained if it had not been for that practical work; and, further, that our knowledge of science itself has been developed to a very great extent, and largely increased by the practical work in which professional men have been engaged.

17,551. Yes, but your point was that the Universities had originally started as professional schools; that they had rather declined from that character, they had changed their character now and had become places in which pure knowledge is obtained or sought without reference to professions. Your demand in the case of engineering tends rather in the opposite direction and to counteract that movement?—It is to supplement the present work of the University by placing the teaching of engineering on the same footing as the teaching of medicine or law.

17,552. I suppose none but engineering students would go in for the engineering course?—No, taking engineering in its broadest sense.

17,553. The purpose of having an engineering degree would be for the professional advantage of students taking that degree?—Yes.

17,554. And therefore the proposal would be open to all the objections which you entertain, as far as the license is concerned, to the University degree?—I do not think it would, because I understand that the principles of science in connexion with engineering are something different from the practical knowledge and skill which a man should gain before he obtains the license to practise as an engineer. Just in the same way the principles of physiology and anatomy may be studied independently of the practice which a medical student must acquire before he gains his license. I think the two things are on the same footing.

17,555. But as I understand you laid it down that this very practice would form part of the course for the engineering degree. You spoke of laboratory engineering; what does that consist of?—I should say that the object of laboratory engineering practice is to illustrate the principles of science underlying that practice. I do not understand how the principles of science can be taught except by practical illustrations which enable the student to see for himself.

17,556. Then you mean to say that the practical work of the engineering laboratory would have the same relation to the teaching of engineering that experiments in chemistry have to chemistry, or experiments in physics to the teaching of physics?—Certainly.

17,557. Would it be with that object that students would go in for the engineering course of a University?—I think so, because they would be better qualified having gone through a course of such instruction

for the practical work of engineering than others would be.

17,558. Then you would not contemplate that the course should be such as would make a sufficiently capable workman into an engineer?—No; certainly not.

17,559. Of course you are familiar with the way in which engineers are trained in a great city like Glasgow by going into the locomotive or shipbuilding yard. You do not intend the University course to supersede that?—No, it would be preliminary to it.

17,560. The whole course would be of a scientific character?—A scientific character practically illustrated.

17,561. Can you give me any reason for founding a degree in engineering which would not apply to a degree in chemistry given with a view to the practical application of chemistry in trade?—I think the reason is the one you yourself have given, that in the subject of technical chemistry the instruction is almost necessarily the same for those who are going to be manufacturing chemists as it is for those who are studying chemistry for its own sake, whereas engineering involves a course of study which, almost from the very beginning, is different.

17,562. There is no question now whether the course of study should be different or not. The quetion is whether this particular department is a fit department to have a degree of its own. My question is, if there is as much chemical science in the course or a chemical student who is going to be put to work in a dye-works or bleach-works, if he does not get a degree of chemical science what are the grounds on which you claim a degree in chemical science for a student who is going to be put to work in engineering science, which is strictly analogous to the chemical course?—I do not think it is strictly analogous, because I contend that chemical engineering is something different from the science and principles of mechanics, physics, or chemistry.

17,563. But we do not give a degree of physics, of chemistry, or of mechanics. The question is why, alone out of these subjects which are treated scientifically, engineering should claim to have a special degree for itself as distinct from the general degree of Bachelor of Science?—I understand you to mean that a course of study in engineering should lead up to a degree in science founded on a special course of instruction, and that the degree should be a branch of the science degree rather that a separate degree.

17,564. That is what I mean?—My main reason for suggesting that there should be a degree of engineering is because I regard the profession of engineering as analogous to the profession of medicine. We have a degree in medicine which is distinct from the degree in the science, the study of which forms a great part of the instruction in medicine. For the same reason, and having regard to the increasing importance of engineering and present position which it occupies, there should be a degree in engineering distinct from the degree in those branches of science the principles of which underlie the practice of engineering. The analogy seems to me to be quite complete. The biological sciences lead up to the degree of medicine, the physical sciences lead up to the degree of engineering.

17,565. The only analogy between the two cases is that they are both professions?—Quite so.

17,566. That is precisely the point with respect to which you say the giving of a degree is not a desirable thing?—I say I do not think the Universities should give the license to practise. But I thought I said that the Universities were originally professional schools.

17,567. Whether Universities give the license to practise or not, would not the engineering degree be sought successfully for professional purposes?—Yes, in the same way that the medical degree is sought for medical purposes, and the legal degree, to which I have already referred, for professional purposes.

17,568. The point is this, that although the University ought as such only to acknowledge and to recognise scientific knowledge, it yet should in this special case do so in a form which, whether the University says so or not, will mean that a man is a competent professor of a particular profession?—I do not think it will mean that, and I do not think the University should be asked to recognise only such knowledge as is apart from the practice of any particular profession. On the contrary, I think professional knowledge ought to be considered in the instruction which is given in a University.

17,569. That, of course, is depriving the University of the right of having a teacher of engineering science, pure and simple. You mean you cannot separate the technical and professional instruction which is required to enable a man to win his bread as an engineer from the scientific part; where as it is the business of a University to recognise only the latter, that is, the scientific part. I take the analogy of chemistry. Chemistry is quite as much a profession for which men prepare themselves as engineering. If you were to have a degree of engineering science, on what grounds could you refuse a degree for chemical science?—I should give the chemical student the right of taking a degree in engineering if he wished to do so.

17,570. That does not alter the fundamental nature of the question. Would it not be a much more simple, a much more truthful, and a much more natural thing for the University to do to certify a knowledge of Science in a University form—that is by a degree in Science—than by making, in the form of certificate, any particular reference to a particular profession?

17,571. (*Professor Sidgwick.*) I think there is a misunderstanding. If I understand Sir Philip Magnus he is using the term "engineering" sometimes in a wide sense to include applied science as a whole?—Yes.

17,572. It is a mere question of words, that is all. What you decire is a Faculty of applied science?—Of applied science excluding of course the application of the different branches of biological science. I was anxious to point that out. If the Commission can succeed in finding any better word than "engineering" to express what I mean, personally I should be very glad to adopt it. I have not been able to find a better word. My objection to "applied science" is that medicine is an applied science, and it would come under the head of applied science. I want some word that will include those branches of applied Science, which are not included in Medicine, and which underlie the practice of engineering and certain manufacturing processes. I can find no other word than "engineering." I would say as regards medicine, that the subject of surgery is distinct from medicine, and yet you have not a degree in surgery.

17,573. (*Professor Ramsay.*) Yes, you do. There is the Master of Surgery?—Yes; there is a degree in surgery, but it is of recent date, certainly in the London University it is of very recent date. At any rate I do not press this point.

17,574. That increases very much the objection, because if the engineering degree means a degree founded upon chemistry, physics, and so forth, no one in the world would hesitate to say that those are proper subjects for a University degree. But the question is why should you give the misleading name of a degree in engineering, which inevitably suggests that the possessor of it has a special professional qualification, and that the man you send out is a competent professional man in engineering work?—I should be very sorry that it should be supposed that a man who possessed the degree of engineering was a competent professional man. I have no doubt that after a time the public would be sufficiently educated to recognise that practical training was indispensable in addition to the academical training in engineering, the same as it is in other professions. No one would care to entrust a legal case to a man who had just attained the degree of LL.B.

Sir P. Magnus, B.A., B.Sc.

15 Dec. 1892.

17,575. Would it not be a much more satisfactory thing to have the degree of Bachelor of Science with arrangements to suit the different departments, such as Bachelor of Science in the Chemical Department, or Bachelor of Science with especial reference to engineering; but not give him a title which has unfortunately a distinctive professional sound, and will be sought for for professional purposes?—That is an alternative opinion in favour of which a good deal might be said.

17,576. There would be many other professions founded in science which might want a degree?—Such as——

17,577. I mentioned chemistry. You might have a chemical engineer?—Of course one can subdivide. No doubt the examinations for the degree of engineering would have to be very broad in character.

17,578. You quite agree in this point that any degree which the University gives must be founded upon scientific knowledge, pure and simple, with such scientific illustrations as laboratory teaching requires, and that the University body is not the proper body to certify to a man's professional qualifications?—That is so.

17,579. (*Sir George Humphry.*) What you feel on the whole is that the University should give a fundamental education of science generally, and that it should also in addition to that give an education in various branches of science as applied to certain particular subjects. There should be a general education, for instance, in physics and mechanics, and further you say there should be the education in those subjects in their application to certain particular subjects such as engineering, architecture, practical chemical work, and other things?—I think mainly engineering.

17,580. Would you include architecture under engineering?—I stated that the constructive part of architecture would be included in engineering. But there is another side of architecture altogether distinct.

17,581. You think there should be a certain special education in those branches of science specified in addition to the fundamental principles of those sciences?—I should say in scientific principles of construction.

17,582. That there should be a certain specialisation in addition to the general principles taught?—To some extent, yes.

17,583. Advancing in different directions?—Yes.

17,584. And your feeling would be that unless something of that sort is done in England, some higher general education and some higher special education, England will not hold its ground in engineering, agriculture, and other subjects in comparison with other nations?—I think it is very important that the higher education should be generally diffused for commercial as well as for other purposes.

17,585. And that that education is scarcely carried out in England at the present time in comparison with Germany and other States?—I should say it is not carried out to the same extent as it is in Germany.

17,586. And unless it is carried out to a similar extent, England in the future can scarcely hope to hold her ground in comparison with those other nations?—It is difficult to prophesy. England has held her own so well in the past, that it is to be hoped she will in the future, but no doubt the greater diffusion of higher University education will help England to retain the supremacy which she has held up to the present.

17,587. Some view of that kind with regard to the future of English commerce and English engineering, and so forth, would be a ground for the application to Parliament for the liberal endowment of a University which would promote such instruction?—That is so, and it is very desirable that the argument should be used.

17,588. Unless some argument of that sort can be used, we can scarcely suppose that a Government influenced so much by public opinion as it is and ought to be, would contribute large funds to a University. That must be the fundamental reason for the application?—Yes.

17,589. And therefore that reason should be made quite clear and distinct?—Yes.

17,590. With regard to the various medical schools, I daresay you are acquainted with them?—With some of them.

17,591. Those that you are acquainted with perhaps may be in your view, particularly ill-furnished; I do not ask which they are, but there are some of them?—There are some of them which are certainly ill-furnished for science schools.

17,592. But there are some which are sufficiently well-furnished?—Yes.

17,593. Because in a large and long subject such as medicine, which persons enter for the purpose of gaining a livelihood the education must be to a certain extent limited. We cannot expect that a very large amount of time should be spent in the pursuit of science unless it is likely to have some tolerably direct application to practical medicine?—That is so.

17,594. And there are some schools, I suppose, in which these opportunities are sufficiently given?—Yes.

17,595. And some in which they are not?—Some in which they certainly are not.

17,596. And you feel that the University should offer opportunities for such scientific education to all, and leave them to avail themselves of it if they are willing to do so?—I think a certain amount of scientific instruction should be made indispensable as a preliminary to the professional work of the medical student.

17,597. And the University should afford opportunities for such instruction?—Certainly.

17,599. And without perhaps absolutely destroying the various schools, it should offer opportunities which they might avail themselves of, and by its examinations satisfy itself that those opportunities had fully been taken?—Yes.

17,598. (*Mr. Anstie.*) I am not quite sure whether I understand the meaning of the term "engineering" as you use it. Do you choose the term because of its being very definite or because of its being very vague?—I am rather disposed to widen the ordinary signification of the word, so as to include the application of certain branches of science to manufacturing industry.

17,600. Did you exclude chemistry?—No, that would be included. I would include the application of chemistry to manufactures.

17,601. Would it be possible to give any more exact definition of "engineering." A County Council advertised lectures on agricultural engineering and it turned out that they were teaching the students how to measure a field?—I should think that was a branch of engineering.

17,602. Would it be possible to define engineering in any more accurate way so as to distinguish it from applied science in general?—I want a word which will denote those branches of applied science which do not refer to medicine. I cannot think of any better word than "engineering;" if you use the word "applied science," Medicine comes under it.

17,603. We had witnesses before us the other day, eminent scientific men, Professor Fleming and Professor Kennedy, who objected to the engineering degree, precisely on the ground that it would seem to indicate to the public the possession of professional capacity, and they said that the Dublin engineering degree, for that reason was not much valued. Have you considered that view of the subject, the difficulty there will be of distinguishing a degree with so specific a name as this is from a professional licensing qualification, or a certificate of practical efficiency?—I think the public would gradually grow to distinguish one from the other.

17,604. Is there anything that makes it reasonable that the public should, in the first instance, be thrown into confusion in order that they may afterwards come

to a clearer view; would not the valuable end, in a University sense, be answered by giving to these branches a distinct educational provision in a University, but making the certificate the same—the form of degree the same—as for other scientific attainments?—I should say, to a great extent, the same end would be answered. I think it is mainly a question for engineers themselves to decide whether it is desirable that there should be a distinct degree in engineering or not, provided that there is a course of study in engineering leading up to a degree. The mere fact of its being called a degree in engineering, or a degree in special branches of Science, is not a matter of the first importance.

17,605. What you really want is an adequate provision of Chairs in the University, and facility for obtaining knowledge in the University, in matters dealing with this branch, and sufficient representation and influence in the councils of the University on the part of those who profess and teach the subjects?—That is the main point that is necessary.

17,606. That is what you attach most value to?—I attach most value to it. I should state that what I was desirous of representing was that there should be a Faculty of engineering rather than a degree of engineering. I have been led into an argument in favour of a degree in engineering, but I should say that what I do attach importance to is a course of instruction leading up to a degree in engineering, whether that degree be called a degree in engineering or a degree in science, does not seem to me to be a matter of importance.

17,607. One question as to a point which you seem to attach a good deal of importance to, the entrance examination. Have you any entrance examination at the City and Guilds?—Yes a distinctly difficult entrance examination.

17,608. I do not know whether you have heard that eminent professors from the Royal School of Science, Professor Thorpe, and Professor Rücker gave evidence that they have no entrance examination there, and that they do not find they want it?—I will leave the professors of the Central Institution, two of whom are going to give evidence before you, to tell you their experience during the last five or six years with regard to the capabilities of the students who have entered the Central Institution since the entrance examinations were established.

17,609. Supposing the absorption plan not to be carried out to the full extent desired by yourself and some others, supposing it became necessary to recognise the continued existence of the functions of separate institutions, such as the City and Guilds, University College, King's College, and other important places, might not the question of requiring or not requiring entrance examination to be left to the responsibility of the institutions. If they found it advantageous and desirable they might have their own. If they preferred, as they seem to do in the Royal School of Science, to go without, they would take their chances of the success of their pupils?—You do not mean that students should be allowed to commence the course of instruction for a degree without passing any examination, do you?

17,610. Yes; I am suggesting that they should be left entirely in the hands of the body who are responsible for education?—I think it would be very undesirable; I think it very important that before commencing his University education a student should be required to have had a sound secondary education; and I would refer to the fact that in Germany students are not allowed to enter the University until they have been through a course of instruction in the Gymnasium; nor to enter a polytechnic unless they have obtained a certificate in the Realschule, and the qualifying certificate is by no means easy to obtain from either of those institutions. It would take long to explain, but I cannot help thinking that if pupils come to a place of higher education with insufficient knowledge you are using very wastefully the abilities of the professors who are employed there to instruct them, and that the professors ought not to be doing, as they have been doing in this country, in many institutions, the work of schoolmasters. They should be required at starting to give the higher instruction. The only way that I can see of insisting that the instruction given in a University is of a high character is by admitting those only who have passed a difficult matriculation examination.

17,611. You would not be prepared to leave that to the practical experience of the body of professors in any particular institution?—No, I would not; I believe the action of the University in this direction would be extremely beneficial to the secondary education throughout the country. It would tend very much to raise the character of the instruction given in our public and private schools.

17,612. On the other hand, you would be prepared to accept something similar to the German system, not requiring the University itself to conduct the examination system, but that the University should accept the results of other examinations approved by the University?—Yes.

17,613. That would content you?—Yes, that would content me.

17,614. Then you seemed to think it was of great importance, with a view to the relation of the University to secondary education, that schoolmasters should be represented on the governing body, and that could be best done by a vote of Convocation. Are you aware whether Convocation has ever sent up a schoolmaster yet?—I do not think it has. It may have done so.

17,615. You cannot impose conditions of that kind with regard to representation, can you?—It would be difficult, and not wise.

17,616. Would it not be a rather better plan to take the opinion of the schoolmasters through some organ of the University than to make them constituent elements of the University itself? It might be a very desirable thing, of course, that the University should have perhaps a special organ, or committee, or department to deal with a matter of that kind, but would it not be better that on that they should meet the representatives of the schools, that the schools should themselves be represented on the governing body?—The difficulty is that one does not know when a question arises which affects the interests of schoolmasters. The professors on the Senate would consult them on points on which they think they require information, but there may be many other points on which it would be desirable that a schoolmaster should express his opinion about which the Senate might not think it worth while to consult them.

17,617. I am not suggesting merely casual consultations of that kind, but something of a more permanent organisation, so that they should have the opportunity at any time of considering and consulting on affairs which affect schools and making their representations?—That might answer equally well.

17,618. (*Professor Sanderson.*) If it were the business of the Crown to nominate representatives of literature on the governing body, schoolmasters would come in in that way?—Yes, that is very likely.

17,619. I think you said just now that you thought as regards subjects a degree in physics and chemistry would cover all the subjects required for engineering, without reference to the policy of having an engineering degree. I think I understood you to say that?—Yes, a degree in the application of physics and chemistry to engineering would cover the subjects.

17,620. I think you said you thought it desirable that professional bodies should have the entire charge of the qualification?—I think so.

17,621. In that case would not the professional bodies require evidence of scientific training?—I expect they would, either by examining themselves, or by requiring certificates from other bodies or from the institutions in which the students have been instructed. They would also require certificates or evidence of practice as well as knowledge-qualifications.

Sir P. Magnus, B.A., B.Sc.

15 Dec. 1892.

17,622. But, as regards the scientific training, would it not be extremely inconvenient if a man were compelled first of all to prepare himself for the degree, and, secondly, to prepare himself to satisfy the professional bodies as regards his scientific training?—I do not suppose that any separate qualification would be necessary.

17,623. Do you think the professional bodies would not accept the degree of the University if there were a degree suited for their purpose?—I expect they would.

17,624. As part of the professional qualification?—As part of the professional qualification.

17,625. And in so far therefore you would not object to the degree of the University serving a professional purpose?—No, certainly not. I think most degrees do serve a professional purpose in that regard. The Arts degree serves a professional purpose for the schoolmaster.

17,626. (*Professor Sidgwick.*) I think you said that you found a strong opinion in Germany in favour of connecting engineering with the University. At the same time, if I mistake not, you said that the teaching of the polytechnic side by side with the University produced a healthy rivalry?—That was the opinion of some of the German professors.

17,627. It occurred to me that if the rivalry was healthy that was an argument in favour of keeping the two systems apart?—To that extent it would be so.

17,628. I wished to ask whether the strong opinion in favour of connecting engineering with the University, was held by those who were concerned in the management of the Polytechnic, or whether it was held by those who taught in the Polytechnic, or whether it was held by those who taught in the University. There are three classes, and as we find in our work of collecting evidence their views tend rather to diverge. I thought perhaps you could inform us how far in Germany the opinion in favour of connecting engineering with the University was entertained by members of those three classes?—I cannot speak so well for the managers of these institutions, because our conversations were principally with the professors, but I think you will find if you refer to pages 207 to 214 of our report, that the opinion is fairly generally held both by the professors of the University and the professors of the Polytechnics. I come across a statement here "Dr. Fick, Professor of Physiology at the "University of Wurzburg, formerly a professor in the "Zurich Polytechnic, also supports the view that the "union of the University, with the polytechnic school "would be distinctly advisable." My eye fell upon that by chance on looking through the pages before me. It happens that the professor of a polytechnic very often goes from the polytechnic to the University and *vice versâ*. Therefore many of these professors would have had the experience of both institutions in giving the evidence which they did give. I should say that the point with regard to the necessity of the existence of separate instruction for University work was one of the points that was very carefully inquired into.

(*Professor Ramsay.*) One of the authorities I heard that opinion from was the Minister of Instruction in Saxony.

17,629. (*Professor Sidgwick.*) I suppose the State examination in Germany for the public service largely controls the teaching?—I think it does.

17,630. Can you tell me how far the State examination, as now organised, requires a particular course to have been gone through either at a University or a Polytechnic. Does it leave the student free to choose between the two or does it prescribe the one or the other?—There is no Faculty of engineering in the University. Therefore the State examination would require the students to have gone through the Polytechnic Institution.

17,631. I meant rather with regard to those subjects in which, as you said, the teaching at different institutions overlaps. Would the student be allowed in respect of those subjects to take the University course, or would he be restricted to the Polytechnic course?—What I said refers to chemistry. I am not aware of the particular State examination in chemistry to which you refer, but in so far as chemists are being trained for manufacturing purposes there would be no State examination, and the manufacturer would select the chemist indifferently from the University or from the polytechnic.

17, 632. Did those professors who desire to connect engineering with the University support your view that a new Faculty ought to be instituted similar to the Faculty of Medicine?—I am not certain that I ever put that question directly to them, because I think you will see that it almost follows as a necessity. The Germans have no Faculty of Science as we have here. The Germans have one Faculty of Philosophy and that covers all knowledge which is not pursued with regard to its application. They have only one. The Faculty of Philosophy takes in Arts, Political Economy, and all sciences. Then, besides that, they have the Faculty of Laws which is a distinctly professional Faculty; and the Faculty of Theology. One could scarcely expect then to include engineering under philosophy. If they added engineering to University studies one might almost infer that they would have an additional Faculty for that purpose.

17,633. I am afraid I should have drawn the opposite inference on this ground. I should say that in the course of the development of the University system the term "philosophy" has come to include so much in Germany that there would be no harm in its including engineering too. It has got so very wide that it might include that amongst the other things which nobody outside a German University would dream of calling philosophy. Then with regard to the engineering laboratories, I think, in reply to the Chairman, you said that a rather costly equipment would be required if the system was to be well carried out?—Yes.

17,634. Are you acquainted with the work that has been done in this department either in University College or King's College?—I have seen the laboratories in both those institutions.

17,635. Do you consider that those laboratories fall far short of what would be required, or do you consider that either one or the other is equal to what is required?—I think that with larger funds they might both be very much improved.

17,636. But would you consider them now both ill-equipped for the work and not capable of performing the work which the academical department would require to institute?—It is a little difficult to answer that question in the exact form in which you have put it. I think the professors of both those institutions would be very glad indeed that their laboratories should be improved by further equipment.

17,637. That is, in my experience, the case with all professors who have either laboratories or museums in their charge. It may not be the case in the University of Strasbourg?—I should point out that there is a well-equipped engineering laboratory at the Central Institute of the City and Guilds of which Professor Unwin is the professor.

17,638. Do you regard an engineering laboratory as having for its end the demonstration by professors or research or both combined?—I understand that the object of an engineering laboratory is for the purpose of demonstration by professors, and also for research work.

17,639. The two ends ought to be aimed at in the same laboratory, you think. They ought not to be divided?—No.

17,640. Would it be also used by the students for practical purposes?—For practical experimentation, yes.

17,641. I was not quite sure if a separate Faculty were established how you would compose the Faculty

and what its relation would be to the Faculty of Science. In the department of chemistry, for instance, would you have separate professors, one professor a member of one Faculty, and another professor a member of the other?—I think that where you have a general Faculty of Science and the special Faculties of Engineering and Medicine, it will inevitably follow that the professors in the Engineering and Medical Faculties will also be professors in the Science Faculty.

17,642. Then with regard to the relation of the Faculty of Science to the Faculty of Engineering,—in the case of medicine, some of the witnesses who have come before us have held strongly the view that the Medical Faculty ought not alone to determine the nature and extent of the scientific preparation of medical students; and if I remember rightly in a statement agreed upon by the London schools as expressing their general opinion, it was suggested that questions relating to the preparatory scientific training for those who were preparing for the profession of medicine should be reported on both by the Board of Studies of the Faculty of Science and by that of Medicine. Would that correspond to your view of the relations in the case of engineering?—I have not considered that question before, but it certainly seems to me that there would be advantages in the Board of Study connected with each Faculty reporting upon the curriculum for a degree in engineering.

17,643. Do you think there is a danger such as has been thought to exist in the case of medicine, that if you leave the course of preparation for engineering to be determined entirely by professional men, the scientific preparation may be too much cut down?—I do not think there is to the same extent, but it is possible that it might be so.

The witness withdrew.

WILLIAM CAWTHORNE UNWIN, Esq., F.R.S., M.I.C.E., and WM. AYRTON, Esq., F.R.S., examined.

17,644. (*Chairman to Professor Unwin.*) You were instructor for four years at the Royal School of Naval Architecture and Marine Engineering?—I was.

17,645. You were 12 years professor at the Royal Indian Engineering College, and eight years at the City and Guilds of London Central Institution?—Yes.

17,646. You heard the evidence given by the last witness, Sir Philip Magnus. Do you agree with most of what he said?—I think entirely with the evidence-in-chief, but there are points in the cross-examination in which I should not agree.

17,647. Do you agree with him in wishing for a Faculty of Engineering?—I think that as there are engineering schools in University Colleges in London, it is desirable to recognise them in the new University. I think apart from the fact that the engineering schools exist already in the University Colleges, I should have been disposed to say that I had rather that engineering was kept out of the University.

17,648. You wish to give evidence in order to show what has been done now by different institutions in London, in the way of giving instruction to engineers, and particularly with regard to the City and Guilds of London Central Institution. There are three institutions connected with the Guilds of London, are there not?—The City and Guilds Institute is the governing body of what are really four institutions. There is the Central Institution, at Kensington; the Technical School, Finsbury; the South London School of Art; and there is the Technological Examination System, which is independent of the other three.

17,649. The one you particularly know about is the Central Institution at South Kensington?—The one I particularly know about is the institution with which I am personally connected, which, of those institutions connected with the institute, is the one most nearly of University rank.

17,650. Does it give lectures in the daytime as well as at night?—We have no evening work except a special class for geometry applied to masonry.

17,651. And you have a thoroughly systematic course of instruction?—We have a complete course of instruction in three branches of engineering, each course extending over three years.

17,652. This particular course is entirely confined to engineering?—It is entirely confined to what we call engineering. That is, there is one course for civil and mechanical engineering; one for electrical engineering, and a course which embraces a much more considerable amount of chemistry, and which we call chemical engineering.

17,653. And this is tested by examinations throughout the whole course?—We attach a great deal of importance to having an entrance examination which excludes students especially of insufficient mathematical knowledge to follow the course. We then have examinations at every term and every session, and the marks at the examinations all count forward to the final examination, of course the marks at the final examination being larger in quantity than those given in previous examinations.

17,654. You give a diploma?—We give a diploma in Chemical Engineering, in Electrical Engineering, and in Civil Engineering and Mechanical Engineering. A student can take two diplomas really by studying another year in the College.

17,655. Is that diploma sought after by people wishing to become engineers?—The present diploma is not very widely known. We hope it is going to be of considerable value.

17,656. It would be one of considerable prestige?—I think it will become of considerable prestige. We shall do very little good if that does not come about. The hope of doing good is that we may make our school an influence on the profession with which we are connected.

17,657. Do you think there ought to be a qualification for an engineer like there is for a medical man—a license to practice?—I do not think it is possible in this country.

17,658. This is entirely independent of the Government, of course?—Yes, it is entirely independent of the Government.

17,659. I suppose it rather resembles the polytechnic schools on the Continent, does it?—I think probably we are more nearly like a German polytechnic school than any other institution in this country.

17,660. The only others which would answer to the description would be the schools of secondary education, grammar schools, and others?—No, the engineering schools attached to the other colleges.

17,661. You rather make a point of the fact that your schools and the polytechnic schools on the Continent have developed themselves independently by the direction of their professorial staff, and are altogether outside Universities?—I think it has been a good thing for the three schools with which I have been connected that they have had liberty to develop in their own way. The School of Naval Architecture and Marine Engineering, which now forms part of the Royal Naval College at Greenwich I think, has probably been by far the most remarkable technical school in this country, the one which, judged by the career of its students, has had by far the greatest amount of success. Cooper's Hill College developed almost on the same lines.

17,662. Is the Royal School of Naval Architecture connected with you?—No, it has nothing to do with

W. C. Unwin, Esq., F.R.S., M.I.C.E., and W. Ayrton, Esq., F.R.S.

15 Dec. 1892.

us. I was an instructor there for four years before I went to Cooper's Hill.

17,663. How is that governed? Is it a private institution?—It was a school established by the Admiralty and supported by the Admiralty, but which admitted private students. It was established at Kensington; it received chiefly students from the dockyard schools, who came there as a kind of scholarship or free studentship. They were six months of the year in the school, and six months practising in the dockyards. The course lasted for three years, and at the end of that time they entered the Admiralty service.

17,664. Was it paid for by the Admiralty?—It was entirely supported by the Admiralty. It has now been moved to Greenwich, where it forms part of the Royal Naval College, and is supported on the same principles.

17,665. And that is entirely a Government institution?—Entirely a Government institution.

17,666. It has nothing to do with any University?—No.

17,667. Then Cooper's Hill College, what is that?—It was entirely a Government institution for training engineers for India. It has now become partly a private college; that is, it now takes private students. At the time I was there the whole of the students, if they passed their examinations creditably, received appointments in the Public Works Department of India.

17,668. As you have already told us, you are now at the Central Institution. These schools, which are entirely independent of any of the Universities have in your opinion been in advance of the schools attached to the Universities?—I think it has really been a fact that the schools I have mentioned had complete courses of advanced technical instruction earlier than any of the University schools. That is, I think they were on the whole completer and more advanced schools than any University schools.

17,669. That would point to the advantage of having schools of that kind independent of the Universities?—It would.

17,670. Then with regard to the conditions of examination of these schools. Did you have external examiners in any of them?—I think in all the three schools with which I have been connected, the main part of the examination has been the examination by the professors.

17,671. And that, you think, answers well? You do not think you want an external element?—I do not think you require an external examiner in a school of that kind, which is independent. As a matter of fact, at the School of Naval Architecture, and at Cooper's Hill College they had external examiners for the satisfaction of the Government, and they carried out a part of the examination in conjunction with the professors.

17,672. That is an expensive process, is it?—It did occur to me to say something to the Commission, in view of their taking evidence about a special Faculty of applied science, about the fact that in schools like engineering schools, where practical examinations are required, a purely external examination is a very expensive matter and a very difficult matter.

17,673. Is it difficult to find examiners?—It is difficult to find examiners in practical subjects suitable for a school, because engineers having experience enough to make their opinions valuable have not themselves been educated at schools; and it was very difficult, even at Cooper's Hill College, to find, in the more practical parts of engineering, examiners who could understand a student's standpoint.

17,674. A practical engineer is a very busy man, is he not?—They are very busy men. It is very difficult to get them to undertake an examination, and, when they do, it is difficult for them to put themselves in the students' position.

17,675. You think it is better that the examination should be conducted by the teacher in an engineering school?—I think it is better that the examination should be conducted mainly by the teacher. I should like to enforce that by a reference to the examination which has just been established at Cambridge, the Mechanical Sciences Tripos. That examination is of this kind. I find that they appoint three examiners. Those three examiners have to set 14 three-hour papers, and besides that, they have to conduct, I think it is six practical examinations. I suppose it will be possible to do that at Cambridge at a cost of 60*l.* a year, but in the case of a larger examination it would be very difficult to get it conducted at so small an expense. The particular point I want to raise in connection with the attachment of a system of practical examinations to the University is this. I find that there are six practical examinations laid out. The first one involves taking students for three or four hours each into a laboratory where they can each have the use of a testing machine costing from 500*l.* to 1,000*l.* The time which such an examination would take would be very great, and there arises this further difficulty; in every laboratory where tests of that kind are made, the instruments are almost all special to the laboratory. It would be quite impossible for my students to go to University College and conduct a test there, or for University College students to come and conduct a test at my laboratory. I just raise that point. I have no doubt that at Cambridge that would be got over partly by oral examinations; they have few students, and it would be possible; but it would be much less possible in an examination established at a London University for students from different schools. Then the second practical examination relates to the testing of steam-engines. The testing of a steam-engine involves the co-operation of at least a dozen people; it lasts at least two or three hours; and I fail to see how it is possible as an examinational matter to have a practical examination in testing steam-engines. It can be done in the course of class work, and the professor can testify that his students have been through a proper series of engine tests, and he can, if necessary, show their note books; but I do not quite see how, as a mere examinational matter, the testing of a steam-engine is carried out.

17,676. You do not think there is any practical objection to a teacher examining his own pupils?—I feel no objection whatever to a teacher examining his own pupils. It has been done in all the schools with which I have been connected, and I think all the schools may claim to have had a reasonably rigid standard of excellence in their students.

17,677. Are they all examined by the man who has taught them himself, or sometimes by another teacher? All the examiners are teachers, but are they all actually men who have taught the pupils who have come up before them?—They are men who have taught the pupils who have come up before them in the cases with which I have been connected.

17,678. And this you do not see any objection to?—I do not see any objection to the teacher of an engineering school examining his own students.

17,679. And you see very great difficulties in the way of external men being brought in. You think the difficulty might be got over, if they are not examined by their own teachers, by the teachers giving testamurs of practical instruction having been given?—I think it is possible that part of the difficulty of practical examinations might be got over by accepting testamurs as to practical work.

17,680. And you see objections to a syllabus arranged so as to have average suitability to different schools. You think that each school ought to have an examination of its own, and that you cannot have a common examination for different schools? My remark led rather in that direction. The fact is that engineering is a very wide subject, and different schools will take a somewhat different view of what it is desirable to teach in the school. The professors of the schools will be men of certain particular experiences, and who will naturally wish to take the course of instruction along lines on which they have had most experience. I think it is very undesirable

in an engineering school that it should not have liberty to expand as freely as possible along the lines which the experience of the careers of its students shows to have been most successful.

17,681. Then you think there is a waste of resources in rival engineering schools in London?—I noted that as a head just to say a word about it. As far as I know now, leaving out smaller schools, there are three institutions for advanced instruction in engineering, King's College, the School of Engineering at University College, and our school. I am leaving out the School of Mines attached to the Royal College of Science, though that, of course, ought to be included as another. Taking the three schools, they have each one principal professor of engineering, and the consequence is that each professor has to cover the whole of the ground required to be taught in the school. I think it is a waste of resources to require each professor in that way to go over the whole range of engineering. It would be very much better if the three professors were combined in one school, and each took a portion of the work and developed his own portion more thoroughly. There is a waste of resources also in being obliged to have three laboratories and three sets of drawing and surveying classes. Everything has to be trebled. Out of the three schools there might be made one very much more important, and one very much more useful.

17,682. You say the end of a technical education is a career, and the success of an engineering school depends a good deal on its being able to facilitate the entrance of the students into practical work. That would influence the choice of professors?—It influences the choice of professors very much.

17,683. It involves the choice of professors who are professional engineers. Would a professional engineer who had got a good start and was making money become a professor?—I do not think there has been any real difficulty in finding professors even in this country, and there has been certainly none in Germany.

17,684. I suppose you would get only those who had comparatively failed in making their own career, would you not?—I do not think that is so at all, but the experience in this country is a little limited.

17,685. It would be a career in itself, you think, to go in for teaching?—It would be a career in itself, and as it leaves a certain leisure, and gives certain facilities for research, I rather think that the position of an engineering professor would be one to be sought.

17,686. You said he must be a practical man, and I thought that rather looked as if he must be a man who had attempted to make a career, that is why I made the remark, I never doubted that the teacher would be as good as a practical man?—I do not think you could have a good engineering professor who has not been in the practice of the profession.

17,687. Then you say the technical school is advantaged by a freedom of action greater than is necessary in schools where the end of the education is a degree or University stamp. The end of the school which you have mentioned, therefore, seems to be to introduce to practical life, and not to prepare for a University?—I think students come to an engineering school in the hope that it will advance them in the profession, and one has to look to that in the course of study.

17,688. In technical subjects which are too extensive for complete treatment you say a syllabus is a hindrance?—I think I might say that in our own school I do not think there has been a single year when our syllabuses have not been revised and somewhat altered, and in certain cases in important ways. I think Professor Ayrton will say that within two or three years a considerable change was made in the electrical syllabus to adapt it to the fact that the alternating currents were coming into practical use; and certainly, it has been so in my own branch of engineering. New matters of importance arise, and it is desirable that they should be introduced into the syllabus at the very earliest moment.

17,689. You think the professor is best qualified to choose the limits of instruction, and that he is the best examiner of his own pupils in such cases. You would do away with the syllabus altogether very much, and leave more discretion to the professor?—Looking at the whole matter from the point of view of what is best for the engineering school, and not considering the position of the University, I think it does want a large amount of liberty to develop on its own lines, and to change itself from day to day.

17,690. You have told us of your views with regard to those different engineering schools, and the way in which they should be conducted. How would the experience which you have gathered in this way be useful as regards a University, would the same principle hold good, supposing there to be a University Faculty of engineering and a degree? You have said that it ought to be very much in the hands of the professors to regulate examinations and to as much as possible examine their own students, would that apply to a University as well as to a school?—Yes; my argument rather leads in the direction that in a London University, it would from the engineering point of view be very desirable that there should be a kind of intra-mural degree in engineering, conducted on widely different principles from the present examinations of the University. I think the engineering schools if they are to form part of the University, and to lead up to a degree——

17,691. I think you told me a little time ago that you thought they did better if they were not joined to a University—if they were left independent?—My personal view is that they would be very well left alone; but I also said that they existed in the University colleges, and I think you can hardly avoid recognising them.

17,692. You do not think it would be advisable to recognise others that have not been recognised till now; you think it would be better to leave them to their independence, in which they have flourished so successfully?—Our view at the Central Institution is that we are getting on very well left alone. We have no particular desire to enter into the University, but at the same time we have no special disinclination, provided our freedom of action as to the course of study is not interfered with.

17,693. You do not think the University instruction might begin where yours stopped. Do you profess to complete the whole education necessary for an engineer, or would there have to be University training besides?—I do not think a University education in addition would be possible or desirable. It is exceedingly important to an engineer to get as early as he can in contact with actual practical work; and a course of three years is as much as a man can afford in getting his scientific education before his practical work begins.

17,694. Then, supposing there was a University degree for engineering, you would send men up perfectly qualified to take it at once without any extra instruction?—Yes; I do not think it has ever been proposed that the degree at the London University should be in advance of what we are doing.

17,695. As far as I can see, you are quite satisfied with the present amount of instruction, without bringing in the University at all?—Personally I am quite satisfied.

17,696. But supposing you were, in spite of your wishes, joined to a University, you would like to have the degree very much in the hands of your own teachers?—I think it would be extremely desirable that something of that sort should come about. We have to look at this kind of thing. Already some of our students take the Bachelor of Science degree at the London University, and one or two have taken the degree of Doctor of Science. If you do what has sometimes been proposed in Convocation—if you have an engineering degree or a Bachelor of Science degree in engineering amongst the examinations of the

W. C. Unwin, Esq., F.R.S., M.I.C.E., and W. Ayrton, Esq., F.R.S.

15 Dec. 1892.

University, it would to a certain extent control us. Some of our students would wish to take that degree, and no doubt we should have in their case to modify their course of instruction somewhat to suit the degree. So that you cannot establish an engineering degree under the present system of the London University without in some way affecting us. I should very much prefer, if you do have an engineering degree, that you should give a certain large liberty to the school to keep its present course of instruction, and to have examinations suited to it.

17,697. And success in those examinations should confer a degree?—The examinations of the school in that case should confer a degree.

17,698. Then another objection you have to an external examination and a syllabus drawn up independently of the teacher is that it diminishes the *esprit de corps* which arises in a school acting more freely; and you say that this is valuable to a set of men going out to a common profession?—I attach very great importance to a school getting a reputation which gives it weight in the profession, of its students all having gone through as much as possible a common course, and measured themselves against common standards; and I think here, again, I am a little arguing against the desirability of a purely external examination. I think that anything that weakens the power of the college professors to direct their students along the lines which they choose as the most desirable is a bad thing for the school.

17,699. You wish to say something about the necessity of a matriculation examination adapted to the requirements of the school. What time would this matriculation examination take place?—Some question has arisen about the desirability of a matriculation examination before entrance into the school.

17,700. You are assuming now that the school is affiliated to the University; that the matriculation entering into the school would be also the matriculation of the University?—I am speaking only of entrance into the school.

17,701. Do you think each school should have a matriculation examination?—I mentioned this because I know it has been asserted that, in schools something like ours, a matriculation examination is not necessary. I wanted to record my own feeling that an entrance examination which enables you to exclude students who are not well able to follow the course is exceedingly desirable.

17,702. What have you to say about the relation of schools of engineering to the apprenticeship system? The apprenticeship system is one that is really in force now, is it not? Pupils are articled to a firm of engineers for a certain number of years?—Yes.

17,703. Is it a good beginning for an engineer's career to be apprenticed to a practising engineer? Do you approve of that system?—At present the ordinary way of entering the engineers' profession is to become an articled pupil to an engineer. In many respects that is a desirable way of entering the profession; but it is also very desirable indeed that before beginning an apprenticeship the student should have had a sufficient scientific education.

17,704. At what age are pupils generally articled now?—About 17.

17,705. Would you make it a requirement that they should be older, and put off their apprenticeship a little?—I think the apprenticeship must be postponed if things are to be put right. I think one of the greatest evils in engineering at the present time is that so many engineers will take apprentices who have had no scientific education, who are not fit to become engineers, and who to a large extent, after having paid a good apprenticeship fee, drift out of engineering. In order to prevent that, what we want in this country is a school sufficiently influential to convert engineers to the idea of insisting upon apprentices having had some scientific education before the apprenticeship begins.

17,706. If there was a degree in engineering, that would be taken, as a rule, before they were articled, would it?—Yes, before they were articled.

17,707. That would postpone the articling for two or three years?—Yes, for two or three years.

17,708. Then you say that if the technical colleges were included in the University it would be desirable that they should form a department, having its own examination system, and independent of the department concerned with the present system of examinations. That is, that the present technical colleges for this purpose would be the University?—For this purpose they would be the University.

17,709. That is the only way in which you think it could be worked, and the engineering education could be satisfactorily conducted?—I think so.

17,710. But I do not gather that you are very strongly in favour of these technical colleges being united to a University, your own opinion being that they get on better independently?—I am not strongly in favour of the school being connected with the University. In this country there has been a tendency to include engineering schools in University colleges, and the tendency seems to increase, seeing that Cambridge has followed the lead of the other Universities. I should like at this point to mention that some kind of engineering degree is now given, I believe in every University of Great Britain and Ireland, excepting Oxford and London. I believe those are the only two exceptions. I may add that I was chairman of a sub-committee of the Annual Committee of Convocation which considered the question of the desirability of an engineering degree. The sub-committee reported in favour of there being an engineering degree. The report was adopted by Convocation and sent to the Senate of the London University. *See* Report of Meeting of Convocation, May 11, 1886.

17,711. What is it called at Cambridge?—At Cambridge it is called B.A.

17,712. But it is a separate examination?—It is an examination entirely by itself, and an examination in engineering. That being so, my colleagues have to contemplate the possibility that there should be an engineering side in the same way to the London University. If there is to be one, I think we should all of us prefer that it should not be the establishment of an engineering degree amongst the present ones, but that in some way or another the examinations of the engineering school should be conducted in a different way. I should hardly have ventured to propose that if it were not that I see that Professor Huxley, in a recommendation which he has made to the Commission, seems to have seen the same difficulty. I should just like to quote the suggestion that he has published in a letter which I believe has been placed before you:—"Make the institu-
"tions which contain technical schools of Theology,
"Law, Medicine, Engineering, and so on, into col-
"leges of the University. Let these examine their
"own candidates for degrees, under conditions
"determined jointly by them and the Senate of the
"University; and present such as they declare fit to
"the University for *ad eundem* graduation."

17,713. You agree with that, and you would have no University professors in engineering—or would you?—To have University professors who would form a body which the Senate could trust would be very desirable in view of leaving the examination to the professors.

17,714. And they would have part in the education of those who were going in for engineering, conjointly with the school?—I imagine that the University professors would be some selected professors of the schools whose trustworthiness the Senate believed in.

17,715. The University professors should be chosen from the existing professors of the schools?—Yes.

17,716. You say that the modification of the present examinations or additions of some new examinations to the present examinations would hinder rather than help the technical schools. So in fact it would

come to this, that the engineers would have exactly the same in education as they get now, only they would have the advantage of a degree, whatever it might be, which would give a prestige to the examination?—Yes, quite so.

17,717. The education would be the same as it is now?—Yes, I think so.

17,718. (*Professor Sidgwick to Professor Ayrton.*) I should like to ask if Professor Ayrton agrees in a general way with the evidence which Professor Unwin has given?—In a general way I certainly agree with Professor Unwin. As he has pointed out the apparatus and the laboratories at different colleges are necessarily very different. The students at the different colleges have worked with the special apparatus, and it would be very difficult, therefore, to set all the students from the different colleges the same examination questions if proper weight is to be given to the special practical course each student has been pursuing. So far I agree with Professor Unwin that it would be very desirable that the work, so to say, of the student at his particular college should count to some extent towards the granting of the degree.

17,719. Do you agree that it is desirable that the Faculty, so to call it, of engineering, should be as independent as possible. As I understand, Professor Unwin thinks that any interference is likely to do harm, and that the more independent the department is, the better it would be for education?—The whole teaching of engineering in this country is at the present time an experiment, and in order to carry out any experiment it is absolutely necessary to have a certain amount of freedom. The real test of the success of a school of engineering is the ease with which the students who have passed through that school, can get employment without paying a premium. If it be found that a considerable number of students who have got the diploma of a technical college are able to enter employment without paying a premium, and in particular if it be found that they can get a salary at starting, you have the best possible guarantee you can have of the efficiency of that school of engineering. When it is remembered that in this country if a man wishes to enter a factory without any particular qualification beyond that he has been to a University, he is generally obliged to pay 100*l.* a year.

17,720. (*Lord Playfair.*) Have you found that your pupils get in without paying a premium?—Of those who get our diploma practically all are able to get into works without paying a premium, and of those who are near the top in a particular year some get 1*l.* or 1*l.* 10*s.*, or even 2*l.* a week to start with, so that instead of paying 100*l.* a year they are paid 50*l.* a year or more.

17,721. (*Professor Sidgwick.*) Do you think that what might be called workshop practice is required as a supplement to laboratory training before the student can become completely fit for practical work?—He ought to have a certain amount of workshop training at the technical college, but there are certain things that he can only learn in the works. You see the main difference between a technical college and a works is this. A technical college is for the purpose of turning out men as well as they can be turned out, whereas the works are for the purpose of turning out machinery; consequently, therefore, a man will derive a great deal of benefit from his subsequent training in the works, but all workshop practice should not be left till he goes to the works. He ought to do a good deal of workshop work in the three years which he spends at the technical college.

17,722. Therefore in your view, the workshop work, so far as is is required before a man enters into an actual business, should go on side by side with the laboratory work?—Certainly.

17,723. (*To Professor Unwin.*) Is that your view?—To a certain extent, yes. We do a certain amount of practical work in the school—actual work, shop-work—because our students really would not understand the instruction without it. By handling the machines they become much more able to be taught I should like to say one word about the apprenticeship system, perhaps supplemental to, and not quite identical with, what Professor Ayrton has said. Up to the present almost all our diploma students have obtained employment without paying any premium. Whether that will go on or not I am not sure, because we are a new institution, and we are on new lines. I should not like to say that we expect all our students to get at once into full practical work without paying a premium, but I do think that the training they have had at the college ought to shorten their apprenticeship by half in any case.

17,724. (*Lord Playfair.*) I daresay you are familiar with the Technological School at Boston in the United States?—Yes, a little. I have not seen it.

17,725. Do you know that the students there get paid employments in going from that school, with the utmost readiness?—I know that is the fact, and I believe it is coming to be the case in America; first, that a great deal of practical work is done in all the technical schools; and second, that the students of the technical schools get employment without any kind or form of apprenticeship, and are paid for it at once. (*Professor Ayrton.*) The reflection is cast by the Americans on our technical colleges that they are not nearly so practical as the technical colleges in America. That is, so far from its being pure science, which the Americans consider ought to be taught in a technical college, they think that English colleges should teach more of the technical side even than they do, and that the more technical the education is the better the opportunity for the student to get paid employment on leaving.

17,726. (*Professor Sidgwick to Professor Ayrton.*) Do you think the American view is sound on that point, or, to put the question otherwise, do you think that, ten years afterwards, the man who is training with a view to immediate work will be really as well equipped for solving the harder problems of his calling as if he had had a more practical training?—Of course the more science he has the better; but he may have a large amount of science, and be of no use to the manufacturer. I may say this in connexion with a little discussion that went on this morning. What may be the state of the case with regard to chemistry, I am not a chemist, and I do not know, but I know perfectly well how the matter stands as regards physics. There are two totally distinct subjects, pure physics and applied physics; there need be no rivalry between them; they are quite separate subjects. The best proof of that is that the two subjects are being taught on the two sides of Exhibition Road. Professor Rücker is teaching pure physics on one side of the road, and I am teaching applied physics on the other. Sometimes when a student has more or less gone through his course, Professor Rücker sends him to me, and I have done the converse when I have found a man wanted to become a teacher rather than to go into a manufactory. The two things are distinct; a three years' course of pure physics and a three years' course of applied physics may be carried on side by side by different professors. I say the aim and the result attained are quite distinct. My students certainly would not be able to pass Professor Rücker's advanced examinations, and certainly his students could not pass mine.

17,727. I suppose your students would be able to pass his more elementary examinations?—Mine would be able to pass some of his elementary examinations, and his, perhaps, could pass some of my elementary examinations, but in the second and third year his advanced course and my advanced course are absolutely different. The aim is quite different; he teaches the subjects that are required for the B.Sc. and the D.Sc. examination of the University of London. I do not; I teach the sort of things that are useful to a man who goes into a factory.

W. C. Unwin, Esq., F.R.S., M.I.C.E., and W. Ayrton, Esq., F.R.S.

15 Dec. 1892.

17,728. Do you think the training you give to your pupils with a view to their ultimate success, is the one best adapted to enable them to pass your examinations?—The training which makes them of the greatest value to the manufacturer is obviously the best training. Throughout the time when he is in the factory the training which enables him to take the highest post in the factory is the best training.

17,729. But it might happen that the training which made him capable of earning at once would not be the best training in the long run?—It depends upon what you mean by earning at once. If you mean earning at once by shovelling coals, I grant it would not be the best; but if you mean earning at once by doing such work as we expect our men to do, I think it is the best.

17,730. You think there is no desire (which would be very natural) to get immediate results, and too much depress the scientific training?—I do not think so; it must be remembered that our course is not a one year's course, but a three years' course, and as Sir Phillip Magnus and Professor Unwin have told you, we have a fairly stiff entrance examination which a student has to pass before he commences technical education with us. Men come with a certain amount of science, and they get a good deal more in their three years' course. It is not learning to go by rule of thumb; it is the very opposite; they are men who are learning never do anything without knowing why they do it.

17,731. You agree with Professor Unwin as regards there being, in your view, no danger of a pressure and a tendency to make the school too practical, and thereby ignore valuable elements of training?—I think it is impossible for a school of engineering, when taught by proper people, to be too practical.

17,732. When you say "proper people" you mean taught by those who are capable of turning out the required article?—Yes, those who are capable of turning out the desired article. (*Professor Unwin.*) I think our whole course is exceedingly practical, but there is very little of it that is not also scientific. I do not want a mere workshop school.

17,733. (*To Professor Ayrton.*) Would you agree to that?—Yes.

17,734. But you would both hold that it is not desirable that the Faculty of Science should have its fingers in your pie; that you would rather be as independent as you can in organising your own school?—Whatever arrangement is carried out, it is absolutely necessary that if schools of engineering are to achieve success they must be able to develop in their own way. That is absolutely certain, because for a very long time to come the exact methods that are best to be followed in the teaching can only be arrived at by experiment.

17,735. (*To Professor Unwin.*) With regard to the question of the preliminary examination, could you indicate the kind of preliminary examination that you think desirable. Something turns on that. For instance, would you approve of the London Matriculation Examination? Would that seem to you to be a desirable examination to impose on all candidates entering your school, or would you have any variation on that?—In many respects the London Matriculation would suit us. My chief objection would be that it is a little too much of a barrier to entering the school. It requires rather too many things. I should be content with a rigidly strict examination up to the London Matriculation standard of examination in mathematics and general knowledge of science, without quite so many things as there are in the present matriculation examination.

17,736. Now with regard to languages, which have a large place in the matriculation examination?—Our practice is to examine in modern languages, because we think they are useful practical subjects, but we do not make them obligatory. We only allow them to count towards passing.

17,737. Is that what you think desirable?—I should like to go further, and make modern languages obligatory.

17,738. But you would not make Latin or Greek obligatory?—Certainly not Latin or Greek.

17,739. You would desire that you should be free to organise the Matriculation Examination as well as to organise what comes after?—(*Professor Ayrton.*) In a subject like electrical engineering, which is advancing with extreme rapidity it would be impossible to be bound by a syllabus written three or four years ago. With regard to matriculation, I do not think it is so serious a matter as the subsequent teaching.

17,740. But it seemed to me that, according to Professor Unwin's view, if, for instance, it is not desirable to require a knowledge of either Latin or Greek, that would create an important divergence from the general practice of all Universities so far?—It would certainly not be desirable to impose an examination in Latin or Greek upon a student who is to be a student in engineering.

17,741. Therefore it would almost follow from that that your department would require a Matriculation examination peculiar to itself?—I think it would.

17,742. (*Professor Sanderson to Professor Unwin.*) Would you give us an account of your entrance examination?—In mathematics we require a knowledge of six books of Euclid, and a little trigonometry.

17,743. Mathematics is a strong part of the examination, I presume?—Also elementary mechanics as taught in schools; and that is a part of the examination about which we are most strict. I think that marks enough to show the standard. We insist on mathematics, partly because we cannot teach the elementary parts of mathematics, and partly because a lad's knowledge of mathematics is a mark of his having used his time well at school, and that the lad is not stupid, and is capable of further education.

17,744. And one modern language?—We have three examinations which are scientific. One is in engineering drawing, and geometrical drawing; one is in physics; and one is in chemistry. It is not published, but our practical rule in judging the examination is that a student must pass in two out of those three subjects. In addition to that, we have an examination in French and German, but the language examination is not obligatory. We do not refuse to accept a student who fails.

17,745. Would you kindly say where your students come from mostly? What schools are capable of sending you men prepared to pass examinations of that kind?—We have students of almost every type. Some have University degrees. Some have been through an apprenticeship in workshops. Some of our very best students are students from the middle class schools who have then gone on to Finsbury. A great many students come to us direct from school.

17,746. Schools where science is taught?—Yes, schools where science is taught.

17,747. At the end of the first year the examinations relate to physics and chemistry entirely, do they not?—During the first year, the students study in all the four departments of the college, mathematics, chemistry, physics, and engineering. During the second year they study in all the four departments, but they give a little excess of time to one particular department, which they choose as their particular department. In the third year they study almost entirely in one department, which is the department they have chosen, with the addition of some mathematical instruction, which is carried on to the end of the course.

17,748. Would you give us your idea of the standard of the first examination, the one which takes place at the end of the first year, before a student has begun to specialise at all?—I think Professor Ayrton had better do that, because physics is a better test.

17,749. (*To Professor Ayrton.*) Could we compare it, for example, with the B.Sc. examination of the London University?—I am afraid I am not familiar with the B.Sc. examination at the present moment. Our examinations at the end of the first year is

certainly a good deal more difficult than the London University Matriculation Examination. It would be more equivalent, I should think, to the intermediate science examination.

17,750. To the intermediate examination in science ?—I think it would be very much the same as far as difficulty is concerned, but more specialised. That is, it would not cover such a wide range. It would be more electrical; we should go less into optics and less into sound. That would be the main difference. It would be more electrical. The examination at the end of the first year includes heat, light, and sound, but there would be more electricity than would be required for the intermediate science examination at the London University.

17,751. Do you think that the extent of knowledge which a man who obtains the final diploma possesses is about comparable to the extent of knowledge which the polytechnic school student in Germany possesses ?—I should say that he would be much more practical than students that I have seen who came from foreign polytechnics. The extent, perhaps, would be the same, but he would have more power to apply himself practically, and therefore, perhaps, would know less of the more advanced mathematical theories. The tendency in polytechnics abroad is to go in if anything too much for pure theory and too little for the application of science to laboratory work, and the application of science to industrial work.

17,752. That is rather a difference of constitution of the curriculum?—The actual standard would be about the same.

17,753. Do you think that men who have been educated in technical subjects at the Universities have the same facility in obtaining immediate employment?—When you say "Universities," do you mean Cambridge ?

17,754. Cambridge particularly, and, of course, Oxford as far as it goes?—Of course there has not been this education for electrical engineers at Cambridge until recently. What has happened is that very often men who have been high Wranglers have come to me for a year immediately after leaving Cambridge before attempting to go into works.

17,755. Would you expect that a man who was trained at either of the older Universities—supposing he followed the technical course, for example, at Cambridge—would be as fitted for a profession as a man trainted at the Central School ?—Man for man I should say no. Of course Cambridge at present has the greater choice of men. It is an older place, and is able to draw from a much larger number; but man for man—taking the same man—I think he would be better if he were trained at the City and Guilds Central Institution.

17,756. Would it answer your view if students possessing your diploma were allowed by the University to take a Doctor of Science degree, specialising a particular subject, without passing through previous examinations ? — You mean something very different from what the advanced B.Sc. examination would be.

17,757. Yes, I mean a Doctor of Science degree in which a man might specialise on his own particular subject, and show distinguished merit by examination and also by original work ?—It would be a pity to make it by examination purely—I mean examination away from the college—because, as I have pointed out, it would be very difficult for an outside examiner to examine upon what the candidate has done in practical work If the D.Sc. were given as it is given now for original work, and at the same time did not require so many subjects to be taken up to get the B.Sc. or B.A. degree, it might not be a bad thing.

17,758. I am assuming that a man might be excused from the B.Sc. on the ground of having passed your examination, and be allowed to present himself, under the conditions which now exist, for the D.Sc., and I ask whether that would constitute a relation which might be useful?—Do you mean that he should be excused all the examinations up to the B.Sc., because he has gone through our course; and that then he should merely present himself and say that he had really acquired certain subjects. I do not think there would be any objection to that.

17,759. Is there any other way in which the University could be useful to the career of your men ?—Yes, in one most important way, which Professor Unwin has pointed out, wholly apart from examination. I think the teaching is equally important with the examination in a University. The great fault is that there is no organisation of any teaching, especially technical teaching, at the various colleges in London. The colleges being wholly distinct from one another each tries to teach what it thinks will pay, without at all considering whether there is any need for such additional teaching. For instance, electrical engineering began to be taught at one London college, and as soon as it was shown to be a rather successful subject, the other two large London colleges started the teaching of electrical engineering. It has been going on at University College for some years, but without there being any electro-technical laboratory whatever, which I think a very bad thing. Of course they are going to have a technical laboratory. Parents have imagined that a student passing through University College, going through the Electrical Engineering Department there has learnt electrical engineering, whereas, as a matter of fact, he has never even seen a dynamo machine in the college itself. It is as if he had been learning swimming but had never seen the water. That has been brought about by the colleges having a feeling of mere rivalry leading them to argue — "This subject is successful elsewhere, "therefore we must profess to teach it." If there had been a central body it would have said, "We "must allow nothing of that kind. If the means "already existing for electrical engineering teaching "are not sufficient, we must create additional means, "but if the means be ample, then a college not previously teaching that subject must not take it up "simply because that subject happens to be popular." For a college to teach the subject it should have a good man, but if such a man can only give an hour a week to it then, no matter how good the teacher may be, such teaching is a sham.

17,760. In that case the University would have to examine your candidates ?—No. The University, if it had control of the teaching, would say, "How "much teaching of electrical engineering is required ? "Where is it best to give it ? Give it at such-and-"such places."

17,761. But if you did not present your candidates for degrees the University could not interfere with you with regard to teaching You wish to preserve your own autonomy so completely that you would not wish your candidates to present themselves for degrees. Is that so ?—We do not wish our autonomy to be preserved so completely that there shall be no amalgamation in the teaching. All we say is that liberty should be given. Liberty might be given to three professors teaching different parts of the same subject in one building. We should like to see very important schools of certain branches of engineering, and all the professors of that subject whom it is desirable to have in London should be collected together, and they should take part in the teaching of that branch of engineering. For instance, mechanical engineering divides itself into half-a-dozen heads: one professor might teach one branch and another professor might teach another branch in the same building. It would save apparatus, it would save space, and certainly it would save labour; and it would be better for the student to feel that at a certain place in London he could get all the different branches of the technical education pertaining to his particular profession. There could be no other way than that which has been suggested, in which this result could be brought about, and that way consists in putting all the funds into a common purse and enabling the University to have the control. For instance, in Japan we had an Engineering College which was under the

W. C. Unwin, Esq., F.R.S., M.I.C.E., and W. Ayrton, Esq., F.R.S.

15 Dec. 1892.

management of the Minister of Public Works, and also a University in another part of the capital; but it has since been found that that was a very undesirable arrangement, and the whole thing is now under one management. Instead of duplicating the teaching of engineering, as they were then doing, they have collected it altogether, and there is no longer an Engineering College under the Minister of Public Works, and an Engineering Department in the University, in the same town under the Minister of Education.

17,762. (*Lord Playfair.*) Where was that?—At Tokio, in Japan, where there was an engineering school having no equal in size or importance in the world at the time, that is in 1874 or 1875.

17,763. (*Mr. Anstie.*) Do I understand you to say that although there are advantages in competition there are also disadvantages, and those disadvantages you desire to get rid of by organisation?—Yes.

17,764. If the organisation is to get rid of those disadvantages, it must be a complete organisation?—I suppose so.

17,765. Embracing, so far as possible, the whole of the institutions of higher rank at which the education in question is given?—Yes.

17,766. In order to attain that object, you would desire so far to see the City and Guilds Institute incorporated in the University?—The point is this, if the City and Guilds Institute is to be in any way connected with the University, then some big result ought to be brought about. If it is to be connected with the University merely as a matter of name, and there is no change to be made except that it is to be possible for a man to go up for a University engineering degree, I do not see that anything is to be gained by such a change.

17,767. So far as the object you wish for is attained by it, you would think it desirable that the City and Guilds should be incorporated?—If such a big result could be brought about, I think it is desirable that it should be brought about; but short of that, I do not see any advantage in that institution being connected with the University.

17,768. Assuming that were done, and the City and Guilds incorporated with the University, you would require that there should be a special organisation providing for the branch of teaching which you are concerned with?—Certainly.

17,769. And that the City and Guilds should be represented upon that?—It would be obviously necessary, if there were any sort of incorporation, that the City and Guilds of London Institute should be represented.

17,770. How far would you be prepared to accept common University teaching in the subjects which form part of the course at the City and Guilds. Professor Fleming here the other day stated that in his opinion for a person who was to become an engineer it was necessary that the mathematical teaching should be almost from the outset different, would that be your opinion too?—It would.

17,771. Different almost from the commencement?—I think it would be desirable that that should be done.

17,772. (*To Professor Unwin.*) May I take it that that is Professor Unwin's view also?—Yes, from the point of leaving school.

17,773. (*To Professor Ayrton.*) Is there any point at which you could again fall into a common course of scientific thought, or would it remain throughout distinct?—Scientific thought is common to all engineering work.

17,774. I am speaking, of course, of mathematical research and inquiry. Is there any point at which electrical engineering, or engineering, would fall into the wider and more philosophic course of mathematics?—The tendency of the teacher of mathematics is to teach mathematics as if it were to be pursued for its own sake, whereas 99 per cent. of students go to him for the purpose of getting a tool which they want to use in their own profession. Therefore, I think that throughout, that is, after the boy has left school, mathematics should be taught as directly applied to engineering. In fact, if it were possible for one man to teach the engineering, and also the mathematical subjects as well as other things necessary, that would be the best arrangement. That being impossible because a man has not the time, and probably not the knowledge, it is necessary to have separate professors, but they should each teach their own subject with reference to the particular needs of the students, and not fall into the error of fancying that the student has come to learn mathematics as a Cambridge Wrangler, that is, for the benefit of his mind and the science of mathematics.

17,775. Would the scientific teaching as you have described it ever again fall into the field of mathematical research?—No, an engineer would not go in for mathematical research, at any rate, the ordinary run of engineers would not.

17,776. (*To Professor Unwin.*) May I take it that that would be Professor Unwin's opinion too?—I should like to make the reservation there that a great deal of engineering is very mathematical indeed, and that whole regions of mathematical research, for instance, the whole theory of the rolling of ships and waves, have been developed by engineers far more than mathematicians.

17,777. Then your view is that there is a region of mathematical research to which the differentiated study might tend?—I think some engineers become extremely mathematical. The late Mr. Froude, for instance, developed a whole region of mathematics as a result of his acquaintance with engineering.

17,778. And to that result the teaching which you would give at an institution like the City and Guilds would naturally tend?—It would to those students whose minds had a bent in that direction. (*Professor Ayrton.*) Are we not using the words "mathematical research" in slightly different meanings? Of course, if an engineer finds that he must improve his tool to obtain a certain result, he will do so, but that is not quite becoming a tool maker. He improves his tool to solve a certain practical problem. If you mean by that, mathematical research, I retract what I said. I understood the expression "mathematical research" to mean simply the development of mathematics.

17,779. (*To Professor Unwin.*) I understand Professor Unwin to say that a man may go a little further than merely using the tool before him; he may take a wider view?—Yes, and I think Professor Ayrton would almost admit that, if we talked it over. (*Professor Ayrton.*) There is no doubt that mathematics has had to be developed in order to solve practical problems. I think there we are agreed.

17,780. (*To Professor Unwin.*) So there is a region in which the more technical study of the science might be of great benefit to and tend greatly to the advancement of the higher regions of the science?—I think so.

17,781. (*Professor Ramsay to Professor Ayrton.*) You spoke of having three different courses of three years' each included in the City and Guilds Institute?—Yes.

17,782. Have you any kind of preliminary examination? Do you require any preliminary knowledge before they begin?—Certainly; we have our entrance examination.

17,783. Can you tell me what your entrance examination includes. Will you give me the whole of the subjects for three years in any one of your courses?—The first year's course in common to all students of the college. It embraces mathematics, engineering, chemistry, and physics. In the second year's course there is a certain amount of specialisation depending on the particular subject that the student is taking up professionally. In the third year the education is almost entirely specialised, that is to say, if a man intends to become a mechanical engineer, he devotes himself mainly to that subject; if he wishes to become an electrical engineer, he devotes himself mainly to that subject; but there is a certain amount of mathe-

matical teaching which runs through the whole of the three years.

17,784. The first year is entirely without reference to any specialisation at all?—The first year is without reference to which of the engineering professions a man is going to take, but it is with reference to the fact that he is going to be an engineer. That is to say, during the first year there is workshop and there is engineering drawing; the teaching, in fact, embraces that portion of the technical course which may be given to all the students in common who come to us. But even this first year's course is in a sense special in that it is a preliminary course for engineers as distinguished from people who are not going to earn their bread by the practice of some engineering pursuit.

17,785. And mathematics pursued right through?—Right through, with the exception of, I think, the chemical students.

17,786. Pure mathematics?—Pure mathematics taught by a man who is constantly endeavouring to show its reference to engineering or electrical problems.

17,787. During those years do you teach geology?—No.

17,788. Or geodesy?—Yes; geodesy, but not geology.

17,789. (*Lord Playfair to Professor Unwin.*) Perhaps you have considered the advantage of organisation to be that it would lead to the extension of your institute. I suppose you do not consider that your institute is fully equipped in all the subjects of engineering?—It is not fully equipped.

17,790. May I run over these subjects: electrical, mining, mechanical, civil, and architectural engineering, and textile and chemical industries, all of which have in different institutions divisions for teaching?—Yes.

17,791. I may refer you to the Technological Institute at Boston. They have lately opened a distinct institution for chemical engineering, not for chemistry, but for chemical engineering?—I have heard of it.

17,792. Would you consider it desirable, by organisation and increased funds, to be able to enlarge your institution so as to take in different branches?—I think we have pretty well branches enough. I should like the organisation to give us more teachers in our branches.

17,793. And have you facilities, laboratories, and buildings enough?—To include more teachers, do you mean?

17,794. Yes?—Possibly we should want some extension of buildings also. (*Professor Ayrton.*) You must remember, of course, that mining is already taken up by the School of Mines, and, therefore, although it is essentially a technical subject, we did not take it up for the simple reason that there was the School of Mines existing before the Central Institute was founded. But for that it would probably have been in the programme of the Central Institution. But without extending our teaching to any other branches of engineering than those taught at the Central Institution, it would be most desirable to be able to subdivide each branch into several sub-branches and to have teachers, each of whom devoted himself to the teaching and developing of his own particular subbranch of a main branch of engineering. For example, my own subject, electrical engineering has already become so extended that it is almost impossible for one man to keep pace with all its ramifications. Land-line telegraphy, submarine telegraphy, electric lighting, electric traction, and electro-metallurgy are five subjects to any one of which a man could easily devote his whole attention. (*Professor Unwin.*) Supposing organisation came about, we might be so connected with the School of Mines that part of what they are doing could be better done in our place, and we could send to them some of our students who might wish to devote themselves to mining engineering.

17,795. (*To Professor Unwin.*) In some of the departments you repeat each other?—We repeat each other, undoubtedly.

17,796. Would the training in architecture come under you at all?—About half the training of an architect, where it is exceedingly analogous to the training of an engineer, ought to be carried on in some part together with that of the engineers, but there is a part of the architectural training which is quite foreign to engineering.

17,797. But not foreign to a technical school, is it?—There is in Germany the building school and technical school conjoined with the engineering school. It is so also in America.

17,798. Are your pupils increasing in number?—We have been in existence about seven sessions. We have now a little over 200 regular students following practically a complete course in the college. I think the number of matriculated students is 154 who are following the complete course, and some others, most of whom I think I may say are virtually in the same position as matriculated students.

17,799. Could you accommodate many more students than that if it were desired?—(*Professor Ayrton.*) With the present staff, no. We consider that with the present staff and buildings it would be very difficult to take more. Of course at a lecture you could take as many students as the lecture room would hold, but when it comes to laboratory work of the higher kind, unless you have an army of assistants it would be impossible to teach anything approaching a crowd.

17,800. Have you not been increasing in geometrical ratio lately. You began, I think, with 10 or 21?—We began with less. (*Professor Unwin.*) The number of matriculated students at the end of the first session was 56, then it was 57, 71, 110, 131, and 145.

17,801. (*Professor Ramsay.*) May I ask how many of those are in engineering?—Do you mean mechanical engineering as distinct from electrical engineering?

17,802. Any kind of engineering?—They are all in engineering. (*Professor Unwin.*) We call them all engineers, but I think this will explain. Of civil and mechanical engineering students there are 70 regular students in the college; of physics students studying electrical engineering there are 92; and of chemical students studying chemical engineering there are 10. (*Professor Ayrton.*) We have practically no students who come to us unless they desire to be trained as engineers. That is to say, when a man comes to us merely to work in the laboratory, in order to pass some outside examination, we have rather made a point of saying, "We are very sorry "we cannot take you. Our special function is to teach "the application of science to industry, not to coach "men for examinations." So all the students we have are training to be engineers, including in "engineers" chemical engineers.

17,803. (*Lord Playfair to Professor Unwin.*) There is land beside you at present for the practical increase, if increase is required, is there not?—A very small piece of ground belongs to us on one side, and there is ground on the other side, but I think it has already been given away. On one side there is still land unappropriated, on the north-west.

17,804. Which has been given away?—On the south-west, towards Imperial Institute Road. That block has, I believe, already been given away.

17,805. On the other side there is a good site still, is there not?—Yes.

17,806. (*Chairman.*) Have you anything to add?—No.

17,807. (*To Professor Ayrton.*) Is there anything else you wish to add?—No.

The witnesses withdrew.

Adjourned to to-morrow at 12 o'clock.

Forty-second Day.

Friday, December 16th, 1892.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

Lord PLAYFAIR, K.C.B., LL.D.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt. D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B. *Secretary.*

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

Sir HENRY ROSCOE, F.R.S., B.A. (London), Ph.D. (Heidelberg), D.C.L. Oxford, LL.D. Cambridge, Dublin, and Montreal, Hon. M.D. Heidelberg, M.P., examined.

17,808. (*Chairman.*) Would you tell us shortly what experience you have had in things which may be useful to us in our inquiry?—My educational experience has been considerable. I was educated at University College, London, and therefore I know the system, both of the colleges then existing and of the University in which I took my Bachelor's degree, as there was in those days no possibility of taking a Science degree. Then I went to Heidelberg and there studied under Bunsen and Kirchhoff, and many of the chief men there, so I know also a good deal about the German system. I was for nearly 30 years Professor of Chemistry at Owens College, Manchester, and I am well acquainted, of course, with the system of instruction pursued in the provincial University Colleges. I am a member of the governing body of several of them, and I know them all thoroughly well. I also had a good deal to do with the formation of the Victoria University, and have been on the Court or Council since the foundation of the University. Since then I was appointed one of the Royal Commission on Technical Instruction, and visited all the chief seats of scientific teaching abroad and in England; and at the present moment I am a member of the Royal Commission on the Scottish Universities, so that I ought to know something about those as well. I wish to say that, although I come here as one of the Vice-Presidents of the Association from which you have had evidence, I wish also to represent my own opinions as well.

17,809. You mean the Professorial Association?—Yes. I appear on their behalf, but also on my own behalf.

17,810. We have had a memorial presented to us. That is the memorial you refer to?—This is the memorial which I have the honour to hand to you, and I hand also to you the signatures of the memorialists (*handing same to the Chairman. See Appendix No.* 40.)

17,811. These are the actual signatures?—Yes. Perhaps I might state the objects of the memorial. It is a memorial to you, my Lord:—"The undersigned "desire hereby respectfully to record their strong "opinion that the foundation of a teaching Uni- "versity for London, without due provision being "made for higher education and original research, "would be unworthy of the metropolis, and would "entail the neglect of an admirable opportunity for "promoting the advancement of science and learning." This memorial is signed in the first instance by a large number of presidents of the learned societies, by Lord Kelvin, the President of the Royal Society, Sir Archibald Geikie, the President of the British Association for the Advancement of Science, Mr. Rosse, President of the Royal Dublin Society, Mr. Douglas Maclagan, President of the Royal Society of Edinburgh, and by a large number of other names which perhaps I need not read, amongst whom are Professor Huxley and Sir Joseph Hooker; by the secretaries of the Royal Society, the Treasurer of the Royal Society, the Astronomer Royal, the head masters of the four large schools, Eton College, Harrow School, Rugby School, and St. Paul's; by Leslie Stephen, Dr. Duckworth, and Dr. Brunton. Then it is also signed by a considerable number of professors and heads of houses in Oxford, Max Müller, R. B. Clifton, the Master of University College, the President of Magdalen, the Master of Pembroke, Story Maskelyne, and Ray Lankester. Then at Cambridge it is signed by the Professor of Greek and the Jacksonian Professor of Natural Philosophy. At Edinburgh it is signed by almost all the professors, the Professor of Anatomy, the Professor of Greek, the Professor of Mathematics, the Professor of Chemistry, the Professor of Natural History, the Professor of Geology, the Professor of Moral Philosophy, the Professor of Materia Medica, the Professor of Midwifery, the Professor of Sanskrit and Comparative Philology, the Professor of Biblical Criticism and the Professor of Theory of Music. It is signed by two professors of Glasgow University, the Professor of Mathematics and the Professor of Physiology. Then by the Principal, and, I think, all the professors of the Aberdeen University; by a certain number of the professors of St. Andrew's University; by the professors of the colleges forming the Victoria University; Owens College, Manchester; the Principal, the Dean of the Medical Department, the professors in the Medical Faculty, and a number of those also in the Faculties of Arts and Laws. At Yorkshire College, Leeds, by the Principal, and by, I think, almost all the professors and many of the assistant professors. In the British (Natural History) Museum by the Director, Sir Wm. Flower, Dr. Gunther, Dr. Woodward, and a number of other men engaged in that important Museum. At the Royal College of Science, London, by the Dean, Professor Huxley, the Professors of Physics, Chemistry, Geology, Astronomy, and Metallurgy. Then I come to the British University Colleges, not connected with the University specially. At University College, London, it is signed by the Professors of Zoology, Latin, Physics, Chemistry, Logic, Greek, English Literature and Pathology. Then at Mason College, Birmingham, by the Principal, and the Professors of Mathematics, Chemistry, Zoology, Botany, Anatomy, Physiology, Physics, Medicine, Classics, French and Italian, German and Pathology. Then at Durham College of Science by the Principal and almost all the professors there. At Firth College, Sheffield, by the Principal and all the professors there. At University College, Dundee, by the Principal and all the professors. At

University College, Bristol, by the Principal and all the professors and assistant lecturers. At the City and Guilds of London Central Institution by the Professors of Chemistry, Electrical Engineering, Mathematics and Engineering. At the Royal College of Science, Dublin, by the Professors of Chemistry, Physics, Geology, Botany and Engineering. At the Pharmaceutical Society of Great Britain (their teaching establishment) by the Professors of Practical Chemistry and Botany, and the Lecturers on Pharmacy and Materia Medica. Then at the end there are a number of Fellows of the Royal Society whose names do not appear in the foregoing list.

17,812. These signatures are those of a great many eminent men, and they have signed the address saying that every scheme that is adopted should contain a provision for higher education and research. But I do not suppose we can take it for granted that all these gentlemen agree with the views that have been put forward with regard to the professorial association?—No, quite so. That is not intended. The signatures simply go upon the wording of the memorial. Perhaps I might say what the object or meaning of this memorial is. It is in the first place to express the approval of the foundation of a teaching or professorial University for London. We have not used the word "professorial" in this memorial, thinking that the teaching University was, as it is in my opinion at any rate, the more important title; and to indicate also that there is no feeling of jealousy on the part of the local or other Universities existing in Great Britain or of the local University colleges. They all are in favour of a teaching University for London, which shall see that due provision is made for higher education and research. The object then of the signatories is to urge the importance of making higher teaching and original research, the primary object of the University and examination therefore necessarily the secondary object.

17,813. Then in order to secure these ends you would do what?—I begin now, if you please, to give my own ideas. In order to secure these ends it appears to me to be necessary that the professors in the Metropolitan University should be the best men obtainable; and, in the second place, that the equipment of the University should in every department be up to the level of the science of the day and not inferior to similar institutions in other countries or in our own. I may perhaps say here, that the equipment for scientific purposes in some of the newer provincial colleges, as well as in, of course, the older Scotch Universities, is of a very complete character. I happen to have just come back from Liverpool, where the other day Lord Spencer opened the new buildings of the University College, and I was astonished, as I think every one would be who went through that building, to see the ample provision which is made in this quite new institution, for teaching both the pure and applied sciences. The same may be said of Owens College, and possibly a somewhat less degree, of the Yorkshire College in Leeds and the Mason College in Birmingham, to say nothing of the Scotch Universities, about which, no doubt, the Commission has had evidence. It is often said that the greatest discoveries have been made in past times by persons possessing small means, and therefore it is sometimes argued that the expenditure which has been urged on the part of many for scientific equipment is not necessary. I believe this to be altogether a mistaken idea. The modern requirements of physical and biological science are altogether different from what they were 50 years ago, and at the present moment successful original research can scarcely be carried on without appliances of a perfect and elaborate character. This fact has been generally acknowledged in all other countries, and is now acted upon, as I have said, by the Scotch and provincial Universities, and I think I may conclude by adding that London cannot afford to be behind hand in these matters. As a member of the Technical Commission which worked from 1882 to 1884, I am able to speak confidently on the subject as regards the extraordinary amount of care and attention, and of course I must also add funds, which are being spent year by year on the large educational establishments in Germany, in France, and Switzerland, not to speak of the United States. Then I have said that from being a member of the Scotch Universities Commission, I am also personally acquainted with the Scotch Colleges.

17,814. Of course it would require a large sum of money if we are to have these professors?—Of course, as you say, my Lord, the first or at any rate one of the most important questions is that of ways and means. In my opinion the Metropolitan University should be a State-aided institution in the sense in which the Scottish Universities, the British Museum and the National Gallery are subsidised by the State, but not directly under the management of a State Department. If we look round we shall find that there are many precedents for this. First, the existing University of London. Here it is not under the direct management of a State Department, but it is a State-aided and subsidised institution. Of course we know that it has cost the country a good deal more than it does at present, owing to the extremely large number of students who present themselves for examination, the fees going to the Government. In the second place the Scottish Universities, for which Parliament now votes no less a sum than 72,000*l.* a year; 42,000*l.* on the original grant, and 30,000*l.* on a recent and special grant. The next precedent would be the Government grant which was made to the English University Colleges by Mr. Goschen, in the year 1889, of 15,000*l.* a year. On the recommendation of a Committee, of which I had the honour to be Chairman which sat last year, and which recommended or which pointed out, that this sum which had been handed over to the University Colleges was of immense value, was doing exceedingly good work throughout the country, and that an additional sum of 15,000*l.* more might well be given in order still further to increase the usefulness of these institutions, it was thought by the Committee that an additional 15,000*l.* would be a sufficient sum for many years to come. Then I say also that the University should receive aid from the London County Council out of the grant for technical education, such grant of course to be applied so far as the subjects are concerned which come under the technical Acts.

17,815. Do you think much of the education given in the Universities would come under the technical Acts?—Yes, a considerable amount, because in the framing of the Act care was taken to define technical education very widely. It includes all physical and biological science, pure and applied. It includes modern languages; it includes commercial education. In fact the only thing it does not include are the ordinary subjects taught in elementary schools, together with ancient languages, literature, and history. You are aware that no money could be applied under the Technical Education Acts to any boy or girl under tuition in the Standards. Drawing, both mechanical and freehand, and modelling, are some of the subjects which may be taught under the Technical Act. Indeed, as I say, the only subjects which cannot be taught are those included in the ordinary subjects taught on the standard scale—up to the seventh Standard—and the ancient languages. Mathematics can be taught.

17,816. (*Professor Ramsay.*) May I ask which Act you are referring to?—The definition is given under both Acts.

17,817. The definition is rather different, but between the two it includes all these?—Yes, between the two.

17,818. You will remember that our Scotch Act is rather different?—I was not aware about the Scotch Act. I was speaking of the English Act.

17,819. In the Scotch Act technical education is defined to be any subject taught by the Science and Art Department, South Kensington?—Yes, that is to say, that South Kensington can give its permit for any subject, for instance, hedging and

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

ditching, if they think it fit. But that is scarcely given under the head of University instruction. At any rate it is wide enough to include all the higher education in Science, in the modern languages, and commercial subjects.

17,820. (*Chairman.*) But is it not rather the idea throughout the country that this technical grant is given for the sake of the artisans and the lower classes rather than the real higher education. Would there not be a great deal of grumbling if it were given to the classes who are considered to be able to pay for themselves?—I will come to that point presently. I have reason to believe that a considerable amount might be given to this purpose from the 160,000*l.* per annum, of which the County Council of London has the disposal, towards a large and comprehensive scheme worthy of the metropolis, and forming the highest step of the educational ladder, as from the elementary school to the University.

17,821. Connected by scholarships?—Yes, scholarships especially. I do not know that the grant need be given for scholarships altogether. This grant would not, I believe, be given so readily to a number of isolated colleges as it would be to a large and comprehensive scheme for the higher instruction in the metropolis.

17,822. That is your idea of what the County Council of London would be likely to do?—Yes.

17,823. Would there be any reason why they should give it to one institution rather than divide it amongst the leading colleges?—Of course it is only an opinion of my own, but it is an opinion which I hold strongly, that there is more chance of influencing the County Council to give money for the higher education if there were a really great scheme proposed which would show that it was within the reach of all classes to benefit from the higher instruction rather than give it to isolated colleges. Then I might go on to say that in corroboration of this I may refer to the statement of Mr. Acland, the Vice-President of the Council of Education, the other day when he said in a speech that he made in Chelsea that if, I think, 10,000*l.* a year was the sum he proposed, such a sum were allocated for this purpose from the County Council fund, it would be hard for any Government to refuse to supplement it by an equal amount. And I have a strong belief that if the Commission were to insist upon the necessity for large funds being forthcoming for this purpose, an expression of this opinion would have very great weight both with the Government, with the House of Commons, and with the County Council.

17,824. (*Professor Sidgwick.*) Might I ask where Mr. Acland's speech is to be found?—It was in the papers.

17,825. How long ago?—About a fortnight ago.

17,826. You quote it as bearing on our present inquiry. Did he clearly indicate that bearing?—He said those were his views.

17,827. Did the speech clearly indicate that it was to be for a University?—Yes. I may point out that in other places large sums have been forthcoming from private sources, and are forthcoming for University instruction. In Edinburgh, for example, no less a sum than 100,000*l.* has recently given by Mr. McEwan for the purpose of building or adding a large and stately hall to the buildings of the University. Again, 100,000*l.* has been left to the University of St. Andrew's. Of course, as Professor Ramsay knows, very large sums of money have been raised in Glasgow for both building and endowment purposes. At Owens College we have raised nearly half a million of money in the course of the last 20 years by bequests and otherwise. In Liverpool University College very large sums have been obtained. Mr. Henry Tate has given, I think, 20,000*l.* or 30,000*l.*, I do not know the exact sum, for building a most magnificent library. There is also a splendid engineering school, entirely the gift of private beneficence by Sir Andrew Walker. Wherever we look we find instances of that sort. There is Mason's College, Birmingham, Firth College, Sheffield, in which private beneficence comes forward when a scheme is proposed of sufficient importance to interest the locality.

17,828. (*Professor Ramsay.*) May I say one word about that, because I have had a great deal to do in raising funds. It is a comparatively easy thing to raise money for erecting buildings, but it is a perfectly different thing to get money for endowments. There is an extraordinary difference between those two purposes?—I know that is so; but at the same time bequests have been made, and money has been forthcoming by donations from living persons for an endowment as well as for building purposes. We, at Owen's College, have had two bequests of 100,000*l.* each.

17,829. I mean it is the more reason why we should insist on the Government grant for that purpose?—Yes, that is my opinion too.

17,830. (*Chairman.*) I suppose the fees cover some portion of the expenses?—But the larger a college becomes, and the more you go into the higher teaching the more expensive is the thing. You must take it for granted that the higher education, like the elementary education, and also secondary education, will not pay for itself. The fees will not pay the cost of the education, and unless you have endowments from the State or from private benefactions these higher institutions cannot flourish.

17,831. In Germany the Universities are almost supported by fees, are they not?—No, that is not the case. They are all State institutions, but they are very large subventioned. For instance, I may state that as soon as the Franco-German War was concluded, the first thing the German Government did was to vote 700,000*l.* to complete the renovation of the old University of Strasbourg, and put aside sufficient money to pay for the working expenses of that institution, 40,000*l.* a year. In the same way in Switzerland, that small country, the sum spent on the great Federal Polytechnic is very large indeed, and the fees in all these continental countries are extremely low. I should like to say that I see no reason why London should not do its part. People say that it is so difficult to get sufficient interest in London; that there is such an enormous mass of persons all having separate interests, and that it is very difficult to get support, and that has been the case, but my belief is that if a scheme were proposed of sufficient magnitude and importance to incite the interest and attention of the London public, funds would be forthcoming in the same way as they have been, and are forthcoming in the provinces.

17,832. And for polytechnics and other things in London one hears the same thing?—Exactly.

17,833. The association of which you were vice-president proposes the establishment of a powerful central governing body for giving higher education; and that the colleges should be unified and organised?—That is the proposal which our association has put forward, and which probably you have had evidence of already.

17,834. Broadly speaking, it is your objection to the Gresham scheme that it does not do that?—That is so, and I may say that this is advocated because the efficiency of the equipment to which I have referred can only be brought about in my opinion by common action. I mean to say that where you have these isolated colleges the force and the energy of the teacher, measured in a pecuniary way, is to a great extent wasted, so that the teaching overlaps and we do not get a sufficient return either for the work of the professors or for the money expended. That, in my opinion, would not be the case were an organised system arranged. Such an amalgamation of course would necessarily involve some sacrifices of autonomy on the part of the professors and the governing bodies of the existing colleges.

17,835. I suppose you will come later to the question of how you would get the colleges to join?—Yes.

17,836. Then I will not anticipate it?—I would confine my remarks, to begin with, to the Faculties

of Arts and Science in respect of which the problem appears to me to be simplest, and looking at them I see there are four institutions which naturally occur to the mind of all, namely University College, the Royal College of Science, King's College, and the City and Guilds Institute. Now of these four, one, namely, the Royal College of Science, is a Government institution, and therefore there can be no difficulty, if the Government should see fit to do so, in making this college a portion of the University. That would therefore be the first and easiest step in the process of evolution, and one which I, for my part, would very strongly advocate.

17,837. The Government would give up all their own control over it?—Yes. Instead of being placed, as it is now, under the Science and Art Department, the head of which is a most able departmental officer, General Donnelly. At the present time the government of the institution, as I say, has grown up under the system, but I conceive that it would be very much more for the interests of the higher education if this institution were included as a part of the University under a form of University government such as that which I propose to indicate afterwards. Then with regard to the other colleges of course the difficulties are greater, but should the above suggestion be acted upon, the advantages which would accrue to joining the University already in possession of an efficient and high-class science school, and especially those of sharing the Imperial and municipal endowments which the University would possess, would be, I think, sufficient inducement to bring about amalgamation, at any rate, after a while.

17,838. That is supposing you could get the endowment?—Of course. I should like to say a word with regard to King's College. As probably the Commission is perfectly well aware that is a denominational institution. There no professor and no teacher can be appointed who is not a member of the Church of England. The government of King's College is, I understand, entirely in the hands of the Church, that is to say, that, only excepting a few members of the governing body who are, as it were, *ex-officio* members, such as dignitaries, political and otherwise, all the other members of the governing body are appointed by the Archbishop of Canterbury. How far it would be possible at the end of the nineteenth century for a University to take upon itself an institution which is purely denominational, especially as State aid to such an institution is concerned, of course, is a matter for consideration. Then, if I may go on assuming for a moment that the institutions I have before referred to became part and parcel of the proposed University, the question is, what arrangement as to the teaching could be carried out? In the first place, I should wish to differentiate between the the graduate or elementary, and the post-graduate or higher teaching, including original investigation. The instruction for the graduate courses might very well be given in each of the centres so far as their staff permitted them to do so. The different portions of the higher instruction might with advantage be concentrated in certain institutions. Thus, for example, King's College might be made the centre for the higher literary training, whilst the Biological and Physical Sciences might be divided between University College and the Royal College of Science; and the Applied Science would be centered (I mean the higher Applied Science) at the Central Institute of the City and Guilds.

17,839. Each of these colleges would continue as it does now to educate its undergraduates on its own system, under its own form of government, but the higher education would be divided between them, and they would each undertake that part which was allotted to them by the University. Is that so?—My idea goes further than that. I would wish to see the University Council or Senate, or Court, or what it may be called, supreme. I would wish to see the whole of these institutions merged into the University, and I point out that whilst the graduate courses, the elementary courses, might be given in several centres it is advisable that for the higher kind of instruction differentiation should take place.

17,840. The colleges would lose their autonomy altogether?—Yes.

17,841. Is there not a certain amount of *esprit de corps* gathered within them which is the motive power which is urging them through their work. Would it not be rather a pity to break up all that?—I will not say that I do not think there is very much *esprit de corps* anywhere in the London Colleges, but I think there would be much more *esprit de corps* if they were all united in one great University system. I say that while the idea is that the higher teaching and the opportunities for research should be made efficient in one institution, rather than allowed to be less complete and thorough in several institutions, there need be very little alteration, or at any rate to begin with little alteration in the duties of the professoriate in the existing colleges. Arrangements would naturally be made by mutual consent for avoiding as much as possible the overlapping of subjects. I wish particularly here to say that I believe myself firmly in the importance of union in the person of the professor who teaches and the professor who investigates. I believe that the best original investigator is very often, though perhaps not always, the best teacher, and *vice versâ*. Very often the man who teaches elementary subjects best is the one who has the deeper and profounder knowledge of his whole subject. It is, I think, true almost generally that the professor who is an investigator finds it desirable to take himself the elementary classes and to hand over the more advanced classes to an assistant who is specially instructed and specially capable of giving that instruction. I am altogether against having pure professorships of research.

17,842. I should have thought that the man who wanted to give his whole time to research would be very much bothered and annoyed by constantly having to go back and teach the rudiments?—It depends entirely upon the amount of work you put upon his shoulders. That of course is a *sine quâ non;* he must have time for himself, but I always find, and I believe it is general, that the busiest men always do the most; and if the man is not overweighted with teaching I do not think that it practically does interfere, rather the contrary, it acts as a stimulus. In Germany that is certainly the case, and I think everywhere else.

17,843. It would soften and facilitate the breaking up of the autonomy of the colleges if you began by appointing the best of the existing professors University professors instead of college professors?—Yes, that is my idea. Of course the claims of the existing professors in the college must be safeguarded. It will not do to go and dismiss them all at once and appoint fresh ones. I think that might be very easily arranged. Of course you are aware that most professors in these colleges are men of eminence in their subjects. I may go on to say that during the initial state of things whilst the existing colleges are to be brought into close union with each other and with the University, it may be desirable that if any great extension of laboratory accommodation, especially suited for research is carried out in one institution that a share in the teaching of that laboratory or in those methods of research should be allotted to the special heads of the existing colleges. I mean to say, supposing it were decided that the Royal College of Science should be merged into the University, and that there the higher teaching in Physics and Chemistry should there be given, it would be rather hard in the initial stages upon the professors of Chemistry and Physics in the other colleges that they should have no power of helping or assisting the carrying on of research in that place, where the equipment would be so much superior to that of their own college. The details of an arrangement of that kind might of course easily be settled by the governing body.

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

17,844. You think the laboratory should be open to all colleges?—I think that there should be some arrangement by which the professors who exist now in the other places should have a voice in the matter, and I believe that the establishment of such a central authority for the University, on which, however, the professoriate is represented is an essential feature of the proposal. Then I would go on to add that as vacancies occur in the existing Chairs they should be filled up. It would be impossible to adopt a simpler organisation. At the head of a body of teachers giving instruction in any one great division of science there might be a chief professor, possibly a Regius Professor, assisted by others who all should be men of high professorial rank, and who might take a share in the higher teaching and in the superintendence of research, but some of whom might also have a special connexion with one or other of the subordinate centres.

17,845. That would be gradual you say, as vacancies occurred. You would not start with that?—No. I would first make arrangements with the existing staffs—of course such as were willing to come in. Then as vacancies occured I would put the thing on a proper footing.

17,846. And that would all be done by the new Senate?—That would all be done by the new Senate or governing body. Then I next come to the question of the constitution of the supreme Governing Body which may be either called a Senate, or as I personally should prefer to call it, a Court.

17,847. "Court" is a new word altogether applied to Universities, is it not?—No, it is a word that is employed in all the Scotch Universities. The supreme Governing Body there is the Court. It would consist in the first place of non-professoriate members, that is, not professors or representatives of the colleges or Universities as such. My point is that the non-professorial governors or members of the supreme body should not represent colleges, but should represent themselves, that is to say, that these should be chosen largely, in the first instance, by the Crown from the governing bodies of the institutions forming the University, and some perhaps appointed by bodies such as the London County Council or the City Guilds, if these bodies contributed towards the maintenance of the University.

17,848. A great number of the governing bodies of the colleges are non-professorial?—A great many.

17,849. (*Professor Sidgwick.*) I understand you to say that they should be chosen by the Crown from the non-professorial representatives of the existing bodies?—Yes. I do not say that all should be chosen, but some should be chosen from the present governing bodies of the colleges.

17,850. (*Chairman.*) And the rest?—For the rest I would say, secondly, the University professors. That is the second set of persons I would have on the supreme governing body. But I do not think the number of the professors need be a majority. Of course on this point I express my own opinion. I am not tied to the opinion of the association which I happen to represent. Some members of that association would give you a different opinion upon that matter. The governing body would concern itself with everything connected with the University, but it would delegate to the Faculties or to the Senatus, as it is termed in the Scotch Universities (and I think that distinction is a very good one), or to the Faculties as they may be called, the whole details of University teaching and examination. These Faculties or the Senatus would, of course, be composed entirely of the professors.

17,851. Then one of the powers of the Court would be the appointment of the professors?—Yes, it would be so, perhaps, or the recommendation of the Senatus or Faculties consisting entirely of the professorial element.

17,852. (*Professor Sidgwick.*) You do not mean to decide the question as to whether the Faculties should act separately or in combination. You say, the Senatus or Faculty, leaving it open?—Yes, quite so. It would depend upon the number and extent of course. Then the whole of the academical work would be carried out by the professorial body.

17,853. (*Chairman.*) With regard to that, I might ask you this. Of course you know the draft of the Gresham Charter. Do you approve of the part of that Charter which treats of Faculties and Boards of Studies?—Yes, I approve of Faculties and Boards of Studies most decidedly.

17,854. And the way in which they are arranged?—No, that I will not commit myself to. The Boards of Studies would be under the Senatus. The Senatus would appoint Boards of Studies to carry out the working of the University examinations and the University teaching, but especially the examinations.

17,855. (*Professor Sidgwick.*) Perhaps Sir Henry Roscoe might say whether he approves of the organisation of the Victoria University in respect of Faculties?—Yes, I do. I think it has been found to work extremely well. A difficulty of course arises where the general Board of Study as we have it in the Victoria University becomes very large. Then it is found necessary to split it up into Departmental Boards. But of course that is all a matter of detail which can easily be arranged.

17,856. (*Professor Ramsay.*) But I think you have no Faculties in that sense; you have Boards of Studies?—We have Faculties in the colleges but not in the University. Then, thirdly, comes the Convocation of graduates, and in my opinion this Convocation should have a consultative voice, but not a veto upon the proceeding of the supreme governing body. I think we find that that has acted very injuriously. I do not think they ought to have a veto, but I think they ought to have an appeal to the Privy Council.

17,857. (*Chairman.*) Would they have any other function except that of appealing to the Privy Council?—No, I do not think so. They would meet and discuss matters, I suppose.

17,858. They would not elect members?—They might do so. The Convocation might have a representative no doubt on the supreme governing body.

17,859. For instance, would they elect the Chancellor?—Yes, that they might do. That is so in Victoria University.

17,860. Not to have a veto but only an appeal?—Yes. Then the central authority in my opinion must be a body of weight and importance.

17,861. The central authority being the Senatus?—I have used the words "central authority" because there has been this awkward mixture of the titles Senate and Court. Whatever the name is that is decided upon, whether Court or Senate, I wish to call it the central authority.

17,862. The highest?—Yes, the highest. The central authority or court must be a body of weight and importance. A great advantage of the foundation of a powerful central governing body would be not only those points to which I have alluded, to give the public a guarantee of the importance and widespread character of the new University, but also, for example, to enter into arrangements for the use for University purposes of the vast collections of all kinds, now established under separate governments in the metropolis.

17,863. Government collections, the British Museum, and so on?—Yes; the utilising for University purposes of these vast collections of Science and Art, Archæology, and the libraries. We have in the British Museum, both in Bloomsbury and in South Kensington, vast collections of enormous value which are at present very little used comparatively, except for people to go to gape and stare at the things. They are very little used for higher education, and I think the University, if composed in the way I have described, would have a very important influence in obtaining the use for students and for research, of these great institutions, perhaps inaugurating or arranging lectures on subjects which might be illustrated by those great collections. It seems to me that

we do not make half enough use of these great places. Then again, with regard to the organisation of the University in its initial stage I should like to say that in my opinion the suggestion which probably you had before you already from the members of the association, meets my view, namely, that in the initial stage the Government organisation of the University should be carried out and put upon a satisfactory footing by a statutory commission; that this statutory commission would appoint University professors as much as possible from the existing staff whose pecuniary interests, of course, would have to be respected, and that all college funds should be vested in the University, the object of trust funds being restricted. What I mean by that is that, supposing in a particular college a sum of money had been left for the purpose of founding a Chair of Mental and Moral Philosophy, I think it would be wrong for the University to take over those funds and apply that money for other purposes. I think it would be necessary to respect the will of the donors in cases of that sort. But otherwise my view is that the whole of the funds ought to be handed over to the supreme University authority. Then the next question would be, what position the University would occupy with regard to educational institutions which are either colleges which have declined to come in, or which are institutions not of University rank? This might be done either by the recognition of the teachers in such institutions in the sense that supervision, and possibly pecuniary aid, on the part of the University should be given in exchange for a certain amount of control given up on the part of the governing body of the college. For example, it might be that in one of those colleges, though they did not choose to place themselves under the University, one professor might be appointed as a University professor, but then the appointment of such a professor when a vacancy occurred must, of course, be in the hands of the University. I would not put any professor upon the Senatus of the University who was not appointed by the University authorities. Now we have got so far with regard to the question of Science and Art I should like to say a few words about the professional subjects with respect to the University professional schools such as Medicine, Law, and Theology.

17,864. (*Professor Sidgwick.*) Do you include engineering?—I include engineering under Science.

17,865. Is it not more parallel with the professional schools?—What I should perhaps define as the professional school are those in which the profession is a close corporation, and in which you have to have special examinations, and special training for passing those examinations. Under Science I include all those branches of Applied Science such as Engineering and Agriculture, and perhaps Music, which are not close professions. I speak of Medicine, Law, and Theology as being close professions.

17,866. Theology would not be close except it is denominational, would it?—No, it would not, but I do not think the time has arrived at present for inclusion in the University curriculum of a school of Scientific Theology. I think this department must be altogether omitted. That is my own opinion. I know there are many who think differently. At any rate if it is to be included, it will have to be a school of Scientific Theology, and not one of a dogmatic character. With regard to Law, again, I have very little to say, because I know very little about it, but I should like to see some plan of co-operation arrived at between the the Inns of Court and the other legal bodies who undertake teaching, so that the University law student may benefit, and that such courses of instruction should be recognised by the University. With regard to Medicine, I hold very strong views as regards the desirability of amalgamation of the scientific as distinguished from the clinical or purely professional teaching of the metropolitan Medical Schools with the University. Such a union and reorganisation of the London Medical Schools has long been recognised as a necessity for securing satisfactory teaching in those particular subjects. This would mean that the University should undertake the control and management of the teaching of the London medical students of the subjects that are called in the Scotch Universities "The first Annus Medicus," namely, Chemistry, Physics, Botany, and Physiology, the rest of the necessary subsequent studies being carried out at the various Medical Schools having hospitals attached to them. To avoid clashing of interest, it would be well if this scientific instruction could be given in an institution *not* attached to a hospital. I believe this would have taken place long ago, and that University College would have become a centre at which this first year's or scientific instruction would be given if it had not been that University College was connected with a hospital and all the other people who had interests in hospital teaching said, "Oh, if we send our young men on to Uni- "versity College to learn their Chemistry, Physics, "Botany, and Physiology, we shall never get them "back again. They will go on to the hospital and "we shall never see them again." If there had been no hospital attached to University College I think it is very likely that years ago it would have been a centre for educational purposes.

17,867. (*Chairman.*) The scientific part would come before the clinical part?—Yes, and instead of having the Physics, Botany, and so on, taught by a large number of persons who do not devote themselves to the special subject, but who are in many cases practising physicians and surgeons who do not devote their whole time to the subject, but give an hour a day to it, they would be men who would give their time and attention to it, and scientific men pure and simple.

17,868. They would not begin the clinical part until they had passed some examination in the scientific part?—Quite so. If no arrangement of a satisfactory nature can be arrived at in consequence of the competing interests of the existing schools, I would advise the formation of the University without Medical Faculties as in my opinion, which is founded on the experience of provincial colleges, amalgamation on some such lines as those indicated will certainly come about after some time. The same thing happened to us in Victoria University. The first charter only granted degrees for Arts, Science, and Law, and it was only after a year or two that we obtained the sanction of a second charter, or a supplementary charter, giving us power to grant degrees in Medicine. And I know that a similar thing has occurred elsewhere, not indeed in a University but in colleges. They have begun to exist as places in which only Science and Arts are taught; afterwards the local medical schools have seen the necessity of coming in and forming part of the college. In Birmingham and Leeds this has been the case. Therefore I should not be without hope that if the difficult and thorny question of medical schools was not approached to begin with they would very soon, or after a while come in. Then I think there is no doubt that at the present time the important technical subjects to which we may give another name—that of Applied Science—including commercial instruction, all coming in under the definition of technical instruction in the Technical Acts, should form a part of a University founded at the present time. I think the interest shown with regard to the question of the necessity for higher education in this particular department is enough to satisfy everybody that no University now—no new University certainly—could properly do the work which it has to do in the future unless these subjects were properly represented.

17,869. I think in Germany where technical education is in a very advanced state it is kept separate. It is not taught by the University, is it?—That is the case, but those who know Germany well are very doubtful whether that severance of the University and the polytechnic is a wise step. The fact is that now an enormous number of polytechnics exist all over the country, and in the opinion of many of those who are best able to judge (many of my friends who are

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

scientific men in Germany have often talked to me about it), it would have been better if, instead of having a dual system, they had arranged a system such as we have now existing, or coming to the front in England, where, side by side with pure science, the teaching of Applied Science exists.

17,870. It would avoid a certain amount of overlapping which we are told now does take place?—Yes, and there is the danger also that in this purely technical school the high development of science is somewhat lost sight of, and I think the co-ordination of Pure Science with Applied Science is a very healthy and important matter; the question of the admission of technical subjects such as Engineering, Agriculture, Applied Chemistry, and even Music; though I do not know that that might be called a technical subject.

17,871. Would you treat Music differently from other Arts such as Painting and Sculpture?—I have not gone into the system of Art education, because I really do not understand it. I think it would be better probably to put Music together with Painting, Sculpture, and so on. At present we might leave out Music. It has now been generally admitted at Cambridge, Edinburgh, and Glasgow, and at all the University Colleges, that these subjects are included as an integral part of the system, and for this purpose I should like to point out that the higher teaching in Applied Science (I prefer that term rather than "technical education") is at present given in the Guilds of London Institute, and this Institution should, I think, in due time become part and parcel of the University; and possibly also the Finsbury Technical College which, although on a somewhat lower scale, educates to a considerable extent in this branch, and covers very much the same sort of ground as the Central Institute in Exhibition Road.

17,872. Would you give a Faculty for any of these things. We have been asked to give a Faculty for Applied Science?—Yes, I think so.

17,873. And a degree?—Yes.

17,874. A degree separate from the ordinary science degree?—I would give a degree. I would include of course a knowledge of the theoretical part as well.

17,875. You would give a degree in engineering, for instance?—Yes, I would give a degree in Honours in Engineering. I would make a man pass by a certain avenue in science instruction and pass a degree in pure science. Then I would permit him to take a special degree in honours.

17,876. (*Lord Playfair.*) Such as a bachelorship and a doctorate?—Yes. Then I would say this, although I cannot speak so strongly on the subject as others probably might, I feel that in a University to be established in England and in the metropolis the question of commercial education should not be lost sight of. In Vienna, Hamburg, and other places on the continent, important commercial schools exist and I think they ought to form a part of the University curriculum; that is to say, that there ought to be means of giving instruction in those subjects in which we feel the want now.

17,877. (*Chairman.*) Leading up to a degree?—Yes, I think so. I see no reason why it should not. And I think it would be very fortunate if that instruction could be given in the City, for instance at the Gresham College, to represent the commercial centre.

17,878. Would you absorb the Finsbury Technical College, and the Central Institution, and other institutions in the same way that you propose to absorb King's College, University College, and others?—I would absorb certainly the Central Institution. I do not know about it being extended to a great many other places, but I would certainly absorb the Central Institution, and possibly also the Finsbury one.

17,879. I suppose it would be done by appointing the present instructors in the way you have spoken about the other institutions?—Yes. Then might I say words regarding my general views with reference to the University?

17,880. Yes?—I think at the present day a new University must be made popular. It must have the support of the people, and it must do a certain amount of work that the people require. The question is: How can this be accomplished? Not, certainly, by degrading either the instruction given or the examinations of the University. Certainly not. But by placing it as the highest rung of the educational ladder to be made capable of being reached from the lowest. For this purpose the classes must be open and available for all who are fit to benefit from them. I would not restrict the attending of the classes or of the laboratories to those who are going in for a degree, but I would allow anyone to come on showing that they could benefit from the instruction given. This opening out of the University downwards must be done, of course, chiefly by exhibitions and scholarships from the secondary and technical schools, and, in the second place, by in some sense assisting the spreading of the work of institutions such as University extension classes, by appointing delegates to these classes, and thus making them in some sense part of the University work.

17,881. Do you care to go into details of how the Teaching University is to take up the duties at present carried on by the University extension classes?—I do not know that I am sufficiently acquainted with that to go into it in detail, but I should think that by appointing some of those gentlemen who are most active on the Board of the University Extension movement in London on the supreme governing body of the University the connexion might be made between the University and these classes.

17,882. Do you think the University might undertake the work itself?—Yes, I think so; or some subcommittee of the University.

17,883. You say the principle of the existing system of the examinations of the present University of London must be adhered to. What part do you contemplate the present University of London should take in this new plan, or do you contemplate that it should take any part?—I am obliged to you for asking that question, because it is one which I particularly wish to speak about. I consider that the present University of London must be as it were the germ or centre round which the new University is to be formed. I conceive that we cannot get rid of the University of London, and for my part I do not wish that it should be got rid of even if it were possible, and therefore I should think that the present system of the University of London examinations would have to be continued. I think it is too late in the day now to attempt to go back upon the path which they have so long followed, namely, of allowing all comers to take part in the examination for Science and Arts. Therefore, in my opinion, it would be necessary that this avenue should be open still.

17,884. You would entirely remodel the present University?—Yes.

17,885. You would sweep away everything that now is, and appoint your court and your intermediate body of professors by whatever name they would have, and take away the power of Convocation to veto. You would, in fact, entirely remodel the existing University of London, leaving nothing but the name. Is that the case?—I do not say, leaving nothing but the name. The system would remain very much the same as it is. I would rather put it that a new charter will have to be made, and that the charter of the present University of London should be renewed and modified to a very considerable extent. The name, as you say, should remain.

17,886. And the system of external examination?—Yes, improved however by the addition always of the University professors. With regard to that I might say that only last week, Professor Huxley, as President of this Association, and I myself as Vice-President, and a number of other gentlemen, several of whom are members of the Senate of the University

of London at the present moment, met a Committee of the Senate, as Mr. Anstie is aware, and there the views of the Association were placed before the Vice-Chancellor of the University by Professor Huxley, myself, Professor Weldon, and others, and I think I may say that we were not only very kindly but very warmly received, and from the few words that the Vice-Chancellor said afterwards I am of opinion that the Senate of the University as represented by that Committee are fully aware that alterations will have to be made, and are not opposed to the views which the association brought before them.

17,887. That is the Senate?—Yes.

17,888. The opposition of Convocation will have to be got over?—Yes. The opposition of Convocation will only be got over by an Act of Parliament. So much for the University of London. I then go on to ask how the difficulties of admitting the two sets of students to the examinations are to be met. One set should pass in through the open door and the other should pass in through the classes of the University. Of course, there are several ways in which that can be done. I am not, for my part, in favour of giving two kinds of degrees, one to one man who comes in through the open door and the other to the man who comes in through the laboratory, but I think it might be very well either to set alternative papers or (as in my opinion is better still) to excuse the man who comes in with evidence of having gone through a certain course and certain instruction in the University laboratories, or under the University professors, a certain portion of the mere examination.

17,889. (*Mr. Anstie.*) You think that the collegiate examination should reckon?—Something of that kind might be arranged. The great point which I wish to urge is the comparative unimportance of examination. The other day a very well-known gentleman, Professor Mahaffy, made a speech in Liverpool in which he said that some people in London had had the impertinence to give the name "University" to a mere examining board. I do not wish to go so far as that, but I wish to say that I for my part think that after all the examination is a very small part of the work of a true University. The teaching is the main important end, and for that reason I believe that now this movement has occurred to obtain a real teaching University in London worthy of the nation, there is an opportunity of doing it which may not occur again in our time.

17,890. (*Chairman.*) In fact, it is only from what has already been done and the wish not to disturb it that you are willing that the London University should continue its system to examine all comers. You do not approve of it in principle?—I will not quite say that. I think the University of London has done very great and good work, and although these degrees are obtained sometimes by persons who cram up too much, yet Ibelieve that it has not on the whole been a great benefit. I believe it has been a great benefit to the country to have had these examinations. Supposing a man crams up a book, it is not, perhaps, the highest form of obtaining knowledge, but it is one form, and I do not think one ought altogether to object to the system. A great many persons take advantage of these classes. I suppose every examination is crammed up to a certain extent. I know I crammed myself up when I passed the Bachelor of Arts examination when I was quite a young man, and I believe it did me much good.

17,891. It shows a certain amount of power of mind to be able to cram up?—Yes; I think it does. Then there is a point with regard to the instruction for women that I should like to say a word upon. Of course the University of London has admitted women to its examinations, and the teaching University will have to admit women or make provision at any rate for the higher teaching of women. I should like to call attention to the fact that there is existing in London at present a very excellent college for women, Bedford College, where tuition of a high character is given them both in Arts and Science. They have good laboratories, and it is a very well appointed place. I understand that Bedford College should such a condition come about, have expressed their willingness to become part and parcel of the University.

17,892. They are rather anxious not to be too much absorbed?—I do not know how far they wish to be absorbed.

17,893. I think they said they would like to keep their own laboratories to themselves. However, that is a detail?—I only wish to express the opinion I hold very strongly, that provision should be made for women.

17,894. Women would have to be kept a little apart from men, would they not?—I do not know. That is a matter which some people answer in one way and some in another.

17,895. (*Professor Sidgwick.*) Is Bedford College adequately equipped?—Yes, I think so. It would require to be enlarged, no doubt, but I believe the number of women going up for degrees from this College is equal to, if not more, than the number of men going up both from King's College and University College. In fact, from King's College nobody goes up for London University degrees.

17,896. (*Lord Playfair.*) For academic degrees?—Yes. Then, of course, there is the other college for women in the neighbourhood of London, Holloway College, which possibly also, in time, might see fit to come into the University.

17,897. (*Professor Sidgwick.*) But do you think that could ever be used for lectures? It would not be really in the University of London, would it?—I suppose it is not in the metropolitan area, but it is close by.

17,898. Then the students would not be able to use the advantages of London University to any degree?—But they have the advantages there themselves. They have everything within their own place.

17,899. (*Chairman.*) You have always taken rather a leading part against the Gresham scheme. You opposed it in the House of Commons?—Yes, I did.

17,900. And a good deal on the ground you have alluded to here, the inclusion of King's College?—That was one ground; but I think a ground of my objection, still further, was the fact that it seemed to me that the Medical Schools were far too largely represented. It was proposed to take in all the representatives of the Medical Schools, many of which are, in my opinion, not on a University scale.

17,901. You opposed it on general grounds, on these grounds amongst others?—Yes.

17,902. Also there was a good deal of opposition on behalf of Victoria University?—Yes.

17,903. You took part in that?—Yes, I agreed with them in their opposition. But I wish to point out that there is no opposition now on the part of Victoria University to the establishment of a large teaching University on broad lines.

17,904. Some time ago you took rather a leading part in the establishment of Victoria University?—I did.

17,905. And that is rather on the principle of separate colleges?—That is on the principle of federated colleges. But, in my opinion, whilst it may be very useful in the North of England, where separate colleges exist in different towns, it is quite another thing in the metropolis where the different colleges are competing against one another; and I do not think that the precedent of the foundation of the Victoria University on those lines is one to be followed in the metropolis.

17,906. What would be the difference?—The difference would be that instead of having three separate colleges, each under their own government, united only by the tie of a common examination in London, we should have one University system of teaching.

17,907. What is the difference of circumstances between the two—the uniting of the colleges in the north of England and the uniting of King's College

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

and University College, and any others which might be found desirable, and let them keep their autonomy, forming a University, and letting them appoint their professors?—The difference seems to me to be this, that in Liverpool, Manchester, and Leeds the people want different things. Liverpool expands in one direction, Manchester in another, and Leeds in a third direction. We have certain common interests, but not all our interests are in common. Whilst in London the interests are so nearly all alike that a common centre of government seems to me a necessity.

17,908. And the distance apart would be an objection?—Yes.

17,909. As far as the principle of Victoria University is concerned I believe there would be no difficulty in King's College being affiliated as it now stands?—I believe not.

17,910. You would not object to that, would you?—I object to State money being given to denominational institutions of any kind.

17,911. (*Professor Ramsay.*) With regard to the main purport of this memorial, it is in favour of a due provision being made for higher education and original research. I suppose every one interested in higher education would be ready to sign that proposition?—I fancy so.

17,912. I think, for instance, there are two signatures from our University. I never heard of this, but I should have thought every one would sign it?—We thought you represented Glasgow University on the Commission, and that it was not necessary that we should ask you.

17,913. The really important point is this: I want to ask you what is exactly meant by the higher education and original research. I was glad to hear that you had no intention in supporting this particular proposition to suggest that the higher research should be separated for the ordinary teaching?—I have no intention of anything of the kind.

17,914. Then it comes to a question of what exactly you mean by making apparently a distinction between higher education and original research. I understood from your answers that you would consider it a great misfortune if the work of higher research was conducted by one set of professors who had no connexion with the ordinary teaching for degrees?—I should do so.

17,915. It has an injurious effect, I believe, upon teaching, and even upon research itself, to put the work of original research into the hands of a special class?—That is my opinion.

17,916. Of course you do not mean to say that all original researchers are good teachers?—No.

17,917. Of course, we all have examples of that before us; but everybody feels that even in the case where the researcher is not a good teacher, the students at large are stimulated by belonging to a school in which they know that some of the first work in the kingdom in their particular department is being carried on?—That is exactly what I meant.

17,918. You are strongly of opinion that it is most undesirable to create any divorce between the teaching man and the man of research?—Yes.

17,919. Now, applying this to cases like the London University, I should like to know how you propose entirely to combine the two. Your scheme contemplates the continuance of the ordinary teaching for degrees at a number of centres in the various colleges. It contemplates also, I understand, the appointment of professors of a higher class who should mainly occupy themselves with research at particular centres?—Not mainly occupied themselves with research—in whose hands the higher teaching should be placed.

17,920. With regard to science you said the only thing would be to centralise the higher teaching of science in the Royal Colleges?—Yes, that is my suggestion.

17,921. (*Professor Sidgwick.*) I thought you said you would divide them?—I should have said that—to divide them between the Royal College and University Colleges because I do not wish to distinguish between them.

17,922. (*Professor Ramsay.*) Then that would deprive the other colleges which might form part of the University of having the same means of conducting the higher teaching. You would take it away from King's College?—I do not think they have it. It is not there.

17,923. You would prevent them?—Yes. I think the very object of the whole thing is to prevent the over lapping of these studies, and to only require the higher studies which cannot be remunerative, which require a great expenditure both of time, labour, and money, and instead of having them half done in several institutions, I would have them well done in one. That is my point.

17,924. Then how could you altogether combine your ideal, which is that the higher research man should also be teaching the elementary subject? If the elementary part of the subject is to be conducted at four or five different places, and you have only one research man, how are you going to do it?—I must ask you not to put words into my mouth. I did not use the words "higher research man." I wish particularly to say that everybody can carry on research to the best of his ability. I wish particularly to say that there shall be no divorce between research and higher education, but that the highest form of teaching should be given in one particular place. I would not prevent the man who was teaching elementary subjects from carrying on investigations.

17,925. It would gravitate, and you would desire the University to make it gravitate?—Yes.

17,926. But you would not draw a hard and fast line between one kind of professor and another?—No; I would not.

17,927. With regard to the interesting facts you quoted about foreign countries. Would it not be desirable to have put before the Commission at the present moment, a statement showing what foreign countries do for higher education, and especially for scientific education. Would not your association be a very proper body to get up the exact statistics on this subject?—That is a very large order as they say. I mean it is a very serious question. I think it is pretty well known. For instance, Lord Playfair is as well acquainted with the German Universities as I am. He knows perfectly well what has been done. If our association could assist the Commission in that way, we should be glad to do so.

17,928. (*Lord Playfair.*) Was there not a return made to the Scotch Commission upon the steps taken in the German Universities?—Yes; in the former Scotch Commission, but that is a good many years ago. You will find a pretty full account of the state of the higher education on the Continent in the reports of the Royal Commission on Technical Instruction of which I was a member.

17,929. (*Professor Ramsay.*) You have spoken about technical and commercial education, and you have said that they should be under the wing of the University. What exactly do you mean by commercial education? What would you include under it?—I do not know that I can really give a distinct answer to that, because I do not quite know myself what is included in the subject. But no doubt there are a good many matters of very great importance, that our commercial classes ought to know, and that they do not know. It is very certain that a great number of foreigners Germans, and others, come over and take high posts in commercial houses and obtain a command over commercial matters which Englishmen seem to have a difficulty in doing. I believe that that is to a very great extent due to their more scientific mode of teaching the subjects abroad than we have at the present moment in England.

17,930. (*Lord Playfair.*) Would not the programme of such a college as the large commercial college at Stuttgart give the information?—Yes. I referred to the ones at Vienna or Hamburg.

17,931. (*Professor Ramsay.*) I suppose you would mean this: modern languages, a certain amount of mathematics, and science? — Yes; commercial geography, book-keeping, shorthand, modern languages, and, I suppose, banking, and questions of that kind.

17,932. With regard to all these subjects, I suppose if there was to be a degree such as is suggested you would not suggest that that should be on a lower intellectual standpoint than other degrees. When you say commercial geography, that is a very poor article, is it not?—I think the degree ought not to be lowered in any one department at all.

17,933. In defining technical education, I think you said that under the Act the only things really excluded are classical languages?—Yes.

17,934. Do not you think you might include them?—I think they might have been included.

17,935. So that practically the object to be aimed at very much is to extend the definition of technical education so as to embrace everything or nearly everything which we regard as teachable by a University?—Yes.

17,936. Now with regard to the question of the constitution of the University. Do I understand that you quite go the length of the association in desiring that the colleges should be obliterated as separate institutions—say King's College and University College?—I do go this far, that I think it would be much better to have the government of all the colleges under one common body. I do not go so far as the pulling the buildings down, but I think the business and the work of the colleges would be better carried on if they were merged in one Governing Body than now as at present existing.

17,937. You would leave all their professors, all their teaching apparatus, and the teaching work that they do, but practically what would disappear would be the governing bodies?—Yes.

17,938. Might it not be a solution of the question if the governing bodies were allowed a certain time during which they might gradually disappear?—If that were thought desirable, distinctly so.

17,939. Let them have an easy death?—Yes, an easy death.

17,940. And that it might be arranged that the existing governing body might be represented upon the Senate for a certain number of years or for life as the case might be, and that then their place might be taken by nominees appointed in another way?—I do not quite understand how the operation can be anything but a sudden death, because you have to remember the funds; how would you hand over funds by degrees.

17,941. What I meant was that the funds should be handed over. Take King's College, for instance. What I meant was that they should hand over their funds, and that the governing bodies should not govern absolutely any longer, but should for a certain number of years send a certain number of representatives to the Senate?—That is my proposition.

17,942. And thus in course of time, those special governing bodies should disappear. You would not keep up permanently a governing body if they had no rights over their college?—I do not see what a Governing Body of King's College would have to do if all the buildings and all the funds of the institution were handed over to the University and a certain number of the governors were on the Governing Body of the University.

17,943. But if the Governing Bodies of these institutions cease to exist, the representatives they send would also cease to exist?—They would be personal representatives and not representatives of the college.

17,944. Then after the first representation they should have no more representation on the Senate in all future time?—Yes.

17,945. With regard to the very important point about concentrating all the scientific part of the medical course in the first year. To a very large extent is it not the case that that first year is very often combined with a second year, and that it is impossible to take all those four subjects in one year?—I do not think it is now that the new regulations of the General Medical Council as to the curriculum have come into play. Nobody can take a medical degree under five years, and I do not think there is time enough then left for the professional studies after the first year.

17,946. You include physiology?—Yes.

17,947. Has the whole of the physiology required in the degree to be got into the first year?—I should think so. Possibly there might be special classes that might come in the second year. But Professor Sanderson will be able to tell us whether that is possible or not. My opinion would be that the first course in physiology might be given in the first year, and if any more special course was necessary that might be given afterwards.

17,948. Would you treat anatomy as a clinical subject?—Yes.

17,949. Is it not the case that many students at present take anatomy in their first year?—Yes.

17,950. With regard to the degrees in applied science, you would not hold, I suppose, to having a special engineering degree, would you? If there was a degree in Science would you not consider that sufficient with a special certificate in engineering?—Yes, that might be. That might be better. People like to have a degree of their own, but I am rather against multiplying the avenues to degrees too much.

17,951. Then as to the London University maintaining a double system of examination; I think the system you preferred was this: we will say there are as at present, three examinations for the London University degree. You would say that the student who produced evidence of having attended at a recognised number of classes at the University of London should be excused the first examination; that a certain number more would excuse him from the second examination; and that the third examination should be the same for all?—Yes, something of that sort.

17,952. (*Mr. Anstie.*) There is a point that you referred to that I should like to develope a little further. I understood you to say that you were of opinion that the new University or the reconstituted University should continue the system of external examination?—You mean together with the professor there should be an external examiner?

17,953. No; that they should examine external students?—Yes.

17,954. That was your opinion?—Yes.

17,955. I suppose you would agree that, speaking generally, the system of teaching authorised by University authorities, for which, as it is sometimes expressed, the University makes itself responsible, may be assumed to be the best?—I do not know that I quite caught your question.

17,956. That the system of teaching which is authorised by the University, for which the University makes itself responsible, may be assumed to be the best form of teaching of the day?—I presume that is the object of the University.

17,957. And, therefore, I suppose you would agree that any system for testing the knowledge required otherwise than through its teaching might very properly be moulded upon the course followed by its teaching?—I think so.

17,958. And that it would be no disadvantage, but positive advantage to the external student that his course of teaching or private training should be laid down for him by the best teaching authorities?—Certainly.

17,959. At the same time you would be willing to admit as I gather from your evidence that although the teaching given by the University might be the best, yet there were other forms of teaching which ought to be recognised?—I think so too.

17,960. In fact though Oxford and Cambridge never failed in anything they undertook, yet it is a matter of common knowledge that their students do in effect resort to teaching, which is not in any sense

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

resorted to by the Universities?—That, of course, is well known.

17,961. And that, of course, is a thing which cannot be avoided?—It cannot be avoided.

17,962. It must be accepted as a fact to be reckoned with?—Yes; in fact the difference between the students who have gone through the course is as great as the difference between one end of the scale of the University students and the external ones.

17,963. So, though you would not think it a right and beneficial thing for the external student that his course should be regulated by the University course, yet you think it also a reasonable thing that, following the University course, he should have it regulated by that authority?—Yes.

17,964. And you see no difficulty in carrying that out?—I will not say I see no difficulty, but I will not say that the difficulties are insuperable.

17,965. Could you suggest any other body more competent than a University body to carry on that sort of inquiry into a man's attainment?—No, I think not.

17,966. Now one word with regard to the attitude of the University to what may be called outside institutions or bodies. You suggested, I think, that they might nominate University teachers in those institutions whose students, I suppose, would bear some relation to the University. Would not that create some difficulty if the University were to appoint University teachers which were not in fact incorporated with itself nor under its direction?—I think these institutions might be very glad to welcome the assistance and aid of the University in the sense that the University would have the appointment of a certain number of their professors or teachers either of the first rank or the second rank.

17,967. Might I suggest this: I do not know whether you have considered the question of the University appointing persons rather to direct studies, and to give advice to those minor institutions and to private students than directly to take part in teaching. Might it not be more beneficial if they had directors of studies appointed whose advice might guide the professors or teachers of the institutions?—That might be advisable, but it seems to me that the teaching is what one wants to direct and assist.

17,968. I admit that the teaching is what one wants to direct and assist, but I want to know whether, having regard to the want of any organic relation between these institutions and the University, it might not be better for the University rather to direct the teaching from outside?—That might be done in addition to the appointment of professors, I think, but I think each case would require careful consideration on its own merits. I do not think we could draw any distinct line of method.

17,969. I gather from your answer to Professor Ramsay that you thought that there should not be too great a multiplication of titles and degrees?—That is so.

17,970. Your view would rather be that in certain departments recognition should be given rather in the way of honours than by special titles?—Yes, but at the same time the special interests of a man likely to take a degree of engineering must be borne in mind. I would not, for instance, insist upon their knowledge of Greek. I would carefully draw a schedule which would enable a man to take a degree without sacrificing his professional career. You will find that both at Glasgow and Edinburgh that has been done, and the arrangements which have been drawn up for the regulation of those degrees would in fact, I consider be a favourable mode.

17,971. It is not required in the London University for the Science degree?—No.

17,972. Now, one question as to the position of the Regius Professor. What is the function which you desire that this Regius Professor should discharge?—My suggestion is that, whether now, or at any rate henceforward, the most distinguished and the men holding the highest rank as the teachers of the advanced subjects should be dignified by the appointment to a Regius Chair.

17,973. As the holder of a Regius Chair, would you give him any power over the other professors in determining their courses?—No, I think not.

17,974. You would not agree to that view?—No, I do not like that.

17,975. You would not give him any power?—No, I would only give him distinction.

17,976. It would make him, as it were, the Dean or leader of the Faculty?—Yes.

17,977. (*Professor Sanderson.*) It would be very useful to us if you would give us some more precise information than we have had as yet from witnesses as to the essential advantages of a German University. I suppose the principal respect in which the German University is superior is, not in its government, but in its organisation for instruction and research?—That is so. The government of the German Universities is a very simple one, but they are mainly distinguished from our Universities and from the system which we have adopted, as you say, by the organisation for the higher teaching and research, and for the comparatively small part which the examinations play.

17,978. Would you explain to us what is the nature of what you call an Institute in the Physical Sciences, and how it works. I mean to say, the relation of the professor to it, and the relation of it to the workers?—I can speak especially with respect to physical science and biological science, natural science I mean. In all German Universities there are special departments, for instance, there is a special Chemical Institute, built for the purpose of arranging for the higher and most elaborate teaching possible, and at the head of that institute stands the professor, who has under him some assistant professors, demonstrators, and so forth. The principal professor is responsible to the University and to the Government, (for they are all Government institutions), and he is responsible to the University for the right conduct of his department and his institute. He is not only the head of the practical work of the laboratory, which is, of course, after all, the most important; but he also gives the lectures on whatever portions of science he chooses to select. All the other portions of science are covered by lectures from the other assistant professors or demonstrators. That, I think, is the general position with regard to the institute, and, as I say there, we find one for chemistry, one for physics, one for physiology, one for botany, and so forth.

17,979. Do you attach much importance to the existence of *privat docenten*?—Yes, I do. I attach very great importance to that. I think the German University system is one that we might do well to copy more accurately than we have hitherto done. The appointment of *privat docenten* is one of very great importance in keeping up the standard, and, I think, that might very well be done by the University of London by the appointments, as I have said, of Regius Professors to take the highest place in this department, those of assistant professors and those of the younger men, who would play very much the same role as that which the *privat docent* does in Germany.

17,980. Would a Regius Professor, in your sense, be simply the professor at the head of an institute?—I think the professor at the head of an institute should be marked out in some way or distinguished from the others; but I do not know that it need be confined to that.

17,981. I suppose a very important point is, that the professor and his institute are very independent in their mode of working?—Yes, I think that is a very important point. I think the heads of a department ought very much to be independent, and that it is from the independent carrying out of peculiar views and actions of the head of the department that his success depends. If he were controlled by others, or tied round with red tape, I think very little would

come of it. He must be practically autonomous in his own department.

17,982. And it is also essential that the institute should be partly an observatory, and partly a teaching institution?—Yes.

17,983. You think the two purposes should be combined in one?—Yes, they should be.

17,984. Would you tell us what you think as to what might be called the thesis work? I mean the system whereby a man obtains his degree by specialising in one subject with scarcely any reference to his examinational performances?—I think in Germany that answers very well. I am not quite sure that so completely a specialisation would answer in England. In Germany the students come from a gymnasium and the higher classes of the Realschulen, and they get a much more thorough education, as a rule, than the men who come from our classes here. I should like to say that I should like all the examinations of the University to be made as general as possible, so as to include as much as possible all kinds and conditions of men.

17,985. You feel, no doubt, that the previous education of a German University student is on the whole much superior to the previous education of an English student?—Yes; I do think so.

17,986. That observation, I suppose, applies rather to natural science than to other subjects?—Possibly so. I am not sure. I suppose it applies to language equally well.

17,987. In what you said about an absorption or fusion of the colleges with the University, do you think the purpose would be answered if the University, having the command of funds, were entrusted with the negotiation of the necessary amount of fusion by mutual arrangement? I mean to ask whether you do not think your purpose would be answered if we could bring into existence a powerful central body authorised to make arrangements for fusion and provided with the power which endowments give?—Yes; it is possible to organise a governing body on the permanent system at once, and give them the power to absorb the colleges. That, I think, would be a very reasonable and proper thing to do. I did not see my way quite to that, and I thought that in the meantime, seeing that the Senate of the University of London cannot do it, and seeing that there is no body at present which can do it, it would be better to constitute a statutory Commission *ad hoc* for the time being. But if a body could be constituted at once, I see no reason for any intermediate body being formed.

17,988. In either case do you think there would be any serious difficulty in their making arrangements with existing teaching institutions?—No.

17,989. Irrespective of any compulsory powers conferred on them by Act of Parliament—by arrangement, or by negotiation?—I should not be for compulsion. I do not think that we should compel the colleges to yield up their autonomy. I think the only way is to induce them to do so.

17,990. Eventually?—Yes; eventually, or at once, if they think fit.

17,991. Do you think it would be possible to partially arrange with the college for a fusion of the teaching in particular subjects, for the acceptance we will say, of particular departments of teaching without accepting others?—That, perhaps, is better than nothing, but I think it would be an unsatisfactory method of proceeding.

17,992. You would not be in favour of it?—No; I should not be in favour of it. It might be necessary as a *pis aller*.

17,993. (*Professor Sidgwick.*) I think you said that the equipment of the Scottish Universities and the provincial colleges, Liverpool, Owens College, and Mason's College, Birmingham, was in your view adequate to the needs of academic teaching now. I understood you to refer to those institutions as instances of institutions which are on a level with the needs of the times?—I should be sorry to say that they were on a level with the needs of the times. I should say that a great deal had been done there, and that there are very splendid and well-equipped laboratories and means of tuition, but they all want more than they have got.

17,994. Are you acquainted with the equipment of University College?—Yes; I know generally what has been done there.

17,995. Should you say that it is inferior to the equipment of these other institutions?—Well, you see, it is much older, and now-a-days a new building for scientific purposes is always to be preferred. At the same time, they have in University College very good buildings, which, I think, only want equipment. They are badly off as regards apparatus, and so on.

17,996. (*Professor Sanderson.*) Might I suggest that University College has suffered much more severely from want of funds than any of the institutions which you have mentioned?—Yes; it is so.

17,997. (*Professor Sidgwick.*) With regard to the amount of research that has been done at University College, are you able to compare that with the amount of research which has been done at these other colleges. Do you think University College would make a poor show as compared with the research which is now being done at other places?—No, I do not think so. I think University College has always had most excellent men, and as a rule they have done most excellent work in the past, as at present. I think University College will bear comparison with anything, including the Universities of Oxford and Cambridge.

17,998. The great thing is to get more funds for University College?—Quite so. It all comes to that.

17,999. If it obtained more funds it could meet the demands of the times?—Yes.

18,000. Then comes the question with regard to your view that funds are more likely to be got for a comprehensive scheme than for isolated institutions. Without disputing that, do you think that that necessarily requires, the complete absorption of these institutions? Do you not think that as far as that argument goes, a harmonious combination of them presented to the public as a new departure in London would be as effective in the way of obtaining resources?—I do not think that any satisfactory arrangement will be arrived at unless you get control. Supposing the University body is re-organised, and supposing King's College and University College remain pretty much as they are, I do not see what you gain; and I do not see what power you would have over the teaching needs of these institutions. It seems to me that if the University is to have any power at all over the teaching in these places, it must have supreme power and supreme control; and I feel sure that as far as funds are concerned if you make a University of which the people may well be proud, (as the people in Manchester, Liverpool, and Leeds, are beginning to be proud of their institutions,) you will have a hold over the minds of the public and the County Council which you otherwise certainly will not get. You may get a few thousands given to the electrical engineering place at University College, or something else at King's College, but you will not really tap any large sum of money unless you go to work and obtain a really large and great scheme. That is my feeling.

18,001. With regard to the denominationalism of King's College, as I understand you, you see no objection to including any part of the staff of King's College in the new University, even if the College as a whole remained outside, and declined to be amalgamated. I understand you to say that particular Chairs might be included?—That might be done. I should object to any State money going to pay a professor at King's College who is obliged to take a religious test before he can teach his chemistry. If King's College would give the appointment of the Professor of Chemistry into the hands of the University authorities I should see no harm in aid being given to such a professor; but I would not submit to the appointment of such a

Sir H. Roscoe, F.R.S., &c., M.P.

16 Dec. 1892.

professor by the King's College authorities, who can only choose a man of one particular denomination.

18,002. In the organisation of Victoria University in which, as I understand, you took a large share, a denominational college like King's College would be admitted?—There is nothing in the statutes to prevent it, but I do not think that any aid from the State would be given to such an institution, and I presume that this University would be a State-aided institution; besides I am arguing in favour of an absorption of colleges into a University for London. Whilst we in the north admit several colleges into a federation, each preserving its autonomy. In the first case I consider that a denominational college could not form a part of the University, whilst in the second it might.

18,003. That is the point of your objection?—Yes.

18,004. You think there would be a strong objection to State money going to any institution that was denominational?—Yes.

18,005. But supposing that University appointment or approval was required for any of the Chairs of King's College which might be regarded as University Chairs, do you not think that would remove the objection. Suppose a University body had power to choose among those professors?—Do you mean to choose among the professors of a particular denomination?

18,006. To choose among the King's College professors, and give the title of University professor?—No, I object to the University being tied up to elect a man for a Chair of science or anything else, who is chosen not from the whole body of competent persons, but from amongst those who happen to be members of the Church of England, or of any other Church.

18,007. My suggestion was not that the University should be tied up to do it, but that it should have the power to give the title of University professor if the University thought it right to do so?—Not unless the University Court or Governing Body has the appointment.

18,008. It would have the appointment so far as the title and rank of University professor would go?—That would not satisfy me, because the University would have no guarantee that the best man had been appointed, religious disability might have prevented it.

18,009. Then I think you spoke with regard to the admission of Bedford College and Queen's College?—I did not mention Queen's College.

18,010. You would not mention it?—I do not know much about it. From what I do know, I do not think it is of University rank.

18,011. You urge the admission of Bedford College not exactly on the ground of its being adequate now, but because you think that it ought to be made adequate?—I suppose in many respects it is adequate now. I believe they send up a large number of graduates to the University of London, and so far as I know with a little help I think they would do a great deal. I think they are on the whole up to the University level.

18,012. And it is now adequately equipped for the teaching of science, is it?—Well, I do not know about that, but there are some good arrangements there in the way of laboratories.

18,013. Then with regard to the relation of teaching to examination, if I understand you rightly, you would desire two different systems of examination to be maintained, the one adapted for students who were taught by the teachers of the teaching University, and the other adapted for outside students?—Yes; that is to say, I would rather modify the examinations in such a way that both sets of people might obtain the degree. I would not have two degrees.

18,014. But it would require, would it not, in some subjects at least if not in others, that the system of examination for outsiders should be constructed on an entirely different plan?—Yes, it would require considerable modification.

18,015. For instance, it has been strongly represented to us, both by biologists and by the representatives of applied science, that it is very desirable to allow for variation in the view of the subject and the manner of teaching of individual teachers, so that the professor should take a share in the examination of his own students. Is that what you would suggest?—Quite.

18,016. Then you would provide for that?—I certainly would.

18,017. And that would apply to the final examination no less than to the earlier ones?—To all.

18,018. In fact one may say that it is often more important in the advanced part than in the elementary part?—I think so.

18,019. Then if the arrangement of the examinations for the outside candidates was entrusted to the professors of the University, would there not be a difficulty in maintaining the impartiality of the examination of which the London University is justly proud—at least in some departments?—It might apply to some, but my idea is that the examinations should not be carried out altogether by the professors, but that there should be associated with each professor in every subject an external examiner who should be chosen for his general knowledge of the subject.

18,020. May I put the difficulty from the point of view that naturally occurs to me, of course, only by way of illustration. I ask myself what would be my position as a Cambridge teacher, having hitherto prepared for a strictly impartial examination, if I were suddenly informed that the organisation of this examination had now been placed in the hands of the University of Oxford. I should feel that my position as a teacher had been very much impaired; that I was now handicapped as compared with those who were teaching at Oxford. Does not that seem to you to be a difficulty?—We have not felt a difficulty in the Victoria examinations. We have our three colleges, and we have our three professors of history, or classics, or what it may be. One only of those is generally placed upon the Board of Studies for examination purposes, and, accompanying him, is an examiner appointed by the University for the purpose of examining in each of those subjects. We have not found any serious difficulty. I have not heard of any complaints at all.

18,021. But, as you were urging, in fact there is not much competition between the different colleges in the Victoria University, because each so largely draws its students from its own town?—Yes, but they have all to pass the same degree of examinations.

18,022. What I mean is that the teacher in Manchester would not be afraid of his student going to Liverpool because of the temporary control exercised by the teacher in Liverpool over the examination. There would be no alarm of that kind. On the other hand, as I was urging, if I were preparing students for an examination permanently controlled by the University of Oxford, I should expect students from the country at large to go to Oxford rather than go to Cambridge?—I do not quite see how that applies to the particular case before us.

18,023. It seems to me to create a difficulty in the way of what you suggest—that the function of the present Examining Board, which you think should be retained, should be handed over to the teaching University of London. Is it not more likely that the required impartiality of the Examining Board would be secured if it were kept entirely apart from the new University?—I have been an examiner at the University of London; I have been an examiner at the University of Cambridge; I have been an examiner at the Science and Art Department; and I have been an examiner at Owens College for years; but I have always set the same sort of questions, and I never found there was much partiality or impartiality about it. I did not find any difference, and I never heard any complaint. I do not know whether one subject differed from another in that respect. Of course, if I am examining in a subject, and a professor hold views which nobody else does, if I examine on those subjects I am not fit to be an examiner. The object

of having an external examiner is to take care that the professor does not trot out his own pet theories.

18,024. If the open examination were in the hands of the professors of one University so far as that University took a special line in any subject, the examination would favour too strongly that opinion?—That might possibly apply in the highest form of examination, but I cannot imagine that it would apply to the case of the ordinary degrees, because the examinations are more in the subjects which everybody must know, and everybody must admit. In the higher examinations it would be less in the nature of examination than thesis.

18,025. You mean for the doctor's degree?—Yes.

18,026. (*Lord Playfair.*) In your proposal for absorbing gradually but effectively the teaching colleges of higher science and learning in London, I suppose you would expect that the central University would have large resources in order to tempt the other colleges to join it?—Yes.

18,027. Would it not require for the proper equipment of a great teaching University in London a very large sum even as an initial sum to commence with to put the teaching appliances in order?—It would require a very considerable sum.

18,028. Considering that some of the foreign Universities, even in provincial towns, have 40,000*l.* or 50,000*l.* a year, would 40,000*l.* or 50,000*l* a year be sufficient for this great Metropolis?—I think not, but I think we might begin with that.

18,029. Are you aware at the present moment there is considerable difficulty in inducing the Government to make a proposal of a very moderate sum in order to equip their own laboratories in the Royal College of Science?—I am fully aware of that, and the present condition of those laboratories is a disgrace to the nation.

18,030. They are obliged, are they not, to turn away pupils continually on account of the size of the laboratories without reference to their equipment?—That is the case.

18,031. I do not know whether the rumour is right, that the Government positively refused to give even a small sum this year for their extension?—I have heard that that is so.

18,032. Do you not think that something must be done to educate public opinion to understand the magnitude of this question, and to understand what a large University upon the full modern conception of what a new University of this day should be, there must be means of getting large funds, partly out of the State, partly out of the County Council, and partly out of the great City Companies, in order to equip the University, and enable it to be organised and properly formed?—That is my most strong opinion, and I believe that it can be done. We only need to look at what is done by the Government for the Scotch Universities. I have already stated that now the Scotch Universities get 72,000*l.* a year. They get it because the Scotch Members of Parliament all joined together to demand it. If public opinion in the Metropolis were brought to the point of its Members of Parliament demanding for the Metropolis that which the members for Scotland have obtained for themselves, the Government could not hesitate for a moment; and we should be able to get an equal sum of money for our five millions of people here.

18,033. What I am referring to is this. Do you think the plan submitted to this Commission of the Gresham University starting as a degree-giving University without funds would be able to carry out the grand system of organisation that ought to be carried out in a great University for London?—On the contrary I am quite certain that it could not, and the evidence I have given I think quite shows that that is my opinion.

18,034. Supposing that the bodies interested in the education of London, such as the City Companies and the County Council, were to give a considerable sum, do you think it could be worked without a statutory commission to make the arrangements by which these funds could be applied to these different institutions?—I think that is much the best suggestion that has yet been made.

18,035. For example, there is the question of the endowment to be settled. There is the question of how far local management should take place in different colleges, and how far academic management should take place. All these are things which a statutory commission could settle much better, could it not, than even a University Governing Body?—That is strongly my opinion.

18,036. That has been the case with regard to Scotland, has it not?—Yes, I believe so.

18,037. And it is going on now?—Yes, it is going on at the present moment. The Scotch Commission, of which I am a member, has those powers.

18,038. And that is the second statutory commission within this century?—It is.

18,039. Formed in order to put the Universities in a proper condition from without as it was impossible to form them from within?—Yes.

18,040. For Oxford and Cambridge there have been statutory commissions appointed?—Of a similar character.

18,041. You said you thought the University of London should be the germ. Were you not rather indicating that it should be the nucleus?—Yes, perhaps "nucleus" is the better word. I will substitute "nucleus," if you please. I meant that the germ was to be fed, and to come into altogether a different form of life from that in which it originally existed.

The witness withdrew.

Augustus D. Waller, M.D., F.R.S., examined.

18,042. (*Chairman.*) You have prepared a statement which you are willing to make, and with which you have furnished me. Perhaps, if I leave you to make your own remarks, it will be the quickest way. Will you kindly do so?—I had prepared this statement to limit the area of my examination to that of which I have special experience, viz., to what in both the scheme of the Professorial Association, and I think in Sir Henry Roscoe's evidence has taken a somewhat subordinate place. That is, the position of the Medical Schools. The questions that I expect to be put to me I shall answer chiefly with reference to one subject, viz., Physiology in the Medical Schools, which, I imagine, should be considered to be of importance as being one of those subjects that is Pure Science, as well as what is known in Scotland as the Institutes of Medicine. In these notes I think I have defined the general position of my opinion in this matter, both as a member of the Professorial Association, and in consequence of my holding a post as a practical teacher in a Medical School. The two points that I mentioned in these notes, upon which I shall be glad to answer questions, are: (*a.*) The relation between teaching and examining; (*b.*) The provision (of that I take it the Commission has received sufficient evidence) necessary for the extension of knowledge by original study. Then I have formulated my own personal objections to the present Gresham Charter.

18,043. In the first place, you wish to have one University for London instead of two?—Yes.

18,044. Because two Universities might lead to confusion and undesirable rivalry. That we have heard a good deal about. That is your opinion independently of the enormous size of London with its five millions of people. You think that two Universities, even in such a large population as that, would clash?—That is so.

A. D. Valler, M.D., F.R.S.

16 Dec. 1892.

18,045. What would be the confusion?—In the medical profession, for instance, there would be a confusion between the Gresham degree and the present University of London degree. It would necessarily arise that the degree given to London graduates would be known as the London degree, in the course of time.

18,046. You think that there would be rivalry?—Yes, and that each one would try to attract graduates.

18,047. In which way would the rivalry tell, in cheapening degrees or in over-lapping?—There are a variety of ways in which it might tell. There would be, of course, the attraction of graduates to the University, and the possibility of the University of London starting as a teaching institution. I take it that the Commission has received evidence of this character.

18,048. Then with regard to the federation scheme, you object to it because it would leave intact an undesirable form of competition between constituent colleges. You are in favour of amalgamation in preference to federation upon those grounds?—I do not commit myself to amalgamation pure and simple. I should like to see better co-ordination of science departments. The amalgamation, I think, is geographically impossible.

18,049. You contemplate the gradual absorption of the different institutions?—I am speaking with reference to the Medical Schools especially again.

18,050. You must give them a certain amount of autonomy?—Yes, I believe so.

18,051. You talk of pure federation. You think that in that case the central board should have some authority and might have more or less given to it under any scheme?—Yes. Again that sentence is framed with special reference to the representation of the Medical Schoools in the Gresham Charter.

18,052. Do you object to medical representation altogether, or do you think it is too great?—I think it is too large. I think it would turn it into a Medical University.

18,053. That is a detail. The numbers might very easily be reduced by joint representation?—Very possibly.

18,054. But as the Charter stands you think it is too large?—That is so.

18,055. And that it would give the Royal Colleges too much control over the Gresham University. But if the representation was entirely that of each medical college sending one member that would not lead to any great power being given to the Royal Colleges, would it?—I think so in this sense. I believe in the great majority of cases the medical representative would be virtually the representative of one or other of the Royal Colleges.

18,056. Merely because they would be members of it?—All the Medical Schools are staffed by members of the Royal Colleges.

18,057. And they are under the influence of the Royal Colleges?—I think so.

18,058. You also object to over-representation because you think it would tend to cheapen the degree?—I think it might possibly end in that. It would tend in that direction.

18,059. You think the absence of a license to practice places the Gresham in a position of inferiority? That is rather a detail, is it not? Power might be given that a degree should qualify for a license?—Not without an Act of Parliament.

18,060. Do you think the degree of the University that is established ought to give power to practise?—I do not say that. The degrees of all Universities do carry the license, and I do not think the University of London should be in a position of unique inferiority.

18,061. Then with regard to the amount of professorial representation on the Senate—as compared with the administrative representation, what have you to say?—That is substantially the third objection.

18,062. That the Senate has not a sufficient number of professors on it, or members representative of professors?—Yes.

18,063. That is rather a question of detail. It might be increased, might it not?—Yes, I think so.

18,064. There is a large amount of professorial representation, is there not? However, you think that ought to be increased. One of your objections to the Charter is that it is not sufficient?—I am very anxious that the professorial element should have a prominent share in the direction of the policy of the University.

18,065. Would you give a dominant share?—No, not a numerical majority. I fancy about one-third of the Senate.

18,066. I think you will find that in the Charter they have one-third: 16 are directly elected by the Faculties. That would be about one-third of the whole?—I was not aware of that.*

18,067. Then we come to the unification of teaching and examination?—I lay very great stress upon that, always with reference to this particular subject of physiology, to which my experience has been restricted. My feeling is, that examining is really a portion of teaching. I am not at all inclined to regard examining as a subordinate or secondary matter. I think it is extremely important in its proper place at the end of the curriculum, and as guiding the curriculum through its course.

18,068. You think the teaching ought to lead up to the examination—that the two ought to be connected together?—That is so.

18,069. And that the teachers should have a strong voice in fixing the curriculum of the examination?—Yes.

18,070. It is the object of the Gresham Charter to bring the teaching and the examination more into harmony?—That is the respect in which the establishment of the Boards of Studies and the Faculties does serve a good purpose. That part I am thoroughly in favour of.

18,071. You believe that a proper system of education requires the co-existence and amalgamation of original study, teaching proper and examination, and that the new University will be efficient or the reverse, according as these three elements are or are not well co-ordinated from the outset?—That is a sentence expressing my belief.

18,072. And the first of these elements—that is original study—can only exercise its influence directly at will, and indirectly through the whole teaching body, by providing each important branch of science with a central University laboratory or institute. You attach great importance to this, and consider that one of the great advantages of the professorial scheme is that it would give a central University laboratory?—For each branch.

18,073. I suppose with a Regius Professor or teacher of superior rank to control each department?—That is my view.

18,074. Then the second and third elements—that is the teaching proper and the examination—you think require unification, and a much better provision than exists at present. You mean not under the Gresham Charter, but the present state of things?—Yes, the present state of things.

18,075. You think it requires a much better provision than exists at present for the practical as distinguished from the book-work factor in the conduct of examinations?—Yes.

18,076. Then as you tell us you have considered the matter especially with reference to physiology. Will you tell us your views about how you think this matter ought to be treated in the new University?—I should feel quite reluctant to propose any complete scheme, but I feel that it is a test subject about which,

* Note *by Witness subsequently to giving evidence.*—In my answers to those questions (18,061 to 18,066), I did not realise that the 16 Faculty members could be considered equivalent to a *professorial* representation This term implied in my view Regius Professors on active service as ex-officio members of the Senate, and not simply Faculty representatives or Emeritus Professors

as far as I know, very little has been said in evidence before this Commission; I feel it to be a representative subject inasmuch as it is a pure science and cannot exist without being sustained from the purely scientific side; that it is likewise applied science, being the Institutes of Medicine and Surgery; therefore, it cannot disappear from the Medical Schools; it must in my view be maintained from the centre by central institutes, and, if I may use a technical expression, at the periphery of the Medical Schools themselves by the local laboratories. I believe the unification that I alluded to between teaching and examination, as well as a sort of informal inspection of these local laboratories from head-quarters, would be brought about by a system of practical examinations held in the laboratories. I believe that point has already been alluded to by a previous witness, Professor Carey Foster. I look upon that from my point of view as a very fundamental matter, especially with reference to this subject. Professor Carey Foster alluded to it with reference to physics. I believe it to be important with reference to this subject, which is all important with reference to medical study.

18,077. You would have local practical examinations in the different Medical Schools, but the scientific teaching would be done by a central authority?—I would not make that distinction between the scientific teaching of the central authority, and the practical teaching of the Medical Schools. I believe the central scientific teaching would be the standard of reference, and very much improve the scientific teaching of the Medical Schools.

18,078. But you would have a central authority?—Yes.

18,079. You would have practical examinations in each different college?—Acting as a sort of inspection of the college laboratories from head-quarters.

18,080. You say that the Regius or University examiner would act conjointly with the college, Would you admit outsiders, anybody who chose to come in, or would you confine these local examinations in the members of the college in which they take place? Would each local examination be confined to its own students?—Yes, I would confine the practical examination to its own students.

18,081. Is there anything more you wish to say about the examinations in physiology?—What I have said here is of course in special reference to physiology, but I think it is a very representative subject in the question of how the University will deal with its science at the same time as its technical application. I have nothing further to say in addition to what I have written in my notes. I have there formulated shortly the opinion I have arrived at.

18,082. Then with regard to the University institutes and professorships; college laboratories and lectureships. Will you give us your views upon this head?—My views are practically to the effect that the main function of any University is the increase of knowledge by learning which is antecedent to that by teaching, and that as regards the practical sciences, the experimental sciences, taking physiology as my instance, large institutions fully equipped are indispensable, such as are to be found not merely in the capitals of foreign countries, but even in the secondary towns of both France and Germany, especially Germany.

18,083. And its original study would be carried on by a man holding the position of Regius Professor?—Yes.

18,084. He would conduct the higher class of teaching, and also be engaged in research on his own account?—Yes.

18,085. And he would afford a standard of reference and source of inspiration to the numerous minor professors in the Medical School?—Yes, I think so. I have used the word "required" because I do not believe it is possible to treat physiology as a science subject centralised and removed from the Medical Schools. I imagine there are three stages of practice in the medical curriculum, first the preliminary work, viz. chemistry, physics, and biology. I take it that Sir Henry Roscoe in naming physiology for the first year really meant to designate what is understood by biology as a subject for the first year. Physiology is a subject that requires of course, more than one year's study, like anatomy.

18,086. How would you divide physiology? Could you divide it into different courses?—The ideal thing I think would be to begin physiology in the second year of medicine prepared for that by the preliminary scientific study, viz., biology, chemistry, and physics, and to study physiology and anatomy as an intermediate medical subject for two years.

18,087. (*Professor Sidgwick.*) You agree with Sir Henry Roscoe about chemistry, physics and physiology?—Yes. Substituting the word biology for the word physiology.

18,088. You agree that this should be taken away from the Medical Schools?—I should like to see biology taken away from the Medical Schools, or the Medical Schools permitted to teach it only if they show proof of sufficient laboratories.

18,089. (*Chairman.*) You say that these minor laboratories would be brought into touch with the Senate of the University by converting their lecturers' Chairs into University appointments, and by adopting the system of local practical examinations supervised by University examiners. Then with regard to the Imperial Examining Board, and the difficulties arising from a dual University examination, they would be rather great, would they not?—I believe so.

18,090. And you think that if you were confronted with the choice of difficulties between making one body perform two distinct functions on the one hand, and on the other having two separate bodies which might clash with one another, and you prefer on the whole making the one body perform the two different duties?—What I have put down amounts to that. There would be an Imperial Examining Board, the present so-called University of London attached to the future University of London, and carrying out its examinations open to all comers, as at present.

18,091. And another board altogether?—Another board altogether, formed from the local teachers of the University, granting a degree to its own students.

18,092. The degrees even would have different names; one would be Imperial, and the other London?—That is so.

18,093. So that there should be no confusion or difficulty between them. You think this would not give rise to the same amount of confusion as degrees given by two bodies, one of which would be called the London degree, and the other the Gresham degree. Would there not be some confusion?—I think not. The students of the future University will be known practically in time as London students, as the students of the University of London, and if there is another University of London there would be a confusion, but that confusion would in my view be got rid of by having a board granting an Imperial degree as at present, only the Imperial degree is at present known by the local name "London."

18,094. It would be for the future called an Imperial degree?—Yes.

18,095. Then supposing the University of London formed the nucleus of this new University, do you agree with the last witness that the Senate and the whole governing body would have to be entirely remodelled?—I think so.

18,096. And this re-modelled body would not only undertake the new work which has been described, but would also take over from the present body the Imperial work, the granting of Imperial degrees?—Yes. It would continue the present function under the proper designation of Imperial.

18,097. (*Professor Sidgwick.*) I understand you hold, that assuming there are to be two separately organised systems of examination, one for the external student, and the other for the London student, you

A. D. Waller, M.D., F.R.S.

16 Dec. 1892.

think there would be more danger of confusion if there were two Universities rather than one. Your line of reasoning would have led me to the exactly opposite conclusion?—Of course if there were two Universities there would not be so much risk of confusion, but I was going upon the premise that it is desirable to have one University of London.

18,098. You urge as a reason for having one University only, that otherwise there would be undesirable rivalry. But is it not the case that unless the University of London got a new charter it could not undertake the function of teaching?—I believe not.

18,099. Then the rivalry of which you think there is a danger would be very simply prevented by refusing to grant this Charter?—As a matter of fact I am not sure whether the present University of London could, under its Charter, undertake teaching functions.

18,100. Then with regard to the objection you urged against the Gresham University, that it would be in a position of unique inferiority if it were not allowed to give a license to practise, do you think it a good system that the medical profession should have so many entrances?—No.

18,101. Would it not be a better system if the license to practise was given by one body?—I should much prefer to see that. It is only in view of the present state of things that the new University should carry a license.

18,102. Then as new Universities are on the point of being founded (we are now concerned with London, but Wales is looming on the horizon, and the Midlands will not be far behind), do you not think it would be a good thing, in view of the desirability of having all the licenses given by one examining board, not to allow the Gresham degree to give the license to practise?—If you could make it retrospective and take away the license from the other Universities, yes, but to have one class of University to give it and another not, seems to me to be undesirable.

18,103. Would it not be an approach to the right principle which might lead to some further movement?—I am not prepared to say that.

18,104. Do you anticipate any difficulty or drawback other than the mere appearance of inferiority?—I anticipate this, that taking the present Charter as the point of departure it would very likely become merely an appendage to the license as at present granted by the Royal Colleges.

18,105. I suppose you are acquainted with the drawing up of the statement of the points on which the London Medical Schools are agreed?—No, I am not.

18,106. At an earlier stage of our inquiry we had a statement laid before us of points upon which the London Medical Schools were agreed. The London teachers of medicine unanimously expressed the opinion that a good general training in arts and science should be required of candidates for a degree in medicine, and that the arrangements for the examination should be made after conference between the Board of Studies for medicine and those for arts and science practically. Do you not think that that combination between the medical Faculty and the science Faculty as regards these preliminary examinations in science, would maintain the scientific standard of the medical degree in a new University?—I do not at once see the bearing of that. This is the first time I have heard of it.

18,107. What occurred to me was that probably your objection to the fact of requiring the license to practise was rather on the ground of the inferiority of the license now given by the conjoint board, the guarantee in a scientific sense rather than the guarantee in a medical sense?—I believe it fully guarantees what it is supposed to guarantee, namely, that the licensees are competent to practise.

18,108. What do you think would be the danger if the Gresham University was started with this restriction requiring the license to practise to be obtained from an outside authority?—I do not say it would, but it seems to me that it might be a danger that it might be a one-sided University, a technical University.

18,109. Would not that be prevented by remedying the other defect you have pointed out, namely, the preponderance of representatives of the medical Faculty; and would it not be also partly remedied, as I was suggesting before, by this necessity for conference between the Board of Studies for medicine and the Board of Studies for science as regards all the scientific elements of the medical course?—No doubt it might be ameliorated by those means.

18,110. You think that is not adequate?—I should not like to say that it was adequate, but it would be in the right direction.

18,111. Then with regard to the system of practical examinations held in the laboratories, I did not quite understand what function the Regius Professor of the central laboratory would perform. As I understand your view medical students would be prepared in their respective schools, and therefore would use their respective laboratories, so that the provision for their teaching would be of an inferior kind?—No, I would not admit that.

18,112. At any rate it would be inferior in status?—Yes.

18,113. You would not propose that these students should use the central laboratories?—No.

18,114. Then I do not quite see how or through what channels the influence of the central laboratory would permeate through these schools?—It is difficult to say, but it would permeate no doubt through the best men of the schools who would be in attendance at the central laboratory, and find there expensive apparatus which are not to be found multiplied by smaller laboratories, and there would be an indirect influence through the channel of the teachers.

18,115. You would not propose that the medical students should even be allowed to use these laboratories?—Yes, if they proved themselves competent.

18,116. Would you require a higher qualification in a student who was admitted to the central laboratories, or would there be need for a course of teaching of a more advanced kind than would be suitable as preparation for the degree?—The formal teaching do you mean?

18,117. The course of instruction. I suppose the central professor would give the course of instruction?—I suppose he would.

18,118. Would that be of any use to those preparing for a degree?—No, I do not think that at all. He would probably himself give a course of lectures. I have considered the central laboratory more from the point of view of provision for research.

18,119. It has been strongly represented to us by witnesses representing other departments, and I think by Sir Henry Roscoe, that it is not desirable to separate research from elementary teaching?—That is so. I feel that very strongly.

18,120. Therefore, you would not separate the elementary teaching entirely from the central institution?—No. The Regius Professor would have teaching duties, not so as to overburden him, but he would have to communicate his mind to an audience.

18,121. Then the examinations should vary with the schools. Each school should have its own examinations?—I think there might be slight variations.

18,122. There should not be one set of papers and questions in all the schools, but all the schools should have their own or each teacher should have his own?—I think the written examination should be a common examination for all the schools; but the practical examination, I think, should allow a certain amount of elasticity to the teachers to examine the students on their own ground under the supervision of a superior examiner—a University examiner.

18,123. Are you aware that the majority of the London teachers in Medical Schools are in favour of a system of examination in which the candidate is not examined by his own teacher?—I am.

18,124. You do not agree with it?—I most thoroughly disagree with it.

18,125. Can you explain the divergence at all?—Yes; I think it depends upon the fact that there is a good deal of rivalry between the schools at the examination, it is felt to be fair play that a man should not examine his own pupils, and that thereby the system has grown up. But I do not think it has any special virtues of its own. On the contrary, I think it is most injurious to proper teaching.

18,126. Would you give the University the power of rejecting any teacher in any of the schools not up to the mark?—I should very much like to if it were possible. If the teaching was below the mark the examiner would report that he was not able to conduct his examination adequately or up to the mark.

18,127. Then you would give a power of acting upon that?—Power of making representations at any rate. I would say probably power of making representations would be sufficient, but further power might be required if that were not attended to.

18,128. (*Professor Sanderson.*) You have not made quite clear to us what your object is in having central institutions for physiology. Is it to enable the higher class of students to pursue the subject further?—That is one object.

18,129. Consequently it would have the same meaning as is attached in America to post-graduate study?—Yes.

18,130. You would, of course, connect teaching with research in this higher work?—Yes.

18,131. It would be what you would regard as the best kind of teaching for a student of the higher class, and that he should be set to work to do something in the nature of research?—That is so.

18,132. So that, in point of fact, the two purposes of a laboratory or an institution of physiology would be kept distinct—the purpose of training a man for his degree; and, secondly, the purpose of training him in the methods of scientific work?—Yes. The two would constitute education proper.

18,133. You said just now that you thought it was desirable to have two standards; that is to say, two degrees, an Imperial degree and an ordinary London degree. Which would have the higher standard of those two degrees?—I think it would develop according to the class of men that were turned out through these two channels.

18,134. You think that they would not necessarily be different in standard?—I think the Imperial degree would be the more searching examination, the more difficult examination in a sense, and in that sense of higher standard.

18,135. Would you propose that the London degree should mean a degree of a low standard?—No, I would propose that it should hold its own with Edinburgh or Victoria University.

18,136. In fact, as good a degree as the University could comprise for the advantage of the public?—Yes.

18,137. Then in that case is it desirable to have a degree of a higher standard than is advantageous to the student himself or to the public? Is there any advantage whatever in having a degree which is above the standard which is best for the purpose of a degree?—I feel it to be more or less of a concession to the present state of things; the London University has become more or less an Imperial Board, and the granting of an honours degree might be recognised as part of that function.

18,138. But with a view to medical science and the interests of the public, you would not think it desirable to have two kinds of degrees?—I would not if we were starting *de novo*. It is only a concession to the present state of things.

18,139. (*Mr. Anstie.*) Your concession is based on this, that there is a degree which indicates a higher range of attainments than the ordinary degree?—I believe so.

18,140. You think it is a practical thing that you should suggest to the collegiate branch of the University that men should go in for that which you have recognised as a lower kind of degree, and not for the higher degree. Would not all the best men go in for what you call the Imperial degree?—At present with the London University degree a small proportion are enabled to go in for that. The new University degree would be of the standard of Victoria University, of Glasgow or Edinburgh.

18,141. We have been told that the great difficulty of the London University medical degree is the time required. That has been the grievance chiefly made by those who have given evidence on this subject. But, however, that may be would not the natural tendency of the ablest men of what you call the collegiate part of the University be to take advantage of the degree which is stamped with the highest character, that is to say the Imperial?—I think so, but I think it would only affect a small proportion of men.

18,142. Would it not affect the ablest of the members?—Yes.

18,143. Then if it affected the ablest of the members that is hardly a fact to be disregarded?—It does so now as a matter of fact.

18,144. But we are desirous to remedy the state of things which we are told on the evidence of a great many witnesses is disadvantageous. What we are anxious to do is to remedy whatever there is that is mischievous in the present state of things?—I am not particularly anxious in this matter. I say it is a concession to the present state of things.

18,145. You say it is a concession which must be made and if made it would aggravate in the highest degree the present inconvenience. What reason is there that we should do that instead of avoiding the difficulties that have arisen?—The present inconvenience is that there is not at their doors an accessible degree.

18,146. What has been pointed out to us not on account of the Medical Schools only, but other colleges and other institutions doing University work is that their courses are disorganised, their methods of teaching are led astray and hampered by the requirements of the University of which they do not form part, and in the settlement of whose curricula and syllabuses they have no influence. You seem desirous of continuing that mischief?—I do not agree that the University of London has exercised a disorganising influence on the teaching.

18,147. Then you differ from the evidence that has been given from the other colleges and schools?—I have not seen it.

18,148. If you think it does not disorganise, does it organise?—It has not had its full proper influence. It has failed in some respects, but without the London University the state of the schools would not be as good as it is at present.

18,149. Then your idea is that the London University has exercised a beneficial influence on the teaching of the metropolis?—Yes.

18,150. And has tended towards its organisation?—Of the best men in the schools.

18,151. That is your view?—Yes. I should have criticisms to offer as to matters of detail, but it is my view that the London University has exercised a good influence upon teaching.

18,152. And that has not been interfered with by the fact that it has had a system of external examination?—It might have been very much improved if it had been more in touch with teaching.

18,153. That is not the question. The question is has it been interfered with by the fact that it has had a system of external examination?—The absence of the internal element, the teaching element, has been one of the drawbacks.

18,154. That is not the question I am putting. I am putting a question as to whether it has been hindered not by the absence of the teaching element, but by the presence of the external examination, which is a very different question?—It has been on a purely external system.

A. D. Waller, M.D., F.R.S.

16 Dec. 1892.

18,155. That is not my question really. My question is whether this organisation has been interfered with by the fact that the University of London has conducted examination of externals?—It has not been so good as it might have been. That amounts to saying that it has been interfered with. Its influence has been subtracted from.

18,156. In consequence of what, do you mean?—In consequence of the absence of touch with the teaching.

18,157. You still answer me a question which I do not put, but I will not trouble you any further upon that point. Your opinion, at any rate, is that the assistance of the teaching element would be of great advantage to the University?—Yes.

18,158. And of great advantage if it is to continue in relation to the external examinations?—Yes.

18,159. In fact that the true course it ought to take in the examination of the externals ought to be guided to a large extent by the opinion of the teachers?—Yes, of the whole country.

18,160. I suppose you are of opinion that the assistance which the University would derive from the teaching element would not be confined only to the metropolis, but that the teaching element would operate to improve the influence of the University on the externals?—That is so.

18,161. That you agree?—Yes.

18,162. Then can you give me any real reason why you propose to divide the functions and to assign to the external students those peculiar and distinguishing marks indicative of a higher degree. Why should the London students be deprived of that benefit, or only get that benefit at the price of disorganising schools?—I do not say that they would get that as I have viewed the question.

18,163. One set would be going in for the collegiate course in a school, and another set would be going in for what you call the Imperial course, which the teachers have told us is mischievous and injurious to the discipline and conduct of the schools?—In my view I have not felt that.

18,164. Then you differ from that opinion?—I differ from it in this respect, that I have not felt the very injurious effect.

18,165. Then you do not accept that view which has been put before us by London teachers?—No, I cannot accept it in that probably abbreviated form without qualification.

18,166. You think it would have no such disorganising effect?—That is another thing.

18,167. Has it or has it not? They say that it has, and I understand you to say that it has not?—I speak from my own experience of the effect it has upon physiology. It sets a standard before my students, and thereby it has an organising effect. It has some regulations about the putting off of the physiology examination, and it submits candidates to a very slight practical test, and in so far as it contains those two blemishes it is disorganising.

18,168. What are the blemishes?—One is that, in regard to physiology, it may be abstained from during a period, and the second is that the practical examination in physiology is not adequate.

18,169. Those are things that ought to be remedied as much in relation to the external student as the collegiate student?—They have not the room to examine the number of candidates practically.

18,170. Do they not, as a rule, examine their candidates in various local centres?—They do not uniformly adopt that system. It varies.

18,171. They do it in all the scientific examinations—all the examinations in natural science. Are you not aware that they hold the practical examinations at various places?—No, I am not—not in the medical curriculum, at least.

18,172. The preliminary scientific, the intermediate scientific, or the bachelor of science?—I do not know it.

18,173. We have had evidence to the effect that no one can take the scientific degree of the University of London now without having gone through a practical school. Do you agree with that?—Yes, but I have misunderstood your question.

18,174. Is it not also the case that practical examinations are held in those places?—Yes.

18,175. Then that being so as far as I can discover these two points are points that affect equally the external and the internal students. What then is the ground for making the distinction between the two classes, and why should not that which is good for the one be also good for the other?—It seems to me that these blemishes, if I may so call them, are matters of detail affecting the present University of London, the present examining board.

18,176. Have they any bearing or no bearing upon the question we are discussing, because you cited them to me as illustrations, and as the reasons or the grounds why you made the difference. What I have a difficulty in understanding is how they make a difference or call for any difference to be made between those two classes of students?—The difference appears to me to be this, that the University of London has accidentally become the Imperial examining board, and is fulfilling the Imperial function, and it may be found possible to carry it on under the title of an Imperial board.

18,177. That does not answer the question I am putting. That is merely repeating again that that is a function which you think must be continued. But you are giving no reason why there should be a distinction made between the degrees?—This degree is not accessible to the great body of men. It is an honours degree.

18,178. That might be a reason for altering the character of the degree, but why should you have these two distinct degrees when the conditions for obtaining them are so similar as I gather from your evidence they are?—It appears to me that the local accessible degree is wanted by London, and that the Imperial degree is wanted by those parts of the country at large, which have not got a University at their doors.

18,179. Then do you distinguish this Imperial degree as something which is very high?—Well, at present under the name of the London University it is very high.

18,180. Which degree?—The M.B. and the M.D. It is taken by a small part of the *élite* of the schools.

18,181. That, we have very various opinions upon, but that is your view?—Yes, that it is taken by a small percentage.

18,182. But with regard to the question of whether it is difficult to take we have had different views expressed. May I take it that your view is that it is difficult to take?—Very difficult to take.

18,183. Will you tell me why the London University should arrogate to itself the discharge of Imperial functions when in fact it does no more than the Dublin University does at this moment?—I am not very well acquainted with the Dublin University.

18,184. (*Professor Ramsay.*) Can you specify any of the particulars in which you say the London degree is very high?—I should like to keep to my own subject, physiology, if I may. I find in physiology that it is a difficult but fair examination. None but my best men can pass it.

18,185. Then you do not wish to say anything as to the clinical subjects or the other parts of the degree?—No.

18,186. You make no comparison between the clinical examination of the London University, and that of the Royal Colleges of Physicians and Surgeons?—I had rather not, because I have no special acquaintance with those examinations.

18,187. And you make no comparison between the B.A. of London, and other B.As.?—No.

18,188. Then could you put into any kind of formula the difference in respect of physiology between the degree of London University, and the degree of Cambridge University?—They are both good degrees as regards physiology. The disadvantage of the

London degree is that in consequence of difficulties in conducting the examinations of large numbers of men, it is almost entirely confined to book work. The practical test is limited to the honours men. Men preparing for honours are prepared practically. That in teaching has this effect; in the case of men not preparing for honours, it is difficult to persuade them to attend a practical class.

18,189. Can you compare the standard of physiology required by London University with that required by Cambridge University?—I should put London as more difficult from my experience of men preparing for both examinations.

18,190. Are the papers of totally different kinds?—That is very little guide?—I think a paper is very little guide. I should prefer to judge by the answers.

18,191. Then the difficulty is that because the men are not told that practical work is necessary for the ordinary cegree they do not get up practical work, and therefore they do not do as well as they would have done if they had got up practical work. That means that they have supposed the matter was a matter of cram, and they have crammed the wrong thing?—They have crammed the wrong thing.

18,192. They have crammed it in a wrong way?—Do you means as regards the final examination?

18,193. Does not what you say rather point to this, that the University is not sufficiently explicit as to the course of instruction which it requires its students to go through, and they not knowing what is wanted do not go through it, and therefore fail?—No, I should not say anything of that sort.

18,194. That is what I understood you to say just now when you said that the difficulty of getting men to pass, is that the University does not require men to go through a particular course, that you know what course is really needed, but you cannot get your pupils to see it?—Put in that form, I agree.

18,195. Supposing the University of London were equally enlightened in telling the students what to learn as the University of Cambridge is, you would not say that the University of London standard in physiology was higher than the Cambridge standard?—I do not carry the whole of the question in my mind, my reason for saying that the London University standard is higher than the Cambridge standard is simply from my experience.

18,196. But your reason for saying it is that you cannot get your men to go through the practical work?—I do not say that absolutely, some of the more enlightened students think the London University honours examination is easier than the pass examination because they are examined practically.

18,197. I do not see that that proves that the examination of the University of London is harder as a physiological examination than the examination of Cambridge?—Well, I can only use what is almost a slang expression; it is more of a Chinese character. A man is required to cram up a much larger quantity of literary work for London University than for Cambridge, Edinburgh, or Victoria.

18,198. I suppose it is a matter of fact with regard to physiological laboratories, that if a man comes, say, from Glasgow to Cambridge he cannot examine men quite in the same way as he would at Glasgow, because the machines are not the same. But that does not show that the amount of qualification demanded from the student in the one place is in a physiological sense higher than at the other?—That is so.

18,199. Therefore, as far as physiology goes, you would not formulate in any distinct way a proposition to the effect that the demands of the London University are distinctly higher than those of other Universities?—No, you cannot say that.

18,200. You cannot formulate it?—No, I cannot.

18,201. (*Mr. Anstie.*) Would you kindly tell me what the book work is?—I used the word "book work" to show that a man is almost entirely examined on it.

18,202. On what head. Every head has its own practical examination except pure mathematics. I am reading from the Calendar of the University of London for the year 1891–92:—"Each candidate "must be prepared (1) to examine and describe microscopical specimens of animal tissues and organs; "(2) to make microscopical preparations of animal "tissues and organs; (3) to prove his practical acquaintance with the chemistry of albumen and its "allies, milk, the digestive juices, and their actions, "blood, urine, and glycogen. Also, to show his "practical acquaintance with the most important "apparatus used in studying the physiology of "muscle, nerve,"—and so on?—It says: "Also to "show his practical acquaintance." That does not mean that he is made to do it himself. He can prove it by talking, or he is supposed to.

18,203. (*Professor Ramsay.*) In physiology do you require a closer connexion between the examinations and the special laboratory in which a student has been taught than in other subjects such as chemistry?—Yes, I think so.

18,204. May I ask in what school you are the teacher of physiology?—St. Mary's Hospital.

18,205. You come from the professorial association?—That is so.

18,206. But I understand that you do not go the length of desiring that the professorial body should form the whole governing body?—No.

18,207. What sort of proportion would satisfy you?—In my own mind I had said to myself not less than one-third of properly recognised professors actively engaged in teaching.

18,208. You would be satisfied with one-third?—Yes.

18,209. One-third of the professors upon the Court or Senate would satisfy you?—Speaking for myself, a homogeneous body of one-third appears to me powerful, and it appears to me to be a sufficient professorial power.

18,210. (*Chairman.*) Is there anything more you wish to say?—No, my Lord.

The witness withdrew.

Adjourned to Thursday, 22nd December 1892, at 12 o'clock.

Forty-third Day.

Thursday, December 22nd, 1892.

PRESENT:

THE LORD REAY, G.C.S.I., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN-GODDARD, Esq., M.A., LL.B., *Secretary*.

Sir HORACE DAVEY, M.A., Q.C., examined.

Sir H. Davey, M.A., Q.C.
22 Dec. 1892.

18,211. (*Lord Reay.*) Are you generally in favour of the idea of having a teaching University in London?—Yes.

18,212. Perhaps you would explain to the Commission the ideal that ought to be aimed at?—I ought to say that the few observations which I am going to make relate exclusively to the Faculty of Law in the University. I am generally in Favour of a teaching University in London, but I have not directed my attention specially to any particular branch of the University except that which I am more immediately interested in, namely, the school of law—whether you call it a school of law or a faculty I do not very much care. I agree with what Mr. Crackanthorpe, whose evidence I have seen, says, that it has been long desired by eminent lawyers, Lord Selborne and others, that there should be some great school of law in London for the purpose of teaching law, both professionally—that is, to those who desire to become a member of either branch of the legal profession, or as part of a general liberal education—and also to people who are going to engage in public life. I have divided the observations which I propose, with the indulgence of the Commission to make, into three heads. I propose, first, to state as clearly as I can, what I conceive to be the ideal to be aimed at; secondly, to explain how far, in my opinion, the present means for obtaining a legal education fall short of that ideal, and why they fall short of that ideal; thirdly, I propose, with the permission of the Commission, to make a few pratical suggestions as to the way in which those ends should be met. First, as to the ideal to be aimed at. I conceive that what we want is a strong and thorough school of law, or, in other words, a *Universitas juris*, and that school of law should teach law and jurisprudence, first scientifically, by which I mean to include the discovery of the general principles which govern the social life of mankind; their social relations with each other; and the logical application of those principles to the complex problems and various relations of life. The Commission will at once understand that the science of law, looked at as a science, is both inductive and deductive, like all great sciences. You must arrive at your general principles or major propositions, by induction, by observation of the facts of human life; but then having arrived at your maxims does not carry you very far. You want to deduce from those general principles, the particular application of those general principles to the different problems and complex relations of life with which law has to deal. Of course, law is the mode of regulating the social life of people in the interests of the community, and what you want to do is to trace the logical application of those general principles, when you have laid down your general principles, into the solution of the different problems which present themselves to the statesman and the lawyer. That is what I mean by scientific. Secondly, I desire that law should be taught systematically and historically. By that I mean that the school of law should study and teach (because I include study and research as well as teaching in my ideal school) the relations which different systems of law adopted by civilised nations bear to each other, and the general principles which are common to all civilised systems of law, and a comparison of the general principles of each system where they differ. Of course for statesmen, nothing can be more important than that historical and systematic survey of different systems of law, and the comparative view of the way in which different civilised nations have worked out the problems which are common to us all under different conditions. With the view to legislation, it is obvious that nothing could be more useful, and it is also obvious that nothing could be more interesting, both to the historian and to the man of general cultivation than such historical and systematic study of law as I allude to. Then, thirdly, it should also teach law practically, that is, I mean for the purpose of people who intend to be professional lawyers in practice. It should teach them what the English law is at the present time, including, when I speak of law, procedure, which is the machinery by which law is administered. It should teach how the English law which they have to practise, has grown into what it is; what are the sources, what the roots out of which the English law has grown into its present form, because, I take it, you cannot understand thoroughly or grasp what law is, or the principles which underlie the way in which law is administered in this country, unless you have some acquaintance with (to adopt an expression used in another department of science) the origins of English law and see how it has grown into its present form. Therefore, to sum it up shortly, the school of law such as I contemplate should teach law, both theoretically and professionally. The Commission, perhaps, will allow me, although it is rather a general observation, to point out the importance of having a school of that character. First of all I wish, with the leave of the Commission, to insist very strongly upon the value of legal training and legal acquirements as a branch of liberal education. I put a very high educational value on a legal training. If the Commission would allow me to be egotistic for a few moments, I would say this: I have had some experience of the ordinary training of a public school and of the University of Oxford, the ordinary training of Literature, Mental and Moral Science, and Mathematics, but I declare that I attach at least equal educational value to the training one gets in applying legal principles to

a concrete problem — the training that is in the application. There is nothing that I know of which conduces to greater accuracy of thought and exactness of reasoning than a thorough sound legal training as a lawyer. I quite agree that you must take that as a lawyer's opinion, but that is my deliberate opinion, having had some experience in education generally. I put the educational value of a legal training and legal learning on a par with the educational value of Natural Science, for example. It seems to me the same thing. It is pursuing and following out a logical application of general principles in the same way as natural laws to the solution of complex and concrete problems. And I should like to add this: It is more interesting, it may be, to some people than some of the sciences which are employed for educational purposes because it deals with the facts of human nature. It directly affects and gives you an insight into the mode in which the problems which arise in human life and in human business and the principles upon which they are dealt with. It is in fact tracing out the logical application of general principles to the solution of particular problems and cases, or in other words of working out results from principles, and, if I may use an expression which is not my own, breaking up generals into particulars. It appears to me that that alone is of very great educational value as a training of the mind to accurate habits of thought and exactness of reasoning. Secondly, beyond the mere value of legal science as a branch and part of liberal education, is what is obvious and requires no comment; the value of a legal training, of a training in legal principles as I have endeavoured to define them, to statesmen; to men who are to become members of either House of Parliament; to men who in country life will have to become magistrates or have to administer the law in some form or another; and also to men engaged in commerce and business of different kinds. Nothing in the course of my public life has struck me more than—I was going to say the infantine innocence—but perhaps the better expression would be, the contented ignorance, of men—cultivated men, educated men—whom one meets in public life, or in the House of Commons, or amongst people in the City, or people you meet in society, of the principles of law, or of the law by which they are governed at present. They seem to expect it as part of the law of nature, that law is merely a thing for professional lawyers and a matter, I will not say that they are not concerned with, but which is beyond their ken. Some people say this would not be so if we had a code; other people say that the remedy for it is a short, concise edition of the statutes of the realm. I am not going to express my opinion upon that, but I do say that in my opinion it arises from the study of law not yet having its proper recognised place as a part of liberal education, and a part of the education which everybody who aspires to be a member of the Legislature, or to take part in the legal business of the country in any form, or to be concerned in commerce or business of any kind, ought to have at least some acquaintance with. He ought to have some acquaintance with the legal principles which have to be applied in particular cases, and also with the elements of law as it exists at the present time. Thirdly, of course I need not speak of the professional importance of such a school of law as I have mentioned. The school of law, which I have endeavoured to sketch the outlines of, would embrace, as I have already said, all systems of law, and should include the systematic study of law on its historical and comparative side. But, of course, one has to deal with human beings, and it is obvious that the majority of students who resort to my school of law (if ever I see my ideal realised in my lifetime, which is doubtful), regard the lectures and teaching to be given for the sake of fitting themselves for the professors of the law. Therefore in the study of English law, I think, under existing circumstances, the practical application or professional training will for some time occupy, if not the chief, at any rate the larger part of the attention of the school of law. But I wish the Commission to distinctly understand that I put this ideal before them not merely on professional grounds, though those are of great value, and I need scarcely say that the more you improve your professional men the more you train and educate your professional men, the better it is for those who have to employ, and those who have to depend upon the advice of, those professional men; so that it is not a mere question of professional interest, but it is a question of improving the minds of the class of professional lawyers on whom you have to rely for your advice, for your assistance, for your advocacy, and ultimately for your judges who have to administer the law in the highest places, including the House of Lords. That is a matter of concern to the community at large as well as to the professional men themselves. Of course, the Commission will understand that I include in my definition of law, procedure as a branch of law, that is to say, the machinery by which the law is administered; the law of evidence, for instance, and the arrangement of the Courts, and the relation of the Courts to each other. All that is a matter to be taught by a school of law, as well as the substantive principles of law. And for the statesman, the member of the Legislature, or for the people who aspire to be members of the Government, it is as important as a knowledge of the principles which underlie substantive law. Well, my Lord, that being the ideal short sketch which might, of course, be very much more developed, which we have to aim at, I proceed now shortly to inquire what are the means which the country at present affords for supplying that need which, I think, exists. Upon that point I should like to make an observation which appears to me to be of some interest, namely, the singular advantage which the position of the British Empire at the present day affords for learning and teaching from our own experience the various systems both of substantive law and procedure, which have prevailed in the civilised word in a comparative manner. At the present time there is hardly any system of civilised law which does not prevail over, and does not govern, the legal relations of Her Majesty's subjects in some part of the British Empire. Anyone who has practised, as I have, to a somewhat large extent in cases of appeals to the Privy Council from various parts of the Empire, will have been struck by the enormous range which the appeals which are brought to that tribunal cover, and the many systems of law which that tribunal is the ultimate court of appeal of. For instance, in the provinces of the Dominion of Canada, in Ontario, and the other provinces of the Dominion of Canada, with the exception of Quebec, and in the great Australian Colonies, you have systems of law founded on English law. But in Quebec you have the improved Code Napoléon. The Quebec law is, of course, founded upon the old French law; but some years ago they passed a code which many people think superior to the Code Napoléon; but which had the advantage of having the Code Napoléon for its basis. If it is not an improvement it ought to be. It is founded upon the writings of the great French jurists, such as Pothier, Merlin, and people of that kind. Again, in the Mauritius, you have to administer the old French law; in Jersey you have to administer the law founded on the customs of Normandy, before France, as a kingdom, existed—the law which prevailed in the old dukedom of Normandy, founded on what is called the *Grand Cortumier*. Again, in Cape Colony and Demerara, you have to administer the Roman-Dutch law, founded on the civil law as taught by Grotius and the other great Dutch jurists. In Trinidad, and some of the West Indian Colonies, you have the old Spanish law which existed when Trinidad was a Spanish Colony, and, lastly, in India, of course, you have to administer the Hindoo Law and the Mahommedan Law; and not only the Hindoo Law *simpliciter* but the Hindoo Law modified and qualified by various local customs. And I ought not to omit that the

Sir H. Davey, M.A., Q.C.

22 Dec. 1892.

House of Lords is the Supreme Court of Appeal of the Scotch Courts. English lawyers practise in Scotch appeals in the House of Lords, and the Scotch Law is founded on the Civil Law, with a large intermixture and adoption of principles derived from English Law; but in my opinion the Scotch law is one of the most logical systems of law with which I am acquainted. So that you see the thoroughly trained English lawyer has only to look at the reports, or attend to the debates in the discussion of appeals in the Privy Council to see put before his eyes the practical application of the principles, not only of English law, but of almost every system of civilised law which has ever existed in the history of the world, including the ancient Hindoo system founded on the teaching of the ancient Hindoo lawgivers. But more than that we have another very interesting thing. In our great self-governing Colonies, in the Australian Colonies, Cape Colony, the Dominion of Canada, and British North America generally, we have most interesting experiments in legislation in both substantive law and procedure going on before our eyes. Some of our Colonies are bolder than the mother country is in experiments in legislation. Therefore, I say that I might also point out that many of the people who are trained in the school of law go out to the Colonies as chief justices or puisne judges—in many of those Colonies and in India particularly English lawyers go from England to become judges and to administer as judges the law which they find in the country to which they are appointed. So that both from the multifarious systems of law which prevail in different parts of the British Empire, which are practically administered in a British court and of which the British court sitting in London is the Court of Appeal, and from the interesting experiments which the Legislatures of the Australian Colonies and other great self-governing Colonies do make in legislation and in alterations in substantive law and procedure the position of the British Empire at the present time seems to me to afford unique advantages for the purpose of supplying both the theory and the practical application of law in all its branches and in its widest sense. But it is a matter of astonishment, this being so, that there are so few great English jurists—I mean jurists who have a world-wide reputation and whose works are quoted in courts outside the United Kingdom. Of course, Bentham was a very great jurist and did an immense service to English law, and his name is known in other countries also. But we have in England very few works like the great work of Pothier, for instance, and Merlin, and perhaps I ought to say Troplong, in French and works like those of Savigny and other great jurists in Germany. And it would be only just to add some of the great American jurists whose works are treated as text-books in the English courts. The English text-books, admirable and valuable as they are, do not, speaking generally, (of course one ought to make certain exceptions which I will not delay the Commission by doing at the present stage), deal with broad or great principles of law. Many of them are exceedingly well done—done with great industry. They show great industry and ability, and they are extremely valuable and useful to the practitioner, but they are for the most part convenient analyses and collections of cases bearing upon the subject with which the text writer deals, which have been decided in the various courts. For that purpose they are invaluable to the practitioner, and it is only fair to say that they are done with great ability, and that they show the greatest possible ability and industry, speaking generally; but they do not deal with broad principles of law, or discuss questions of law, (of course the Commission will understand that I am speaking broadly there are exceptions, of course,) in the same manner that you find jurisprudence and law dealt with by some foreign writers. In saying this I do not desire to deprecate in the least degree the value of the English text-books to the practitioner, but I wish to point out to the Commission what I believe to be the consequence of the way in which the study of the law has hitherto been carried on in England, or until recently. Our text writers who deal with legal subjects, deal with them more on the practical side, and give the analyses and the result of decided cases instead of dealing with the application of general principles to concrete cases. Again, if I may be permitted to speak of a class to which I myself belong, the English lawyers, (no doubt anybody who has had a large acquaintance with English lawyers will think the same,) I include both barristers and solicitors, will be struck with the high standard of business capacity I think amongst barristers, and certainly amongst solicitors. What I mean is that in advising a client what he ought to do in certain circumstance, the conduct of a case in court, and the general conduct of a client's business I believe is done extremely well both by solicitors and barristers at the present time, and it would be untrue und unjust not to say that there are men amongst the solicitors, some of the great City solicitors, who are admirable commercial lawyers, well skilled in commercial law, and able to advise their clients in commercial law. I will not, for obvious reasons, say much about barristers. It would be untrue to deny that there have been many eminent men who adorned the English Bench, and living men too who still adorn the English Bench and dispose of the English legal business who are men not only well trained and well skilled in the English law which they administer, but who have a large grasp and power of application of general principles to the problems which come before them. But I think it would be found that those men are men who, by their intellectual ability and industry, stimulated by professional ambition, have gained the qualities which I mention, and certainly it is not due to any training which they have received in the earlier branches of their career. I think it would be true to say that the majority of us live from hand to mouth; we pick up our law as we go. Necessarily in the course of a large practice of a diversified character, you pick up a great deal. We argue our cases, which we have to argue in court, too much in the way of endeavouring to show that the case before the court is covered by some previous decision which is more or less like it, instead of what I conceive the finest advocates should do,—argue it from general principles of law which they conceive to be applicable to the case and using previous decisions for the purpose, not of founding their argument but of illustrating it. The Commission will see at once the distinction which I desire to draw. The finest advocate will, of course, state the general principles which he conceives to be applicable to the case he has presented to the court, and he will show how those general principles apply to the case in hand, or, if there is a conflict of principle which is usually the case, he will show how that conflict ought to be decided, and he will illustrate his argument by reference to decided cases. The other mode of arguing, which I think of an inferior character, although I agree myself that all of us are guilty of it, is saying, "This case more or "less resembles the case of A. *v.* B. which was "decided a year ago," or so many years ago, or of endeavouring to show the distinction between the case of C. *v.* D., and the case that is being argued. That is the characteristic of English lawyers, with all their merits, and I think it shows the hand-to-mouth kind of manner in which they pick up their law by the way. Notwithstanding the great knowledge, the great ability, and the great grasp of legal principles which many of them possess, the majority of English lawyers show, I think, the way in which their law has been learnt, and the want of some such learning as that which I desire to see afforded. What are the schools of law at the present time? First of all, with regard to our ancient Universities. In my time, at Oxford, there was very little legal training indeed, and there must have been much less than there was in the previous century when the Commission remembers Blackstone's Commentaries were the lectures

which he delivered as Vinerial professor, which shows that in Blackstone's time, at any rate, he must have had an audience for which it was worth while to write lectures of that character. But at the present time Professor Holland and other gentlemen will speak with intimate knowledge of things that are very important; there are professors of great ability and great knowledge who regularly deliver lectures at Oxford, and there is the organisation of teaching at Oxford. But I do not think that the study of law has attained the position which in my opinion it is entitled to occupy as a part of the recognised curriculum of University teaching. Of course, the teaching at Oxford is necessarily only of a scientific or theoretical character, and does not deal at all with the practical application or the professional side of legal teaching. I will not say anything about Cambridge, because I am not entitled to do so, except that one knows from what one has heard that the teaching of law has very much increased and improved of recent years in that University also. Then there is the Victoria University which has an exceedingly good school of law, and there are the London colleges, King's College and University College, which also have legal professional teaching. Those, I think, are the great schools and chief schools, which afford legal education of a scientific or non-professional character. Then we have for professional teaching the Inns of Court and the Incorporated Law Society. I have had the opportunity of reading my friend's (Mr. Crackanthorpe's) evidence on this subject, and I will say generally (it will save the time of the Commission if I do so), that I agree generally with what he said about the Inns of Court and the Incorporated Law Society. I am not going into the history of the Inns of Court. I desire only to say that amongst the defects which Mr. Crackanthorpe pointed out in the Council of Legal Education as a means of affording legal training, that which struck me the most is its narrowness. It is exclusively under the control, and its professors are exclusively members, of the Inns of Court itself. It only admits students of the Inns of Court who desire to become barristers, to its lectures. It does not purport or pretend in any way to give legal training as part of a liberal education, or to teach law to anybody but those who have entered themselves as students of the various Inns of Court and desire to become practising barristers. I do not desire to say anything about the work of the present Council of Legal Education because it has only recently been enlarged into its present form. It has been thoroughly overhauled and reformed, although the reforms do not go so far as many of us desire that they should go. I think it will be only fair not to criticise its work until one has a longer and larger experience of its working. But I want to illustrate this, which I hope is no breach of confidence. I was on the committee when complaints were made of the insufficiency of the work of the old Council of Legal Education. A joint committee was formed of the four Inns of Court for the purpose of devising a new scheme. I was appointed a member of that committee by Lincoln's Inn. We drew a scheme which, although not perfect, was a very fair scheme, and the scheme we proposed would have been at least the nucleus of a school of law, because we proposed that the Council or Governing Body should include not only members of the various Inns of Court but also outsiders of eminence whose assistance would be valuable; and also we proposed that the lectures should be open to all persons whether members of the Inns of Court or not, which, of course, was a very radical proposal. Our original proposal when it was laid before the Inns of Court for their consideration did not meet with favour in those respects in which we hoped it would, and it was reduced to a scheme of the present dimensions in which the Governing Body is exclusively in the hands of the Inns of Court themselves, and the lectures are not open to anybody but students of the Inns of Court. Therefore the Commission will see that in its present organisation it is in no sense a school of law, but merely a means to enable the Inns of Court to satisfy themselves of the professional requirements of those who seek to be admitted to practise as barristers; it does not even include the members of the other branch of the profession. So that you have side by side a system of professional education for barristers and a system of professional education for solicitors. I need not say, in the first place, with the waste of power which always happens when you have two bodies doing the same work, and also with considerable loss of efficiency, because two local bodies do not do the work so well as a larger body with a broader basis and broader aims would. One of the greatest blots on legal education at the present time is, I think, the separation of the education of those who, from temperament or otherwise, are going into one branch of the profession, from the legal education of those who are going into another branch. After all it is the same law they have to learn; they are, to a large extent, the same class of persons who go into one as into the other. It may be that the persons who are going to become solicitors in most cases begin their professional education rather earlier; but still a great many of those who become barristers do not go to the Universities; and, on the other hand, a great many of those who have taken degrees at the Universities now, I am glad to say, become solicitors, or rather I ought to put it in this way: I am glad that amongst those who become solicitors are a great many men who have had a general education at one of the Universities. So that, in my opinion, there is no earthly reason to be alleged besides the jealousy (which I do not share) which is felt by some of my brethren, of admitting solicitors to the same education and to the same system of training as that which is thought best for barristers. I think the few words which I have said will suffice to point out to the Commission my views, at any rate, as to the effect of the want of systematic legal education in England, and as to the fact that at the present time the means of obtaining either general training at law or professional training at law, are not adequate to the demand. Now, I should like to say a few words as to the remedy. The first observation I desire to make is this, and this is a thing which I feely strongly, that it is a unique opportunity that we are discussing. When you have received a commission from Her Majesty to consider the best means of forming a teaching University in London, I say it is a unique opportunity of forming such a general school as was contemplated by Lord Selborne when he introduced his Bill in the year 1854, I think it was, such as I have endeavoured to sketch out. It is an opportunity which, if it is allowed to pass by at the present time may not recur for a great many years. When the Charter of the former University, which was proposed to be called the Albert University, was before Parliament, and it was expected it would receive the Royal Assent, I moved in the Bench of Lincoln's Inn for the foundation by that Inn, in concert with the other Inns if they were willing to join, of a grant to found such a Faculty or school of law as I have foreshadowed. My motion, of course, stood over, owing to the discussion in Parliament and the probability there seemed that the Charter never would receive the Royal Assent. But I regret to say that my motion did not receive that amount of support (although it received support from some very distinguished members of the Bench) which I should have liked it to have had. The first point is this: London is, in my opinion, undoubtedly the place for such legal school as I have indicated. I say this without prejudice to the excellent work which is being done in this direction by Oxford and Cambridge and the Victoria University. But London is undoubtedly the place for such a general school as I have indicated, that is to say, a school of law which shall be both theoretical and practical or professional. One may call in aid—although of course it is easy to point out differences—the analogy of medicine. London is the best place to teach Medicine in, because you can teach Medicine

Sir H. Davey, M.A., Q.C.

22 Dec. 1892.

a surgery theoretically, side by side with a practical application of what you are teaching. That is the reason why I think London is the proper place for such a school of law. You have a combination of scientific and practical study, and men may see the principles which they hear laid down and which they hear explained in the lecture room, put into actual practice under their eyes. The articled clerk or student of the Inns of Court can attend the lectures and study in the University side by side with the work he is doing in putting into practice the principles of law which he is learning in the University. And the advantage of this combination of practical with scientific teaching is that it prevents the teaching becoming of too professorial character. One often hears complaints made of so-and-so that he is a mere professorial lawyer. There is a certain amount of truth in that. If law is taught only from its scientific side without that combination with practical teaching which is necessary to make a finished lawyer no doubt the teaching acquires somewhat too much of a professorial character. Then, secondly, I think it should be, not a school of law itself—not a legal University itself—but I should desire to see my school of law a Faculty in a University; that is to say, I should desire to see the study of law made part of University training. You will in that way get rid of professional narrowness, and you will do something to achieve what I desire to see recognised, that is, that law may take its proper place as a part of a liberal and general education, not merely, as I have said, for professional men, but for men who are engaged in other walks of life as well. Then, thirdly, in my opinion, the foundation and basis of the legal Faculty or school of law within the University should be the Inns of Court with the aid of the Incorporated Law Society. Those are the two great professional teaching bodies. In the first place the Inns of Court are in possession. They have all the prestige of antiquity and of combining within their numbers the greatest lawyers of the day, both on the Bench and at the Bar. The two together are entirely in possession of the professional teaching, and they are in possession of such scientific teaching as there is in London, combined with King's College and University College; they, with King's College and Unlversity College, are in possession of the teaching. But, secondly, what is perhaps more important is this: they have sufficient pecuniary means to found a Faculty of law on a satisfactory and working basis; first, that it should be in London; secondly, that it should be part of a University system; thirdly, that the Inns of Court, with the aid of the Incorporated Law Society, should form the basis and foundation of the system. Now, my Lord, I am quite aware of—and no one knows it better than I do—the difficulty of getting the Inns of Court to move themselves. But if the Inns of Court are not willing to recognise all their opportunities of usefulness in this direction of what I conceive to be their public duties and their true interests, then, speaking as a Bencher of Lincoln's Inn, but expressing only my own private opinion, and not by any means expressing the views of the Bench or even the views of a majority, or, perhaps, of more than a small minority of the Benchers of Lincoln's Inn, I personally am quite prepared to see compulsion put upon the Inns of Court to do what I conceive to be their public duty, if they will not undertake the task themselves of providing the funds out of which this is to be undertaken. Of course, for that purpose an Act of Parliament would be necessary. But I can see no reason why the Inns of Court should not be taxed to provide the means. If they are willing to undertake it themselves to convert themselves, as it were, into the college of law or the Legal Faculty, so much the better. That is what I should like to see best, but you cannot compel them to do that even by Act of Parliament. This can be done if they will not step forward and take the place which I, as a Bencher of Lincoln's Inn, would be proud to see them take, a place in the fore front; I see no reason why Parliament should not provide the means of taxing the income of the Inns of Court for the support and maintenance of the Faculty or School of Law in the same manner as the colleges, both at Oxford and Cambridge, have been taxed under recent legislation for the purpose of supporting and maintaining professorial teaching in the two Universities. Then with your Lordship's permission I desire to make a few practical suggestions. I do not pretend to have worked out a scheme. That would require patient and long attention, which I have not been able to give to it. But I desire to make a few practical suggestions as to the form which I think a Faculty should take. The first point is that I think the teaching of law should be done entirely by the University, that is to say, that the Inns of Court and the Incorporated Law Society should no longer have imposed upon them or be required to undertake the duty of teaching law to their students. The means of teaching law should be found in my opinion in the Legal Faculty of the University. Secondly, I think that the Inns of Court and the Incorporated Law Society should retain the right of fixing the conditions upon which a person to to be admitted either to the profession of a barrister or the profession of a solicitor, and if those bodies chose to retain as part of those conditions a system of examinations, I think they should be permitted to do so. But my own opinion is that a legal degree or a certificate of proficiency from the University ought to be a sufficient test of legal education of the candidate to be admitted either as a barrister or a solicitor. That is my own view. Of course that would depend very much upon the standard of the University demanded for its degrees, and, speaking as a University man, I should hope that if any teaching institution should be founded in London the degrees will not be given too easily; that the standard even for a pass degree, if it be thought well to retain pass degrees, should not be made too easy. I conceive that a degree ought to be a certificate of proficiency in arts and education generally, and in my opinion I think some harm has been done to the older Universities by the ease with which they have given their degrees. That is a pious opinion which, perhaps, is not very relevant to the present discussion, but provided that the degrees or certificates of proficiency in law are not given too easily, I think that both the Inns of Court and the Incorporated Law Society might well accept the degrees of the University as a sufficient test of proficiency without themselves requiring further examination, because it must be remembered that there is the strong stimulus of professional ambition and desire of professional advancement which, in fact, has done more than anything else to make the lawyers of the present day, and that will still operate upon men's minds to induce them to improve their chances of advancing in their profession as much as possible, so that it is not really so very necessary that you should have a very strict additional examination. The fourth point which occurs to me is this: if the certificates of proficiency or degrees are to be accepted by the Inns of Court and the Incorporated Law Society, those certificates or degrees must be adapted to the particular circumstances of each case, that is to say, they must be classified, because it is obvious that the amount of legal training which is required or is sufficient for a man who is not going to be a professional lawyer is less, and, perhaps, different in kind, from that which ought to be demanded from a man who is going to be a professional lawyer. And, again, as between barristers and solicitors, seeing that at the present day, at any rate, men become solicitors at an earlier age than that at which they become barristers, and it is supposed that a larger and more exact knowledge of law is demanded from the barrister than is supposed to be sufficient for the solicitor, it would be only fair if the degrees are to be accepted by the admitting bodies, that the degrees should be adapted to meet the requirements and the circumstances of each case; in other words they should

be classified. The fifth point is the constitution of the Board of Studies. In my opinion it ought not to consist exclusively of professors, but the professors ought to be of course and must be a very large constituent element in it. Whether they should have a majority or not is a matter of detail upon which I express no opinion; but I think it would be useful to include amongst the Board of Studies, in addition to the professors and teachers themselves, a certain number of eminent men, as good men as you could get from amongst the judges and leaders of the Bar; also a certain number of solicitors; and lastly I think that the Senate or governing body (I do not care about the name) of the University which is to lay down the curriculum and to regulate the admission to degrees ought to be in touch with the Board of Studies, and ought to have a substantial representation on the Board of Studies. I think if you got a Board of Studies of that character it would be as good as you could get under existing circumstances. You would have the professorial element to prevent law drifting into merely professional teaching; you would have judges and members of the Bar and solicitors to take care on the other hand that it was not too professorial, and did not lose touch of professional requirements; and then you would have the governing body also substantially represented on the board. The next point is the converse one, that the Board of Studies should have a substantial representation on the other hand on the governing body, because the governing body fixes the curriculum, it fixes the conditions upon which degrees and certificates of proficiency are to be given, and it is a body which represents the University as a whole of which I desire to see that the Faculty of Law shall be an equal partner with the other Faculties. The next point I have noted is: who shall be the examiners? The question which has agitated a great many minds is whether the professors who teach should also be the examiners. The argument on each side may be summed up in two sentences. On the one hand, if you have outsiders to examine it is said to be unfair to the students whose train of thought and reading, and way of looking at things have necessarily been guided by the teaching which they have received, and if you have an outsider to put questions he will put questions in a manner and in a form which perhaps is not the way in which they have been taught to look at things, and which questions if put in another form and in another manner might be answered by them, so that to have outsiders alone I think would be unfair to the students. On the other hand, to have professors alone would, I think, be unsatisfactory, because if they were to have the exclusive right of examination the examinations would be apt to run into grooves, and the students would be apt to content themselves with learning by rote what they have to learn from their teachers without really mastering the principles which underlie it. I do not venture to go more into detail, but I think the examining body, whether a board or not, ought to consist of a happy combination of teachers and outsiders. The last point which I have noted is this. It is a point of general interest, but applicable as much in my opinion to legal teaching as to other teaching, that is the function of a professoriate, and the relation which a professoriate should bear to catechetical teaching. There ought in my opinion to be a combination of professorial teaching and catechetical teaching by means of sub-professors or readers or whatever name you like to use in close relation with, and acting under, the general direction of the professorial body; so that it should be the office of the readers or sub-professors to assist their students in the general line of reading laid down by the professors. So that on the one hand he may prepare the student's mind for the lectures which are to be delivered at intervals by the professors, and on the other hand he may work out what necessarily in a lecture is not given in detail; he may work out the hints and suggestions and principles laid down in the professor's lectures in detail by catechetical teaching. Professorial teaching alone is, in my opinion, of very little value unless it is accompanied by a careful system of private reading, and to direct that private reading is the office of catechetical teaching, and the office of the sub-professors should be to work in harmony and unison with the professors; to make the lectures useful to the students by directing their reading, assisting them in their reading, and preparing their minds for the lectures, so that when they go to the lectures they will go with minds prepared to receive the seed that will be sown. Those are the general observations which occur to me, and the practical suggestions, and I ought perhaps to say to the Commission that in making these suggestions I have availed myself of the experience I have had, not only as a member of the University of Oxford taking some interest in University reform generally, but also as standing counsel for the University of Oxford during the last 15 years, in the course of which the new statutes that have been made regulating both the University and the colleges have come before me somewhat frequently, and I had to express my opinion on the construction of them chiefly. But from my perusal and observation of the working of those statutes, I have been led to form opinions of my own on the general subject. If there is any other subject on which I can be of assistance to your Lordship and the Commission I should be very glad.

18,213. (*Lord Reay.*) We are much obliged to you for the very interesting statement you have made to us which leaves very little room for catechetical additions. But you have not touched upon the question of Roman law. Will you tell the Commission what part you assign to Roman law?—I am not a great proficient in Roman civil law myself. I know something about it. I attach great value to the study of Roman law as being an organised logical system of law, and perhaps for the purpose of educational value it has the same kind of use that a dead language has in literary training. You can study the way in which the people of a past civilisation worked out general principles and legal problems for themselves not distracted by modern considerations. But I intended to include Roman law amongst all those systems of civilised law to which I think the University ought to direct its teaching. I think they should teach all systems of civilised law, that is to say, should profess all systems of civilised law, including Roman. Naturally apart from the logical and complete character of Roman law, and from the fact that the Roman civil law forms the foundation of, I think I may say, all the Continental systems, that is to say of all the Latin nations, and of the German system of law, Roman law naturally must occupy a great part in every legal school in which law is taught practically and historically in the way I have endeavoured to explain. I do not separate Roman law from other civilised systems of Law, Roman law is very complete. But Hindoo law, for example, is an extremely logical system of law worthy of the study of the student. This, of course, expressed in a language and deals with ideas which are not so familar to us as the language in which the Roman law is expressed; and the ideas it deals with are not so familiar as the ideas with which Roman law deals. Every system of law which is a logical application of general principles to practical problems is in my opinion worthy of study. I should attach importance to Roman law for the reasons I have mentioned.

18,214. The field which you propose to cover is so large that I suppose you would leave a great deal of option to the students as to which lectures they should follow—Yes.

18,215. And also, I gather, you would leave them various avenues to obtain degrees?—Yes.

18,216. There would be, for instance, an avenue for those who were looking to the Bar, and an avenue for those who were looking to the solicitors' profession?—That is what I intended to express when I said

Sir H. Davey, M.A., Q.C.

22 Dec. 1892.

that the degrees or certificates of proficiency should be classified.

18,217. And they should not only be classified with reference to their future professions, but also with reference to the degrees of knowledge they desired to obtain. The students who came to the Faculty mainly for scientific purposes, might obtain a higher degree than those who merely came for professional purposes?—I hope (I dare not say that I think it will be reached in my lifetime) that at some day persons who are historical students or students for the purposes of history may attend my School of Law, and may find the greatest benefit from it. Of course, the connexion between History and Law is most intimate. Law cannot be understood until it is studied historically. And, on the other hand, the materials of history, in the best sense, are to be found in the statutes and laws of the people.

18,218. Although, of course, your object would not be to deplete the Faculties of Arts or Science, still, I suppose, if this school was organised on the lines which you have sketched you would contemplate the possibility that we should approximate more to the situation of France, where by far the majority of the students frequent either the Law or the Medical Faculty?—My own opinion is this, I think that will be the course which a London University will take. I conceive and I hope that the richer classes who have more leisure, and are able to extend their general education to a later period in life, will still frequent the older Universities, and the men whom you will have at the London University will be the men to a large extent who are gaining their living in some form of business, or are learning their business side by side with University teaching. That is what I expect, and necessarily the Medical and Legal Faculties would be the stronger Faculties. I do not think you will find much demand for what I may call general teaching in arts in the sense of the Oxford School or the Cambridge Triposes. That is only a speculative opinion, but it is my opinion. But I hope that some day or other my Faculty of law will be so famous that people will resort to London for the purpose of attending the lectures of the professors.

18,219. You would recruit a great number of the professors from the profession, but you would not object in such subjects as Criminal Law, International Law, or Administrative Law, also to recruit them from those whose condition was unquestionable?—No; I would leave it perfectly open. Necessarily there must be members of the profession, members of the profession probably who either from temperament or otherwise are more disposed to a professorial life than the active life of the profession. It must be remembered that many men are not so well fitted by temperament or inclination for practice. It is not every man who cares to spend his life in wrangling in the Law Courts all day.

18,220. Considering the great need there is for the existence of the teaching which you have described to what is it to be attributed that the want has been so little felt?—I think partly it is the practical character of the English people. The English people have not that regard for scientific theory in their practical pursuits, which, perhaps, the Germans, and to a less extent the French, have. But also, I think, it is due to this; the absorbing character of the practice in the legal profession. The business part of it takes up so much of a man's time; he does pick up his law as he goes. Any man who is in large chambers and desires to learn does learn an immense deal of law. He learns it no doubt in a haphazard, casual, by-the-way sort of fashion, but he does learn an immense deal of law, and unless the earlier training is given to him which would induce him to study for himself, his mind is not allowed to see the advantages or necessity of it. But then it is fair to qualify that by saying that a great many who have been brought up and have had no legal training, such as I had when I came to the Bar, except in the chambers where I was a pupil, have by their private reading made themselves lawyers and jurists of great eminence. I might mention names of the present day, but it would be perhaps invidious to do so. Amongst the great judges who are familiar to us all before whom we have practised many might be named who have, notwithstanding the want of training, by their industry and intellectual capacity acquired that which they would have got by training. But of course those are only the choice spirits.

18,221. The busier they are in later life the more important it is that they should have had the training earlier?—Yes.

18,222. I understand also that your opinion in the main does not differ materially from that which was stated by the Committee of Legal Education of the American Bar Association?—I have read that, but I have not got it present to my mind.

18,223. (*Professor Sidgwick.*) Do you see any difficulty that might arise if the Inns of Court, retaining the power you propose they should retain of admitting to the Bar, should establish these especially close relations with what would after all be one of the Universities of the United Kingdom. Would there not perhaps exist in the other Universities a feeling that in determining the conditions of admission too much regard might be paid to the opinion of one body of teachers?—What you mean is that, to take the example of the University I am best acquainted with, the Oxford School of Law might feel themselves put rather into the cold by the advantages which the London School would have by its close association with the bodies which admit to the profession?—Yes.

18,224. Perhaps there might be a danger from that, and I for my part should be sorry to see anything done to damp the efforts which have been made by a distinguished body of men at Oxford, and I believe at Cambridge also, to promote the study of the law. But on the other hand you must remember that my theory of the London University is that it is to be both a theoretical and a practical one. I think it is the combination of the two which will make it a success. The Oxford school almost must remain a scientific school, a school which teaches law merely as a branch of learning. It cannot have from the necessity of the case the same relations with the professional teaching as I hope the London University will have. And notwithstanding that danger I should not feel disposed to forego the great advantage of having the Board of Studies in close relation with the admitting body for the purpose of keeping up that union of the scientific and the practical. But I quite see the danger which you point out.

18,225. Do you conceive that the same kind of teaching, the same treatment of law by professorial lectures would both meet the needs of those who are training for the profession of lawyers, and also the needs of those who only aim at it as a part of liberal education or as a preparation for public life?—To a very large extent, yes, but it may be that there would be classes formed which would be more suited, or more useful I ought to say, because I do not agree that knowledge of law is not useful to everybody. It would be more useful to professional people, but I should like to see other men equipped with it. My ideal, which I do not pretend to expect to see realised in my lifetime, is, that every man who comes to the Bar should be equipped with that preliminary knowledge which would also be sought by the man who is going into public life.

18,226. Does it seem to you that there is any force in the view I have heard suggested, that the difference which you emphasise between English text-books and modes of argument, and foreign text-books and modes of argument depends, to some extent, on the difference between the established English view of reports of decided cases as contrasted with the views that are held in France and Germany?—To a large extent. And I will add this: that has grown very much from the multiplicity of and the piling up of reports. But at present the tendency is rather the

other way. The evil is beginning to cure itself, because the number of volumes of reports that fill our shelves is so enormous that no human being can pretend to have a full acquaintance with them.

18,227. I have heard it suggested that so long as the English view of the force of decided cases is maintained there must necessarily be a difference between the scientific and the practical teaching of law: that a teaching of law which laid stress upon principles would necessarily not produce in the student the habit of mind which he would find to be practically useful in arguing a case in Court?—I do not think that is so. I will take one instance, and I will take the instance of a man who is dead. Anybody whoever heard Lord Cairns argue when he was at the Bar, or who has heard or read Lord Cairns' judgments in the House of Lords will see exactly what I mean. Lord Cairns seldom quoted a case to say, "This is the case of A. *v.* B.;" but in his judgments in the House of Lords he would state the principles which he was going to apply to the case before him; he would state how he applied those principles, and then perhaps he would refer to some decision which had been quoted to the House in the course of the argument for the purpose of illustration, and show how it agreed with the way in which he had applied his principles. But I think I said in the observations that I made that it is only advocates of the highest order who can made the precedents their servants instead of being their slaves.

18,228. Would it be wrong to ask whether in your opinion, in considering the decisions which have been given by judges of our dependencies, defects can be traced which are due to a want of training in comparative law?—I should be sorry to say anything which might seem a reflection upon particular individuals, but from my experience in arguing cases in the Privy Council I should say, yes. But I ought also to say that there is an extreme adaptability about the English mind, and it is extraordinary how an English common lawyer sent to India will master the principles of Hindoo law if he applies his mind to it. But I do think I have known instances such as Professor Sidgwick alludes to.

18,229. You understand that I was anxious to meet the argument that after all we get on as well without it?—One has heard that argument before, and it is a very difficult argument to cope with. It is not necessary to deny the greatness of Lord Mansfield or Sir William Grant, who were brought up without this School of Law, to advocate it. I do not hope to make the lawyer of the future either a Grant or a Mansfield, but I could do something, I think.

18,230. (*Rev. Canon Browne.*) Have you any idea of making the theoretical training pre-graduate and the professional training post-graduate?—That would be very much what I should suppose the Universities of Oxford, Cambridge, and Victoria aim at; that a person should get his training at Oxford and Cambridge, or Manchester, or Liverpool, and then come and plunge into his professional training. My own opinion is that they go on better side by side. A man takes more interest in the theoretical part of the work if he sees it side by side with practical work, and also I think that without any prejudice to professorial teaching the effect of a combination of practical teaching, or practical professional purposes, is to correct what is charged against professorial teaching; that it is teaching *in vacuo*, if I may use that expression, and not sufficiently directed to practice. I do not mean to say that that is a well-founded charge, but that is a charge which is made against it.

18,231. You do not fear that in the case of a man who is intending to be a professional lawyer the theoretical side might be obscured by what might be called bread-winning ideas?—Well, of course, it is at present; but that I am afraid is inevitable. I should like everybody who becomes a solicitor, or attains any public position to have had a liberal training at the Universities. But I cannot secure that. Bread must be won. I should be afraid of it.

18,232. Some of us who have had a great deal of experience in University work find that it is continually thrusting itself in, and the only remedy seems to be to separate the theoretical from the practical?—Then I am afraid you will not get the theoretical.

18,233. We have a law school at Cambridge where a good many men who are not going to be lawyers, squires' sons, are sent to read for the Tripos or for the law degree. If we teach them theoretical principles we are doing them, of course, a great deal of good, but if we teach them a little professional practice then we are launching upon the world a very dangerous person—a person who thinks he knows a little of the actual practice of law?—Yes, he is a dangerous person no doubt, and so he is in every department of life.

18,234. Especially in law cases. He may create a great deal of law business?—Yes. I think a half-informed person in every department of life—in economics I would say—is a very dangerous person indeed. A man may be his own lawyer, or he may advise his villagers. He may make wills.

18,235. That is the danger, so from the Cambridge point of view I would rather have kept the two entirely separate. Then you referred to another question, which is of great interest, viz., the question with regard to teaching being too professorial. The difficulty might be met in London. Elsewhere I do not quite see how it is to be. A really successful lawyer can almost always not afford to take a professorship?—That is the difficulty. His time is too valuable.

18,236. We get excellent abstract lawyers to lecture as professors who have sometimes been at the Bar and been unsuccessful?—Yes.

18,237. Is it not better that they should let practice alone?—Yes, perhaps it is. If I want a man to lecture on the structure of the courts or on procedure I must have a man who is acquainted with it. But for many of the subjects which I have alluded to, as, for instance, the historical study of systems of law, and the comparative study of systems of law I do not think it in the least degree necessary that a man should have been a practising barrister. Sir Henry Maine, for instance, would be an example of what I mean.

18,238. So that was the limit of your remark with regard to teaching being too professorial, and not given by a practising lawyer?—Yes.

18,239. Now, one question of a different character. You said that you hoped the Incorporated Law Society and the other bodies might accept the degree of the University without further question?—Yes.

18,240. I do not know whether you have been acquainted with the approaches the Universities have from time to time made, either to the Incorporated Law Society or to the Council of Legal Education. I have been concerned in some of them, and we have found an extreme stiffness on the part of those authorities in London, so that after many years I practically gave it up. May we hope that there will be any very great change in that respect?—No.

18,241. (*Mr. Rendall.*) You used "Board of Studies" as a synonym for "Faculty" in the outline of the constitution you sketched?—Yes.

18,242. And you suggested that the Faculty and Board of Studies should not consist exclusively of professors, but should have an element of judges and leading barristers and solicitors. What kind of selection or nomination should you think of for them? From what sources would it proceed?—I have not thought of that. In the Oxford Statutes I think the Boards of Studies in the different Faculties are framed by persons *ex officio*, partly by persons nominated by the Hebdomadal Council, and partly by persons elected by Convocation.

18,243. Professor Dicey in his evidence gave us to understand that the element of professional lawyers, such as judges or barristers, was so insignificant as practically not to be noticeable. There is a certain element of external examiners, otherwise they are almost

Sir H. Davey, M.A., Q.C.

22 Dec. 1892.

entirely University professors or lecturers or readers at Oxford?—I had merely thought of the desirability. I have not gone into the details of how they should be selected. I merely wish to express my opinion of the desirability of the Boards of Studies consisting of eminent barristers of the character I have named, as well as men engaged in professional teaching.

18,244. Would it tend to conciliate the opposition or the stiffness of the Inns of Court if some such nomination were placed in their hands? Would that make them more ready to accept University jurisdiction?—I am afraid not. There is undoubtedly a very strong feeling of exclusiveness in the Inns of Court which leads me not to look with very sanguine hope to any voluntary action on their part. I am a member of the Bench of Lincoln's Inn myself, and I do not want to be too severe on my colleagues.

18,245. For the University as well as for the Inns you feel it far better to conciliate than to override by Act of Parliament?—Yes.

18,246. But even representation on the Faculties as well as representation on the governing body will not, so far as you can judge, very much help?—I think not. I must not go into details, because the knowledge comes to me in a confidential character as a member of the Bench, but I think I may say that the temper of the majority of the members of the Bench is that they desire to retain in their own hands the exclusive education, training, and fixing the conditions of membership of the Bar of their own students, and there is a vesy strong jealousy undoubtedly existing against uniting barristers and solicitors in one system of education. That is the greatest difficulty which Lord Selborne found in, I think it was, 1854. It was the strong jealousy of any joint system of education with solicitors. You know the prevailing fear of barristers is the introduction of American system which will unite the two professions. I am not going into that now, but I think the same feeling which actuated the majority of them will actuate them in this case.

18,247. I suppose in the voice or jurisdiction given to these outside nominees the members nominated would be restricted to the province of the law Faculty?—Yes.

18,248. You would not wish to extend their powers into other Faculties?—No, I have not thought of that.

18,249. (*Mr. Anstie.*) With reference to the question put to you by Professsor Sidgwick as to the possible jealousy that might exist if the Inns of Court dealt on a different footing with the London University from that on which it dealt with the older Universities, would you see any objection to their co-operating in a similar manner with Oxford and Cambridge and accepting their examination in the same way for educational purposes as a certificate for call to the Bar?—Not if the examination gave the same guarantee of proficiency. Accepting examination is a mere means to an end, and if you achieve the end, certainly.

18,250. And the Inns of Court would be able to secure that efficiency if they co-operated with the University in conducting the examinations. It is a method which has already been suggested to us by one of the law professors at Oxford?—If they will, yes.

18,251. You see no objection to such a course as that?—No.

18,252. I should like to ask you whether you can help us to a practical solution of the question of what position the Inns of Court should take in connexion with the University. Would you allow them a representation upon the governing body of the University?—My own theory was that the Inns of Court would nominate a certain number of members on the Board of Studies or Faculty to represent them there, other members being appointed in other ways, and that the Board of Studies should be represented on the governing body; but whether the Inns of Court should be represented directly on the governing body appears to me to be a matter of details which cannot be answered as an abstract question. It would have to depend in the first place upon how you treated other bodies in a similar condition. Does every great hospital, for example, have a representation on the governing body? Then you would have to deal with the Incorporated Law Society. I cannot therefore answer that question in the abstract form in which it is put, but I will go as far as to say this, that of the Inns of Court are prepared to take what I think would be their true position, I think they ought to have directly or indirectly to have, I was going to say the controlling voice, but certainly a very large voice in the Faculty and a certain voice in the governing body. How that could be done I am not prepared to say.

18,253. You at least see no objection to their being represented on the governing body?—No, I see no objection to that.

18,254. Would you think they should be represented on the Faculty by the professors and teachers whom they appointed, or in an additional way?—In an additional way. For instance, I suggested that a certain number of judges and members of the Bar should be members of the Faculty. They, I suppose, would be nominated by members of their own Inns.

18,255. Would not they more suitably fill the position of members of the controlling body under which the Faculty in last resort had to act?—Well, the Faculty, I presume, will have to arrange all the courses of study; it will be responsible for the arrangement of the professsor's lectures, and seeing that the co-ordination is preserved which I mentioned last between the professors and the prelectors or readers. That being so, it appears to me that the more effective control will be exercised through the Faculty than through the governing body. But really this is a matter of detail which I have not worked out in my own mind. I have not gone beyond the somewhat crude suggestions which I offered to the Commission. I have not worked out in my own mind the full details of a scheme of this kind.

18,256. Would you prefer not to express an opinion upon that?—Yes, upon the abstract question you put to me, certainly.

18,257. May I ask you whether you think it will be possible to favour the Commission with a copy of the scheme which was put forward for the reconstitution of the Legal Council and which was not accepted?—I should think not, but if the Commission desire it the best person to ask would be Lord Coleridge, who was chairman of the committee. I will inquire, if the Commission desire it, and if I can get one, I will send it to your Secretary. I have not got one myself.

18,258. But you are not prepared on your own authority to forward one?—No. It was a mere, what would be called in public life, departmental committee, and I should conceive that the proceedings of it were more or less as confidential as the proceedings of the Bench are.

18,259. But if the Commission express a wish to see it you think the wish might be gratified?—Yes, I think so. Lord Coleridge was the chairman, and he would probably send it.

18,260. (*Mr. Palmer.*) The school of law you have given us you have told us is ideal, but in sketching the practical form of the Faculty I think you said that the Inns of Court and the Incorporated Law Society should not teach the law?—Yes, that the teaching should all be done in the University. I think that was Lord Selborne's scheme in 1874.

18,261. For a school of law. But did that touch the question of a University?—No, it did not. It was the school of law, but not as part of a University.

18,262. From the point of view of a University which has to test and influence teaching indirectly by examination and possibly directly by professorial Chairs, in your opinion is it part of the functions of a University to undertake ordinary school teaching or to leave that to schools and institutions?—Theoretically, I suppose, a University does not undertake teaching in that sense, but, practically, as Universities

are understood now-a-days, I think they do. Speaking again of the University I know best, Oxford, certainly it undertakes teaching of a more extended character than it used to, and I think that is true of the newest University, Victoria. It is a question of names, is it not, more than anything else?

18,263. If the teaching institution is efficient—take for instance the public schools in the kingdom—University influence is very great, but it would not interfere with their management?—No, it would not teach outside its own ambit.

18,264. But in this case you would think that necessity required that a school of law should be instituted, and if there were no efficient school the University should undertake it?—Yes. I think so. What I meant by my answer to which Mr. Palmer alludes is that if a school of this kind was established and the Incorporated Law Society might be relieved, as I ought rather to have put it, of the duty or burden, which ever it is, of teaching their students. That is rather what I meant.

18,265. You would not relieve them if they were thoroughly capable of performing it?—No.

18,266. You would not, for instance, suggest that the Colleges of Physicians and Surgeons should be relieved of their duty of examining for medical proficency?—No, certainly not.

18,267. I think you said that a degree should represent a certificate of proficiency adapted and classified for barristers, solicitors, and the public. That does not necessarily imply, I take it, three degrees, but it might imply one degree with additional qualifications added by the licensing bodies, that is to say, the solicitors or the barristers. Would it not be possible to have a single degree with such further qualifications as might be necessary for barristers or solicitors?—Yes, I think so. That is a matter of detail. Really what you want is a degree. That is what I wanted. But then I can conceive that the Inns of Court and the Incorporated Law Society might each of them say, "Your degree is all very well, but we "want something more than a degree. We want "professional acquirements." And if the Faculty of Law of the University was prepared to give a certificate of competency of proficiency in professsional requirements plus the degree which it gave to all its students that would answer rather what I meant.

18,268. You did not include any arrangements of that kind?—No.

18,269. (*Sir George Humphry.*) I do not know whether you are acquainted with the scheme which the Senate of the London University laid before Convocation recently?—No, I have not seen that.

18,270. (*Mr. Anstie.*) Yes, I think Sir Horace Davey was present at a vote of the Bench which accepted that scheme?—Is that a proof of knowledge? Then I will say it is not present to my mind.

18,271. (*Sir George Humphry.*) Part of that proposal was that examinations for degrees and for license to practise should be given by an examination conducted by the Royal Colleges of Physicians and Surgeons, in conjunction with the University; that there should be examiners appointed by both; and that the examination so conducted should give degree and qualification to practise. Do you think it probable or possible that any such arrangement could be made between this new University we are proposing and the Inns of Court—that is to say that they should unite in an examination? And might not such union tend to promote the willingness of the Inns of Court to enter into any such scheme as you have proposed?—Yes, it might, but I do not promise anything on behalf of the Inns of Court. No doubt it would be an additional inducement, and one which I might venture to express a hope that the Inns of Court would consider. May I add this?—I think it very desirable not to multiply examinations more than you can help, because remember most of those men who come to the Bar at any rate have been to the University. They have been examined at the University, and they are rather tired of examinations when they come to London. So it would be desirable in my view not to multiply examinations more than was necessary.

18,272. That was the object of the Senate?—So I understand.

18,273. Therefore you would, on the whole, agree that it would be a desirable arrangement if it could be carried out?—I agree that it would.

18,274. With regard to general education do you feel that the student who is a candidate for the University degree in law should be required to possess a certain, and that perhaps a rather high, standard of general education before he enters upon his legal studies?—I think so.

18,275. That some such examination as that of the present Matriculation of the University of London might well be required; and that all students should pass some examination of that sort?—We have an examination of that kind at the Inns of Court, and in my junior days I used to be one of the examiners. We examined, I think, in Latin and English, and I think English history. I think that is all that we examined in. But it was an entrance examination.

18,276. Without specifying the nature of the examination, you think there ought to be some examination to indicate that there had been good teaching and good general knowledge of the subjects required?—Yes, you must not put it too high.

18,277. Do you think such a plan as you propose and as is wished to be carried out would be best effected by one University in London, or by there being two Universities?—Do you mean whether the present examining University should be amalgamated?

18,278. Whether it would be better on the whole that there should be one University or two?—I have always been of opinion that what I should have liked would have been to see the present existing examining University of London become the teaching University as well as the examining one.

18,279. And you think that would be the better plan?—Yes, decidedly, but we must do what we can.

18,280. (*Professor Ramsay.*) Generally speaking you quite agree with Mr. Crackanthorpe's evidence?—Yes.

18,281. There are two points with regard to the practical part of the scheme upon which I think there is a certain amount of difference, and upon which I should like to ask your opinion. With regard to the question put by Mr. Palmer, you said originally that you wished the whole of the teaching of law to be done by the University, but that the Inns of Court and the Incorporated Law Society should have exclusive control over the license?—Yes.

18,282. This is the practical question. Are you of opinion as a practical man that the whole training which a barrister or solicitor requires, and which he ought to be made to pass through, could fitly be given by the University as part of a University course?—No, certainly not; that the articled clerk and the aspirant to the position of an advocate must have experience in the chambers of a barrister or in the office of a solicitor.

18,283. That is to say, before they could be given the license to practice?—Yes. But you cannot examine him upon that. My view is that you must trust to professional ambition and desire of advancement to secure that sort of experience and training. He will not get practice if he has not got it, is the answer. No barrister who did not understand his practical work sufficiently—I do not mean knowledge of law—no barrister who did not know how to draw a deed, or do the things which must be done in Chambers would get any practice. That is the answer.

18,284. But so far as the examination is one the subjects of which can be taught and examined into in an ordinary way the whole of the teaching might be done by the University?—Yes.

18,285. And it would be for the two professions to say what in addition to that teaching they would require as a proof of that competent knowledge

Sir H. Davey, M.A., Q.C.

22 Dec. 1892.

and practice?—Yes. If they require, for instance, an examination into what is supposed to be learnt, and what is learnt by an articled clerk, and by a pupil in a barrister's chambers, I do not know how you would examine into that. They would examine into that for themselves. The University cannot do it, certainly.

18,286. But the University would undertake everything which the Incorporated Law Society or Council of Legal Education now do, either in the way of examining scientifically or teaching?—Yes.

18,287. And that implies that the Inns of Court and the Incorporated Law Society should go cordially into this movement?—Yes.

18,288. Mr. Palmer spoke of the three possible kinds of person contemplated. Besides the solicitor and the barrister there is also the general legal education of the country gentleman that you spoke of. And there is a fourth, if I understood you, viz., the case where law becomes part of an M.A. degree?—I did not put it quite so high as that, but I should like it to be recognised that no man is to be considered a thoroughly cultivated or educated man who has not some general knowledge of the principles of law, and also some knowledge of the laws of his own country. But I did not put it quite so high as that, I was prepared to recommend that and should enforce it.

18,289. I do not mean enforce it, but it might be an alternative?—Yes, I think so.

18,290. In your opinion it is quite possible for a University to combine every kind of teaching that can be required in the department of law both for the professional man and the non-professional man?—Yes, if you exclude that sort of experience that one learns in chambers. I do not mean the law you pick up, but what the articled clerk learns; how to do his business and how the business is practically done. When I took pupils they used to learn a certain amount of law, at least I tried to make them, and they also learnt how to do things, for instance, how to draw a statement of claim or a statement of defence or a deed. I do not think you could examine in that very well, but you might perhaps.

18,291. At any rate, whatever is required in that respect could be quite well managed in the Inns of Court and the Incorporated Law Society without any reference to the University?—Yes.

18,292. Therefore if the Commission proposes to establish a Faculty of Law, and is met by a statement on the part of the Inns of Court or the solicitors that it is quite impossible for the University to meet the intellectual requirements of these professions, you would say we should not be justified in saying that there is no sound foundation for that statement?—I should use one word. It would be a word not of agreement with them.

18,293. Then the next point is this. What are the practical steps for this Commission to take with regard to action of the Inns of Court. Looking to Mr. Crackanthorpe's evidence, would it be fair to say that the Inns of Court have hitherto resisted every proposal for the improvement of legal education?—I do not think that would be quite fair, at any rate not in my own Inn—Lincoln's Inn. I only know the other Inns from the outside. I think that would be putting it too high. As I have said in my evidence which I gave this morning, no doubt there is a very great jealousy of outside interference, no doubt there is a very strong feeling against uniting with solicitors for educational purposes. There is a very strong feeling against allowing anybody to interfere with the education of barristers, but I do not think it would be fair to say that within those limits the Inns of Court are not desirous of making the legal education as good as it can be made. I do not think there is any disposition, if you understand what I mean, but they narrowly confine it within those trammels.

18,294. Could you say that the opposition raised to schemes like Lord Selborne's has been in part founded upon an educational idea; that they did not believe in the superior educational character of the system he proposed?—I do not think they would admit that. I think they would put their opposition to Lord Selborne's scheme on a totally different ground; that it was mischievous as tending to assimilate the two branches of the profession.

18,295. Then they would not take the ground of saying that looked at educationally it was not a beneficial movement?—I do not think they would like to do that. No one likes to be an opponent of the higher education.

18,296. You think it would be extremely difficult to get the Inns of Court to come into this arrangement by anything short of an Act of Parliament?—I think so, but it is quite possible that if this Commission with all the weight which belongs to the members of it were to express an opinion as to the public responsibility and duties of the Inns of Court there are members of the Inns of Court who would take care that it was well considered, and it is quite possible, speaking of my own bench, that something might be done. That is all I can say. There are certain members certainly of the bench of Lincoln's Inn, and I believe of the other benches, who would do their best to get the thing carried. Whether they would succeed or not I cannot say, but I am not at all hopeless that as far as Lincoln's Inn is concerned something might be done.

18,297. Could you give me your opinion upon the following two alternatives? There are two proposals as to the way in which this Commission should deal with this whole subject. One is that it should present a report upon the whole subject, recommending a new charter such as was proposed before in the case of the Gresham University Charter. That charter would, of course, constitute a new University with a constitution and a Senate, and it would recognise a certain number of bodies in London. Of course no charter could go into details such as those we have been discussing to-day. The charter could not perforce bring an unwilling body into the University?—No.

18,298. In that case the only chance of the Inns of Court being brought into the system would be that the Senate as constituted by the charter might negotiate with them as a Senate, and might say to them: "We as a University are proposing to deal with you. "Will you come into us?" And if the Inns of Court were to meet that by a *non possumus*, the game would be up; there would be nothing more to be done. The other proposal is that the Commission should recommend, not any definite alteration in the charter, but should suggest that the whole matters connected with the charter are too complicated to be dealt with by anything short of a special statutory Commission, to be appointed like the Commissions of Oxford and Cambridge were appointed, by Act of Parliament. That Act would appoint the statutory Commission. The statutory Commission would act under the powers of the Act, and the Act would enumerate the bodies which should form part of the University, and with which the statutory Commission would have to deal. Now let us suppose that this Act of Parliament said that the Inns of Court must come in, and that the statutory Commission must deal with the Inns of Court and the University so as to make an equitable arrangement between them. I wish to ask you, would not that be a more effective way of bringing influence to bear upon the Inns of Court? Would it not be much more difficult for the Inns of Court, supposing their action to be entirely hostile to oppose successfully in Parliament any proposal for the formation of a Faculty of Law in the University, of which they should have the main management, than to give the Inns of Court the power of simply saying yes or no to voluntary negotiations instituted by the Senate of the University?—In my opinion the latter course would be much more efficient, the proceeding by statute. And I will go further, and say that in my opinion it would be difficult to get a satisfactory efficient teaching University

on a satisfactory basis without it, because the other course involves compromise, and compromise always, in my experience, means something which satisfies nobody. But this is really a question which I am hardly entitled to express an opinion upon, because it is really the advice which the Commission will give to Her Majesty, which is for them, and not for me. My own opinion is that nothing efficient will be done without statutory powers.

18,299. You would not yourself consider it a violent or high-handed proceeding on the part of Parliament?—No; and if you ask me for my parliamentary experience I should think that when Parliament knows the facts of the case it would probably give the powers.

18,300. Now there is this question of detail with regard to the Boards of Studies and the Senate. Mr. Crackanthorpe's view as presented in his evidence was that the Faculty of Law should consist almost exclusively of the Council of Legal Education, or be appointed by it, and that practically it should be independent of the Senate of the University?—My view is that it would not be necessary to maintain the Council of Legal Education, as they would have no longer any function.

18,301. And you would assign to the Boards of Studies the special duty of making arrangements for the course of study, for examinations and degrees; and you can recognise that they ought to be, like other Faculties, under the supreme control of the highest governing body of the University?—Yes.

18,302. (*Lord Reay.*) And such influence as might be exercised by the Inns of Court would be exercised by them through representation on University Boards?—Yes.

18,303. (*Sir George Humphry.*) With regard to the funds which the Inns of Court have, which might be applicable to such purposes, do you at all know what those funds are?—I am not at liberty to say.

18,304. The benchers know?—The benchers can ascertain what the income of their own bench is.

18,305. Is there any publication of the accounts?—No, the accounts are not published.

18,306. Then the knowledge really is in very few hands?—I suppose any benchers have access to the accounts, and could inform themselves as to the amount of income and the expenditure, but the accounts are not printed or published.

18,307. There is no statement of accounts laid before the benchers at any meeting?—No.

18,308. (*Professor Ramsay.*) Is it known from what source the funds are derived?—From landed property chiefly and proceeds of Consols. A large part of the property of Lincoln's Inn comes from the rents of chambers.

18,309. Was it left to the Inns?—I do not know how it was. Whether it was purchased or not, I cannot say. It has been held a great number of centuries.

18,310. (*Mr. Anstie.*) With reference to the Council of Legal Education, and the disappearance of it which you contemplated, there is a certain benefit in having a body of that kind as being common to the Inns of Court?—Yes, it might be said so.

18,311. It might, perhaps, be convenient with regard to any dealings, whether in statutory Commission or otherwise?—What I meant was, that if the suggestions which I have outlined were adopted the Board of Legal Education would cease to exercise their main function of arranging their curriculum of studies.

18,312. But they would still have certain other functions?—Yes, they might as a convenient committee of the four Inns.

18,313. (*Lord Reay.*) You would be quite prepared to leave the appointment of the professors to the University?—Yes.

The witness withdrew.

Professor Thomas Erskine Holland, D.C.L.

18,314. (*Lord Reay.*) I think you have given much attention to the question of University organisation in general, both here and on the Continent, and also to the specific question of the place which the legal Faculty should occupy in the University?—Yes. I have given a good deal of attention to both points.

18,315. I believe you have published articles on the subject?—I have written articles and letters to the papers on both questions. Also I gave an address to a rather curious gathering, at which, I think, your Lordship was president, viz., in the educational department of the Health Exhibition some years ago. I was very much surprised to be asked to deliver an address to that section on this question of legal education. With your Lordship's permission I will hand in a copy of that address (*handing same to the Commission*). Lord Justice Bowen was also to have delivered an address.

18,316. With regard to University organisation in general, you have seen the Gresham Charter?—Yes.

18,317. Perhaps you will give the Commission your views on the Charter?—I should like to state that I have read the Charter, but not the report of the first Commission on the subject, nor of the debates in the University of London, nor have I read the discussion about a professorial University. I am thus not well posted up in the whole controversy, nor am I sufficiently acquainted with the practical friction that there may be between the different bodies concerned, and speak, therefore, with considerable diffidence, and perhaps rather in the abstract. But I venture to say in the first place that the whole Charter should be reconstructed on different lines. I should put the colleges in the back-ground entirely. It seems to me that the prominence given to the colleges is very misleading. It is a sort of reminiscence which is not warranted by facts of an epoch, now passing away, in the constitution of the old Universities. In London the colleges, of course, would not be places of residence. They are, in the first place, collections of lecture rooms and laboratories, and, in the second place, they are corporations with, I presume, considerable funds and endowments for professors. From each of these points of view they deserve most careful consideration, and no doubt also with reference to the great services they have performed to the cause of education. I cannot help supposing that the only object of the governing bodies of those colleges is to do public service; not to maintain their own autonomy precisely as it now exists, but to throw themselves into this question with a view to being of the greatest use that they possibly can be to the nation. The same remark applies also to the University of London with which I have had the honour of being connected as examiner, and of which, therefore, I speak with the highest respect from some knowledge. As I have said, I should put these colleges into the back-ground, and in the Charter to be granted to the new University I should omit almost all the references to them, beginning with the recital that the Charter is granted on their petition, and so throughout. I should found the University mainly on the great divisions of study, that is to say, on the Faculties. I have put down some heads of suggestions as to the sort of Charter I should like to see granted, and your Lordship will of course understand that what I have jotted down is of the roughest possible character. I have not attempted to draft anything like even the heads of a Charter. First as to the name; I would

Prof. T. E. Holland, D.C.L.

22 Dec. 1892.

venture to hope that negotiations will be renewed with the University of London, and that that name will be ultimately acquired for the new institution. No doubt this aspiration has been expressed by many other witnesses who have been before you. The University of London, it appears to me, ought, after its reconstruction, to drop any interference with the colonies, any superintendence over the colonies, which I believe is now a small part of its activity; nor do I think that its superintendence, which at present is very useful, over the provincial teaching bodies, will continue to be as necessary as it has hitherto been. We have the Victoria University now taking a great deal of this work off the hands of the London University for the north of England, and it looks very much as if before long we shall have a Welsh University taking another large section of this work off the hands of the London body.

18,318. (*Mr. Anstie.*) And a Midland University we are told?—That I had not heard of as approaching; but I do think that the University of London will not be as necessary in this department of its activity as it has hitherto been. It has done good service, but it seems to me that it ought henceforth to restrict its operations to its own diocese, if one may use a term borrowed from a different department of thought.

18,319. (*Lord Reay.*) Would you make it purely local?—Yes.

18,320. And drop its Imperial character?—Yes. I should in the Charter attempt to define the "precincts" of the University of London. I should give some such definition as it was given in the last Charter—the county of London. My second point is that I should start by creating a University in four Faculties, and I should like those to be Law, Medicine, Science, and Arts. There might be the power of creating future Faculties, but one would hope that those powers would be exercised cautiously, and I should prefer to reserve such powers for a subsequent Charter. The custom of Europe does not authorise us in going much beyond the Faculties I have mentioned, and probably under them could be grouped all the necessary teaching.

18,321. (*Mr. Rendall.*) Do you include Theology in the Arts?—I should not include Theology at all as at present advised. Theology I supposed to have been purposely kept out of the scheme.

18,322. Sometimes it is included in Arts?—I would not include it in Arts.

18,323. (*Professor Ramsay.*) What do you mean by the custom of Europe? Do you mean it is the custom of Europe to exclude Theology?—I was purposely putting Theology aside, because I thought under the terms of the reference to you Theology was excluded. I daresay I am mistaken. Otherwise I should be glad to see a Faculty of Theology.

18,324. Your remark about Europe did not apply to that?—No.

18,325. (*Lord Reay.*) You would have no objection to a Faculty of Theology?—If there were no practical difficulties, yes. Of course we know that in Italy there is no Faculty of Theology, in consequence of the practical difficulties which there exist, and I should have thought that similar difficulties would exist here. So I would have the University founded distinctly in these four Faculties, and I think you will have to face the question, which is rather important, whether degrees in Arts or perhaps alternatively in Science, ought to precede professional degrees or not. That has just been touched upon this morning, and I think it is important. The old system was that all the superior Faculties were founded in Arts. You went through the Arts course, and then when you had a liberal education you entered upon the professional study.

18,326. In Germany they enter the Faculty at once because they rely on the gymnasium for the preparatory education?—Yes, in Germany the old system has entirely given way. In England it is very much broken in upon.

18,327. (*Professor Sidgwick.*) What is your view as to what is desirable?—I hardly venture to have a view. There ought, no doubt, to be some testimony to general culture at some stage, but how far you are to carry it I do not know. I am not sure whether something like the matriculation examination at the London University would be enough. I should like to carry it a little further I think. Then (and this is my third point) having created the University in that way, I should create next a strong council, or, as I should prefer to call it a Senate, and the constitution of this council or Senate seems to me perhaps the most important point of the whole charter. I should put in, first, the official members, the chancellor, vice-chancellor, and the like; secondly, at any rate for the present, certain nominees of the Crown to start the constitution. They might be afterwards dropped out. Thirdly, and to this I attach very great importance, groups of members nominated with special reference to the several Faculties, and I would have them nominated by what I call "Constituent Institutions" (which I use as a general term to cover the Colleges, the Medical Schools, and the like); but not exclusively by them; for I would give a voice also to some other bodies in the way which I will now indicate. *E.g.*, one would say: "For the Faculty of Medicine there "shall be x members to be elected by such Medical "Schools as are herein enumerated as being, or shall "hereafter be admitted to be, 'Constituent Institu-"tions.' For the Faculty of Law y members elected "by the four Inns of Court and the Incorporated "Law Society." I would have no members elected under this head till the four Inns and the Incorporated Law Society should come in, nor would I have any Faculty of Law started at all until by one means or another these five bodies have come in. Modes have been indicated to-day by which the coming in of these bodies might be brought about. It does not seem to me that the sort of staff that can be kept up by the existing colleges is, or can be, sufficiently endowed to make it worth while to have a separate Faculty of Law. So I would eventually have a certain number of members on the Senate to represent the four Inns and the Law Society. For the Faculty of Arts I would have z number of members elected by University College, King's College, and the Ladies' College (I do not know the proper description of it), or such of them as should have been admitted to be constituent institutions, also by the trustees of the British Museum. For the Faculty of Science I would have zz number of members elected by University College, King's College, the Ladies' College, possibly the Government School of Mines, and the Royal Society. Each of these four groups should form what I should call Faculty Committees of the Council, and without their advice hardly any steps should be taken affecting the particular study.

18,328. (*Lord Reay.*) The Faculty Committee of the Council is the Board of Studies?—I should constitute that rather differently.

18,329. (*Professor Ramsay.*) I think you meant the Senate when you said Council just now?—Yes, I have used the two terms synonymously.

18,330. (*Lord Reay.*) Whenever a subject relating to the Faculty should come before the Council this committee would be consulted?—Yes, and I should make it very difficult to override them. I should give these Faculty Committees almost dictatorial powers.

18,331. Then the Council would have nothing but a veto?—Something like that. Then for the present you might possibly add to this Council or Senate the existing members of the Senate of London University, if it is absorbed in the new institution. Afterwards, of course they would die out, and eventually, when only a few Senators of London were left and when the Crown members were also extinct, I would add one representative from each Assembly of a Faculty.

18,332. What do you mean by "Assembly of a Faculty?"—I will come to that directly. It consists of the professors. I fear that my notes are very inartificially drawn, so that what comes later is some-

times implied in what comes earlier. Then (and this is my fourth point) there must be a clause as to the powers of the Senate. One great function I think, would be to admit institutions to be constituent institutions of the University. It would also have a sort of veto over the appointment of professors and the organisation of particular lines of study. It would also authorise certain buildings to be used and the like, and I daresay it would have other functions. Then my fifth point relates to the Convocation of the University, but I should not call that together for 20 years. I do not think there would be any graduates who had sufficient experience as such to entitle them to a voice in the management of the institution in less than that period; and I should like to point out that the graduates of which it is to consist ought to be defined, that is to say, one asks, Are they to be full graduates with the highest degree, or is each B.A., or other person who takes his lower degree, at once to become a member of Convocation? I think he ought to go through a sort of probation and ought not to have a vote until he has taken the higher degree.

18,333. Then you would have a body called Convocation?—Yes, I should have Convocation.

18,334. What is, in your opinion, the advantage of having Convocation?—I see that in your Charter they are allowed to select the Chancellor and have certain functions of that sort, and I think it would be useful to let the graduates have a voice in representing their views. I would not give them any direct originative power.

18,335. Is it the experience of Oxford that Convocation is a useful body?—The analogous body in Oxford is what we call Congregation. It certainly is useful there. It has distinct legislative powers: questions are debated there as they are in the House of Commons, and new statutes are passed.

18,336. (*Professor Sidgwick.*) The analogy of that body to the one you have defined is not very near?—Not in function but in constitution.

18,337. They must have taken a degree?—It implies the passage of at least two years over your head, after taking your first degree, before you can become a Master of Arts, and I think that is important. The time of probation in the case of the other degrees implies further knowledge and advanced examinations. In the case of Master of Arts it means simply two years, but even that, I think, is valuable.

18,338. (*Lord Reay.*) Then Convocation would be an assembly of those who had attained the higher degree?—The full degree of Master of Arts or Science, or of Doctor in Law or Medicine.

18,339. Whether resident in London or not?—That I had not considered. I should probably give them a vote as long as they were on the books and allow them to come up.

18,340. You see no difficulty in having that outside influence brought to bear on the affairs of the University, which you have stated is to be an absolutely local University?—No, I do not see any harm in that. I think the man who had actually graduated here would take a pride in it, and it would be desirable that he should. But I do not attach much importance to Convocation. I should not summon it for 20 years.

18,341. You would keep them in suspense?—Yes, and in the meantime give all their powers, such as they are, to the Senate. Then my sixth point relates to the officers. These would be the Chancellor, Vice-Chancellor, and so on, and the Registrar. My seventh point relates to the members of the University, viz., the officers; the members of the Senate; all persons for the time on the teaching staff; all the graduates, and all matriculated students.

18,342. They would be members of the University?—Yes, they would be members of the University. That term is defined, I think, in the Gresham Charter. The Corporation, I think, consists of the Chancellor and members. In the eighth place, and this is rather an important point, in considering who the University teachers are to be, I would suggest some such definition of them as the following:—"The University "teachers shall be such persons, whether or not "holding office in any constituent institution, after "election by the appropriate electoral board, if any, "as shall have been approved by the Senate, after "consultation in each case with the Faculty Com-"mittee of the Senate specially interested in the "matter."

18,343. Then you contemplate in the constituent colleges teachers recognised by the University and teachers who would not be recognised?—Yes. The University would be quite supreme in picking out certain men and recognising them and leaving out others. The University would be responsible for the whole thing.

18,344. It would be a recognition of individuals and not a recognition for teaching purposes of institutions?—Quite so. That is just what I meant to express. They would be recognised to be professors, lecturers, or demonstrators—I do not know whether that is a sufficient list—in a given Faculty or Faculties. I would have them recognised in a given Faculty always. A University teacher should be at any time removable by the Senate with appeal to the Chancellor, and the cause would have to be specified.

18,345. (*Professor Sanderson.*) What you mean by recognised is what we mean at Oxford—when a man announces lectures they must be recognised?—Without recognition by the Senate he would not have the status of a University professor at all, so he would be ignored.

18,346. So he could not even offer his lectures?—No, he could not offer his lectures, he would not be known to the University all. I contemplate that some University professors would belong to the constituent institutions, and others would not. Now I come to a point (my ninth) about which your Lordship asked me with regard to the Boards of Studies and Assemblies of Faculties. The professors, lecturers, and so forth in each Faculty should form the Assembly of that Faculty. Each assembly should elect annually its dean; should eventually send one member to Council, and should elect a Board of Studies (of course the details must be provided in the Charter) of the Faculty, which should promulgate the list of all lectures, specify the subjects, times, and places of their delivery; and should prescribe, subject to the general supervision of the Council, courses of study, and subjects for examination. In short, I would give to the Boards of Studies very large powers indeed of controlling the whole education in the particular Faculty. The electors would not be bound only to elect members of their own body, and one would be very glad to see them elect distinguished persons from outside, for instance, judges and others. It might be desirable, as Sir Horace Davey said this morning, to take care that that was the case. There might also be some direct representation on the legal Board of Studies of the Inns of Court and the Incorporated Law Society. There would be no objection to that from my point of view.

18,347. (*Lord Reay.*) In the Assembly of the Faculty you would put all the recognised teachers in the University?—Yes, of each Faculty.

18,348. And would you have ordinary and extraordinary professors?—I think so. That is a question of detail.

18,349. Do you not think there is a great advantage in having promotion for professors; appointing younger men as extraordinary professors, and then promoting them to be ordinary professors?—Yes.

18,350. It is the simplest way of getting rid of a professor who does not come up to the standard of efficiency?—Yes.

18,351. And it works well elsewhere as we know?—It works admirably in Germany. It enables a man to see whether he is fitted for the career and if he is not he can leave it. Then the next point (my tenth) I venture to mention has reference to University buildings. I would define them as being: "such "examination halls, lecture rooms, laboratories,

Prof. T. E. Holland, D.C.L.

22 Dec. 1892.

"museums, hospitals, and so on, being within the "precincts of the University as shall be for the time "being on the register." The Council would have the duty of registering certain buildings as recognised for University purposes. My eleventh point has reference to the registers which should be kept of officers of the teaching staff in each Faculty, of Matriculations, of Examinations passed, of class lists, of scholarships and prizes, of University buildings, and of constituent institutions. My twelfth point relates to Matriculation. I would provide that students may be matriculated as such irrespectively of being or not being members of a constituent institution. I think that very important.

18,352. Would you have a matriculation examination?—Yes.

18,353. You are in favour of a matriculation examination?—Certainly, unless there is some evidence produced *aliunde* of sufficient culture. I should insist upon all persons, even if already members of a constituent institution, being matriculated by the University, after giving such evidence of proficiency in their studies as should be prescribed. Then (my thirteenth point) in order to graduate I would suggest that a student must prove first, his matriculation; secondly, the lapse of the prescribed time from such matriculation; thirdly, attendance on the prescribed instruction:—

18,354. You would have compulsory attendance?—Yes, I should. I would give plenty of option as to where and how; but I would insist upon it. There should be attendance on prescribed instruction given in University buildings by University teachers. Fourthly, the passing of the necessary examinations.

18,355. There are various ways of obtaining the same degree?—Yes; I would say there should be variety, and possibly even different degrees for different purposes. That is rather abnormal, but they have at Edinburgh a degree of Bachelor of Laws and also a degree of Bachelor of Law, which is rather a fine distinction. One is intended for advocates and the other for Writers to the Signet. Then (my fourteenth point) I would enact that all examinations should be conducted partly by University teachers, and partly by external examiners as to which there is a tolerable consensus of opinion now. Then at the end of the Charter I should define carefully "constituent institutions," or (which perhaps would be better), give a list of those which are to be immediately recognised, leaving it open to the Senate to add to the list afterwards.

18,356. Would you recognise an institution although you would not recognise its teaching staff?—I should not recognise its teaching staff.

18,357. Then what is the object of recognising the institution?—It would give it a right of sending members to the Senate and other privileges of the kind, and put it in relation with the University.

18,358. You would give the governing bodies of University College and King's College a right of sending representatives to the council of the University?—Yes. Perhaps you may not have remarked that I propose to give to those two colleges large rights in the Faculties of Arts and of Science though no rights in the Faculty of Law; and also rights to their medical schools in the Faculty of Medicine.

18,359. Those rights could be exercised by the governing bodies?—Yes, I suppose so. That would be a detail to my mind. It would be for them to decide, but they would send their representatives in the way they thought best, or it might be defined by the regulations.

18,360. Of course, in the case of University College with which I am acquainted, you might have a representative from the Council, and you might have a representative from the Senate; both elements might well be represented?—I have not gone into those details.

18,361. You do not wish to define it?—No, I do not go into particulars of it. Then, lastly, besides defining, or giving a list of "constituent institutions," you must also define the term "precincts of the University," or at any rate make it clear that all these institutions and all these buildings are to be within the administrative County of London including the county of the City of London. Those are the points I would suggest for the Charter. Practically, therefore, the Senate, as soon as it was constituted provisionally, would have to look round and see what professors it chose to recognise; then, what new Chairs were required, and how to get the funds for them, and then what buildings were suitable. The University would need central offices, and a hall, or theatre, for public functions, but the teaching need not be centralised.

18,362. Therefore the University might at once start a system of University lectures with professors who are now engaged in University work, and who would be recognised by the University?—Yes. I should hope that the University would be able to avail itself of the talent of University College, King's College, and the other places at once.

18,363. You do not contemplate that it would be necessary to have the University fully equipped before you commenced?—No, I would begin with the Faculties which are already ripe and let the other Faculties stand over until there is really good material for them.

18,364. And gradually expand them?—Yes, gradually expand them.

18,365. And there would be great advantage in making a gradual expansion. There would be gaps that had to be filled up?—Yes. I am decidedly in favour of a very gradual commencement, and of not starting any Faculties which are not likely to be immediately strong. I should not centralise the teaching, but should teach medicine at the medical schools, and should teach the whole of the law in the neighbourhood of Chancery Lane, about Lincoln's Inn, supposing the Inns and the Law Society to come into the scheme. I would not have any law at all except just in the neighbourhood of the courts. The whole thing ought to be concentrated there. I was asking myself what consideration could be offered to the colleges for coming into this scheme and it seemed to me that they would have sufficient reasons; they would have a preponderant voice on the Senate; they would have the recognition of most of their professors as being teachers' attendance on whom would qualify for the degree, and they would have a great voice also in arranging examinations. Then comes the question of the relation of the degrees given by this University to the various professions. I should like to maintain absolutely independent the existing bodies which grant admission to these professions, merely procuring their acceptance of the degree of the University as an adequate test of all that can be tested by examination, but no further. What I have to say upon that I would rather say with special reference to legal education if the Commission have patience to hear me any further to-day.

18,366. With regard to the Faculty of Law you have heard the evidence given by Sir Horace Davey. Perhaps I may ask you whether you agree with the statements he made to us with regard to the objects of the Faculty of Law and the means which ought to be taken to start it on a sound footing?—Yes, I cordially agree with almost every word that was said by Sir Horace Davey to-day. I do not know whether it is worth mentioning, but there might be a doubt whether he made certain points quite clear about the Oxford studies. I think he drew a little too sharply in general the line between theory and practice in teaching. I do not think that much teaching is given at Oxford in English law, at any rate, without the closest attention to practice. I may say that a man who learns English law there does not learn it "in the air" in the least, but he learns it with constant reference to cases; he is taught to study the cases that are reported every month, and he is posted up in the latest decisions of the courts.

18,367. Would you agree with what Sir Horace Davey said with regard to the cases being based upon

principles?—I did not quite follow Sir Horace there. I think it was your Lordship or Professor Sidgwick who pointed out that there is a difference in this respect between the continental courts and the English, that the continental courts do really attach value to principles in a way that we do not, and they do not attach the same force to cases that we do. I think all English law teaching must be directed to the cases, no doubt as containing principles, but in the first nstance as being conclusive.

18,368. Then you do not agree with him on that point?—Not fully. Of course I quite concede that London is the best place for studying law, and I think everybody must come to London to finish his education at any rate. After men have been to Oxford or Cambridge they must come here to study in chambers.

18,369. You contemplate that if there is a school of law in London your students would come?—No, I do not think so. I think we should have done for those of them who had gone through our full legal curriculum all that could possibly be done in the way of teaching except in certain technical subjects. But those technical subjects cannot be taught in a University. I think our students would come up with a knowledge of principles, and would go straight into chambers and would have nothing to say to the classes in London. That is my conception. That is to say, that the London University Faculty of Law would be alternative to the Oxford or Cambridge Faculty of Law, but the Oxford or Cambridge Faculty would not necessarily lead up to further study at the London University.

18,370. You think they would be concurrent?—Yes. I think Oxford and Cambridge would have some advantages which might lead some men to pursue their studies there.

18,371. But there is a technical part which you say cannot be taught by a Faculty?—Yes, there is a part which must be learnt by everybody in chambers or offices.

18,372. (*Professor Sanderson.*) Do you contemplate that the degree should be part of the qualification?—Yes. As far as examination goes the degree ought to be absolutely conclusive.

18,373. I mean that it should be accepted as evidence of part of the education required for qualification?—I think it ought to be accepted conclusively and finally as far as examination and teaching goes. It will not supersede the training in the offices.

18,374. (*Lord Reay.*) Has the Faculty at Oxford or Cambridge tried to obtain full recognition from the Inns of Court?—Yes, constantly.

18,375. What has been the result?—We have obtained partial results, but not what we want. They take part of the topics as sufficiently covered. They say to our graduates "In Roman law we shall not "have to examine you again." In real property and in certain other subjects they are not satisfied. Our B.C.L. degree implies an infinitely higher standard than the Bar examination. There is no comparison at all; it is an honour standard with a very wide range. It is a ridiculous hardship that a man who has passed that should come up here again and pass a rudimentary examination which he laughs at.

18,376. With regard to the question of precedent examination in Arts you would not like to add anything to that?—No, it is, however, a question to be faced.

18,377. What number of Chairs do you think the Faculty of Law should have?—I may perhaps say that I think there ought to be this sort of staff; a Chair of jurisprudence and comparative law. Sir Horace Davey said a good deal this morning about the need of comparative law being studied. I do not think all the students, or even a large portion of them would have time to study comparative law, but I think it ought to be open to them to get the instruction if they wish it. I should have a professor and a reader on this subject. I think everybody ought to be driven through a sort of drill of analytical jurisprudence, and there ought to be lectures on comparative law for those who can go to them. In the German Universities they teach what is called "Encyklopädie," and I think it is useful to a beginner. In Roman law I think there ought to be at least two professors, in international law one, and on the conflict of laws there ought to be one.

18,378. Where do you put international private law?—I use the term conflict of laws as synonymous with, and preferable to, that very misdescriptive term. Although it is not a very big topic I should have a separate professor of it; he need not always be lecturing, but it is a topic that is very special, and it ought to be handled by a man who has made a special study of it. Then I should think on English private law there ought to be four or five professors at least, covering such topics as real property, contracts and torts, mercantile law, equity, admiralty and probate, procedure and evidence. Then on English public law there ought to be two professors, one of constitutional law and another of criminal law and evidence. When I say professors I do not mean that all these men need be full professors.

18,379. Ordinary or extraordinary?—Yes. I do not think I have mentioned the History of English law. There ought to be a special professor of that, because until there is we shall never have books written on it. It is generally grouped with constitutional law, but I do not think there is really much connexion between them. It is only on certain points that the two topics coincide.

18,380. (*Mr. Anstie.*) Procedure would come a little nearer?—Yes, and in the constitution of the courts there is a point of contact between the two subjects.

18,381. (*Lord Reay.*) Would you have a Chair of Administrative Law?—Yes, I suppose there ought to be one. It is not very important in England.

18,382. It is becoming more so?—Yes. I daresay it would be wise to have something of that kind dealing with the whole topic of local government as well as what is specially called administrative law, of which we have not yet much. Then a Chair of Oriental Law and a Chair of Canon Law, as long as we have an Established Church, Canon Law, and the Statutes affecting the Church. That would naturally be held by the chancellor of a diocese. Then besides the regular staff one would like to see occasional courses given, possibly by judges. I believe there are one or two judges who would not object to give a course occasionally. Then as to the appointment of professors that should be, I think, by a Committee of the Inns of Court and the Incorporated Law Society, small enough to be responsible to public opinion. The names of the members ought to be known, and the committees might, perhaps, also include one member from the Law Faculties of Oxford and Cambridge, or from the new University of London itself. The committee should not exceed five altogether.

18,383. (*Lord Reay.*) Would you have a separate board for the appointment to each Chair, or would you have one board to appoint to all Chairs?—I think it would be better to have separate committees, as we have at Oxford, specially organised. I have not worked it out, but in any case I would have the members of the committees appointed by the four Inns and the Incorporated Law Society, with some external help from the older Universities; one member from Oxford and one member from Cambridge. I have not worked it out in detail, but I quite agree that it would be better to have different bodies for the different Chairs.

18,384. And you must avoid the danger of having the boards too much under professional influence?—I do not rate that danger quite so highly as some people would if you could bring public opinion to bear upon these bodies, and if the names of the appointors were known. There are very good men in the Inns of Court if they only be got into the right committees.

18,385. Of course you would make the appointment subject to the sanction of the Council of the University?—Yes, it would have to be subject to their

Prof. T. E. Holland, D.C.L.

22 Dec. 1892.

sanction. Certain professors would be appointed for life, and I think others for short terms. The salary ought to be liberal. I do not think the full professors, if they are to lecture much, ought to have less than 1,000*l.* a year.

18,386. And fixity of tenure?—Certainly, either for life or for a definite period. I should allow at least all the English law professors to practise, and if they could not do their duties consistently with practice they should resign. But I think if they are not in touch with practice their teaching would lose very much.

18,387. You do not make it a *sine quâ non* that they should all be?—No, but I should not disqualify them. It is sometimes proposed to disqualify them from practising, which seems to me be a grave error.

18,388. (*Professor Sidgwick.*) Would you give those who were in practice 1,000*l.* a year too?—Yes.

18,389. Then they would have more than the others?—Yes. I think that is often the case with the medical teacher; he occupies a place as professor in a medical school, and he has a big practice. When his practice becomes too large he abandons his Chair.

18,390. (*Mr. Rendall.*) Is is not rare for there to be a large salary and a large practice?—I have no actual knowledge of what goes on in the Medical Schools, but I think you will have to pay these men a considerable salary, because they would not have the certainty of making at least some professional income that a medical man has. A medical man can generally keep himself going to begin with, which is not the case with a barrister.

18,391. (*Lord Reay.*) And the teaching interferes, perhaps, more with the practice of barristers than it interferes with the practice of a doctor?—Yes. It might be fatal to it ultimately. Then I think the lectures ought to be open to all comers, probably with a fee, but should count for degrees only to matriculated students.

18,392. The matriculated students, of course, would take precedence?—No doubt they ought, but otherwise I would throw the lectures open to anybody who came, on payment of fees or fulfilment of other conditions. Then examinations should pre-suppose attendance at lectures during a certain period. Possibly one might dispense with a certain portion of the attendance at lectures in favour of attendance in chambers or in an office, but in some way or other there should be professional study carried on for a definite period before a man presents himself for examination.

18,393. What do you mean exactly by professional study?—I mean to say working at deeds and pleadings, and so on, in an office or the chambers of a barrister.

18,394. You make that a *sine quâ non* before he obtains a degree?—No. I say that ordinarily a man must show that he has been attending lectures during, say, three years, but I would dispense with part of the three years if he would show alternatively that he had been in an office or chambers.

18,395. Then you accept that as a substitute for part of the lectures?—Yes. I would let him off perhaps a year's lectures out of three if he had been certified by his master to have studied well in his office. I think that would be so valuable that you might accept that as part of the University studies.

18,396. The Board of Studies would have to arrange for that?—Yes.

18,397. The study in chambers would be a substitute for lectures?—Yes, for some of them. Then I think I would rather have a high pass examination in law than classes. Class lists are overdone in most places. But no doubt a few prizes would be a good thing for men who did exceptionally well.

18,398. You would make the standard of degrees a high one?—Yes.

18,399. And you would not have an honours standard?—I do not think I would have classes, but I would have some prizes or scholarships extra. The standard should resemble that of our degree of Bachelor of Civil Law at Oxford, which is an honour degree. We classify the men and do not give the degree to anybody who does not come up to the third class. But I think without classification you might make an honour degree.

18,400. Then ought you to have a preliminary examination and also an intermediate? In France they have the Bachelorship, the Licentiate, and the Doctorate, and in Germany they have only a final degree examination?—I believe it is so in Germany. I do not know about France.

18,401. Then with regard to what Sir Horace Davey called a catechetical part, what is your view?—I do not attach much importance to that. I think a professor ought to see his pupils, to look over an essay or something of that kind from time to time, so as to have an opportunity of conversation with the pupils, but I do not think much good comes from catechetical lectures.

18,402. Would you have in the Law Faculty anything like the German system of seminaries?—Yes; I think special study of that kind might be very useful.

18,403. A number of selected students work out certain subjects in the higher stages in detail. The professor assists them in the method of inquiry and to follow up with them certain lines of inquiry?—Yes. If you could get men with leisure enough for that, but our practical men are hurrying on so that I am afraid you would not get any.

18,404. In Germany they have it and the *École libre des Sciences politiques* has adopted that system, and it is a curious fact that the first group they started was under the present Prime Minister of France?—No doubt that would be extremely interesting. Then I think this examination would qualify for the degree of Bachelor of Laws. As I was mentioning, at Edinburgh they have an abnormal degree of Bachelor of Law, which is meant for the Writers to the Signet, which is not so advanced as the Bachelor of Laws. One does not like that fine distinction of nomenclature. I should have thought it would be sufficient to have certificates such as I think they give to notaries in France. I think in most continental countries they have a separate course for notaries. I know they have in Italy. It occurred to me that there might be special certificates after a two years' course, or something shorter, to meet the case of people who did not want the LL.B.

18,405. In France you have the licentiate?—Yes.

18,406 That is all a matter of detail?—Yes.

18,407. You only want to have different stages?—Yes. Then I should make every man do Roman law for his degree. I would venture to put the claims of Roman law rather higher than those of foreign systems generally, or of Hindoo law; even if it were only for this reason, that the Roman law underlies all the systems of the Continent and several others besides. It is not merely that it is co-ordinate with all the foreign systems, but it is the mother of a great many of them. It is like learning Latin with a view to learning the Romance languages afterwards. It is also essential for diplomatists to know something of Roman law.

18,408. (*Professor Sidgwick.*) Would you say it is essential to learn Latin to learn the Romance languages?—No, I do not say it is essential, but it throws a good deal of light on them.

18,409. Would you say it was a saving of time?—Perhaps not a saving of time for merely ordinary purposes.

18,410. Do you think it is a saving of time in the study of law to learn the Roman law?—Yes, I think the case is different there. The conceptions flow historically in so very important a way from Roman law. I think you would save time by learning it, so I would make that essential. I think for the higher degree of Doctor of Laws there ought not to be any examination. The examination in the University of London for the degree of Doctor did not strike me as so satisfactory as the examination for the degree of Bachelor. At that later stage of life men do not sit so well under exami-

nation as they do at an earlier stage. I think you ought to have a good published work or the writing of a special dissertation which is approved. We have introduced that at Oxford with very good results. The book or dissertation has to be submitted to a Committee of the Faculty, which reports upon it to the Faculty Board, and only if it is approved does the man get his degree.

18,411. (*Mr. Anstie.*) The same principle exists at the University of London with regard to the degree of Doctor of Science?—But it has not been introduced in regard to law.

18,412. No?—I am convinced it would be a great improvement to introduce it in all law graduation Then as to locality, one would hope that all that is necessary would be provided by the Inns of Court and the Law Society in the neighbourhood of Chancery Lane somewhere, either by means of the halls of the Inns of Court or by specially constructed places, and if possible a students' law library should be founded in that neighbourhood. It would be a great boon for the Inns of Court because it would clear their libraries of the mere student reading his text books, who is now very often in the way of persons making more advanced research, or working practically in the courts. Then, lastly, a few words on the relation of the degree to the legal profession. As I think I stated before, I would have the Inns of Court and the Law Society continue to be wholly responsible for admitting persons to the profession. They would go on exercising discipline over the profession, and the Inns would keep up such social life as it is possible to maintain in the profession of the Bar. I am not one of those who think that the dinners in the Inns of Court are wholly without use. I have derived great benefit from them; I have made many friends at the dinners at the Inns, and am sorry that they are not better attended than they are now. I would leave to the Inns of Court the discipline of the Bar, but would relieve them, as Sir Horace Davey said, of the duties of examining and teaching. I would give to them and to the Law Society the greatest weight and the greatest voice in arranging who the professors are to be and what the examinations should be, and the like, but I would not let them do the work themselves directly. They would have a preponderant control over the whole legal course in this University, and they would aslo say what special technical certificates they require for the two branches of the profession in addition to, or in substitution for, that degree. Then I should like to point out, in answer to something that was said to-day, that similar privileges ought to be extended to other good Faculties in the kingdom: the Oxford law degree ought to be accepted equally and concurrently with that of the University of London as conclusive of a proper standard of knowledge having been obtained in all that can be tested by examination. Similar recognition might, no doubt, hereafter be granted to the degrees of Cambridge, and possibly of other institutions in the United Kingdom. But in return for that we ought to offer to the Inns of Court and to the Incorporated Law Society some share in the government of our Faculties. We are quite prepared, I believe, to do so at Oxford, and I may mention that we have at the present moment two very eminent persons co-opted on to our Board of Faculty, namely, the present Lord Chancellor and Lord Justice Bowen. We have had others before—Lord Justice Cotton and Mr. A. Cohen, Q.C.—who, though they have not come to our meetings, have been of use to us by advice and in other ways. I should like that carried much further, and then in return for it to get our degree accepted as final, so far as any examination goes, in accordance with the principle *Nemo debet bis vexari pro eadem causa.* It is a great nuisance for a man who is thoroughly well examined at Oxford to come up here and be put through the mill again; and a very inferior mill it is. I do not know that I have anything further with which to trouble the Commission to-day, and I must apologise for the rough way in which I have been compelled to jot down my notes for the remarks which I have made to them.

18,413. (*Lord Reay.*) The Faculty would decide how a University degree should be obtained: no outside body would have any control over it except in an indirect manner?—No.

18,414. The University would have paramount power over the studies, and over the examinations?—Certainly.

18,415. (*Professor Ramsay.*) Did I understand you to say that the Faculties were to be made up out of the institutions?—No, not exactly. The Faculties proper would consist of the teachers wholly. The Faculty Committees of the Senate would be elected to a large extent by what I have proposed to call the "constituent institutions."

18,416. The members of the Senate?—Yes, the members of the Senate. For instance, the Law Committee of the Senate would come entirely from the four Inns of Court and the Law Society. There would be regulations of course to settle how they elected their men and what number of men they would elect.

18,417. But the Faculty would contain a great many teachers besides them. They would be on the Faculty, but in addition to that all the teachers recognised in the University or doing University work would be on the Faculty?—None of them would be on the Faculty in my scheme.

18,418. None of the teachers?—All the teachers but none of these other men who are sent as members of the Senate. My Assembly of Faculty, and my Committee of the Senate looking after the affairs of the Faculty are quite different bodies.

18,419. (*Mr. Anstie.*) Your committee is an organ of the Senate, or the Council, or whatever it might be called?—Yes.

18,420. And the function of that is to meet and deal with the special Faculty and consider matters in common?—Yes.

18,421. (*Professor Ramsay.*) Then you spoke of buildings as belonging to the University?—Not as belonging to it necessarily, but as available for its use.

18,422. That is to say, every building used by the University would in that sense be a University building?—No, the buildings would have according to my scheme to be separately recognised. The teachers would have to be recognised and also the buildings, and the buildings must be within a certain radius, or their being recognised would not be contemplated for a moment.

18,423. How would it affect University College in that respect?—Our Council would consider "Does "that college present such advantages that we wish "to recognise it?" Then they would communicate with the college and say, "Are you willing to be recognised by us."

18,424. Then the buildings would not be handed over?—No.

18,425. You would simply register them as buildings in which University teaching might take place?—Yes.

18,426. And University teaching might not take place in others?—University teaching might not take place in non-registered buildings.

18,427. Supposing King's College was held by the Council not to come up to University College, the King's College buildings would be outside the University range although the University teachers in King's College might be recognised?—Yes.

18,428. Then what would happen to a professor in King's College who was recognised when the buildings in which he taught were not?—He might be invited to lecture at the Inns if he were a lawyer, or in Chancery Lane; or the University might be otherwise able to provide for him. If they could not provide for him he would fall through; he could not lecture.

18,429. Then you must not only have University lecturers, but they must lecture in University buildings?—Yes.

Prof. T. E. Holland, D.C.L.

12 Dec. 1892.

18,430. (*Mr. Anstie.*) You are opposed to making any distinction in graduation at the University between pass and honours?—I rather hold that view.

18,431. But would you abolish that distinction where it exists?—Yes, I am rather inclined that way.

18,432. Would not that tend to lower the character of the degree?—It is a very difficult question and a wide one.

18,433. You would not express an opinion?—I would not express an opinion, but I very much incline that way. I should like to hand in the supplement to the "Oxford University Gazette" showing the organisation of our lecture lists: also a book just published at Strassburg, called "Minerva," showing the organisation of all the Universities of the world. I do not know whether the Commission have had their attention directed to this useful work. (*A copy was handed to the Commission.*)

18,434. (*Mr. Rendall.*) I was not quite clear whether in what you said you distinguished between Council and Senate, or used the terms indifferently?—I used them synonomously. I prefer Senate myself.

18,435. In the way you deal with these bodies do you regard them as institutions rather than as groups of members of different institutions?—The electors to my Senate are not all constituent institutions. For instance, I propose that the Royal Society should help in nominating some of the members of the Senate, in respect of the Faculty of Science, and the Trustees of the British Museum in respect of the Faculty of Arts.

18,436. How would you avoid the difficulty of unduly multiplying bodies if you take the institutional representation as a basis. There are not only the 13 Medical Schools and King's College and University College, but there are an immense number of institutions from whom we have had evidence—Bedford College, Holloway College, the Birkbeck Institution, a large number of theological colleges, a large number of training colleges, City and Guilds Institutes of various kinds, South Kensington, and so on. The number of institutions is enormous. You can hardly give more than one representative to each institution?—I should not give nearly so many. I should make them club together and elect members between them. I should put the Medical Schools together and let them elect their representatives. I should not let them have a member each.

18,437. What do you think would be the result of a constitution of that sort? Who would be the kind of representatives likely to be elected? Would it not naturally be rather a member of the governing body than one of the teachers? In King's College or University College, for instance, or a medical school, would not the tendency be to elect a chairman or some responsible head of the institution rather than any teacher?—That might be so; I do not know; the responsibility would be with them. But you see each institution, according to me, would not have a man for itself. The 13 Medical Schools, if there are so many, would appoint perhaps six men. There would be a conflict of interests.

18,438. I should have thought naturally precedence would be given to some one who was in the honorary position of chairman or head of the institution. No doubt various institutions would put forward different representatives, but the tendency seems to me to be almost inevitable that they should select some one who had titular position or precedence in the body?—I should have thought Guy's would conflict with St. Thomas's on a question of that kind, and that they would combine to run in distinguished scientific men. One would hope so.

18,439. The constitution you suggest provides no guarantee for a balance on the highest body of the University between the teaching element and the administrative element represented by such people as the chairman or heads of institutions?—No, that is quite true.

18,440. Had you thought of that at all?—I had thought of it. I had not deliberately disregarded it.

18,441. There would be on the one hand a number of nominees representing the administrative side, and probably representing large bodies like the Inns of Court, but as far as institutions are concerned representation by direct election from the different Faculties would give a balance of teaching representation and a direct balance proportionate to the strength of Faculties on the highest body of the University?—What I wanted to do was to give the institution some consideration for coming into the scheme. That was my main motive. I think, for instance, that if the law professors were to elect the members of the Senate the Inns would not be interested in the matter. The only way to interest them would be to let some central body formed by the Inns and the Law Society send in the legal representatives.

18,442. In your scheme did you approach it chiefly from the side of the law?—No doubt I was thinking chiefly of that.

18,443. In law it would be easy to give the Inns of Court, and in medicine it would be easy to give the Conjoint Board some representation on the Council as well as some representation by Faculties. Do you see any further objection to that? The chief inducement to come into the University would be the University status that was gained; recognition and participation in giving the degree. Those would be very strong inducements to all educational institutions, but not so much to law?—I should have thought it would be a strong inducement to University College to come into the scheme. It would send in a very large body of representatives in the Faculty of Arts, and also in the Faculty of Science.

18,444. Not a large body on the Senate or Council unless the number was very large. Naturally University College as the strongest institution would be disposed to secure a large amount of representation?—I should not give it any representation for law; nor for medicine, except for its Medical School which would rank as one of the Medical Schools of the Metropolis.

18,445. Then that is the inducement, that is the reason?—Yes. With reference to the Inns of Court to try to interest them in this new scheme by showing them that they would have the absolute control of this study which is so essential to the men who intend to practise in the profession.

18,446. (*Lord Reay.*) Absolute control over the professional part?—Practically I should give them control in the appointment of the teachers. Of course the curriculum and all that would be worked out by the professors.

18,447. (*Mr. Rendall.*) There is one further point. Where a teacher belongs to an institution, such as the British Museum for instance, such teacher and such institution would have no direct representation at all, nor any voice or representation on the University Council?—I should not confine it to constituent institutions. I would give a vote to the Royal Society.

18,448. Say a teacher of the Birkbeck Institution came in as a recognised teacher of the University he would come on to the Faculty, would he not?—If he were admitted by the Senate.

18,449. But you say that neither he nor the institution to which he belonged could have any voice or representation upon the Council or Senate?—No. You cannot give representation to everybody. I should not consider those cases.

18,450. You would not consider it was required?—No, I should disregard them.

18,451. (*Professor Sanderson.*) I should like to understand the method you recommend with regard to recognising teachers by the Board of Faculty?—It would not be by a Board of Faculty. It would be by the Senate of the University.

18,452. In the first instance by the Council or Senate?—Yes.

18,453. In that case it would not be a very effectual way of keeping out the ineffectual teacher, because if it were merely an act of recognition, any reasonably

Prof. T. D. Holland, D.C.L.

22 Dec. 1892.

good teacher would have a claim to that recognition. Is it not absolutely necessary that every teacher whether subordinate or higher, should go through some process of election?—WhenI said "admitted" I meant a very serious process.

18,454. Not the least like our Oxford process?—No, I do not mean anything analogous to the process by which notices of lectures to the lecture list, I mean regular election as professor. I only covered it by the general word "admission."

18,455. The election of all teachers would be the same?—Yes.

18,456. Always by this Board?—Yes, always by the Senate. It would be very serious act. It would be the most important thing perhaps in the University system.

18,457. With reference to the higher studies in law, is it in your opinion desirable for the promotion of legal science, or for the good of the public that men should be encouraged to undertake what may be called higher, or what the Americans call post-graduate, studies in legal science?—I think so, for those who can spare the time for it, or those who aspire to Colonial practice or Indian practice, or who wish to take up a professorial career. Of course a man who is keen after earning an income at the Bar would not do anything of the kind.

18,458. And with reference to the Doctorate, would you regard the thesis as an evidence of real work done?—I should make it original work.

18,459. Would you only give the Doctorate to men who had done some new work?—Yes.

18,460. May I ask what is the reasonable duration of a legal education including both the study of principles and the learning of practice?—I should think if you divide the two things you might learn the principles in about two years and a half; then I should think you ought to have about two years more for learning the technical, in chambers or in offices and going about the courts. Then you would have some idea of the thing.

18,461. In Oxford the legal part of a man's study usually lasts about two years, I suppose, does not it?—Yes, about two years. That is if he qualifies for the degree of B.A. by going through the School of Jurisprudence. Then if he reads for the B.C.L., which is more advanced, he goes usually up to London, continues his reading in chambers, comes back to Oxford for six months, or as long a time as he can spare, and goes away again.

18,462. (*Lord Reay.*) If we incorporate in the Law Faculty all the subjects which the French have separated from their Law Faculty and placed in the *École libres des Sciences politiques*, we might have a special board of studies for those subjects?—Yes, I should think so.

18,463. Because those curricula would be entirely differentiated from the curriculum for the Bar?—I should have thought it would be rather like what happens now at Oxford, that many of the professors' lectures are put down in two lists. Professor Burdon-Sanderson's, for instance, occur both in the medical list and in the science list, and so I think many of the legal lectures might occur in a *Sciences politiques* list, and also in a law list.

18,464. You might in some cases duplicate them?—Yes.

18,465. There would, however, be lectures, such as science of finance, history of treaties, and history of political economy, which would not overlap?—Yes.

18,466. In fact, all that large range of studies which public men require would make it necessary to differentiate in the Faculty if we are not to have a separate Faculty those studies, of course, would not be within the province of the Inns of Court. The professorial element would be admirably represented by some of the highest permanent officials in the Public Offices?—The Permanent Under Secretary of State.

18,467. Yes, men like Sir Robert Herbert, for instance?—Yes.

18,468. You would have no objection to that?—No, not at all.

18,469. It would be very desirable to connect the University with that side of applied science?—I quite agree that that would have to be worked out in some way. There might be some modification of the school in that sense.

18,470. Have you anything to add?—I think not.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Forty-fourth Day.

Friday, December 23rd, 1892.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

The Right Hon. the LORD PLAYFAIR, K.C.B., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
The Rev. Canon BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

The Rev. T. W. SHARPE, M.A., and H. E. OAKELEY, Esq., M.A., examined.

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

18,471. (*Lord Reay to Rev. T. W. Sharpe.*) You wish to give evidence with regard to the training of teachers by the Universities, and the status which the students in the training colleges should occupy in a University?—Yes.

18,472. Would you explain by what methods you think these objects can be attained?—As to the status of students in training colleges I may say that it has risen considerably in recent years. The syllabus of studies at the training colleges was originally pitched

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

for a much lower degree of knowledge. It was thought at that time that the residential training colleges were training teachers for a humbler class of schools than those which they now are called upon to teach. Several conditions also have altered since the training colleges were first established; the appointment of a better class of teachers in the colleges; the establishment of pupil-teachers' centres by most of the large boards for the purpose of raising the educational and professional status of their pupil-teachers, and the removal of the restriction of the University of London, that no one could matriculate without a knowledge of three foreign languages, either dead or living; and the higher pay generally of the teaching profession; these conditions have all tended to raise the status of the students at our training colleges. During my inspectorship of training colleges, I endeavoured, with the concurrence of my superiors, to lead students, as far as possible, in the direction of matriculation at the London University in order that they might afterwards, if they had leisure, qualify themselves by private study for the B.A. examination, and so raise their position. When I first knew the training colleges in the year 1875, there was no provision, or scarcely any, for the teaching of pedagogy except merely practically and experimentally; but with the concurrence of some leading training colleges I introduced some elements of psychology to give some sort of scientific basis to the training which had till then been without any scientific basis. The students in training colleges at the present time are of much higher status or position relatively to other classes of cultivated men than they were 15 years ago. Mr. Oakeley will be able to tell you better than I can how far they are on a par with the ordinary B.A.'s at the older Universities, and how many of them now, either at the time of their residence in the training colleges, or by private study, after they have left it, have taken B.A., or B.Sc. examinations. They pass an examination, as a rule, in all the ordinary English subjects, and acquit themselves better, as far as I am a judge, than most English people who have been trained at schools and Universities. They also have, generally (I am speaking of the higher students), a good grammatical knowledge and power of translating Latin and French books, and most of them have also passed a rather difficult science examination in two subjects designed specially for them by the South Kensington examiners; so that I think they clearly have a claim if a teaching University were founded to come within its scope, whether as affiliated colleges or in some other way, and a claim that they should have the higher teaching which only University professors can give. As regards the teaching staff of the colleges, I may say that there is very great variety of lecturers both in attainments and in their power of teaching. If I am wrong as to the present state Mr. Oakeley will correct me, as I speak from recollection of four years ago. The Education Department has a veto upon any teacher, so that there is no absolutely defective teaching; but the teaching is of a very variable character, and it is only by pressure upon the committees that the inspectors of the training colleges have the power of insisting upon a better class of teachers. There is no jealousy in the colleges, so far as I know, as regards coming within the scope of University teaching. A teaching University might be very serviceable to the colleges. If a Chair of Education were established at a University, I think a professor who either collected the students of the neighbouring training colleges or visited the outlying ones, might be of very great service in raising the ideal of education both on the physiological and psychological sides. Mr. Oakeley will correct me if I am wrong, but in my time there were only two professional teachers of physiology, at Westminster Training College and at Saltley, and the teachers of psychology were of a very moderate order indeed. There would be a great economy of teaching power if the colleges could be grouped in the same way as they are grouped at Oxford and Cambridge for lectures, and the professors might deliver the higher lectures on education, or on any other subjects that a University might think fit to agree upon with the colleges. But speaking specially of education I think they might send the professors or gather the students together on those two subjects, and the teaching staff of the colleges might very well supplement their lectures either by amplifying or simplifying them for the students, and also by applying them to the practical works of the practising schools. All friends of education ought, I think, to welcome the proposition to raise the future educators by some connexion with University teaching which would supply a higher ideal than at present exists. I speak with great respect of the training colleges. They do immensely hard work. I do not know whether Mr. Oakeley will take the same view as myself, but I consider that as a rule, in the provincial colleges especially, the country has a right to expect a higher and better staff than is at present to be found there, except for some of the lower branches of the studies. Passing on to the subject of the examination, though the question is more especially connected with teaching, (as the examination will probably follow the teaching,) I think there should be one professional diploma for all classes of schools. At present the students of training colleges are divided into two sorts; those who attend day colleges and those who attend residential colleges. The students of the residential colleges pass out with the University stamp upon them; the others pass out with a stamp which I believe to be of nearly equal value, but which is not of equal value in the eye of the public. That is the Government certificate stamp. I think it is desirable that the students in the residential colleges should be able to acquire the same status in the eyes of the public as those of the day colleges. That is very desirable for several reasons. It establishes a comparison at once of the work of residential colleges with the work of the day colleges, and the professional money value of a degree at the University is higher, and ought to be higher than the stamp of a certificate by a Government Department; also the standard of education is likely to be more flexible, and to be less stereotyped than necessarily is the case in a Government Department with so many vested interests to consider. Those are the chief points which I desire to lay before the Commission.

18,473. You do not ask for a special B.A. degree with a special curriculum for students at the training colleges?—No, I should deprecate that very greatly. I should have the same standard of knowledge for the students in the training colleges, and for all outside students, whether attending a University or not.

18,474. And the University is not to supersede the training college?—The training colleges would probably establish relations with the University by mutual consent. The colleges should still exist for the social and domestic training and also for the class-teaching, which no professors in English Universities would have time enough to give. The class teachers should be left to supplement the lectures of the professors much as others do now at Oxford and Cambridge.

18,475. Which Chairs do you wish to see established in the University? I gather from the evidence you have given that you want a Chair of the theory and practice of education, another Chair of physiology, and another Chair of psychology?—I should desire separate teachers for the two branches, physiology and psychology, making psychology include the theory and practice of education.

18,476. You would put that Chair in the Faculty of Arts?—Yes.

18,477. And the other Chair you would put in the Faculty of Science?—Yes.

18,478. Those Chairs would not supersede the necessity for similar education being given in the training colleges?—Of a lower or more practical nature, scarcely perhaps of a lower, but I may say of a more practical nature.

18,479. The University would supplement the training colleges?—The University would direct and the training colleges would supplement, and carry the teaching forward to a practical purpose.

18,480. But would you give preference in the appointment of school teachers to a man who had been at the University giving a man who had been at a training college a subordinate position?—I should prefer a teacher from a training college to an untrained University student.

18,481. You attach importance to a man having been either at a day training college or at a residential training college?—The very greatest.

18,482. Would you allow the University itself to examine in those branches in which it has taught, or would you have a board of examiners, as it were, for the whole country?—A board of examiners for the whole country would be most desirable; supposing it was conducted by the teaching University alone a board of examiners consisting of some of its representatives and also represensatives of the training colleges would form the best board.

18,483. A mixed board?—Yes, a mixed board for that particular branch.

18,484. Practising schools are attached to the training colleges?—Invariably. That is one of the conditions of their existence. The residential training colleges have one generally on their own premises or within a short distance. The day training colleges, as in the case of King's College, have to send their students to one or more outlying primary schools.

18,485. And you do not contemplate, of course, that the University should undertake anything in connexion with that department?—No, no part of the practical application of the two sciences.

18,485*a*. The University would deal with purely theoretical subjects?—Yes, purely theoretical.

18,486. (*Professor Sidgwick.*) If I understand your view the students can go through a thorough course of University training and also their practical training at the same time?—I should prefer myself to see the practical part follow after the University. I am chairman of a secondary college for women—the Maria Grey College—in which we do not admit them for the special year of training until they have passed either the B.A. examination, or the higher local or some similar examination. We insist upon their obtaining all the knowledge they have to impart before they enter upon their training. At present both in the residential and training colleges the students come up so moderately prepared that they are obliged to carry on both at the same time.

18,487. Do you anticipate any change in that respect in the training for the primary schools?—I do not see any prospect of it at present.

18,488. Therefore, so far as that goes, what you are now asking for these students is that the work shall be carried on side by side?—Yes.

18,489. Then do you conceive that the students who are also going for this practical training could really be made to attain a University standard in the difficult subject, for instance, of psychology. Do you think they would have time?—I think they would have time to acquire the elements necessary for their training, and they might carry on their knowledge afterwards. Some of them do actually obtain the degree before they leave the training college.

18,490. In speaking of the older Universities to which you referred I hope I shall not be blamed for saying that the standard of an ordinary degree is not perhaps so high as it is desirable it should be in a new University, and I hope that the standard of the teaching of the University of London by which any degree may be obtained would mean what as far as I know in the older Universities an ordinary degree does not mean that the student is really qualified to teach such and such a subject in which he obtains a degree. If the standard is adequate it ought to mean that he has obtained such a grasp of the subject?—Yes.

18,491. Well, assuming that standard was attained, do you think that the psychology which it is desirable that you should induce an average schoolmaster trained in a primary school to attain would be up to the standard which the University ought to enforce?—I think the professional training ought to be the same for all classes of teachers.

18,492. I was speaking with regard to the subjects of psychology and physiology?—They would be the simpler elements of psychology of course.

18,493. Yes?—It would not qualify them to pass in the Mental and Moral Science Tripos of Cambridge, but it would qualify them to learn sufficient of the laws of the human mind, especially in relation to young children, without interfering very much with their progress in their ordinary studies.

18,494. You think it would be up to the standard that a University ought to lay down. I suppose you would agree that the University ought not to give the University certificate for knowledge below a certain point?—That is so.

18,495. And you think the average student preparing to be a schoolmaster might be expected to attain this standard?—I think the large majority of those in the London colleges who have the pick of our pupil-teachers might attain that standard; but I should think very few in some of the more backward country colleges.

18,496. I suppose you would retain an examination by the department in these subjects, which those who could not pass the University standard would have to go through?—It would be necessary to have a lower examination for those, and the students, or the authorities of the colleges might elect which examination they shall take.

18,497. It would be understood that the *élite*, if I may say so, were prepared for the University standard?—Yes.

18,498. And I suppose that the colleges would accept the University line of study, or do you conceive that they would desire to exercise control over it?—I think they would be compelled to accept it in the interests of the students. The students would demand it, and the colleges would be compelled to follow in the interests of the students themselves.

18,499. As regards the other subjects which they learn, not those on which the art of teaching said to be founded, but those which the schoolmaster has to impart, do you think the same statement may be made; that the best students would be able to attain the University standard?—A certain number would certainly obtain the B.Sc., others would reach the intermediate, some would only reach the matriculation examination. But they are all pressing for University recognition, and the colleges are encouraging them.

18,500. You would not desire that the University should adapt itself in any way, but rather pursue its own lines, and admit the students. The only adaptation would perhaps be in giving special certificates in some cases?—From the University?

18,501. Yes; would that be your view?—Yes, quite.

18,502. It might be that the course desirable for your students, or a certain number of them, did not exactly lead to a University degree, but still the fact that they attained a sufficient standard under a course of University instruction might be certified in some way; or do you think that the degree is essential?—Whatever course of study the University laid down would be at once followed I expect by the training colleges, so that if they did not exactly attain the B.A. degree or other ordinary degree they would be benefited by the course of studies laid down, and would have to be content with a lower certificate if they did not attain University status.

18,503. (*Rev. Canon Browne.*) With regard to the question of distance, you spoke of collecting the higher students at a centre. Of course, in Cambridge a man from your own college would reach a 50-minutes' lecture with a loss of five minutes at each end. Is

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

any such thing possible in London?—With the railway communication we have at present three of the colleges—the Battersea, Chelsea, and Westminster Training Colleges, might meet at a convenient centre with half an hour's loss of time each way, or less.

18,504. Would it not, in your opinion, be highly advantageous, not only on this account, but on many other accounts, supposing a great teaching University were established, to have, what we might call, branch centres north, south, east, and west?—You mean similar to the University extension centres?

18,505. Yes; that there should be the work of the University going on at several centres?—Certainly; it is far more desirable that the professor should visit the centres in the outskirts, or other parts of London, than that the students should be collected to meet the professor.

18,506. You would have meeting places for the students here and there?—Yes.

18,507. With regard to this question of the lowest degrees of the Universities of Oxford and Cambridge, you have, of course, experience of men who have passed through various kinds of degrees. There is likely to be a fallacy in speaking of the lowness of the ordinary degree. Have you had experience of the best men who have passed through the ordinary degree?—Do you mean as teachers?

18,508. Yes, as teachers?—We have very few indeed who have passed through Oxford and Cambridge in our primary schools. The B.A. teachers are nearly always those who have taken the B.A. at the London University.

18,509. Have you had experience of the very best of the men who get the ordinary degree?—When I was resident at Cambridge I used to know what the position of the man was who had taken a high place in the poll list.

18,510. Take those and the honour men?—I should prefer the higher poll man to the lower honour man.

18,511. Would you not also say that you might spoil a very useful teacher by applying too high a method to him, a man who would become a useful teacher?—It would depend upon the simplicity of the teaching of the professor generally whether he could bring himself down to the level of the average teacher.

18,512. That would be a great blessing, of course, to the average teacher?—The cleverer the professor the easier it would be to bring himself down to the level.

18,513. It is easier to lecture to high men?—Yes.

18,514. But after all there would be some subjects—for instance, would you contemplate all elementary masters and mistresses really understanding something about even the elements of psychology?—Certainly. I should be very desirous that they should.

18,515. That they should all be trained in it?—Yes, that they should be able to give some scientific reasons to themselves and others for the methods they pursue.

18,516. A number of these, I suppose, you say ought to really give the ordinary elementary teaching, whereas a number of those who are going to be their colleagues might properly be put to higher teaching in psychology?—Probably a professor might form two classes, as is done by the teachers in the University.

18,517. You would leave it to the professors?—Yes.

18,518. You would not throw upon the training colleges the responsibility of saying this is a first-class type of persons, and that is a second-class type of persons?—Probably the professor would consult the authorities of the colleges who know more about the characteristics and positions of the men.

18,519. But some consultation would be necessary?—Yes.

18,520. Someone must interpose somewhere to prevent a person not fit for the higher teaching in psychology from attempting to attend lectures?—Yes.

18,521. (*Mr. Rendall.*) In specifying physiology and psychology, I presume you are chiefly thinking of those subjects as connected with the art of education?—Yes

18,522. Very much on the line suggested by the existing code which specifies particular chapters of Herbert Spencer, and so on?—And certain simple heads of psychology.

18,523. Both subjects in relation to the art of teaching rather than treated as they are in the Universities as subjects for a degree?—Yes, it would be more with reference to their practical application that intending teachers should be trained, but I see no reason why they should not go through the full course.

18,524. You spoke of the claim of the colleges to some kind of incorporation with the University. In what sense were you thinking of incorporation. Was it in respect to teaching chiefly or examination or administrative government?—Of teaching almost entirely. The examination might be left to follow.

18,525. The examination you would not put in the hands of the University?—I was thinking of a teaching University rather than an examining board. I have considered the point more with regard to how far the professors might direct the teaching of the training colleges, and might help them, rather than with regard to examinations.

18,526. The government and the internal economy you would leave entirely to the heads of the colleges as at present organised?—I think they should confer with the Universities; there should be some line of connexion between them, or they would be liable to friction.

18,527. Can you develope that at all?—No, I have not studied the point; but it would be easy to frame some scheme.

18,528. The training colleges depend almost entirely on the Goverement grant or on the Government grant together with an entrance fee paid by the students. Would you think the University ought to have any sort of control over the administration of those funds?—I think the University would be very unwise to meddle with the money part of the transaction.

18,529. The administration, management, and so on must depend entirely on the way in which the money is applied?—I look upon the University as being supplied with funds from some source or other, and being able to supply the money wanted for the training colleges either with a fee or without a fee.

18,530. Should you think that the direction of the educational programme should be in the hands of the University?—I should very much prefer it.

18,531. Can you tell me your idea of the relation between the University and the Education Department. At present the primary teachers are under a code which insists on a special programme, the tendency of which is to give a very wide range of subjects, all of which are compulsory, whereas the tendency of the University is rather to specialise and lay particular importance on two or three subjects?—Your question only applies to the residential training colleges, I suppose?

18,532. To day training colleges as well?—The day training colleges are almost independent, except as regards the professional part of their training.

18,533. I think the Department in every case makes very exact requirements as to which subject should be selected?—I will leave that to Mr. Oakeley. He will be able to tell you more about the connexion than I can.

18,534. What is your thought with regard to the residential training colleges as to the relation of the University and the Education Department?—The Education Department might be represented on some board directing their studies. I do not think the Education Department need require more than that.

18,535. At present it prescribes every detail of the curriculum of the code?—Because there is no other body to take its place.

18,536. Would the Education Department be willing to resign sole authority?—I cannot speak with the least authority, but personally I should be very glad to see a University board for this particular purpose framing the course of the training and also the examining.

18,537. And you think there would be a reasonable chance of their accepting the curriculum devised and supervised by the University?—I think in their own interests they would be glad to take it, because it would raise their status. No one at present knows the value of a Government certificate.

18,538. The value of a Government certificate at present means that it shows a given amount of proficiency over a range of subjects such as are taught in primary schools, such as drawing, music, school management, and so on, besides history, geography, and English, which are all compulsory subjects?—History and geography are compulsory for a certain part of the training, but a student is now exempt from studying history or geography in the training colleges, if he has learnt those subjects sufficiently well before he enters, or if he has not done that he may leave them at the end of the first year.

18,539. You would be in favour of extending that, would you?—Yes, I should be in favour of extending that if he showed that he had sufficient command of the subjects he is obliged to teach before he enters.

18,540. You spoke of the practical part of the training. What do you think as to the length of course. At present the normal course is two years. Would you think of an extension of that period of time?—I think a student might devote a third year to the professional part, leaving the first two years to the acquiring of the knowledge of the subjects he had to teach.

18,541. At present almost every University curriculum requires three years of preparation for the degree alone, and in this case you would have these students with extra subjects and with criticism lessons to which you attach considerable importance, and yet you would only give them two years, or if you gave three years you would put the practical training at the end of that?—It is quite possible that the pupil-teacher before he entered the training college might have acquired the knowledge of all these subjects not taught at the University, geography, English grammar and history.

18,542. And pass them at the end of the pupil-teacher's training?—Yes, they may do that already as regards English history and geography.

18,543. Do you think there would be any hope of the Department extending the grant to three years for those who were taking the full course?—If sufficient reason were given I think the Department would consider the proposal.

18,544. I do not suppose any large number of the teachers would themselves provide funds for the third year?—I think it very unlikely. It would have to be aided by a grant from the Treasury.

18,545. You expressed it as your opinion that a large majority or at any rate a majority of those in training might attain University degree standards. Do you know at all the per-centage you have hitherto trained for the degree?—Mr. Oakeley has all those statistics with him.

18,546. One would be right to say, that it is comparatively a very small per-centage, and only in the best colleges, such as Battersea and Chelsea?—A small per-centage obtain the B.A., but they obtain it under conditions of extreme difficulty. As I have said, at the training colleges their training is mixed up with teaching of other subjects. They have a short time for learning, and they start with comparatively little knowledge of Latin. They have to acquire it very rapidly after they enter. But if a different course of instruction could be laid down for them, and could leave the ordinary subjects when they first entered for a three years' course of professional training, I think the majority of the students would quite come up to the level of the ordinary B.A.

18,547. Would you include in that women teachers as well as male teachers?—No, I see no chance of it at present, because the standard for women teachers is pitched at a lower level than that for men.

18,548. Is not it true that in mathematics women stop about where the degree begins? They learn nothing more than arithmetic, Euclid, and Algebra, which are generally put into the lowest examination of the University of London.

18,549. You would not be able to extend the hope to women at present?—Not at present, unless their courses were differently shaped.

18,550. In the day training colleges hitherto, I think it has generally been found that it is only possible to train the highest, or more or less the highest, say, the first 500 on the Queen's Scholarship list. Would you, in your judgment, think the possibility of obtaining a B.A. degree might be extended further than that?—Mr. Oakeley will answer that question better than I can.

18,551. (*Mr. Anstie.*) I wish to ask you what is the exact relation existing between the Government as represented by the Education Department and the training colleges. That seems to me to lie at the root of this question?—The residential colleges are private institutions under committees belonging to various societies which are assisted by grants from the Treasury on condition of their submitting themselves to inspection, and to the annual examination.

18,552. Building grant and maintenance grant?—There are no building grants. Since the year 1870 no building grants have been made.

18,553. Some of them were founded on building grants?—With the assistance of building grants.

18,554. Now there is a maintenance grant?—There is a maintenance grant of so much per head on every student who, after at least eighteen months' working in a public elementary school, obtains a certificate. No payment is given for any student until he has gone out into the world and served for 18 months in one school. During the course of his residence no grant is made for him.

18,555. Those grants are paid into the general fund of the committee of management and applied by them at their discretion to the maintenance of the college. Is that so?—That is so, but with a restriction as to the purpose for which they are applied.

18,556. What is the nature of the restriction?—That the Department shall be satisfied with their balance sheet, and the appropriation of the amounts.

18,557. To purposes of training?—Yes. It must be for purposes of education and training solely.

18,558. Government inspects these colleges and also examines?—Yes, and examines all the students in the residential colleges.

18,559. Not in the day colleges?—In the professional part of their training. The syllabus for the examination has now been divided into two parts; the professional part of the training, and the subjects that are necessary for a B.A. degree, or for the ordinary Government certificate.

18,560. How are those two classes of subjects dealt with?—The professional part of the training is one, and the subjects necessary for the B.A. degree, or for the Government certificate are the other. They are mainly the subject of knowledge such as they would be obliged to teach in the public elementary schools.

18,561. Does the Government prescribe the classes?—Yes. Mr. Oakeley will tell you about the examinations that the day students pass.

18,562. Are they on an essentially different footing from those of the residential colleges?—Yes.

18,563. (*Lord Reay to Mr. Oakeley.*) Will you answer the question?—The distinction is this. The syllabus in each year is divided into two parts. The first part, as Mr. Sharpe has said, relates to technical part of the schoolmaster's work, that is teaching, school management, reading, and repetition. Those alone are compulsory. Music and drawing are optional. The second part of the Syllabus lays down

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

for each of the three years of training, (because there may be a third year now under certain conditions,) the subjects that are necessary to be taken up. In the second year, which is usually the final year, the subjects are divided into groups, so as to prevent a man taking up too many subjects. For instance, at a college like one of the London Colleges, Battersea, Borough Road, or Chelsea, a man in his second or final year will take up English which is treated pretty thoroughly from a somewhat elementary point of view, as far as it goes. He would take up mathematics, which means six books of Euclid, and Algebra, as far as the end of series, and he would take up two languages usually Latin and French. That would be the second year work. Then turning to the day colleges they may, in lieu of Part II. of that Syllabus, offer an approved University examination. For the University of London the Matriculation examination is accepted for the first year's work; the Intermediate for the second, and the final examination for the third year. That option is, of course, given also to the residential colleges. They, instead of taking Part II. of the Syllabus, may go in for the Matriculation the first year, and so with the other two.

18,564. (*Mr. Anstie.*) Then there is no distinction in that respect between the day and the residential colleges?—No. They may may matriculate in the first year and finally pass the degree if they stay for the third year. But then, as Mr. Rendall has said, at the day colleges all the students are not sufficiently advanced to take this University examination, or to go towards the degree, so this is what happens to them. They take the college's terminal papers, and those papers having been marked by the professors or examiners are sent to the Education Department, and they there are adjusted according to a common standard, and the men are classed separately, so that there are two classes; the one class in each list would give the persons who passed the University examination. We accept that in lieu of Part II. The other class gives the persons who have passed either the day college terminal examination or the examination in Part II. prescribed by the Education Department. The one refers to day colleges, and the other to residential colleges.

18,565. Then there are three classes: those who take degrees, those who bring up the college certificate, and those who go through the Government examination alone?—Yes.

18,566. (*Mr. Rendall.*) Do you speak of the sessional examinations?—Yes; I think they call them terminal at some of the University colleges.

18,567. (*Mr. Anstie.*) The colleges must be conducted practically under the direction of the Education Department. I am speaking of the residential college?—Yes, certainly.

18,568. The day colleges would be conducted by the University Colleges to which they are attached?—Yes; but with regard to certain rules laid down by the Department as to which they must be satisfied. For instance, one rule is that in the first year if a man takes the Matriculation he must take geography. The day college must furnish some teacher of geography for the day students who are taking the University examination. They must take geography, it being considered that every schoolmaster must be able to teach geography and it does not come in the University course.

18,569. The collegiate course is a course settled between the Department and the college?—Yes.

18,570. The college complying with certain requirements of the Government in that respect?—Yes.

18,571. In the residential colleges is the whole system of education prescribed by the Department? Yes, entirely; except for those who take the University degree, and those degrees may be said to be approved by the Department.

18,572. The day colleges are all attached to existing institutions of University rank?—There is a day college in connexion with every University college in England and also at Oxford and Cambridge.

18,573. They all follow the collegiate regulations?—They all follow the collegiate regulations, and all students have to be examined in Part I. of the Syllabus.

18,574. A more important question in this matter would relate to the residential colleges. They are at present out of any University system?—They have the University system which I have explained inasmuch as they can take a University degree instead of our Part II.

18,575. But you say they are under the control of the Department?—In other respects, but we allow them to take a University degree. Of course they are only taught by the professors of the college. There is no teaching from University professors in the residential colleges, but they have greatly improved their staff of teachers of late years, as Mr. Sharpe has said. At the London colleges they have first class Oxford or Cambridge men in classics, and they have some fairly high wranglers who teach mathematics. A considerable number of men at the London colleges have availed themselves of the permission to take the University examination. I have here a paper which gives the University classes in 1892. I find that at Battersea there are 139 present or past students who are graduates of the University, and 325 are undergraduates. Last year 61 University successes have been gained at the Universities of Oxford, Cambridge, Dublin, Durham, and at the Royal University of Ireland. 18 of these were gained by resident students.

18,576. (*Professor Ramsay.*) What do you mean by University successes?—University examinations.

18,577. You were speaking of residential students?—Yes, they can go up for this University examination.

18,578. At Oxford and Cambridge?—Two of these Battersea men have passed examinations at Oxford and Cambridge, having gone there after they left Battersea. Of the resident students at Battersea, 18 of what they call successes, that is matriculation or intermediate have been gained in the last year. At St. Mark's 23 resident students, and at Borough Road 36 students in residence have matriculated. In honours 22 were in class 1 and two in class 2. Four men passed in the intermediate arts in the first division and six in the second. Those are resident students this year.

18,579. A total of how many have passed through the colleges?—It is a very large number, but it has only been of late years that the Syllabus had been sufficiently raised to enable them to pass through with any degree of success.

18,580. (*Lord Reay.*) At what stage of their career did they matriculate?—The first year. We only accept that. We do not count the Matriculation in the second year as of any value. They have to take our Part 2.

18,581. (*Mr. Anstie.*) The Department still controls the internal management of the college?—Yes.

18,582. (*Mr. Rendall.*) Might I interpolate one question on the statistics before we leave this point. I gather that there is no B.A. in the list at Battersea or St. Mark's. I understood you to say, none for the B.A., four for the Intermediate first division, and six in the second division?—The paper here merely says that 18 of those successes were gained by resident students. It is probably Matriculation in the first year. Only one or two students are in the third year at any of the residential colleges in England.

18,583. Are there statistics showing the actual degrees obtained at present?—No, I think you may take it that it is chiefly Matriculation. I think I ought to add that the residential colleges are at an enormous disadvantage at present with reference to the University colleges respecting their powers to succeed in these examinations simply from the fact that the year

of the residential colleges begins at the end of January; the year of the University college and of the day college affiliated to it begins in October; so the residential colleges only have about five months to prepare a man for Matriculation while the University colleges have the whole extra term. Therefore it should be put down more to the credit of these men in residential colleges that they can matriculate at all.

18,584. (*Mr. Anstie.*) Are they bound to keep that time for the commencement?—Yes, by the Education Department. The inconvenience is so great that I think that probably in course of time there will be an alteration so as to begin the year for all colleges in October. But that has not been decided at present.

18,585. Having regard to this relation which you have described, how far do you think it would be possible to allow any other University authority to have a directive power over or in the colleges?—I should say that the only directing power I should conceive possible is over their own examinations.

18,586. But not over the management of the colleges?—No.

18,587. Nor over the tenure of the Chairs or the character of the education given?—Any such change would be a complete revolution, because at present a residential college is managed by the National or some other Society. Usually in the case of the Church of England colleges the Bishop is the chairman.

18,588. (*Lord Playfair.*) They are all denominational, are they not?—Yes, they are all denominational if you count the British and Foreign as denominational.

18,589. (*Mr. Rendall.*) Not quite all, for instance the Edgehill Training College?—I am speaking only of the training colleges for men. Homerton College is connected with the Congregational Society, and there is the British and Foreign, which has two colleges, one at Borough Road and one at Bangor.

18,590. (*Mr. Anstie.*) But all, whether denominational or not, are under the control of the Department, and it would not be possible for that reason to introduce any other directing authority?—I do not see myself how it is possible at present. The Department pay a large grant to the colleges, and they have to be satisfied with the management and the teaching staff.

18,591. Then what is the precise way in which you think any connexion can be established between a University and these residential colleges?—I should have thought that the three great London colleges that I have named have quite shown their fitness to be three constituent colleges of the University.

18,592. When you say constituent colleges in what sense do you use the word?—In the only sense that they would accept it, namely, having equal rights with the other colleges.

18,593. Do you mean to say the University would accept the training given there?—Of course the men who would be at these residential colleges would endeavour to take the degrees of the University, but they could not all do so any more than they can now at the day colleges attached to the University.

18,594. They might send up their men to the examination?—They might send up their men to the examination. They would benefit by the lectures given by the professors.

18,595. By the University professors?—Yes, by the University professors in the college. That would be a very great advantage. An instance of that is the way in which the new college at Carnarvon has been created in order to share in the advantage of the lectures. The college has been moved to Bangor for that purpose.

18,596. If the University in part consisted of certain colleges, and if at those colleges the teaching of the University were given it would be necessary I suppose, that the residential colleges should be associated with one or other of the larger colleges of the University, would it not, if they were to take the benefit of the teaching. If the teaching were only given in certain large colleges, and these men from the residential colleges are to get the benefit of that teaching, they must be associated with one of those colleges, must they not. They would not be on their own independent footing?—I think that is the only condition on which they would accept the relation. I have here a note from the spokesman of the residential colleges in London who says, "We may be "offered instead of a constituency, a kind of associa- "tion or affiliation which will carry no privileges, and "make us subject to a new control. This we should "not accept.

18,597. Does that mean that they must take part in the government of the University?—I think they would expect that one of their members should be on the University Council.

18,598. And are those the only terms which they would accept?—So this person says.

18,599. Do you think it contemplates that the University might have Chairs of its own at the College?—I think it would be a very great advantage as regards the teaching of psychology.

18,600. And that is one way in which they might assist them in the same way as they might minor institutions elsewhere?—Yes.

18,601. Beyond those you do not offer any suggestions as to any basis of union?—I do not see how it could be done without completely altering the constitution of the residential colleges.

18,602. (*Mr. Palmer to the Rev. T. W. Sharpe.*) I think you have said you would like to have University Chairs of Physiology and Psychology established?—Yes.

18,603. No doubt you have no provision for funds for those Chairs or you would have provided them already?—There are teachers of the humbler elements of both.

18,604. The Chairs you indicate would be more advanced, and you are not prepared to say where the funds are to come from which would support those Chairs?—Not at all.

18,605. But that would be a distinct thing in which a University might assist you in giving further instruction in those advanced subjects?—It would be a distinct advantage to the students.

18,606. Otherwise, as I gather from the answers that both you and Mr. Oakeley have given to Mr. Anstie, that the administration of these colleges must be left to the colleges themselves, and the examinations and teaching is necessarily subject to the terms of approval of the Department from whom you receive public money by way of grant?—I do not see at all why the terms of the trust deeds of the colleges should not be altered so as to admit of a wider constitution than they originally had. I see no reason why the Education Department should not assent to any change in the constitution, and also assent to admitting anybody else into a share in the management.

18,607. As yet every institution which receives the Government grant does so on certain terms which the Department approves?—Yes.

18,608. That is so at present?—Yes.

18,609. It would be a new departure if they were to welcome the University in that direction?—A very excellent departure, but a new one.

18,610. (*Sir G. Humphry.*) I think you mentioned that there are three training colleges in London?—Yes, within easy reach of some central place.

18,611. These three being ——?—Battersea, Chelsea, and Westminster.

18,612. How many students are there in each?—About 120 in each.

18,613. And there is at present a sufficient staff there for carrying on the work of training, that is to say, of giving information with reference to school management and so on, which is the great work done there?—They give practical rules, but generally they are very deficient in the scientific part.

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

18,614. You want the scientific part to be connected with the teaching University of London?—Yes.

18,615. But with regard to the other work done in training colleges, that would be hardly a work which a University could well supervise?—I should not go so far as that.

18,616. The actual work of training for teaching others?—It might well be done in the colleges.

18,617. It would be well done in the colleges and would hardly be a work over which the University could well or would beneficially preside?—You require a practising school.

18,618. That part could hardly come under University supervision?—I should hardly say that. An officer from the University might be deputed to look after the practical part under the direction of the professor of psychology.

18,619. It might not be work which a University would do very well?—That I cannot say.

18,620. You have spoken of the importance of becoming acquainted with the laws of the human mind. There is also of course a human body?—I mentioned physiology as one of the two chief branches.

18,621. As regards physiology the ordinary instruction in physiology would perhaps hardly give that kind of information which might be required from a master of a school or training college?—There are two very admirable teachers, Dr. Corfield, who lectures at Saltley, who is a great authority——

18,622. Yes; there could not be a better?—And there is also a very able man at Westminster. They give a general knowledge of physiology before they begin to apply it to education.

18,623. An important point in connexion with education at the present time is having due regard to the body especially as we know that there are increasing accumulations of persons in towns, and that there is also associated with that and this greater mental culture an increase of what we may call nervousness creeping over the nation, and to some extent the civilised world?—If you remember my evidence I put physiology and psychology on an equal footing. Physiology is better taught than psychology. It is excellently well taught in one or two colleges; psychology in very few.

18,624. There is a question of great importance as to how far it is desirable to keep young persons in school at a time. It certainly appears to me from my small knowledge of the matter that they are liable to be kept in school too long?—I think the question of physiology in relation to hours of studies and other matters of health has been too little cared for.

18,625. That is, perhaps, the most important subject of the whole?—I should not put it as of greater importance than the study of the human mind.

18,626. But the human mind is so intimately related to the human body that any deterioration whatever of the human body is certain to be followed by deterioration of the human mind?—But I do not think you could readily find any one qualified to be at once professor of physiology and psychology?

18,627. I was referring to this very point you have mentioned that the subject is not quite sufficiently attended to with regard to schools and that they have perhaps, in my estimation, too little to do with the body which I would almost say is the more important of the two and especially at the present time when, as I have said, persons have become congregated in towns and there is an increase of nervousness, and what we mean by nervousness is almost sure to be followed by nerve weakness and want of mental power?—I have often felt that the inspectors of school are themselves very deficient in this respect. Speaking for myself personally I have always felt throughout my life that I should like to have known a great deal more than I do about the condition of the human body, especially the nerve system.

18,628. We know that it is mental weakness and want of mental balance partly which tends to fill our asylums at the present time?—Special attention is being paid to that as you no doubt know by a committee of experts.

18,629. (*Professor Ramsay.*) Are you acquainted with the training college system as it exists in Scotland?—No, except by knowing inspectors of training colleges. I have never visited any of the training colleges in Scotland.

18,630. I suppose you know the Scotch Code?—Yes, it used to be identical with the English Code till the Secretary for Scotland's office was established.

18,631. Will you tell us what exactly is the amount of grant made by the English Department to various kinds of training colleges?—50*l.* a year for the male training college.

18,632. You mean 50*l.* per annum for the male residential colleges?—Yes.

18,633. And for women?—75*l.* for the two years, that would be 37*l.* 10*s.* for each year of training.

18,634. And what is the amount given to the day colleges?—(*Mr. Oakeley.*) The amount given to the day colleges is 10*l.*, which is paid to the committee for tuition and 25*l.* paid to the student for maintenance.

18,635. Is that given in the form of what are called Queen's scholarships?—They are all Queen's scholarships. The definition of Queen's scholar is the person who passes the admission examination and enters a training college of any kind.

18,636. So, that as a matter of fact, the day college gets 35*l.* and the residential college with all additional expenses get 50*l.*?—The college gets 35*l.* but it is bound to pay 25*l.* for the maintenance.

18,637. A student finds himself where he likes?—He lives at his own home or where he likes.

18,638. (*Lord Reay*). Is it given as payment for results?—No, that is not the case with regard to the day colleges, because it was felt that the payment for maintenance of the student could not be deferred for three or four years, and, therefore, it is paid at once.

18,639. (*Professor Ramsay.*) Does not the expense of the residential colleges upon its students come out greater than that?—No. Their income is the grant and the subscriptions of the committee and the friends of the college. The latter part of the income which is small; then there are also the fees of the students which amount to about from 15*l.* to 20*l.* a year at the colleges for men.

18,640. They do pay fees?—Yes, about 20*l.* in the two years at Battersea and Borough Road.

18,641. What proportion of the total expenses is met by the Government grant in the residential colleges?—About 70 per cent.

18,642. They get 70 per cent., only it is deferred for two years?—It is deferred until a man gets a certificate.

18,643. That means a discount. And the remaining 25 per cent. is made up either by subscriptions or by fees?—Yes.

18,644. What proportion do the subscriptions amount to?—About 12 per cent. roughly.

18,645. And the fees?—About 18 per cent.

18,646. With regard to the day colleges, what the government does is this; it gives 10*l.* to the college for each student. What is that 10*l.* for?—Tuition.

18,647. Does it cover the tuition which he gets outside the college as well as inside the college?—Not always. Of course the fees differ at different colleges. In Wales, I believe, it covers everything—at Aberystwith and Cardiff.

18,648. If it does not cover everything where does the balance come from?—The student has to find it himself.

18,649. The student does not pay the fees *eo nomine*?—No; at Cambridge University the student would have to pay 40*l.* or 50*l.* at least.

18,650. (*Professor Ramsay.*) Now with regard to the educational question. It was brought out in your evidence that there are as a matter of fact at present three types of schoolmasters trained in different ways. First of all there is the type of the schoolmaster who gets nothing more than the training

of the training colleges; who does look for higher instruction of a University type at all, either at a residential college or at a University College; there is, secondly, the class of student who combines University training with normal college training. The idea of combining these in one system was due to Scotland, I think?—(*The Rev. T. W. Sharpe.*) You mean the University degree?

18,651. (*To the Rev. T. W. Sharpe.*) No, I am not talking about a University degree at all. I am speaking of students whilst under training at a training college receiving part of their instruction in a University, instead of receiving the whole of their instruction at the training college?—We have no class of that sort in a residential college.

18,652. I am not speaking of any particular kind of college. I am looking simply and solely at the schoolmaster as he is turned out?—I quite understand. Your second class would be the students of the day colleges who did not obtain a degree but yet were taught by University professors.

18,653. Yes. And the third or highest class are those to whom Professor Sidgwick's question bore reference; those who ultimately get a degree?—Yes, those two classes would necessarily be formed whether taught by University professors or taught in the residential colleges.

18,654. That would depend of course upon the conditions of the University granting the degree?—Yes.

18,655. Does not that difference of training correspond to three classes of teachers who are required by the circumstances of the country?—The lowest class will generally be found in the country colleges. The pick of the Queen's Scholarships go to the London schools or the day colleges. The country colleges have to be content with those who take a lower place in the admission examination. (*Mr. Oakeley.*) I should like to make one addition to that or an alteration. I am sorry to say the day colleges do not get the pick at present.

18,656. (*To the Rev. T. W. Sharpe.*) This lowest kind of teacher, or the teacher who is not fit to take advantage of University classes, still less fit to prepare himself for the degree, is required by the circumstances of the country. You cannot get rid of him?—Required by the circumstances of the country, because we cannot pay a higher teacher, do you mean?

18,657. It is required by the circumstances of England and Scotland that every individual teacher should have gone through a higher course?—Because of his own want of abilities or because of the inability of the school to pay the salary of a B.A.?

18,658. The want of means or previous training?—The low position he would take necessarily would condemn him afterwards unless he had exceptional advantages, to fall into the lowest class.

18,659. All of them, or nearly all, have been pupil teachers?—With very few exceptions.

18,660. With the exception of a small per-centage all of them have been pupil teachers, and it must be so, because you have no means of keeping the great body of the future teachers employed in education alone except by means of pupil teacherships?—Yes.

18,661. But as a matter of fact they have to be tempted, from the age of 15 years or so, by the money you give them as pupil teachers, to enter the profession at all?—There are a certain number who enter at 17 or 18 and act as assistants.

18,662. The whole system rests upon this, that you are obliged by the conditions of livelihood to lay hold of boys and girls at that early age, and make of them teachers who are paid at that early stage. The result of that is that a great number of those who go into that normal course are those who have gone through a pupil teaching course. And as a matter of fact if you take them you find a large proportion of whom you or any examiner would say that they are not fit recipients of University education?—I am happy to say that they are a diminishing number. The chief reason for their falling so low before was the poor teaching of an inferior teacher. All that the Department says is that the instruction must be given by a certificated teacher, and that they must pass certain examinations.

18,663. That has no doubt improved the acquirements of the teachers, but notwithstanding all that improvement, if you were to examine the pupil teachers as we get them now, and as we are likely to get them for many years, you would find they would not come up to the mark of, and be fit recipients for, University education?—I think there will be a very great rise in all our teachers when more centres are established.

18,664. Have you ever made any comparison between the teachers of Scotland and England?—I have heard it said that the pupil-teacher of Scotland knows Latin better than the pupil-teacher of England, but that except for that England holds it own.

18,665. You would not say that the Scotch schoolmaster is inferior in mental calibre to the English schoolmaster, would you?—He is inferior in discipline very often, but in other respects he holds his own.

18,666. The Scotchman, you say, is superior in Latin?—Yes, and in general culture.

18,667. And in general logical grasp of mind?—Possibly.

18,668. I have had a great deal to do in examining pupil-teachers in Latin and in that stage of their career, and the conclusion I have come to is this, that there is only a proportion of the number in each year that are really fit to be sent forward to be taught Latin in University classes. I think you know the system which prevails in Scotland. Perhaps I may just shortly mention it. It commenced under Francis Sandford in the beginning of the year 1873, and it is this. There is an examination at the entrance to the training colleges each year. Those who on that examination prove to be fit to enter the University classes are allowed to attend the University for certain subjects while at the training colleges. That examination only a proportion of the students succeed in passing. At this moment the numbers in Scotland are as follows:—Out of 860 students at the training colleges in Scotland 160 are attending University classes; of those 160 many who have been passed by the Department as fit for University education scarcely come up to the mark which I considered satisfactory even our Scotch University system. I therefore look upon it as an illustration of this fact, that supposing the English pupil-teachers are as good as the Scotch, and no better, there will be a large proportion of them of whom you would say that they are not fit for a University education?—That would apply to the great body, but in the London colleges we get the pick. (*Mr. Oakeley.*) I should like to make a remark bearing upon that. It has not been easy to test, but with regard to the day students at Owens College, Manchester, they entered last January very low indeed on the list, and nearly all of them passed the University examination at the end of the first year.

18,669. (*To the Rev. T. W. Sharpe.*) I can give you many facts of that kind. There is no doubt that many of these students do show great power of work. I cannot say that they are on the whole a superior class of students as compared with others. There is a tendency to mere repetition in their minds and rather a want of culture, but there is a great desire to learn and an intense desire to do well in examinations. There are occasional instances of the kind you mention. I only want to bring out this, that it is quite visionary to look forward to a state of things in which every certificated schoolmaster in England can with profit be taken through a University course?—I quite agree with that.

18,670. The second point is this, that in the 160 there are a considerable proportion who come up knowing enough to make it worth while giving them a University education?—Yes; even with this poor

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

preparation they may have received from inferior teachers.

18,671. But they are fit recipients of some kind of University education?—Yes.

18,672. But it does not at all follow that they are fit to go through the whole course and take the degree?—Not the whole 860.

18,673. Not the 160?—I should be sorry to say that. No doubt your experience is greater than mine, but with regard to the London students I should say they were fit to go through the matriculation and the intermediate examinations. I could not answer for the degree in the two years.

18,674. It is not so much a question of mental fitness, but mental fitness joined with not having the means to take them over four years. In our University these students attend for two years; they cannot take a degree in those two years because the least course for a degree is three years, and in the case of most students it would be four, because they do not come up sufficiently well prepared to pass the higher Matriculation examination which we now have. Therefore, whether from want of means or other circumstances, a large proportion of the 160 would not be able to go forward and take the degree?—They might be prevented by the length of time and want of means.

18,675. Yes. Therefore there seems to be in England, as in Scotland, three classes of teachers, those who can afford time, energy, and so forth, to enable them to go through the course; secondly, the men to whom it will be a great advantage to take a portion of the University course to supplement the training college education, and last the class who will not think of going to the University at all?—Yes.

18,676. With regard to the higher class—those who may take the M.A. degree—there is no reason for making any distinction between the training college students and others?—No, they must be on the same footing.

18,677. They must go through the matriculation and other examinations. Therefore the University does not require to make any special provision for them. The question is about the intermediate class. I want to know whether you do not think it desirable to institute with a view to such teachers a special University certificate inferior to a degree, but superior in its value, and in what it attests to the certificate of a Government Department?—It would be difficult to assign them their respective money values, which, as regards a professional diploma, is one of the chief things in the eyes of the students. They would calculate the value of each from a professional and money point of view. It would be very difficult to differentiate the three so as to say that a certificate of the University was necessarily higher than the certificate of the Education Department.

18,678. I was not thinking of the money value. By value I meant value to the holder of it as a testimonial when he comes for employment?—I am afraid you will find that many of the students look at the money value more than the honour value.

18,679. But if it has an honour value it will have a money value?—They will both go together if the honour value is clearly understood.

16,680. What happens in Scotland is this. If a School Board has a vacancy men produce testimonials; one man is educated entirely at a training college; the first question asked is: "Has this man been at a "University for any part of his course." His certificates are accepted, and if he is an M.A., that is certified. That makes three different grades of candidates, and I can assure you that in Scotland it has a great influence in the minds of school boards who choose schoolmasters for employment?—I merely suggested that schoolmasters might not be able to assign its proper value to each certificate.

16,681. I ask you whether you think it desirable educationally on the part of the Universities to have an intermediate certificate not so high as a degree from which many students of the training colleges are cut out because they have not the time, but still a certificate which would represent a University training for something like two years in certain subjects of knowledge, and be of value for the schoolmaster's profession?—It seems rather complicated at first sight, but I think it would work well.

18,682. It has worked admirably in Scotland. The student may attend as many as five different courses in his two years. Those classes are paid for now by Government, and all that is wanted is that the University should certify to the fact that he has gone through the course in those five subjects and give him a certificate accordingly—a teacher's diploma or something of that kind. It is vain to hope that the majority could find time for the degree, but they could find time for a course of lesser scope?—Certainly.

18,683. I will hand you for your consideration a scheme which has been drawn up with that view (*handing same to the witness*). The next point is about management. Is it desirable that the University should have anything to do with the management of training colleges? With the residential colleges of course not, because I understand that they have no connexion at all with University classes?—None whatever.

18,684. Then is it desirable or necessary that the University should have anything to do with the management of the day colleges? Would you not lay down this as a principle: that the University ought to certify nothing which it does not teach?—Are you alluding to the professional part?

18,685. No; that the University as a University should not give a certificate of any kind in any subject which it does not itself teach?—I am not aware that this is the practice of any University.

18,686. The teacher is required for his Government certificate to pass a number of subjects, some of which no University teaches. Would it be a desirable thing that a University should be given the power of giving a complete teacher's certificate?—I would reserve those subjects for Government examiners.

18,687. Yes; is it desirable that a University should be given the power to grant a teacher's license?—Not if the license is supposed to cover subjects which they do not teach themselves.

18,688. Some of those must be included in a teaching certificates. A University does not teach spelling; it does not teach geography, or music, or elementary drawing?—No.

(*Professor Sidgwick.*) With great respect to my brother Commissioner's view, I do not think it ought to be taken as the view of the Commission that a University does not teach geography.

18,689. (*Professor Ramsay.*) I only take that as an illustration. This is a very practical question; it is before the Scotch Department, and I think it may come before an English Department. Would you think it desirable to put into the hands of the University a complete certificate for teaching?—They would not apply for any part for which they were not responsible.

18,690. Yes, but I take it for granted that a teacher's certificate must include subjects such as school management which at present no University teaches?—That is understood by the holders of University distinctions to be granted in England solely by the Education Department.

18,691. And you do not see any harm in that arrangement continuing?—I do not think so; unless a Chair of education were established.

18,692. Then you think that by means of a Chair of education, a University could test future teachers in all practical and elementary subjects?—The University of London does already test them in the practical subjects, and so does Cambridge.

18,693. That is not accepted by the Government as satisfactory is it?—It is only for secondary schools. (*Mr. Oakeley.*) They are going to accept the Cambridge certificate in the second year.

18,694. (*To the Rev. T. W. Sharpe.*) And you think that it would be desirable to accept them?—I should always prefer the diploma of the University to that of a Government Department.

18,695. In that case would you say that no certificate should be given at all by the Department?—Not if one were given by the University of equal value.

18,696. And that the Code could be worked by the University entirely, and not by the Department at all. The whole system in England depends upon this: That no teacher is allowed to teach unless he holds a Government certificate?—The certificates of certain bodies are already accepted for assistant teachers—I think there are 14 or 15—such as the higher local examinations, the L.L.A. of St. Andrew's, and others.

18,697. (*Professor Sidgwick.*) As a matter of fact, the University of Cambridge for many years has done exactly what Professor Ramsay is assuming a University cannot do. As regards secondary schools, it has given a certificate of proficiency in practical teaching. It is in regard to that, that I should like Mr. Sharpe's view as to whether he thinks it undesirable—as has been suggested—that the University should do this; having in view the fact that it is not a mere question in the air, but that it is an established practice of the University of Cambridge to do this. Do you think the University of Cambridge ought to leave off?—I think it desirable that it should continue.

18,698. (*Rev. Canon Browne to Mr. Oakeley.*) You are very familiar with this work, and I should like to ask whether from your own personal knowledge you think that Cambridge, as compared with other bodies, should cease to do this work of granting a practical certificate?—I think the Cambridge certificate is an admirable one, and the Education Department are quite prepared to accept it in place of their own school management for the day colleges in the second year.

18,699. You are speaking with full knowledge of the work actually done by the students trained at Cambridge and in other parts of the country?—Yes. I have examined for the Syndicate several times.

18,700. (*Professor Ramsay.*) This certificate is exclusively accepted for secondary schools?—Yes.

18,701. What I want to know is whether you think that system can be judiciously extended to elementary schools?—I think it is a good thing. (*Mr. Oakeley.*) It is extended in Cambridge in the case of day students. The Education Department accept it for day students attending the day colleges.

18,702. Those are students who do not necessarily go forward to a degree?—It is a condition that they shall pass.

18,703. The practising schools are at Cambridge?—Yes.

18,704. Under whose charge are they?—They are under the general charge of the committee of the training college. (*Rev. T. W. Sharpe.*) The Syndicate also examines the school whenever it pleases.

18,705. (*To Mr. Oakeley.*) So that the Syndicate certifies the fact that the teacher has practical experience?—And that the school is itself a fit one.

18,706. The University does not undertake the supervision of the conduct of the students in the day training colleges, does it?

(*Professor Sidgwick.*) Yes, through the committee.

18,707. (*Professor Ramsay to the Rev. T. W. Sharpe.*) So that the students in the training college are entirely under the University for teaching discipline, and so on, like other students?—Yes.

18,708. And you would be glad to see that system extended?—Yes.

18,709. And there is no subject required under the Syllabus which could not be covered in that way?—No, I should think not.

18,710. Music, for instance, and drawing?—(*Mr. Oakeley.*) I should think not. The examination in music is by Sir John Stainer, I think, in the colleges, but it is an optional subject.

18,711. (*To the Rev. T. W. Sharpe.*) Is there any reason why the University should not take the control of the day colleges?—I see no reason.

18,712. Would there be any need for a representation of the day colleges on the governing body of the University?—Only to take control of the studies.

18,713. How would you have that representation made?—By a syndicate or a board of some kind.

18,714. I mean representation upon the Senate. To what extent would you think the training colleges who would be likely to benefit by this should have representation?—As modifying the studies, do you mean?

18,715. I understood you to say that the training colleges ought to be represented on the governing body of the University?—(*Mr. Oakeley.*) I think I said that.

18,716. (*To the Rev. T. W. Sharpe.*) Have you any suggestion to make upon that?—I should like to see a board established having on it representatives of the training colleges, the teachers, and the Education Department.

18,717. That would be something like a Board of Studies to which the heads of these colleges should be invited?—Yes.

18,718. But you do not mean that the colleges should have a right to send a representative or representatives to the Senate?—No. It would be a Board of Studies consisting of representatives of the different bodies concerned established by authority of the Senate.

18,719. (*Mr. Anstie.*) Is what you want a Joint Universities Board or a board attached to one single University?—I was considering the teaching University that is to be founded.

18,720. (*Professor Sidgwick.*) With regard to the teaching of psychology, do you conceive that the teaching that would be required for these students would impose a financial burden on the University?—The students would attend lectures and pay fees.

18,721. So that it need not impose a financial burden upon the University?—No, I think the colleges would be glad to pay the fees for the higher teaching.

18,722. (*Lord Playfair to Mr. Oakeley.*) I do not know whether you have explained to the Commission the manner in which these day colleges are growing. What are the numbers attending?—I am afraid I cannot tell you that, I should say that there are about 300 men. Every University College in England and Wales, as I have said, with two exceptions, has started a day college, but they have not filled up their numbers to the limit allowed by the Education Department, and I have not got the latest numbers.

18,723. What are the two University Colleges that have not?—Bristol University College and Bangor.

18,724. Bangor will be out of that soon because they are now carrying the training college to Bangor are they not?—Yes, they are moving the Carnarvon Church of England Training College to Bangor. It was burnt down last Christmas, it will be a residential college.

18,725. In connexion with it?—No, not in connexion exactly, the students will have the benefit of the chemical lectures and some others, and will pay fees.

18,726. (*To the Rev. T. W. Sharpe.*) I think you said that the education of pupil teachers was very much improving on account of the system of central education?—Yes, central classes.

18,727. Does the University extension come in and help that?—There is a certain connexion now being established between University extension Classes and the Queen's Scholarship Examination, allowing the marks gained by the certificates, gained at those classes, to count on an equal footing with the marks obtained from the Science and Art Department.

18,728. Do you anticipate that the effect of this improved education to pupil teachers will be to produce a considerably larger number fit for University education?—Certainly, an increasing number from year to year.

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.

23 Dec. 1892.

18,729. (*To Mr. Oakeley.*) How is the practical teaching and the theory of education taught in these provincial colleges?—Every college is bound to appoint a normal master or master of method who gives lectures on psychology, and on school management, and superintends the practice of the students in the practising school, which is usually one of the best board schools in the town.

18,730. So that that is amply provided for?—Yes, it is provided for; there are certain advantages which the residential colleges have, which the day colleges will never have in that particular respect, but it is provided for as far as can be done.

18,731. Are these day training colleges applied to female as well as male students?—Yes.

18,732. And are they taking good advantage of it?—Yes, I believe they are taking very good advantage of it indeed. Mr. Fitch inspects them, but I know generally the character of them, and I know that at the recent examination, several of the girls were successful in the University examination.

18,733. There are no day colleges, are there getting up altogether the University Colleges?—No, they are only allowed to be so attached, they must be affiliated to some University college.

18,734. You know probably that in America there are day colleges unconnected with any University or collegiate system with as many as 1,000 or 1,500 pupils in each?—Yes, I have heard so, but I know very little about the American colleges.

18,735. You think the other plan better of not having separate day colleges of that kind, but having them in connexion with well-recognised University colleges?—I should think so decidedly because the object is, that they should take studies of University rank.

18,736. (*To the Rev. T. W. Sharpe.*) I think we completely understood your last answer (I had misunderstood it before) that you do not contemplate any new University sending professors to lectures at separate training colleges, but that you rather meant that the pupils of training colleges should go to University professors lecturing at some central place?—At the beginning of my evidence I said that either plan would be equally good: either that the professor should be peripatetic and go to the colleges or the colleges go to him. I do not think it matters much.

18,737. Do you not think it would make a difference in public sentiment if they went to the professor rather than the professor go to the colleges?—I think the convenience of 200 should be consulted rather than than of one man, and leave public sentiment alone.

18,738. Public sentiment is not always reasonable and especially if there are State subventions to be had for the benefit of these professors?—I was thinking also of the waste of time in going backwards and forwards.

18,739. Would not the fact be that if the University established a distinct professor, say of psychology it would be a great inconvenience to the public if his time was taken up by being made a peripatetic professor throughout different parts of London, whereas if there were high lectures in psychology in one place it would be much more convenient?—Yes; if London were not such an unwieldy place as it is. In a place like Paris it would be easier. As a general rule it would be better for the student to go to the professor.

18,740. And it would be better for the professor not to be lecturing half a dozen times a day, but to go on to devote his time to high lectures and the development of high teaching?—Certainly.

18,741. (*Mr. Anstie.*) Might not the difficulty suggested by Lord Playfair be to some extent met by the suggestion that there might be a lecture delivered at a centre sufficiently near to the training college to allow of the students attending?—Yes.

18,742. You might go to the neighbourhood of the training colleges without going into them?—That would be readily done in the case of the three training colleges to which I have already alluded.

18,743. (*Lord Playfair.*) Just to clear up your position which I know is a broad one. I will ask you this. You personally have no sordid appraisement of the value of certificates with regard to the future of teachers, but you know that the certificate must be made so applicable to the future occupation of the teachers that they will naturally attach a value in money to the degrees which are given?—It should be so applicable.

18,744. One of my colleagues asked you whether it was not a very sordid view to take as to the money value of the degree. Is it not quite necessary that the degree, whatever it is, shall have a relation to the practical part of his future life?—You mean it will determine the value of his future salary. Certainly, in that sense it would.

18,745. (*Professor Ramsay.*) With regard to the peripatetic teacher, is it not one of the great advantages of a University that a man can mix there with other students and be influenced by other minds?—Yes.

18,746. They keep out of the narrow grooves that otherwise they might fall into?—That is the great advantage of all Universities.

18,747. And would not that advantage be lost if the professor went round like a teacher of dancing to the various colleges one after the other?—Some advantages might be lost.

18,748. (*Lord Reay to Mr. Oakeley.*) Perhaps you would give to the Commission any evidence supplementary of Mr. Sharpe's which you think ought to be given, or mention any subjects on which you differ from Mr. Sharpe. Do you agree generally with what Mr. Sharpe stated?—Yes, I agree generally with what he stated. After Mr. Sharpe ceased to be inspector of training colleges, there were some great changes on the part of the Education Department, which I think have been more or less mentioned to-day. Those are in the formation of the day colleges, and it is very difficult thing for the Department to hold an even hand between the day and residential colleges. They both have great advantages of their own. I should be very sorry to see them come to an end. In their going on side by side very great and improving effects will be produced as years go on.

18,749. Therefore, you look forward to these various methods of preparation for the profession of schoolmaster being continued, you do not ask for the unification of these various curricula?—I do not think so, it seems a little complicated at first sight, but it really works pretty easily in practice. That is, the man who takes University examination is in one category, and he may belong to a day or to a residential college. Then there is the man who takes the residential course laid down by the Syllabus pure and simple, and, lastly, there is the man in the day college who depends on sessional examination which the Department accepts.

18,750. The man at the day college can, therefore, do one of two things; he can either read for the examination of the University of London and take a degree, or he can take what you call a sessional examination?—Yes, this is how it works: the better men take the University of London Examination. Those who cannot take it depend upon their college examination, in fact, some men fail in University examination, and then the Department allows them to fall back upon their college examination, on the papers they have worked at the end of their year.

18,751. With regard to the practising school, and to what I believe you have called lessons in criticism, would you say that the residential training colleges offer any advantages over the day training colleges?—I think they do in that particular case, the criticism lessons, which we regard as of great value in training are lessons given to the students in rotation by the day or residential colleges. The student told off, prepares notes of the subjects assigned by the master of method, and at the hour appointed a class is brought into the training college from the practising school. The whole of the second year's students are present, and the whole of the staff of the college, the principal,

the various lecturers, and the assistant tutors. The lesson is then given by the student, and the principal, who directs matters, calls on one or two students to criticise it, which they do from their places. Then some of the staff criticise, and finally the principal sums up; that, I think, all people who have studied the method regard as perhaps the most valuable part of our training in England. I think it is almost peculiar to England, I cannot find out that exactly the same system is carried on in Germany.

18,752. Would it not be possible to bring in a day college student to that part of the residential curriculum? —They are obliged to undergo precisely the same system by the Education Department. They have these criticism lessons, but the difference is this; one good thing at the residential colleges is that the whole of the staff are present. I heard a lesson at Battersea the other day in the ordinary course of my inspection, the lesson being on some question connected with chemistry. The principal called the chemical lecturer, to make some critical remarks, which he did from his knowledge as an expert, and very valuable they were. They revealed faults in the lesson which I, who have very little knowledge of chemistry, had not at all detected. At the day colleges the criticism lessons are entirely in the hands of the normal master. The able lecturer comes and gives his lecture to the day students together with the others, and off he goes; he has not any further immediate relation with them, and he does not attend these criticism lessons, so that the only person who attends is a man who probably has been a certificated teacher himself.

18,753. That raises another point. You would say that the staff at the residential training colleges is more homogeneous than the staff that gives the lessons at the day colleges?—Yes, they give their whole time and interest to the students alone, and reside in the same house, and are all amenable to the same rules of conduct. All these are distinct advantages on the side of the residential colleges. Then another reason that would not occur at first probably to anybody who had not experience is that at the residential colleges the men are much better fed; they have regular meals and good food, which is more than they had before. I mention that because I found that in connexion with a certain day college in London some of the students were half starved; because the bursary of 25*l.* had been partly used for the good of their families. On the other hand the day colleges have some enormous advantages which the residential colleges have not. One is, as anyone could see in a moment, the fact that these boys of 18 who are caught up as pupil teachers at 14 come into intercourse with other students. That is University training, perhaps as important as the second great advantage, which is intercourse with the professors at the University colleges. I should also add that there are, generally speaking, far superior laboratories and libraries at the University colleges. Those advantages they have on their side, so I think you will find that one set of colleges has certain advantages which the other has not.

18,754. On the day college side the tutorial element might perhaps be strengthened?—Yes, I should think so. I mentioned to the Principal of Owens College that defect of the criticism lessons. He saw it at once, and he said that the professors would be quite willing to attend them, but they would be rather at sea from the want of their technical knowledge of a lesson; they would not know exactly how to criticise, or where; but he said they would try to give it by, for instance, the professor of history being present when a lecture on history was being given.

18,755. The entrance examination is conducted by the Department, is it not?—Entirely.

48,756. What is your experience with regard to the preparatory education which the student has had? Where has he obtained it as a rule? Has he generally been a pupil teacher?—Yes. These examinations are open to all persons who are more than 18 years of age, and British subjects. The Department has always hoped that people of a rather superior status, and a rather better education than pupil teachers would be attracted, but that has not been the case. One reason is that the secondary education in England is in such a state of chaos. The ladder that Mr. Fawcett used to speak of does not exist at all; you have the voluntary schools and the board schools which are extremely well taught, and then you have a leap to the public schools of England.

18,757. There is a great gap which you would like to see filled up with secondary schools of an appropriate nature for your students?—Yes, and other subjects. I have always thought that Matthew Arnold's cry, "Organise your secondary schools," was the one thing to look to now. If you go to Rochdale, Oldham, and the other large towns of Lancashire and the west riding of Yorkshire, you will find that there is no secondary school worth speaking of as a rule. The sons of the manufacturer will go to a board school for the want of there being another school there, and then when they come to be of sufficient age, if the parents can afford it, they are moved away to some great school. But the gap is not filled up.

18,758. The majority of the students are pupil teachers?—Yes.

18,759. And the pupil teacher with all his defects comes out well in that examination?—Yes. No doubt the curriculum of that examination is aimed at the pupil teacher course. But such subjects as arithmetic or elementary mathematics you would think ought to be as well followed by other candidates who have been pupil teachers.

18,760. Are the pupil teachers as a rule taught by the masters under whom they practise, or do they get any other tuition. As a rule, in country districts they get only their master's tuition, but in large towns, lately there have been introduced what are called pupil teachers' centres where a man who is a specialist will teach his own subject.

18,761. Therefore, a town pupil teacher has great advantages over a country pupil teacher?—Yes, that is shown by the last few Queen's Scholarship lists.

18,762. With regard to the teachers who enter the profession after having been pupil teachers and assistant teachers, do you contemplate that in future there will be no demand for teachers trained in that way?—I think the Department considers that otherwise they would rather break faith with pupil teachers, because you give them no means for getting a certificate. The training colleges for masters can only admit something less than 800 a year, and the day colleges about 300 more.

18,763. (*Lord Playfair.*) What is the annual examination?—The persons who pass examination in the first and second classes which qualify for admission are about 1,600 in number, so that a good many of them go back to the schools as assistant teachers, counting in our rules as two pupil teachers in the required staff. They remain there and get two good reports from the inspector who examines the school, and they may then present themselves at the ordinary Christmas examination, and if they pass they obtain certificates.

18,764. (*Lord Reay.*) In the examination for admission to the day colleges and residential colleges are those who pass first put in the residential colleges, or is it left to their own option?—The matter is left entirely to the students themselves. The student may elect to enter any college, and if he is high enough on the list he is taken into that college. At the present time the day colleges are so little known by the public generally that the supply of students has been very small. They are mainly those persons who elected to go there, and they stand low on the list. The best students will choose Battersea or the Borough Road or Chelsea.

18,765. Those who come out first choose the residential training colleges?—Yes. There is no comparison at all. The average position of a man at the Borough Road on the Queen's Scholarship list,

Rev. *T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A.*

23 Dec. 1892.

which is the entrance examination, is about 130. The average position at Owens College is something like 800 on the list from the top, the average being found by adding all the places together and dividing by the number of students.

18,766. Do you think the school boards will give preference in the long run to the day training college students?—I think that is very difficult to say. As Professor Ramsay observed this morning, in Scotland they have given great preference to those who have a degree. I think they would in England when it becomes common. In fact it is so now in the rare cases which exist up to this time of their being graduates. Even at the University of Cambridge, although there are other difficulties there, the Education Department sanctioned the admission of 25 in each year, 50 altogether. In the second year they had only two or three who elected to go there, but they obtained a few other men who could not get into the residential colleges, or who afterwards changed their minds. The difficulties at Cambridge, or at Oxford perhaps still more, are that the necessary expenses are considerable to a man in the position of a pupil teacher.

18,767. But at present their number is limited?—Their number is limited to 25, but so far from filling up the 25 they only get three in one year.

18,768. Has there been a great demand for them?—They are only at the end of their first year, or rather they have served one term in their second year now.

18,769. Have you any graduates?—Not yet, because the system has only been in existence for two years.

18,770. Then that question cannot be answered?—No, except theoretically; it has not worked long enough. I may say with regard to, I think, 13 students, who entered for a first year's course at Cambridge last year, I met the director the other evening, Mr. Oscar Browning, and he showed me the list of the previous examination which these people are obliged to pass by the rules of the first year. I was exceedingly surprised to find that eight of the Queen's scholars had got into the first class in Part 1., which means mathematics and logic.

18,771. Would you be in favour of giving to the students of the residential colleges under arrangements with the University some access to University lectures?—I think it would be an admirable thing if it could be arranged. I think in some answer I gave earlier this morning I said it would be impracticable, but Mr. Sharpe seems to think that the Education Department would rather fall in with it, and would rather put pressure on the colleges to accept it. The difficulty I had was whether the committee of the colleges would in any way favour it, because they might prefer going on in the way they have gone on up to the present time if they have no voice whatever in the management of the University.

18,772. Then there is a question of very great importance. Are you not afraid that if the standard of these examinations of your teachers is very much raised they would wish to have a rather better position than that which the primary schools offer them?—I think that is very likely with regard to the day colleges. We can only bind a man up to the time he gets his certificate. After that time I do not think the Department could interfere with his taking service in another school.

18,773. So that there is a danger and a risk. They will be useful of course in the other career, only they will not be useful for the schools for which they have been prepared?—I think in many cases that will be so, but I think the best class of men will be better off as a rule as masters of board schools. I was talking the other day to Canon Daniel, and he said that many of his men in the board schools were receiving 400*l.* a year, perhaps more, but some equally good men had gone to secondary schools as masters of English and elementary mathematics, and they would never rise from that position; they never could hope for a head mastership; so that in the long run they would have been better off if they had stuck to elementary schools.

18,774. (*Professor Ramsay.*) Is it generally a defect of the teaching in an English elementary school that it is simply mechanical?—Yes, I think so, that is because the students have been always in one groove.

18,775. And you think that the narrow course of instruction laid down as a pupil teacher is very deleterious to the mind of the pupil teacher?—I certainly do not think it promotes the exercise of the reasoning faculties as it ought to do. He is rather apt after a long day's work to spend the evening in not thinking of his subjects, but trying to write them out in his note book, and that has an effect upon him afterwards.

18,776. Is it the case in England that there is, as in Scotland, a good deal of dissatisfaction at the results of the whole elementary school system?—On the part of the public do you mean?

18,777. The educational results tested in other ways than by inspectors and examinations are not in respect of intelligence developed and real knowledge acquired quite worth all the money that is spent upon them?—I am afraid there is a great deal to be wished for in that respect. One reason, no doubt, is the early age at which children leave school. If they leave at 11 one meets them afterwards in night schools, at least, I did in the north, at the age of 14, and they have forgotten everything they have learnt. That is a great misfortune. In the higher social ranks, if children of 11 were to give up intellectual work altogether and do nothing but manual work, which is equivalent to the half-time work of these Lancashire children, and you were to examine them again, you would find very little had been recollected.

18,778. You want a stimulating effort on the part of the teacher?—Yes.

18,779. Therefore, you would regard this movement for enabling teachers to get some form of education at a University as a great step forward?—I should certainly consider that University students ought to be able to teach more intelligently.

18,780. Especially when, as you said, they are taught in conjunction with other students going into various other professions?—Yes.

18,781. I understood Mr. Sharpe to say that there would be no great objection made on the part of the Education Department to the adoption of such a system generally?—Of course, you will understand I am merely giving my opinion. I should think not.

18,782. You think there would be no practical or mechanical difficulties such as have very often been urged?—I cannot say that I can see any difficulty myself. We are trying to liberalise the studies, and the new Syllabus which will come out in a few days will be found to be an advance in that direction.

18,783. The point which used to be brought very much was this, that your University-trained teacher had intelligence and knowledge but no method; that the purely normal training college student had method, but no intelligence, and that a mixture of the two was considered most desirable. You are now quite prepared to give up the training college element?—Speaking of the older class of teachers I think that might be very true, but if you look at the men who get into the first division at the end of the second year I have always thought the knowledge they display in their examination is quite as much as that of ordinary graduates.

18,784. (*Lord Playfair.*) From residential colleges?—Yes. The persons who are in our first division at the residental colleges show quite as much knowledge as a graduate at any University in England, as far as I know it.

18,785. That is the best of the students?—Yes. At Battersea they would pass about 60 per cent. in the first division, or more. Take mathematics, no one would get into our first division without solving at least two-thirds of the geometrical deductions set. I do not know how it is at the present time, but a few

years ago a man would have passed the B.A. degree without doing any geometrical deductions. I remember at Durham University I set some easy deductions which were looked at generally as conundrums.

18,786. (*Professor Ramsay.*) Is it a fact that the knowledge of Latin that the student possesses is less than that of mathematics and other subjects?—In languages he is very deficient. We have tried to assist the University colleges in that respect in England, as I believe is the case in Scotland. We allow the pupil to take the Latin grammar instead of English during his career as pupil teacher. In the case of a poor boy who went up to Cambridge without any Latin or Greek it is wonderful that he manages to pass the previous examination. At Oxford, I imagine, it would be more difficult in the Responsions, because there they give a little bit of Latin prose.

18,787. It is not so much in language as in general intelligence and knowledge that men are really deficient. Their idea of history consists in knowing a few dates. Is that the general idea?—Yes, I am afraid that is a general fault, want of culture and reading. You will frequently find that they have never read any of Scott's novels, or if they have it has been somewhat of a task, or it has been a prescribed book in the school.

18,788. Then where there is a subject given out for an essay, do you find it to be the case that the teachers elaborately prepare their students to write impromptu essays, and teach them forms of speech without any sense?—Yes, I have heard so. I can easily conceive it.

18,789. That is done to a considerable extent?—I have never known it to be done, but I can conceive it.

18,790. To complete the system you ask for what I think you call a professor of psychology?—Yes.

18,791. Can you explain to us what you mean exactly by psychology in that sense. What would it include?—It would include the various elements of psychology so far as they relate to elementary education. For instance, I may give you a book, which I think covers the subject, which was written expressly for the purpose, Sully's Handbook of Psychology for Schoolmasters.

18,792. But that is a very elementary form of philosophy?—No doubt. I presume that the professor would go much further than that, and he would give lectures which would correspond to the syllabus of a moral science tripos.

18,793. What is meant by your psychology is just that amount of knowledge?—That is all that they do at present in the syllabus.

18,794. In the Scotch Universities, and I suppose it is the same in the moral science tripos at Cambridge there is a difficult subject called logic; all the good training college students take that class. Would not that be of very much more value than this special subject of psychology relating only to education?—I am afraid there is a great deal in that, but even in the Teachers' Training Syndicate at Cambridge an able examiner has more than once complained that there was so much phraseology without meaning. In a report I wrote myself on it I said that a little psychology was a dangerous thing. In the school management of the second year it is drawn up in this way in the Syllabus. Processes of reasoning, formation of habits of character, considered in their relation to teaching and moral discipline. That is all the psychology that comes in school management.

18,795. Does that subject seem to you one that should take its place as part of a University course?—I think all people who have studied education are agreed that we ought to give a good deal more, and promote the study a good deal more amongst teachers, especially with regard to the development of children's minds and the formation of habits and character.

18,796. That would be a half physiological study, would it not?—Physiology would take somewhat different lines. It would deal with the laws of health probably for students.

18,797. But at any rate your object in having a professor of psychology would be to make the course of education something wider than it is at present?—Yes, and I should think Mr. Sharpe's suggestion of a Chair of psychology and of physiology on the two sides of the University would be exceedingly helpful to the teachers.

18,798. Would you prefer that to having a professor of education?—A professor of education would probably combine psychology and method but not physiology.

18,799. Are you aware of the methods pursued or the course adopted by any professor of education in any University?—I know very well what the course is as adoptod by the master of method, who answers to the professor in the training colleges. He gives lectures on school management and on this elementary psychology, taking as a text-book the easier chapters in Sully's book or some other books. There are very few books that would be suitable for pupils of that kind. He attends the practising school and superintends the studies there. Your professor of psychology, I imagine, could hardly attend to the practice. Therefore I think he would have to deal only with the theoretical study of it, and that is the great difficulty that some of the examiners at Cambridge and the Teachers' Training Syndicate have mentioned, that they did not know enough of the actual practice to know how far they could press a student in that branch of the examination.

18,800. Then you would require another University teacher or professor to deal with the practical part?—I should think the suggestion made as to having a Chair of education, as at Edinburgh, would answer very well.

18,801. It is called "The Theory, Art, and Practice of Education." Would that answer?—I should think so. Is Professor Laurie able to effect anything?

18,802. I cannot give you details of his course. I understand that you have a system by which you can allow graduates to become teachers with a very short apprenticeship?—Yes. An assistant in a public elementary school, after a few years' service, may be examined for our certificate; or he may enter one of the training colleges for one year, taking the second year's course, and obtain a certificate in that way.

18,803. There is a plan in Scotland by which a graduate is allowed after three months' training in school to take the certificate. Have you any such plan in England?—No.

18,804. Would you think that desirable, or not?—I think it would be desirable.

18,805. (*Mr. Anstie.*) With reference to some of your answers, I should like to draw attention to some evidence that has been given before us by M. Couvreur, of Brussels. He stated that it was originally the practice to allow of no license being given to teachers unless they proceeded from the normal schools, but afterwards by a change of legislation or of administrative action the graduates of the various Universities were accepted as licentiates. He gave it as his experience that they proved to be inferior schoolmasters to those who came out of the normal colleges. Have you any observation to make upon that?—I have not any actual experience, but I rather think that has been stated in the reports of the schools more than once.

18,806. In your judgment are there elements of training in residential colleges which are valuable to schoolmasters and which are not found elsewhere?—Yes, I think there are some elements. For instance, in every lecture that is given at a residential training college, and in every question that is asked of the students, it is borne in mind on the part of the lecturer that a person is going to teach in an elementary school, and that must have a good deal of effect on his work. If there is a paper on arithmetic a student is asked to prove rules as he would to children, and so on with other subjects. By the nature of the case you could not have that at the University.

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq., M.A

23 Dec. 1892.

18,807. (*Professor Ramsay.*) You have referred to criticisms made recently in the case of Scotland. Do you mean recently, or long ago?—I am not quite sure that he did not mention it privately, but I heard it not very long ago from a great official.

18,808. It was not from any official source you got it?—No.

18,809. I am very anxious to get any information on that point that is to be obtained?—I do not know whether the Secretary of the Scotch Education Department will give it you or not, but I should not like to say who my informant was, because he might consider that he had given it me privately.

18,810. (*Mr. Anstie.*) I understand that those who are educated at the training colleges, have it constantly presented to their minds that have to communicate their information to the small immature uneducated mind with which they have to deal?—That is so.

18,811. And that is wanted, and likely to be wanted, by those who go through the training?—I think it is a difficulty. The more intelligent will probably derive other advantages which will counterbalance that, but as far as it goes it is a difficulty, I think.

18,812. I should like to know how far the alteration with regard to the rules as to the grant in the course of the last year or two would change your view about the fitness of the graduate to teach?—I think the change is a very good one indeed, as tending to make the children more intelligent. I do not think there is any loss in the way of effective teaching. The teachers teach as diligently as when the grant depended entirely on the result.

18,813. The effect has been to put the education on a more liberal basis, or a more reasoned basis?—Yes.

18,814. Under those conditions would the advantages possessed by the masters who came out of the residential colleges remain the same. Would they still possess the same advantage over the others?—I think they have certain advantages, and these are amongst them; but it would be difficult to say, as I have as yet met with a very few graduates indeed who are teachers. As the day colleges have only been established for two years, there has not been time for their students to graduate.

18,815. Do you think that would tend to increase or diminish the advantages which the residential colleges gave their men over those who were trained in other places?—I think it would probably diminish them, because the University graduates would have more intelligence.

18,816. It would not altogether destroy them?—No, I do not think it would destroy them. Many of the masters I have met with from residential colleges are quite excellent in every way.

18,817. (*Professor Sidgwick.*) In the discussion that has taken place, the question with which we are immediately concerned—that is the function and organisation of the teaching University of London has perhaps dropped rather into the background, or, at any rate, I am not quite clear as to what your view is on that point. How far do you suppose in London the new teaching University should undertake the management and the training of teachers in London; or, if you do not propose that it should undertake the management, could you state exactly what you propose it should do?—I think it would be a very great advantage if the University would appoint a representative on the board or committee of the training college, with a view of directing and guiding to some extent the studies and other arrangements of the men; and it would also be an immense advantage for the students to share in some of the lectures on University subjects, if that could be arranged, whether at a centre, as Mr. Sharpe proposed, or at the colleges, would be a matter, I think, of detail and future arrangement.

18,818. You would desire, as I understand, that a certain number of the pupils of the colleges, not all of them, should take advantage of a certain amount of University teaching?—Yes.

18,819. But that the selection of the teaching should remain in the hands of the colleges so far as the students did not prepare for a University degree?—Yes.

18,820. If they prepared for a University degree, of course the whole determination of what they should study would be in the hands of the University. If they did not it would be in the hands of the colleges?—Yes, or rather of the Education Department, which imposes it on the colleges.

18,821. Then what proportion of the students do you think would go for the University degree?—I think that at Battersea, Borough Road, and Chelsea, the whole of the students would.

18,822. Then if the whole of them would, practically the whole charge of the teaching institutions, except so far as the practical training is concerned, of which I will ask you presently, would be in the hands of the University. Is that your opinion?—I am not quite sure how that would be arranged. You have at present the committee of the college, and you have the staff; and with the present staff of these colleges, if we altered the beginning of the year to October instead of their starting at a disadvantage as they do now, Canon Daniel told me that he should send the whole of his men in to London University, the Matriculation the first year, and the Intermediate the second.

18,823. We are not here concerned with the London University regarded as an examining board; we are concerned with a teaching University. Of course it must be presumed that they would be able to prepare freely for the examinations of the London University as at present organised, but you desire that they should come to a certain extent under the influence of the new teaching University?—Yes, certainly.

18,824. Only you would not desire that the University should undertake the whole of the work of the training colleges: that it should absorb them?—Exactly so. I merely mentioned the London University examination to show that they would be qualified to do that amount of work at the end of the year.

18,825. You would not desire that they should be absorbed in the new University?—No, I think that would be very difficult, and it would be unjust, I think, to the excellent teachers they have there.

18,826. That, of course, might be met by temporary arrangements, but you think that in itself, and apart form any difficulties in the transition, it would be desirable that the organisation if these schools should remain quite independent of the University?—I think so. Perhaps you will allow me to explain that I did not come to give evidence with regard to the University so much, I only came to give evidence about the training colleges.

18,827. It was with regard to the training colleges that I spoke. I wanted to know how far you thought it desirable that in the future they should be entirely absorbed, and become a part of the University?—I do not think it would be a great advantage to them to become absorbed. They might have a share, which might be hereafter decided upon.

18,828. If they all went in for University degrees, the natural thing would be for the University to undertake the management of their studies just as much as of those of other students?—The University would, of course, direct the studies in drawing up their syllabus, and so on. They would do that in all cases.

18,829. (*Mr. Anstie.*) Do I gather from your late answer that you are of opinion that the connexion of the training colleges with, and their access to, the London University, would be more valuable if the University were constructed on a more teaching basis?—I should think so, certainly. The University of London at present is merely a place which lays down a syllabus, and examines men.

18,830. (*Lord Reay.*) Do I understand that you agree with what I understood to be the drift of Mr. Sharpe's evidence; that the University should, to a

great extent undertake, both with regard to the training of these teachers and the examining of these teachers, what the Department is doing now?—Yes. That privilege the Victoria University for instance, which is a teaching University, has now. If the students read for the degrees of Victoria, the education Department does not interfere at all, they accept the pass list of the University, and merely examine the students in Part I., which is the technical part of their work.

18,831. And not only for the graduates, but that the University should also give the certificate of what we may call the lower curriculum. I understood Mr. Sharpe to say that he thought it would be an immense advantage if part of these certificates which are now given by the Department, were given by the Universities. I am speaking of Universities generally?—What the Department now does is to obtain a list from the University of persons who have passed, and, providing these persons have also passed in the school management examination, conducted by the Department, they are certificated.

18,832. (*Lord Playfair.*) The essential part of their certificates is the University pass?—Yes, that is the essential part. We look at the other as no less than essential, but no doubt it is much easier; it is not so extensive in amount.

18,833. (*Lord Reay.*) But you would approve of that? You think that the University should undertake these examinations?—I should think the University might do so in any case. As I was saying before, in the Training Teachers' Syndicate there is an excellent examination which the Department have decided to accept in place of the examination in the second year's school management.

18,834. There are at this moment, of course, examinations conducted by the Department for the pupil teachers?—You mean the examination for the admission to training colleges?

18,835. Yes, and also before pupil teachers become assistant teachers; they have nothing to do with the University; they are entirely under the control of the Department?—Yes.

18,836. What I ask is whether you wish the Universities also to undertake these departmental examinations *quoad* the scientific part?—I do not see any objection to it at all, if the Universities drew up a sufficient scheme.

Rev. T. W. Sharpe, M.A., and H. E. Oakeley, Esq M.A.

23 Dec. 1892.

18,837. (*Professor Sidgwick.*) With regard to the subject of of psychology I did not quite gather how far you agreed with Mr. Sharpe's views that a professor of psychology would be of service to the teachers?—I certainly think he would be of service to the teachers.

18,838. There are two views taken. I do not know whether you are acquainted with the German Universities?—Not very well.

18,839. I understand that there is a considerable diversity of view on the question of how far a professor of pedagogy is desirable, or how far pedagogy ought to be a subject treated a professor of psychology; as to how far what is required is a specialist, or rather a person who is paying special attention to the art of education, and making that his main subject, or how far it should be given to a professor of psychology, who makes it only a part?—I rather think that in the German training colleges they have a professor of each branch, but, failing that, I think you might combine the two.

18,840. It would make a difference in the University organisation in this way: that if you required a Chair of pedagogy, it would certainly involve a financial burden on the University?—Yes.

18,841. If, on the other hand, it was found desirable that the students should attend the lectures on psychology, it would be rather financially advantageous to the University. Perhaps you have not a decided view on the subject?—No, I am afraid I have not.

18,842. (*Lord Reay.*) Even if there were a Chair of psychology you would be in favour of having one for the theory, practice, and art of teaching?—Yes.

18,843. The Chair of Psychology would not necessarily comprise all?—No, it would not.

The witness withdrew.

Adjourned to Thursday the 12th January 1893 at 12 o'clock.

Forty-fifth Day.

Thursday, January 12th, 1893.

PRESENT:

THE LORD REAY,, G.C.S.I., LL.D., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
Rev. CANON BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

G. JOHNSTONE STONEY, M.A., D.Sc., F.R.S., examined.

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

18,844. (*Lord Reay.*) Perhaps you will give the Commission the benefit of your views with regard to what ought to be the aim of a University. I think you have given much attention to the subject?—I have, my Lord. I think the great aim that the University ought to keep in view is to secure that the most highly educated members of the community shall also be the best educated. There is an extreme tendency to create institutions for educating men highly in particular departments where they have not the opportunity of mixing with men who are undergoing a high education of quite a different type, and education under such circumstances is apt to produce a result that I believe is very injurious to the community: that of making men, as I once heard Archbishop Whateley describe it, as narrow as they are

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

deep. It is of serious importance to the community; because the most highly educated members of the community will, in some degree immediately, and in a greater degree ultimately, be the teachers of the rest; and, in fact, guide thought in community; and to have this done by persons who are narrow in their views is a very unfortunate thing. I could give special instances (I will mention Belgium) of the mischief that arises in that way. That is an instance where the narrowness that principally is seen is the narrowness arising from what I may call separating the tares from the wheat, and educating the persons of an ecclesiastical tendency of mind in one institution separately from the persons of a liberal tendency of mind. I speak especially of the education in Brussels, and also in Ghent, and Liège, as compared with that of Louvain. I should mention that I studied the question of Belgian education very carefully some years ago, but since the dissolution of the Queen's University I have intermitted that study, so I am speaking from knowledge which is now some years old. However, probably the state of things is still the same. One result in the community is that the harshness of language in each of the two classes in reference to the other is of an exaggerated type that we have no conception of in this country, and that produces great public mischief. A similar effect follows from any other narrowness on the part of the higher educated men of the community; and I think there is special risk of this in London, for in an enormous community like London, the tendency towards separation—towards, I may say almost, disintegration of studies — is immense. From a community with a population greater than that of all Ireland concentrated in one place you can collect together any number of men of any one particular type of mind. There are, of course, some obvious advantages in bringing these men together, and that has led to the formation of special schools. You have got separate technical schools, separate science schools, where the students never meet a man undergoing literary training, and you have separate law schools, separate medical schools, and others. A great University in London ought, I think, to counteract that influence, and it might in a great degree change the current of events into what I regard as the right direction, partly by leading some of these institutions to add on other Faculties, and become what I should call University colleges, instead of colleges for one branch or class of study only; and in other cases by dividing the studies into two portions, one portion of which could be with advantage studied either in the University itself if it teaches itself, or in the University colleges, if it teaches through colleges, and the rest only pursued in the special technical, science, law, or medical school. I could give particulars in reference to medical education that, I think, would conclusively show that that is practicable in a case where some persons would represent it as impracticable. I take it that the great aim of the University ought to be, to secure that all the persons who are most highly trained, and who come under its influence, shall have been trained under conditions in which they will have been brought into immediate practical contact with other courses of study than those that they are themselves pursuing, and with the persons who are undergoing that other type of education. The great thing is to have students trained in such a way as to be, not only the most highly educated, but the wisest citizens of the great social community. I take it that the great aim of the University is to turn out that kind of educational product; and accordingly all its arrangements ought to be framed in such a way, as that so far as its influence extends, this result should be attained either wholly or in the greatest practical degree. That, I take it, should be the aim of a University.

18,845. Might I ask whether concurrently with these duties the University might not also pursue two other aims, namely, that of teaching in view of the various professions, and that of educating specialists in various scientific departments?—Certainly.

18,846. You do not exclude them?—No.

18,847. You include them, only you are of opinion that those objects can be obtained through the means you have set forth?—Some of those aims, I believe, could be best attained by special departments or schools in the University colleges side by side with other schools of a totally different type; others of those aims will in practice be most easily attained by that sub-division of studies which I have spoken of, pursuing a portion of them in University colleges or in the University, and the rest only in these separated institutions.

18,848. Perhaps you would illustrate your meaning?—I will take the case I have mentioned, the medical case. Anatomy, physiology, *Materia Medica*, chemistry, physics, botany, and some others that ought to be included in a medical course, can be not only as well but better taught in a University College than in separate medical schools. On the other hand, there are branches of pathology that can be better taught in a school attached to the marvellously great hospitals that you have here in London. I was very much impressed by a visit that I made a few years ago to St. Thomas's Hospital on the other side of the Thames, on which occasion I saw the *post mortem* examination of a patient who had died. I cannot conceive anything that would be more instructive to a person training for the medical profession than to be present at such inspections; and it is moreover of advantage to the patients, since it acts as a wholesome check upon the physicians and surgeons without its being in a form that is felt as a check. The perfection of a check is that it should be effectual, and at the same time not felt as an interference. All these advantages are attained by a practice of that kind, and I was surprised to find on that particular occasion that there were only four students present. I think the regulations of the schools ought to be such as would encourage the presence of a much greater number on those occasions. If this were the proper opportunity to do so, I could give suggestions in reference to some of the details of medical education that I think would, if followed out, lead to a very much better result being produced by discriminating between students of different aptitudes, not enforcing upon the better students what in their case is an overload of lectures, and so on. This is not the time to enter into details, but that will serve to illustrate the fact. I think there are some branches of the medical education which can be better studied in a University college where there can be accumulated all the best appliances—well-equipped laboratories, dissecting rooms, laboratories for physics, chemistry, physiology, and so on—where moreover the students would have the collateral advantage (not only an advantage to themselves, but an advantage to the community at large) of being trained in immediate contiguity with men undergoing wholly different types of training. There is nothing, I think, to prevent a system of that kind being carried out in London, and more especially since the medical curriculum has been extended to five years. The same sort of thing could be carried out in reference to other special schools. Some of them, I think, should be extended into what I call University colleges, that is colleges providing for all or most of the Faculties that a University ought to include. Some encouragement would very probably lead to an enlargement and a great improvement of the institutions that there already are in London, for instance such institutions as the great science schools. All their students would benefit if they were enlarged into University colleges; no doubt it would be a great extension, and would involve much additional expense, but the result would be that these institutions would become fitted to be colleges of a real teaching University.

18,849. I think you wish to give the Commission your views with regard to the success which has been achieved by the Oxford and Cambridge system?—Yes.

The success of Oxford and Cambridge has been largely due to the magnitude of the endowments that have been employed. If it had not been for the extent of those endowments it is obvious that they could not have attained great success by the methods they pursued. I do not suppose that if any persons had now the expenditure of some millions of capital in buildings, in the equipment of laboratories, and so on, and if they had endowments of some hundreds of thousands of pounds to expend annually, they would be so mad as to think of founding 30 colleges within one University.

18,850. Your idea is that intending benefactors would be more inclined to give endowments to the University than to colleges?—I think a great deal depends upon how the scheme is to be worked out. There are two distinct ways in which a teaching University can be created. One of them is to have the University itself giving the University instruction. That was in fact the practice in ancient times in the Universities of Oxford and Cambridge, but by a gradual encroachment of the colleges upon the functions of the University the teaching lapsed into the hands of the colleges. Of late years there has been since the times of the University Commissions of 1854 and 1856 a gradual tendency towards the restoration to the University of some of the teaching. Those subjects that require the equipment of large laboratories, for instance, are gradually lapsing into the hands of the University, while those that in contrast to the other subjects may be called chamber studies are in greater degree remaining with the colleges. There are two kinds of Universities. The Universities of Oxford and Cambridge are a sort of mixture of the two kinds. If separated, one would be a University in which the University should do the whole of the teaching and the other kind would be a University where the University was the central institution in connexion with which there were a number of colleges each of which should be fully equipped for the whole of University teaching. Of course in Oxford and Cambridge the colleges in addition fulfil their original intention of being the places of residence; and I believe it to be of very great importance that halls for the residence of students should be associated with the University that it is proposed to establish in London.

18,851. If the University in your second plan were to teach through the colleges would you in that case allow the colleges to appoint their own professors with some recognition of the University, or would you desire the University to appoint the college professors?—If I were given time I should be prepared to speak on that subject. With reference to the actual mode of appointment of the professors I believe myself that a mode embracing various different ways of appointment is really the one that will work best not confined to any one definite way of appointment. But I should like to have time to consider before giving any detailed evidence on that subject. I should be quite prepared to give evidence after having had time to think over the detail.

18,852. Perhaps you would give the Commission your views on that point in a written statement at some future time?—Yes. That is not quite so much an immediate answer to the question your Lordship put to me, because that does not immediately necessary involve the question of whether it should be the University authorities or the special authorities of the college that should appoint. However that would come in collaterally in connexion with it. (*The witness subsequently sent a paper on the subject. See Appendix No.* 41.)

18,853. With regard to the great question of absolute *Lehrfreiheit*, as I think for want of a better word we must call it, what have you to tell us?—That is a very important question, because the vitality of teaching in a large degree depends upon the teaching being exactly what meets with the full sympathy of the teacher. I believe if the University itself taught it might have a considerable number of persons engaged in teaching each subject, especially each of the subjects of what we may call chamber studies. I mean those studies that do not require the equipment of large laboratories, and so on. In other studies embracing, for instance, the whole range of mathematics and classical studies, mental science, and all the others which we may class with these as chamber studies, there is really nothing whatever to prevent the University licensing and recognising the teaching of a large number of persons, and in a great degree setting each of them free to give the instruction which they themselves feel most inclination to give. Of course all these things must be within certain practical limits, but a great deal of the valuable effect of *Lehrfreiheit* might be given by having a multitudinous staff of teachers. We in this country would generally speak of these as being professors, lecturers and coaches. For instance, take the third of these classes which nearly corresponds with the *privat docenten* of the German Universities. There can be no questions that in the University of Cambridge, for instance, and in that of Dublin, and in a great degree in Oxford also, the highest teaching of the University is the teaching of the coaches. That is teaching given to the most advanced students, and at present that teaching is not recognised; it is a thing that is nominally outside the University. That leads of course to perhaps too great liberty being allowed to the student to do what he pleases in some respects, but at all events I think it would be desirable to have this teaching recognised, and also other teaching—the teaching of lecturers specially qualified for teaching the poorest classes of students as well as the lecturers teaching the most advanced students in special branches. I think there ought to be these three classes which would in some slight degree correspond to what they call in the German Universities the ordinary professors, the extraordinary professors, and the *privat docenten*.

18,854. You do not consider the coach the equivalent of a *privat docent*, do you?—In some degree I do. There are three classes. They are to this extent analogous, though it is not worth troubling about. The real thing is that we have in existence in the English Universities the three classes of teachers.

18,855. In the German Universities the *privat docent* is appointed by the University, but there is the coach as well not recognised by the University?—Yes, but you cannot prevent that existing.

18,856. But I understand you to suggest a class of coaches licensed and recognised by the University for the highest teaching?—Yes, for the highest teaching where the University would exercise discrimination as to whom they should so recognise.

18,857. Then they would become virtually *privat docenten?*—Yes. For instance, take a case that I am acquainted with at present, and one that is probably known to most of the members of the Commission; there is the case of Mr. Hobson, in Cambridge, who is one of the mathematical coaches. There can be no question that it would be a suitable thing that his teaching should be recognised as the teaching of the University. And what does the present system lead to? It leads to not insisting upon any teaching in the University being received. It leads to the thing that is required by the University being the mere passing of certain examinations in the case of a great many students.

18,858. Might I ask you to explain a little more in detail what you understand by chamber studies?—I mean those studies which can be pursued from books only, and which do not require laboratories or equipments of various kinds, observatories, and so on, such appliances as there are, for instance, in the Cavendish laboratories at Cambridge, in dissecting rooms, in physiological laboratories, or in chemical laboratories.

18,859. You do not mean by that a class of students who would not attend the lectures in those Faculties where there are no laboratories?—No, I should require them to attend some of the instruction

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

required by the University, and I would make the University instruction embrace the teaching of every one whose teaching is in fact the best teaching the University does supply.

18,860. Then with regard to *Lehrfreiheit* you would object to the professor being in any way subject to a syllabus or conditions of an outside examination. You only wish the professor to give the best he can give to the students of his own knowledge?—That is if you had this sufficient number, because in the sufficient number there would always be some who would make it their business to provide for the wants of all the different classes of students.

18,861. Of course professional students would have to be prepared for the professional examinations?—As things at present are with a very small staff of teachers in each University College, you must bind the professor to give the instruction which the University thinks it most advisable to give.

18,862. But your object is that in the highest University teaching the professor should be as untrammelled?—I should like that the arrangements should be such as would make that possible, I believe that if that be made possible, you will have increased vitality and fulness brought into the instruction, and I think you will indirectly produce a number of collateral advantages, such, for instance, as facilitating the advancement of knowledge by original research within the University and matters of that kind.

18,863. You cannot have original work, and you cannot have research without *Lehrfreiheit*, that is your contention?—Precisely. And my contention is that the best system will be one that will make that compatible with the primary object, which I take to be the turning out of the best educational result upon the students.

18,864. Then as a corollary of *Lehrfreiheit*, we have *Lernfreiheit*?—I think a very important feature in English education, as compared, for instance, with most continental education, is this: that a man is required to pursue combined studies for a considerable time before he is given the opportunity of specialising. I would certainly wish this practice to be continued, but that the liberty of choice should at the same time in several respects be extended by creating such options during the period of combined studies as are not incompatible with the main object, and which would at the same time provide better than the present arrangements, for the varieties of the human mind. I think that this would be quite possible, but to set the student so completely free, as he is in the German University I do not think produces a good result, as it to a large extent defeats what I regard as the main aim of the University, namely, to secure that everyone who passes through it shall be a man who is well, as well as highly, educated. Of course it is in the earliest part of the course that the combined instruction will necessarily come, and, as the student advances, he may be allowed more and more to specialise.

18,865. You would take care that the student who comes to the University merely to get the minimum required for the purpose of being admitted to his profession, should find what he requires, as well as the student who comes to the University for purposes of original work and for scientific research, in any Faculty?—I would not allow a man to come to the University who requires the minimum which would provide for his profession. That man is more properly educated in a technical school. I would allow him to attend the instruction of the University, but I would not certificate him by the University.

18,866. You would not give him any degree?—I would not give him any degree unless he submitted to the conditions under which the University thought it could safely secure that a man should be sufficiently widely educated as well as deeply. I do not wish that the education of a man in other subjects than those which are his main subjects, should be pursued beyond a certain point, and I would give options to provide for exceptional cases which everyone must have come across where a man of very great capacity for some branches of human study has a special inaptitude for some others. I think a University ought to provide for everything of that kind, and at the same time to secure that its main aim is carried out. The main aim is in some degree carried out by the mere contiguity of these men to others pursuing wholly different types of advanced education.

18,867. Would you object to the University entering into any arrangements with outside professional bodies, giving them great influence in the University, whereby the University might secure the recognition by those professional bodies of its own examinations as one of the conditions for admission to the ranks of the profession?—I cannot answer that question by a simple "yes" or "no," because I would certainly wish to associate many of such bodies with the University, but, it may be, on one or other of two conditions being fulfilled. One of those conditions would be that they should enlarge their sphere of operations; that they should superadd to what they are now doing a sufficient provision for other studies to become University Colleges. That would be one condition, and that would chiefly apply to such institutions as technical schools or science schools, and institutions of that kind. I do not see why endowments should not be forthcoming for enlarging these institutions, and making them University colleges. Another condition which would entitle them to come into connexion, would be that of dividing the studies to be pursued by their students, at least by those of them who are University students into two portions, one of which should be given in University Colleges, or in the University itself if it itself directly teachers, and the other portion of which should be pursued in these mere professional colleges. I gave an illustration from medical education of the kinds of studies that I think would be suitable for treatment in the one, and the kinds of studies that would be better provided for in the other.

18,868. You wish for such guarantees as a safeguard that the education at any University shall not in any way be endangered?—Yes. Unless these institutions submit to one or other of these requirements, I would not allow them to come into connexion with the University. If you do allow them to come into connexion with the University without complying with those conditions their influence would be disastrous. I believe it would be disastrous in this way, that although it might be intended that the influence should be small it would gradually become greater. Remember that there are great forces in operation, especially in London, towards the creation of these isolated institutions.

18,869. And the University must be on its guard against influences which you have described as likely to be detrimental to its highest functions?—I think so.

18,870. Then your next point is with regard to examination. The aim of the University should include the weaving of the examination, system and the teaching system into such intimate connexion with one another that they will each strengthen the other; and especially that the examinations shall strengthen the teaching. As bearing upon this subject, I beg to hand in two documents (*see Appendix No. 41a.*) prepared for the information of the Government by the late Queen's University in Ireland. Our experience in the Queen's University leads to the conclusion that if the University teaches through many University colleges the colleges should be thrown into groups for purposes of examination. I believe that to be essential. I think three is about the greatest number that can be conveniently combined in a group. If there are more than three, the necessity for throwing them into groups arises, and at the same time a certain sacrifice must be made in reference to the ostensible value of a high place in the University examinations. Then, again, there are many subjects in which the result of the teaching cannot be determined by an examination. I think the attempt to introduce what

are called practical examinations into examinations has been one of the most important improvements of modern times; but, at the same time, it is incapable of really grappling in many cases with what is wanted. For instance, take the case of a man who is studying experimental physics; his laboratory work for the whole year should be allowed to count. Then, again, the actual teachers should be themselves examiners. The teachers should be thrown into boards of examiners as your Lordship will see described in the documents I have handed in, and as also is done in Belgium. In Belgium they have two of what they call *Jurys d'examen*, which are, in fact, boards of examiners, one of which consists of the teachers in each subject in Brussels; another member of that board is a teacher in the same subject in one of the smaller colleges in Ghent and Liège; the third is an external assessor. Similarly, the other *Jury d'examen* is formed by boards of three examiners in each subject of whom one is taken from the other small college, one from Louvain and the third is an assessor. At all events that used to be the Belgian system.

18,871. I believe that system has been materially altered if not altogether abrogated. I believe the rule is that a University examines its own students?—In the Queen's University in Ireland there were three colleges far separate from one another, one in Belfast, another in the extreme south in Cork, and a third in the west in Galway, and from the experience there, I should say, it would be quite possible and very much easier under the conditions that prevail in London to form boards of examiners which would secure very many important advantages. The boards of examiners might consist of the professor in each of the grouped colleges, and, perhaps, an external examiner with them, but the professors should be given the leading influence on each board. Moreover, the University regulations with respect to the details of the teaching have to be considered. Of course you must remember that a University man who is in a University for three, or, at the most, four years, cannot go through the whole range of even one particular study. There must be a selection made as to what he is to be taught, and those selections should not be the same in every year. Now all the suggestions with reference to the changes which are to be made should emanate from the actual boards of teachers. Those suggestions would come before the University authorities, and, unless there were some obvious objection to them, they would be naturally adopted. Even in the Queen's University, where we were enfeebled by the governing board having a very small contingent of professors as members of it, they were always adopted. I do not remember a single instance in which they were not. So that arrangements could easily be made by which all such details upon which the vitality of the teaching largely depends should be made practically by the professors. Of course sufficient notice must be given, probably a year's notice, before any change is allowed to come into operation. There is no difficulty then in creating such boards of examiners, and there are other great advantages. One great advantage—a great practical advantage when you are dealing with large numbers of individuals is the following: The examiner is subject to the most effectual check in reference to the fairness, efficiency, and honesty, of his work that you can possibly subject him to by his being obliged to do the work in the presence of colleagues as expert as himself, and moreover he does not feel this in the least degree as an interference with him. As I have said, the perfection of a check, especially in the case of a man in a high position of professor of a University, is to be both effectual and unfelt. Then, in addition to that, having boards of examiners instead of single examiners undoubtedly prevents narrowness. I could enumerate a number of advantages that there are in it; and there is no possible reason why those advantages should not be attained in the University of London with the enormous backing you have in London. But then, if you have more than three, or, at the very outside, four University Colleges in the group it becomes unmanageable. That is, the number of members of the board would necessarily become too great, and if there are more University colleges it becomes necessary to group the colleges, and to have the whole of the University Examinations held in, I will suppose, duplicate, if there were two such groups. That necessarily surrenders some part of what I may call the prestige attached to a very high place at University examinations; but I really think our present existing University arrangements, and more especially in Cambridge, direct the attention of students a great deal too much to examinations. What does it lead to? Take, for instance, the mathematical studies in the Mathematical Tripos. The competition partakes in a large degreee of the qualities of what I may call a horserace; it is working against time with fierce energy. I deny that training for this is any important advance in mathematical training; I absolutely deny it, and I think no person who really carefully considers the question can maintain it. Then another great disadvantage it has, is that it deals with very great inequality, and therefore with unfairness with different types of minds. For instance, a case that is obvious is the case of memory, which, by the way, although called by one name, is really a group of wholly different faculties, according to what it is the memory of. But there is a facility in remembering the details of work that has been gone through, and reproducing them in the examination hall under pressure which one person has, and which another person has not, although the second person might be very much the better man. I can quite conceive that a man like Sir Isaac Newton might not by any means be the best person to answer in his own book. One candidate may require time to think over the questions to recover the whole course of thought, whereas another person who has that peculiar type of memory has an immense, and I think a very unfair advantage over the other, who may really be a very much better mathematician in all essential respects. I only give that as an instance, but the same thing applies to a number of other studies. I do not like a system which throws the whole object of University life forward towards a final examination. You must sacrifice the prestige of a high place in the final examination in some degree by having the final examination held in duplicate if it is necessary to do so in order to group the colleges, for I believe you will not be able to attain true University education unless the weaving of the examination for the instruction into one another is affected in a way that cannot be attained without making the professors either wholly or predominantly, the examiners.

18,872. Your contention is that the main aim of the University is to provide good teaching, and the second aim is to have the results of that teaching in the University tested by the fairest means without creating what you call a race?—And also without controlling the instruction by the examinations. The examinations should do the very opposite of controlling the instruction; they should aid the instruction and co-operate with it.

18,873. The examination is a test of the teaching, and does not interfere with *Lehrfreiheit?*—That is so; it becomes grinding in an objectionable sense where the teaching must necessarily be preparing a man for an examination; of course there are limits to all these things, and to some extent the candidates must be prepared for the examinations. The examinations should be strong examinations.

18,874. If you have efficient teaching efficient examinations are the natural result?—Yes; then there was a question your Lordship put to me, I think with reference to how to deal with dissimilar subjects of examination. I believe that is of great practical importance, and it was worked out with what appeared to be singular success in the Queen's University, therefore I thought I might be allowed to describe the way in which it was dealt with there. There the course was a three-years' course, and during the first

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

two years all the men were obliged to go through the combined instruction. They were brought up at the end of the first two years for what was called their first University examination in which they were examined in the whole range of that combined instruction, including, for instance, both classical and mathematical instruction and some other. The difficulty then at once presented itself, how in the examination, to have the awards of the different boards of examiners combined so as to produce a just result. Of course the common practice is for the examiners to give numerical marks. We found, and I think it will be found everywhere, that these numerical marks are exceedingly treacherous; there are two respects in which they are treacherous, and there are two causes which make them treacherous. One of these is that the absolute amount of a particular percentage is utterly different in different subjects of examination. Take, for instance, an examination in metaphysics or in classics, and compare it with an examination in pure mathematics. Within my experience, so far as it goes, 30 per cent. represents honour answering in a great many mathematical examinations, and similar proficiency in metaphysics, for instance, would certainly not be lower than 60 or 70 per cent. If you bring the numerical results of the two subjects together you are obviously committing an injustice. Then another difficulty arises from what follows necessarily from that; that is, that there is a want of what may be described as rationality. I am using the term in the way in which it is used by opticians with reference to the spectrum. Different kinds of glass will, some of them, expand the blue end much and the red end little; others will expand the red end much and the blue end little. That is spoken of as a want of rationality in the spectra. The difference between the candidates in the upper ranges of the per-centage are very wide in some subjects. There may be cases where one man might get 75 per cent., and another man 56 per cent., and both would deserve first-class honours, and fully deserve them, and the other candidates would range between those numbers. In other subjects the numerical differences between the men in the honour class will not be so great and they will not range over any very long stretch of the numerical scale. It is quite evident that if you bring the crude numerical judgments and combine them together as numbers you do very great injustice. The way was provided for in the Queen's University, and which was found very successful, was by dividing the candidates who passed into three classes, first class, second class, and a pass class. Then below those came the rejected. We required each board of examiners to record in which of these classes they would place each of these candidates if they judged from their own subject only. That is, we obliged them to translate from their own numerical marks into a body of judgments. That made each particular board of examiners face the difficulty of forming an estimate as to what the value of the numerical marks was. Each examiner had to tell whether a man was low down or high up. For instance, if he got into the second class, which was the lower of the two honour classes, the examiner would say so. The printed form used by the examiners, of which I can forward a copy (*see Appendix No.* 41*b*), divided each class into quarters, and thus enabled the examiners to point out whether they would put them into the upper quarter, or one or other of the two middle quarters, or the bottom one, in the range of answering that they thought to bring the student within, for example, second class honours. That was carried out by each board of examiners. It was these judgments in the several subjects that were afterwards combined. Sometimes they were translated into a new set of numbers. But at all events the whole process made the examiners face the difficulty of forming an estimate as to what the numerical marks really meant. I may mention that this method was very unpopular when it was first introduced. Several of the examiners could not see its use; but after a little experience it was unanimously approved, I believe without exception, and the value of it was very much felt. That would be of practical use if what I have proposed be carried out—if a portion of the University course should consist of combined studies.

18,875. What influence do you allow the teachers to exercise in the University?—I have partly mentioned that in connexion with the grouping of the colleges. I would try to secure for the teachers effectual influence in reference to all those points in which the examinations can strengthen the teaching, but I think it is very necessary that the University should not be altogether in the hands of teachers, because no institution is in a really sound condition that is not gradually progressive, and it must be continually, or at least frequently, undergoing changes, some of which will be moderate changes and some of which may be in some degree even deep-seated changes. In all those cases I think you will find that a governing body consisting of teachers only will be obstructive, and it is necessary to have other judgments combined with those of teachers in such a way as will prevent that. One of the ways in which that operates is as regards private interests, pecuniary interests, the number of students, the amount of fees, and things of that kind. These things ought not to prevent the development of a University, and the arrangements should be such as would secure that cases of that kind could be fully met without injustice. I believe that such arrangements could be made in a properly endowed University.

18,876. You limit that observation about obstruction to the administrative arrangements?—Yes.

18,877. You do not apply it to the curricula or to the examinations?—Certainly with reference to the curricula I would apply it. That is, it may become necessary or advisable to alter the studies; to introduce options where options do not exist, and to alter the order in which studies are pursued. Various things of that kind may become advisable, and teachers may be found, I think, very conservative indeed on such occasions. And remember, that the body of resistance on an occasion of that kind is always a very strong body, no matter what you do. I think a University should be in a position that would make it move with the gradual development which is going on in the world, and that its resting content with only doing as our fathers did is a very great mistake.

18,878. (*Professor Sidgwick.*) I did not quite gather how you would obtain the progressive element?—I would have arrangements by which if any changes were made in the University which affected an individual he should obtain due compensation for it. I mean, which affected him pecuniarily. That would be one thing. In the second place I would have the government of the University consist, not exclusively of teachers, but there ought to be also other persons who should be strongly imbued with what I might call the University spirit, but who would be entirely free from these personal interests.

18,879. How would they be appointed?—That is like the other question about the appointment of the professors. I should require time before I ventured to offer any suggestion about that. I would have a large element of professors.

18,880. (*Mr. Anstie.*) You would include that in your paper?—Yes. (*See Appendix No.* 41*c.*)

(*Lord Reay.*) It is fully understood that Dr. Stoney will reserve this point for the statement which he is going to send us.

18,881. I think the experience generally has been that the progressive element was represented by the teachers, and the obstructive element imported by outsiders?—Certainly, and why? Because there has been far too great a preponderance of the outside influence. I would have a due balance.

18,882. Then you limit that outside influence. You want representatives of outside progressive tendencies?—I want both elements to be present in due proportion.

18,883. You wish to neutralise influences in the University which might be obstructive?—Yes.

18,884. (*Rev. Canon Browne.*) I understand you to say that there are two obstructive bodies, I also think you said that the teachers caused the obstruction?—So they do sometimes, for instance, if it is proposed to alter the order of studies, and to bring on a study in one year rather than another. I venture to anticipate, although I have no knowledge of the fact, that there will be a number of disputes and difficulties arising as to how to deal with the fifth year that the Medical Council has imposed. There are very great difficulties arising from the number of private interests that have to be dealt with.

18,885. Are we to take it from you that in your belief the teachers are obstructive and the outside people are obstructive?—Both may be in different cases, and I would provide against obstruction in both cases.

18,886. By what third body?—Not by any third body, but I should frame the governing body with the view to avoid obstruction from either element.

18,887. That can only be done by putting in some third set. There are teachers who are obstructives, and outside people who are obstructives. Who are the third body?—It is by a careful balance of those two, and by providing means by which pecuniary interests shall not be amongst those that will create obstructions.

(*Rev. Canon Browne.*) My only difficulty really was how you can balance obstruction by having two obstructive bodies.

18,888. (*Mr. Anstie.*) May it not be the fact that they would obstruct in different directions?—Yes, and on different occasions. The obstruction never arises from both at the same time. That is what I meant by saying that the domination of the University by the teachers ought to be avoided in the constitution of the University.

18,889. (*Lord Reay.*) Then you wish to say something with regard to the instructiveness of reports?—There are three reports, one of which is exceedingly instructive; that is the Oxford University Report, and the debates in Parliament upon it in 1854. In order to judge of those debates it must be remembered that the parties in the University were very powerful, and each of them, if I might say so, coached up the members of Parliament who spoke on both sides, and it gave a tone and an instructiveness to the debates which they would not have had otherwise. I would therefore include along with the report of the Commissioners, the debates in Parliament upon the report of the Oxford University Commission. I think they are a very instructive chapter in the history of Universities.

18,890. The Commissioners are quite aware of their importance.—That was the one which first increased the power of the actual teachers in the University of Oxford. Then the corresponding Report for the University of Cambridge and the corresponding debates are of less importance, because the question was really decided by precedent at that time. Those were in 1856. Unfortunately it was before those that the Dublin University Commission sat, and therefore it sat at a time before light was thrown upon many of the questions which came under the purview of the Oxford University Commission, the report of which had not then been published. But in the report of the Dublin University Commission, there is the evidence of Dr. Lloyd. That I think is of special incidence upon the business of this Commission, because he deals with what he in his evidence looks upon as the chief defect of the University of Dublin amid its many important excellencies, which arises from the fact that it has to provide for or does provide for students who are *bonâ fide* University students and at the same time for other students who obtain a University degree by merely passing examinations. He deals with this, and I think his evidence is very instructive. I desire, therefore, to invite the attention of the Commission to that evidence. (*See Appendix* No. 45.).

18,891. In what year was that evidence given?—I am not quite sure, but I think it was in 1853.

18,892. What was the view taken by Dr. Lloyd?—He was very much opposed to that system being continued, and he thought that, notwithstanding the fact that it would make a very great sacrifice in some respects of interest in the University, the great reform that was wanted was to discontinue it. All the true graduates of the University of Dublin feel it a hardship (if hardships are to be spoken of in this connexion) that men should go about the world with the degree of the University of Dublin who are not *bonâ fide* University men, when they themselves are *bonâ fide* University men. It is not a question really of hardships, but I look upon it that the blending of the two functions in one University, which is one of the things I have heard spoken of in reference to the London University, would be a very disastrous attempt.

18,893. Your contention is that a man who has been a *bonâ fide* student at the University ought not to obtain the same degree, and ought not to be placed in the same category as the man who has not been at the University?—That is from that minor point of view. But the great objection is that, having to provide for these men lowers the whole system of the University, and does a great deal of harm by placing the examinations in a wrong position.

18,894. The tendency is, you think, to make the examination easier than it need be for those who have been *bonâ fide* University students?—Some of the examinations certainly. The pass examination undoubtedly.

18,895. Lowering the standard?—It is not lowering the standard in respect of rendering them more easily passed, because the tendency of the University of London, so far as I am acquainted with it, is to make the examinations more difficult, rather than easier. But they do not represent real University education in which the teaching and the examinations should be interwoven; and they do a large amount of mischief along with some good. As far as I am concerned I do not think the degree of the University of London ought to count as a University degree at all. They do not represent University education in my sense of the word. A man who has the certificate of the University of London may have been brought up under the most narrow circumstances, and my contention is that a man may be deeply educated or highly educated, whichever you may wish to call it, without being well educated.

18,896. As you said in the beginning of your evidence, a *bonâ fide* University education means attendance at the University?—A great deal more than that. It also embraces, being directly in contact with men of wholly different types.

18,897. I meant to include that in attendance?—And in connexion with that I think it is of very great importance that to promote association with them there should, if possible, be halls for the residence of students attending the different Faculties together, and, if possible, college parks for their amusement. For the poorer students, a Union such as that which has been established at Edinburgh, would be useful. All these things are useful from their tendency to promote that which I think should be the distinctive feature of University education.

18,898. They must have led the University life to its fullest extent?—To its fullest practicable extent. And I would look to the special circumstances in London, which are in some respects very peculiar, and make such provision as is practicable for promoting intercourse between students.

18,899. I think this exhausts your evidence?—Yes.

18,900. Have you anything to add?—I do not think I have. I think everything has been included in what I have said. But I would deprecate very strongly an attempt to make the London University which is proposed, merely a sack to hold a heap of

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

G. J. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

institutions that cannot possibly provide University education, no matter how high the education in them may be.

18,901. You lay great stress upon organic unity?—Yes, and of the right kind. And in the case of these other institutions I have ventured to suggest that they should be encouraged to become University Colleges where it is practicable, as in some cases it is, and in other cases that they should confine themselves to that part of the teaching which can be best carried out in these special institutions, and leave all that can be as well carried out elsewhere to be provided for by the University.

(*Lord Reay.*) I wish to make an observation with regard to Belgium, which is rather important. What has been stated about Belgium in the evidence we have had before is this: that the University of Louvain is a Roman Catholic University; that the University of Brussels represents the undenominational principle; but the State Universities of Ghent and Liège are, to a certain extent, fluctuating quantities, because the professors are appointed by the Government of the day, and represent consequently the views of the Government which for the time being happens to be in power. In making remarks upon foreign systems of education great caution is needed.

18,902. (*Sir George Humphry.*) You have mentioned certain schools in which you think the education is not effectually carried out—certain of the Medical Schools especially. You think they would be better grouped together. Have you experience with regard to the relative advantages of teaching in large institutions and in small institutions as to in which the students really make the best progress? Have you any experience or knowledge on that subject?—It is a very important and difficult subject?—I have experience to a certain limited extent. I think, so far my experience goes, the larger the institution the more effectual the teaching is if there is a sufficient supply of teachers provided.

18,903. And you think that is the case, that they really do supply teachers who exercise an influence over an individual man in a better way than that in which it is carried out in the smaller schools?—I think the number of teachers is frequently not as great as it ought to be, and the provision for the individual men is not generally as great as it ought to be.

18,904. And perhaps there may be a difference between commencing students and higher class students?—Certainly.

18,905. For instance, I have understood that in the German Universities, the teaching of the commencing students is really not very effectually carried out; that the various teachers devote themselves so very much to research and their own particular interests and that they do not so much consider their duties with regard to the students. Have you any knowledge of that?—No, but I think that could be provided for by superadding other teachers whose instructions would be recognised by the University.

18,906. But practically it is not so done. We must not only consider an ideal University, but a practical one. What practically is best to be done?—That is speaking of the future you mean?

18,907. Yes. How can that be compassed best? There are a large number of teaching institutions in London, and I want to know whether it is not advisable that those teaching institutions should be utilised, regulated, controlled, and directed by the one University, not abolished, but controlled, regulated, and directed?—I doubt much very whether it ought to be done by a teaching University.

18,908. Done by the University but not abolished?—Certainly, not abolished. But if the whole education is obtained in these professional schools, I do not think it ought to be in connexion with the University, unless a portion of the education is given in connexion with University colleges.

18,909. You mean that it should not be recognised?—Not recognised nor a degree given to them by the University. I do not think it is a University education if it is only a medical education.

18,910. I suppose University education would mean the communication of good sound knowledge in particular subjects. That would be the real first view and desire of the University?—Yes, but it would not be the essential part. It would be *an* essential part, but not emphatically *the* essential part. The essential part would be that it should be given in such form as would make the men well educated as well as highly educated. You are only speaking of their being highly educated.

18,911. No, I am speaking of their being well educated; that the object of the University should be to give and to insure good education in the various subjects which it took cognisance of?—By good education, I would include necessarily being under such circumstances as to fully appreciate the effect of other modes of culture upon the human mind. I do not think a man in a Medical School only, is under such circumstances.

18,912. That you would insure rather in the earlier details of education, but when they come to specialise as in law, theology, and so on, they must pursue to some extent independent courses. They would not be brought so much into relation with each other?—I have advocated, and I would still venture to advocate the carrying out of such of those subjects as could effectually be carried out in University colleges. I gave instances, anatomy, physiology, chemistry, and some others. I have this much experience in reference to the question you put to me, that chemistry is not as effectually taught in small separate Medical Schools as it is in a large chemical school attached to a University; neither, I think, is physiology. I think I may venture to say that.

18,913. You have spoken of the collation of examination and teaching, and the effect of the one upon the other. The examination, I suppose, must under all circumstances take the lead to a considerable extent. Examinations are really the great fulcrum by which education must be carried on, and regulated, are they not?—They are a necessary adjunct.

18,914. They must be something more than an adjunct. The really great and important thing is the institution of a thoroughly good examination?—I do not think that is the really great important thing only.

18,915. Not only?—I think the examinations should co-operate with the teaching, and I think the teaching ought to be largely reformed in the Medical School. I do not think it is of any great use to oblige a good student to attend many of the lectures as he is now compelled to attend, and it would be a very good thing to substitute practical work in many cases for attendance at those lectures.

18,916. I am not speaking of Medical Schools, but of examinations generally. Is it not a very important point that the examinations should be if possible improved; that they should take cognisance if possible, not simply of the amount of facts a man has, but of the ability to use them, and that therein is the great difficulty. If that were carried out, then that would direct the teaching in some manner?—In that connexion I have already ventured to suggest that the practical work done by a man through the whole year, should be brought up as part of what would determine his award at the examination; that is in some cases—in cases to which it would advantageously apply. That is what I should consider as a further step of improvement upon the great improvement which was introduced when practical examinations were introduced some years ago.

18,917. You think that the evidence of the teacher as to the work done, should tell in the examination?—As to the laboratory work done for instance, the investigations carried on, and things of that kind. But I do not think it would be well to have the examinations made the main aim of the instruction. They are necessary for two purposes; both to ascertain how the student has progressed, and also for the purpose of

applying an incentive to make him work. The utility of examinations is not a single thing; it is to be considered with reference to different classes of students. The way in which the objects would be kept chiefly in view in providing for what I may call honour students in the examinations and in the teaching, are utterly different from what they are in reference to what I may call pass students.

18,918. All that goes to show the greater importance of the examinations, and the very serious consideration that should be given to the mode of conducting them?—Undoubtedly, so as to weave them and the teaching together. I think that the main aim should be to make the one co-operate with the other.

18,919. (*Mr. Anstie.*) I understand you to speak of University colleges. May I ask in what sense you use the term "University colleges"? Do you mean colleges which teach all subjects of human knowledge?—That would be an impracticable ideal.

18,920. What would be the limit of that ideal?—The limit of that ideal would practically be that it should at all events embrace the main subjects which were dealt with by the University.

18,921. What would the main subjects be?—I should say that they must include a strong classical side; they must include an equally strong mathematical side; they should include such subjects as chemistry and experimental physics, and I think they should also include such things as physiology and anatomy. I do not think a college is properly speaking a University College that does not provide for the main branches.

18,922. Enumerated as you have now enumerated them?—It is very hard to make an enumeration of that kind. I would not refuse to recognise a college because of its short-coming in one direction if it were in the main of the type that was required. It must embrace a very powerful literary side, and it must embrace a very powerful scientific side, and without those two both being strong it should not be a University College. Those should be the two sides, and the other things I mentioned are going more into detail as to what each of them should include.

18,923. It would require a great deal of power on the literary side. Now, to bring this to a practical test (because we have to consider it a great deal from that point of view here), may I ask what you would do in the case put to you by Sir George Humphry of a medical student desiring to obtain a medical degree under the condition which is now imposed five years, or, as some witnesses have said it ought to be, six years medical course. Would you say that no student should be allowed to take a medical degree unless he resorted for his education to a University College such as you have given us a description of?—For his education in some of the subjects that are now taught in a medical school.

18,924. Can you tell us how far the equipment of the medical schools whose representatives have been before us are adequate to the purpose, say schools like St. Bartholomew's and Guy's?—In one sense I suppose that they teach these subjects well. That is not enough for a University.

18,925. What would be enough?—That the student should be brought under that kind of influence during his education which makes him a University man.

18,926. That is a little vague, is it not?—What is that kind of influence? Is it not rather defining a thing by its own definition?—No, I think not; at least it does not present itself so to my mind. I think it essential that he should be brought up along with, side by side with, and as much as possible in contact with, men pursuing totally different kinds of education from his own; and he should have an appreciation of how great an effect may be produced by other types of education from that which he is himself receiving. That is the critical thing which I think should be insisted upon by the University as such.

18,927. These conditions are not only desirable, but to be insisted upon during the University course?—Yes, in order to obtain a degree from a teaching University.

18,928. And do you think we could practically deal with the Medical Schools on that footing?—I am not prepared to give evidence on that point which would be of any weight. But if they do not come into an arrangement of that kind they should not be part of the teaching University. I think they should be left to be provided for as they are now by going to an examining body.

18,929. Then you would in fact limit the power of medical graduation to the students at colleges which would answer your description if we could find them?—When they are created.

18,930. Then you do not think they are created at present, is that so?—I think they are imperfectly created. I think the object of this Commission is that they should come into existence.

18,931. Then you do not think there are any colleges which would answer you description?—Yes, I think University College, for instance, is quite entitled to be regarded as a University college in my sense of the word.

18,932. And King's College?—King's College I am not so familiar with, but I presume it is.

18,933. Then, practically, the result of your evidence is that everyone who is to take a medical degree at this University is to go to one of those two colleges?—Unless others are created. I take it that if sufficient pressure were brought upon some of the great science schools that exist in London they would develop into University Colleges by embracing along with their science teaching an adequate and ample provision for literary teaching also.

18,934. And do you think it practicable or even desirable that there should be superadded to these schools of very high rank, and in their own way of quite equal rank to the colleges you have referred to, a literary department?—I think it should be made a *sine quâ non* of their being any part of, or recognised by, a teaching University.

18,935. You think it would be desirable that there should be such a department added, for instance, to the City and Guilds and the Royal School of Science, where some of the highest work is carried on; you think it is desirable that there should be a literary department added to them for the purpose of enabling them to enter into the system as University colleges?—I think so for the purpose of giving a good as well as a high education to the students.

18,936. I do not ask whether it would be desirable for a student to have all these things, but whether you think it practicable or even desirable that, as things stand, it should be added to these institutions?—I think very desirable, and that until that is done the students turned out by them will not be what I call well, as well as highly, educated men.

18,937. Would you apply the same to law?—I would.

18,938. Then you would allow no man to take a law degree in this University who was not attached to one of these University colleges, although the fact is notorious that those who come to the Bar, and to a large extent those who become solicitors now, have very often gone through a University course?—In Oxford or Cambridge?

18,939. Yes, or elsewhere?—Those are University men.

18,940. But they are not of this University, and, therefore, would not be admitted to graduation in this University?—Certainly not, unless they have gone through a similiar course in one of the other Universities.

18,941. We are, however, dealing with the facts of educational institutions that we find in London and educational needs that we find in London?—The question is whether the facts existing in London make it impossible to create a teaching University in London. I, myself, should certainly regret to think that is so.

18,942. You mean a teaching University of the type you have described?—Yes, of the type I de-

G. I. Stoney, M.A., D.Sc., F.R.S.

12 Jan. 1893.

scribe, which is I claim the only type for a real teaching University. I do not think a teaching University which is merely an agglomeration of colleges each devoted to one side of teaching is entitled to the name.

18,943. But those are not the only two solutions of the question?—I think the only one between the two is what I suggested, that is that a portion of the teaching in the professional colleges should be recog nised, providing there has preceded it, or is superadded to it, either before or after, teaching in the University in the subjects which can be equally well taught there.

18,944. Would you be in favour of adopting what some have called a system of equivalents, taking education given in one place and supplementing that by education given in another place so as to make the University total of requirements?—I would certainly do so in reference to medicine. That is, I think, there are some subjects that can undoubtedly be better taught in Medical Schools attached to great hospitals than they can in medical schools attached to a University college. There are other subjects in the medical curriculum which, I think, might be possibly better, but certainly as well, taught in colleges attached to a University. I would naturally give the University degree to men who have done as much as they can consistent with the proficiency of their professional education in connexion with a University college.

18,945. And you would apply the same to law, I suppose?—I would apply the same to law.

18,946. And the other subjects?—Yes, to other subjects, certainly.

18,947. Literature and science?—I do not know of any institutions in London that are colleges of literature only. There are great science schools.

18,948. And of course there might be schools of literature?—Yes.

18,949. And that you would admit as a solution?—I had rather bring pressure upon the science schools to become University colleges, because they have already what I might describe as far the larger half of what is requisite.

18,950. I am not quite sure that I understand what you mean by becoming University colleges. Take, for instance, the Royal School of Science at South Kensington; that is completely fitted with apparatus, and it has an extremely powerful staff of professors of great eminence and ability. How would you make it a University college?—In the first place I would superadd to their chamber studies in science something stronger than they have at South Kensington.

18,951. That is in the same direction?—Yes, and in the other direction I would superadd a powerful literary side.

18,952. That just brings me to the practical difficulties which we have to deal with here. If you add that, it means the expenditure of a large sum of money in the creation of a staff and the erection of buildings and appliances. Would you desire that that should be done?—Yes.

18,953. You are aware that already the existing colleges complain of competition and the withdrawal of students, and now you propose to create another centre which would still further tend to withdraw them. Would that be a method which would be accepted readily by the existing institutions?—I am not considering what would be accepted readily; I am anxious to get pressure to bear to bring about what is really desirable. I think London would easily bear a third University college.

18,954. What you would desire is that University colleges according to your description should be multiplied in London?—Not multiplied but added to. I mean only a difference of a degree.

18,955. You mean that they should not be made too numerous?—Yes.

18,956. But you think they should be made more numerous than they are?—I think that is probably the best solution that could be obtained, but if I had my desire I would keep down the number. I had a great deal rather see the whole of University College and the Royal School of Science brought together than two separate institutions, if such a thing were practicable. That is, I would have a double staff, or a multiple staff for that matter, in the same institution rather than in separate institutions.

18,957. You do not mean in the same building, but you mean in point of organisation?—It would be essential that they should be in the same building.

18,958. Surely you must appreciate that that would bring us to an almost insuperable difficulty?—Therefore, as the next best thing I would rather see the Royal School added to so as to make it a University College.

18,959. One of these alternatives you would require?—The other one I would require if it were practicable, but I do not suppose it is.

18,960. If I may say so, one seems to me about as practicable as the other. Are you acquainted at all with the proposals of the association for the promotion of a professorial University?—No, I have not seen them.

18,961. Your view would be that the Royal University of Ireland is no University?—Emphatically so.

18,962. (*Professor Sidgwick.*) You have had experience of the Dublin University as well as of Queen's University?—Yes. That is, of course, ancient experience in my time, and also from living in Dublin for some years, and being more or less in contact with Dublin University men.

18,963. And your opinion is that the system by which both the examination of outsiders and the examination of students residing in and taught in Dublin are placed in the hands of one body is a bad system?—Very bad.

18,964. If there is to be an examining board, examining the country at large you think that ought to be separate from the teaching University, and there ought to be a careful distinction maintained between the two?—I am very distinctly of that opinion.

18,965. The students should not be called by any common name?—It is not merely a question of calling students. I really regard that as a subordinate question, although not one to be overlooked; but I believe it would lower the institution inevitably. I do not think it would be found practicable to have a real valuable teaching University discharging functions of that kind also, and there would be continual jealousies between the two classes if they were not brought into the same examination. A whole heap of practical difficulties would arise, and I believe the things could not be made to work satisfactorily.

18,966. (*Lord Reay.*) Have you anything to add?—I think not, excepting the two points that I will send to you.

The witness withdrew.

SIDNEY COLVIN, Esq., M.A., examined.

18,967. (*Lord Reay.*) You are prepared to give evidence with regard to the study of art and archæology in a University, and more particularly the proposed University of London?—Yes, I am prepared to answer questions on that subject.

18,968. The first and obvious question is: In what sense art teaching is, and in what sense it is not, in your opinion, a proper part of the work of the University?—My view of that point is that it is not a proper part of the work of the University to undertake the practical training of artists; that for the training and teaching of professional artists, with the help of studios and models, the University should not necessarily be called upon to provide. It has not been the custom in other countries. For instance, in France the École des Beaux Arts, which is a State institution quite apart from the University of Paris, provides such teaching. There students receive their initial training, and thence they generally pass into the studios of distinguished artists. At the École des Beaux Arts there is a certain amount of historical teaching subordinate to the practical, but neither in Paris nor in any of the Universities in Germany, including the great capitals where art teaching is carried on, such as Berlin, Munich, and Vienna, is there any school of practical art included in the University system. Nor does it seem to me that such a thing is in its nature part of University work.

18,969. University College has, to a certain extent, deviated from your system?—Yes, that is so. There were three endowments left by the late Mr. Slade, one at Cambridge, one at Oxford, and one at University College, London. Those have been treated by Mr. Slade's representatives and executors rather differently; that is to say, at University College it was, I believe, the express wish of Mr. Slade that the endowment should be used to found an actual practical Chair for the teaching of art. In any case, that has been the view there taken of it by the college and by the administrators. At Oxford, if I am not misinformed, the Chair has been held by two professional painters in succession, and there has been a mixture of practical and theoretical teaching. At Cambridge, on the other hand, the professor appointed has always been a teacher of the archæology and the history of art. So that the practice in the case of those three endowments has been rather divergent. The Slade School at University College, London, is a distinct rival school of practical art to the Royal Academy. Perhaps I may give you the reasons which make me think that this, on the whole, is not a desirable thing. In the first place, eminence, or the promise of eminence, in the practical arts does not at all necessarily go with the other faculties which are generally supposed to be cultivated at the University. The general cultivation of mind in literary or scientific matters is a very different thing from the cultivation of the gifts of hand and eye in practical art, and the two kinds of aptitudes are often found quite apart. Suppose, for instance, in a University you had a school of practical art; the man who had most gifts, and perhaps genius, for the career of an artist, might very likely be inapt and slow of learning in other matters. Some of the most distinguished artists of the century, like Turner and Ingres, have been almost untaught, and perhaps unteachable in other things. Therefore the most successful art student might, by his temper of mind, be most unsuccessful in the other studies of the University; and *vice versâ*, the most generally cultured man among students of practical art, might make a very poor artist. So that in that way the pursuit of practical art as a profession stands, to my mind, very separate from the studies which are the general object and aim of University teaching. The practice and experience of other countries seem to point in the same direction. On the other hand, I should be inclined to say that for students working specially at archæology and the history of art, a certain amount of manual training is a very desirable thing, and a useful help, and a certain pass standard might be required of students making that their main study.

18,970. The practical work you prefer to leave to he Royal Academy or to other bodies?—Yes, to the Royal Academy or similar teaching bodies. I do not wish it to be inferred, now that the Slade School at University College has been so long established on the principles I have mentioned, it would be necessary to change or to disendow it, especially as there exists also a separate Chair of Archæology at that institution. But I think that the work of such a school is not theoretically an appropriate part of University teaching.

18,971. Then you would organise the archæological and historical studies systematically. Perhaps you would inform the Commission which curriculum you would introduce?—What I understand by the systematic study of archæology and the history of art as a regular branch of University teaching seems to subdivide itself into three or four main heads. One is the study of classical archæology—the study of Greek and Roman antiquity in its monuments. That has been for years in Germany a recognised and highly organised branch of University teaching. The second branch would be the study of Oriental, particularly Egyptian and Assyrian, art and archæology. The third branch would be the mediæval and renaissance, including the history of sculpture, architecture, and painting as special disciplines, and the historical development of those branches of activity in connexion with general history. My opinion, partly founded on experience at Cambridge, and partly founded on that of other Universities abroad, is, that those are disciplines which are in themselves attractive; that they are capable of adequate tests by examination, and that they fill a position which is very suitable to a certain class of minds. They partake in one sense of the nature of scientific studies, inasmuch as they deal with material objects, viz., the works of sculpture, architecture, and so on, so that the discriminating powers of the eye, the faculties of observation and analysis, are developed by them; but they deal with such objects not as fashioned by the forces of nature, but as fashioned by the hand of man, so that in that sense they belong to the literary and historical branch of studies.

18,972. You would require in students of these subjects a good deal of preliminary classical, literary, and historical knowledge?—Exactly. Supposing that any student of archæology and art history were to wish to take his degree in archæology and the art history of the Greek and Roman worlds alone, I think in such a case it is desirable to require of them a thorough knowledge of the classical languages and literature—either that, or history, or both. Such is the requirement made in the German Universities, or at least in most of them. If a student makes a study of classical archæology his main subject of examination, they require him to take up with it is classical literature and perhaps also some other secondary branch of study. For the study of inscriptions, which is so large a part of archæology, a knowledge of languages and philology is of course very necessary.

18,973. And in the same way where Oriental archæology was the chief object, there the student would naturally attend lectures in the Oriental department?—Yes, by the same analogy, and perhaps the more so, inasmuch as so great a portion of the extant materials of the study are in one case hieroglyphic, and in the other case cuneiform, inscriptions. The student cannot advance far in either Egyptology or Assyriology without going to a certain point in both those studies.

18,974. And to Englishmen the study of those subjects is of vast importance?—It is a study that should be most attractive to Englishmen, and the

S. Colvin, Esq., M.A.

12 Jan. 1893.

materials in the British Museum are among the richest in the world.

18,975. Then with regard to the history of mediæval and renaissance periods of sculpture, architecture, and painting generally, what subjects do you think ought to be taken up by students?—As a rule, I should say that the secondary study taken up along with, and in the background of, those would be the history of the periods concerned. As was shown by one very distinguished example—Professor Freeman—the study of architecture and its development is intimately bound up with the study of social and political history, and furnishes the necessary key to a large part of it.

18,976. And also a knowledge of modern languages?—These studies cannot be very well carried out without a fair knowledge of modern languages and literature, because so much of the literature of the subject is written in them, and especially in German.

18,977. Then you wish to give evidence with regard to the German Universities?—It struck me that, inasmuch as the systematic pursuit of these studies are comparatively new in this country and is older in the German Universities, especially so far as classical archæology is concerned, I might get from a distingished authority at one of the German Universities a brief account of how the matter stood, and what the history and position of these studies in the German Universities was. I have such a letter written by Professor A. Michaelis, Professor of Classical Archæology at Strasburg, which, perhaps, it may be desirable to hand in to the Commission. Professor Michaelis writes:—"In the German Universities "archæology is the older of the two courses of study "which you mention. Even in the last century "archæological lectures were delivered. Heyne, in "Göttingen, did special service in obtaining for "archæology an assured position in connexion with "classical learning. In the first half of the century "the number of Universities in which archæology "was regularly represented increased. Thus, for "example, Creuzer was teaching at Heidelberg, "Welcker and Jahn at Bonn, C. O. Müller and "Wieseler at Göttingen, Thiersch at Munich, Ger"hard at Berlin, Jahn and Overbeck at Leipsic, E. "Curtius at Göttingen, and afterwards at Berlin. "In the smaller Universities the study was repre"sented in a more casual way, if it happened that "one of the teaching staff was acquainted with "archæology." That is, when any docent, that is a degree of teacher less than a professor, happened to give a lecture. Professor Michaelis goes on to give a list of teachers of archæology in the various German Universities, and, then, he says, "Special Chairs for "archæology were only established generally, when the "available supply of younger men of archæological "training became larger. This was due, in the first "place, to the severer system of training introduced at "Bonn, and, in the second place, to the Archæological "Institute at Rome, and dates from about 1860. "There are now only a few minor Universities, which "have no regular Chair of Archæology. All the Chairs "are attached to the Faculty of Philosophy." The Faculty of Philosophy, of course, includes our Faculties, Arts and Letters both, and I assume, therefore, that in any division of Faculties, what in England is the Faculty of Arts would include this study, "Many of "their occupants are also classical scholars (philo"logists), though they do not always deliver classical "lectures. In particular, the tradition founded by "Welcker and Jahn maintains the association of the "two subjects. This has been modified by Brunn" (that is a very distinguished professor at Munich), "who would like to make archæology as independent "as possible, and who will not hear anything of "analogy between classical scholarship (*philologie*) "and archæology. At the same time it cannot be "said that his pupils have sought to form a closer "alliance in some other direction such as history, or "with later art. For the most part they wish to be "archæologists pure and simple." So much for the study of classical archæology, which, I may mention in this connexion, has already within the last dozen years taken root as Oxford and Cambridge, and holds, at least in Cambridge, a place in the regular system of final examinations for classical degrees. Professor Michaelis goes on:—"The study of the later "history of art is much more recent in Ger"many. If I leave Kinkel out of account, who "between 1840 and 1850 as a teacher at Bonn, "inspired a number of young men with enthu"siasm for more recent art, Springer is really the "first who pursued art history as a true course of "academic study, at Bonn, Strasburg, and Leipsic "(see Springer's very interesting autobiography). At "Berlin Grimm represented the subject, but he was, "of course, quite unqualified to supply a methodical "introduction to the study. Besides Springer, Ja"nitschek at Leipsic, and Schmarzow at Breslau, are "the only men who have instituted a strict course in "art history—Woltman died too early. The pupils "of Springer and Janitschek have for the most part "made some study of archæology, but have preferred "to connect themselves with history, especially with "mediæval history. With regard to the remaining "students of the subject this holds good still more "exclusively. Other teachers of art history do not "attempt so much to form a school as to exercise a "a general influence, and to make the history of art "an instrument of general culture at the Universities, "So, for example, I may mention Dehio at Strasbourg, "and Lange at Königsberg. Others combine the "attempt to attract scholars in the history of art by "means of exercises and elaborate lectures, with "attempts to exercise a general influence by public "lectures or demonstrations. Such are Schmarzow "and Wölfflin at Munich." Then there is a passage which it is, perhaps, hardly worth while to read at length, stating the safeguards that had to be introduced in connexion with this study; and that at first some of the teachers who lectured on it were imperfectly informed, while the audience who came to hear was composed of persons not accustomed to severe academic discipline, but of dilettanti, and often of invalids whose means permitted them to travel in the south and revel in its art. Then he says: "Only by degrees, and "mainly through the services of Springer and Ja"nitschek, the whole character of the studies is "becoming more severe. Now, by degrees, we are "beginning to hope for a satisfactory succession in "the academic chairs, whilst hitherto we have been "in the greatest difficulty when it has been a question "of filling up a professorial vacancy. In connexion "with this is the fact that a considerable number of "German Universities are still without any repre"sentatives of art history, and throughout Germany "there are only a few regular professorships of the "subject—at Berlin, Strasbourg, and Leipsic. No "other instance occurs to me at the moment, though "there may be a few more. Undoubtedly this will "be changed as soon as the appropriate and qualified "teaching power becomes available. The existing "Chairs are all attached to the Faculty of Philosophy. "If students wish to take their degree in archæology "or the history of art, they can naturally only do so "in the Philosophical Faculty. The treatment of "the examination and the grouping of the other sub"jects required for the examination vary in different "places. In Bonn, so far as I know, classical scholar"ship is required as the main subject from every "archæologist, and philosophy and history are added. "Students of the history of art do not take a degree "at Bonn, because Justi likes best to give no lectures "at all, and attracts no pupils. Here (at Strasburg) "a student can choose either archæology or history "of art as his chief subject. With the former, "classical scholarship is taken almost always as a "subsidiary subject, and together with it either his"tory of art or history of philosophy. For those "who take the history of art, history and archæology "are usually the subsidiary subjects, but now and "then philosophy is taken instead." Then he goes on to say that he is not acquainted with the exact

order or places held by the studies in other Universities, and he quotes certain authorities for the history of the studies and their establishment.

18,978. Then you contemplate that the students should be matriculated students in the Faculty of Arts?—Yes.

18,979. They would have the same preliminary secondary education as the other arts students?—Yes.

18,980. Then they would branch off into three groups: one group classical, the second group Orientalist, and the third group would take modern literature and languages?—That is my idea of the natural division of the subjects.

18,981. Then the next important question is, how you propose to utilise the British Museum for this purpose?—That is a subject which I approach with some delicacy, being an official of that Museum, and not having the right or the desire particularly to criticise the existing organisation. But it seems to me that the creation of a teaching University in London would bring about a new order of things. It is obvious that the British Museum is one of the greatest repositories in the world for materials for all kinds of archæological studies, and were the proposed University established it would be natural to expect that the materials stored in the British Museum would be in some special way put at the disposal of students and teachers in this range of subjects. I cannot say that I have at all completely thought out a working system in which the students of a future University of London could have facilities in any different or exceptional way from that in which the general public have them, but roughly I should think it would be natural that some of the professorships at such a University should be held by officers of the Museum; that those officers should get students at such a University about them; and that professors in such subjects not being officers of the Museum should have special conveniences and special facilities given them for using the collections.

18,982. And, I suppose, you contemplate the appointment of *privat docenten* as the Germans call them?—It would, I should think, be necessary that there should be a considerable number of teachers in a subordinate position to the professors.

18,983. But there is no difficulty whatever in obtaining access to the British Museum, and no difficulty would be placed in the way of University professors teaching their students there?—Certainly no difficulty would be made in the way of University professors taking their students there; but as the Museum is at present arranged and constituted, it is not a very convenient place for giving lectures. There is a certain amount of lecturing done there at present by outsiders who are permitted by the Trustees to go round with groups of peripatetic students discoursing as well as they can. That is inconvenient. Hangers on are in the habit of coming, and there is always a great shuffling of feet. I think it would be an advantage to the British Museum if there were sets of lecture rooms within the Museum itself, to which objects on which it is desirable to give lectures should be moved, and where audiences could be collected as in other University institutions. We have at present nothing of that kind. Two officers of the Museum have held successively professorships of Archæology at University College, but under the existing system all their work has been done outside museum hours. In the one case all the lectures were given in the lecture rooms at University College; in the other case, that of the present occupant of the Chair, my colleague Professor Poole, he both lectures in the college, and also gives demonstrations within the Museum itself. But the whole of this work is not a recognised part of the official work of the Keepers, that is to say, it has to be done over and above the day's work, which has to be devoted to the cataloguing and other necessary work of the Museum.

18,984. You would desire to make it an integral part of the work, and that the Trustees should recognise as a most important part of their duties?—The time of the present staff of the Museum is, I take it, very completely filled by their immediate and necessary duties, such as purchase, classification, cataloguing, answering inquiries, making the collections as fully as possible available, in short, to students in general. Time for direct teaching they have extremely little. If much direct teaching were to be done by the Museum staff, I think the staff would certainly have to be increased.

18,985. And that might be a matter of arrangement between the University and the Trustees?—Speaking as a private individual, that is the way it presents itself to me.

18,986. And to secure this a representative of the Trustees of the British Museum might with advantage be a member on the governing body of the new University. That is an obvious course to take, is it not?—That is a new suggestion to me, but I should think it is very desirable that the British Museum should be represented on the governing body of the new University. I think it would be a great improvement in the position of the British Museum if it were given more of the character and status of a University or learned body than it has now, and less those of an ordinary public office.

18,987. The gentlemen who are in charge of these priceless collections should have a professorial status in the new University, and, if the staff were increased, this would in no way prevent the administrative part of the work being discharged under their supervision by other officials?—I imagine the two duties might be made compatible. It presents itself to me in that light. At present, I think many of us feel that there is a wide gulf between us and the public. We endeavour to train our own assistants in the science of these things, and we endeavour to make the collection as available as possible to students of all kinds. There come a few genuine students, chiefly foreigners, to work in various branches in a scientific manner. Besides that, the Museum is frequented to a very large extent by mere, I do not like to say loafers, but people who have no preliminary knowledge, and who are not pursuing studies in a systematic way at all. It seems to me that to be brought into direct connexion with classes of regular students would be a valuable stimulus to the staff itself. The resources of the British Museum are eminently teaching resources, and many of us would like to do direct teaching work; to bring the Museum into direct communication with the proposed new University in some way might effect this object, and be of very great help to us.

18,988. Then I understand that for these students it would be very useful to send them, for instance, to Rome, Athens, and Egypt after they had taken their degree?—No doubt in the study of archæology, especially of classical archæology, to complete the work of a student the opportunity of travelling abroad, and visiting and studying in various foreign countries, is extremely desirable. Both at Oxford and Cambridge such studentships do in fact exist. The Germans have their Archæological Institute, and the French have the schools of Athens and Rome for that purpose. Supposing a University of London with a sufficient endowment were to come into existence, I should conceive that one of the things which it would do would be to make provision for students pursuing this branch of studies abroad.

18,989. Have you anything to add?—No, I think I have given you the general outlines of what I had to say.

18,990. (*Professor Sidgwick.*) With regard to the relation of the British Museum to the University, if I understand you, it is clearly your view that it would be a gain to organise the teaching work that you think the Museum ought to be made to do, within the University rather than outside the University. I put the question in that form, because it might be held that granting that the collections of the Museum should be made more useful in the way of teaching, there still is no reason why this should not be quite independently organised. I understand that your view

S. Colvin, Esq., M.A.

12 Jan. 1893.

is that it should be organised within the University rather than outside the University?—I certainly incline to that view, chiefly because the University is more likely to provide a body of students really bent upon accurate and consecutive studies than the outside community.

18,991. Suppose it should turn out that the Trustees of the Museum preferred a different organisation, that they desired to make their collections of more use in the way of systematic teaching, that they desired to control but not to come into the University,—should you still think that the University ought to organise its own teaching in the history of art and archæology, or should you in that case think the University had better leave that part of the work alone?—I think that any University established to-day, which had not organised teaching in art and archæology, would be extremely behind the times, and supposing it to organise the teaching in its own way the materials of the British Museum would be necessarily the main materials; there would be also those of the National Gallery, the South Kensington Museum, &c. I should certainly advise that these studies should not be left out of the University curriculum.

18,992. You would, however, prefer to bring the two organisations into harmonious combination?—Yes. It seems to me that the work of the British Museum is essentially on the lines of University work. We are essentially a learned body, and I therefore think that if a joint organisation could be satisfactorily arranged it would emphasise the University character of the Museum. I am not prepared with any definite scheme, nor do I quite think that my position as an official would justify me in giving more than a general impression to that effect.

18,993. Without asking for a definite scheme, do you think that, considering not only the British Museum but every institution of the kind, it would, as a general rule, be desirable that those who had the management of the different departments of the institution should also be University teachers?—I think the case is almost one that must be decided by qualifications of individuals. There are persons admirably fitted to be keepers of museums who would be neither desirous nor very capable of communicating knowledge by means of University lectures. If the two offices are to be conjoined it seems to me that it must be through the selection by University authorities of members of the Museum staff who are both willing to teach, and have the faculty of teaching.

18,994. You think the two sets of appointments should be kept entirely distinct, but that it would be desirable that the officials of the Museum when they felt themselves qualified should be candidates for the Chairs in the University; and it would be desirable and in your view quite possible, that some arrangement might be made by which in that case a portion of the routine work of the Museum should be placed in other hands?—I think such a system might be devised. It would involve an increase of the existing staff certainly.

18,995. It occurred to me (though perhaps it is trenching too much upon a part of the subject on which you would prefer not to offer a suggestion) that perhaps in case the Chairs of the University were adequately endowed, and the head of a department of the Museum were made a University professor, in resigning part of his work, he might also resign part of his stipend that he received from the Museum; so that the combined arrangement might be carried into effect, without any increase in the cost of the staff of the Museum?—I hardly like to express an opinion upon an arrangement in detail of that kind, but such a proposition would necessarily have to be considered if the general idea of collaboration between the University and the Museum were accepted by the various authorities concerned.

18,996. Do you know how far this combination has been carried into effect in Germany, for instance in Berlin, Munich, or Vienna?—I am sorry to say that my information is rather imperfect on that point. In Berlin E. Curtius was at the same time, I believe, Professor of Ancient History in the University and Director General of the Antiquarian Department of the Museum. I do not know precisely in what manner he made the collections of the Museum available for University lecturers, but he, and others also, have made the two offices work together. There has been, I am informed, a new regulation in Paris whereby some of the directors and assistants at the Louvre give lectures which are held I believe in the Sorbonne. That is an instance of direct teaching being allied with the work of museum officials.

18,997. (*Mr. Rendall.*) I think the collaboration which has taken place between the Museums and a University has been by the head of the department of the Museum undertaking lectures for University College, for instance?—For University College, and for the University of Cambridge at one time.

18,998. But I mean that as yet there has been no case of a professor of an external body, whether a college or a University having special privileges granted to him by the Trustees of the Museum for utilising these resources for teaching purposes?—To the best of my belief none. There have been several outside persons who have been allowed to lecture in the Museum, and who do lecture in that way. But these outside lecturers have not been members of the organised staff of the teaching body. It was because the professor was known to the Keeper of the Department as a person fitted to give these private and unauthorised lectures.

18,999. But you do not think we need apprehend any great or insuperable difficulties in establishing some definite recognition of University professors?—My impression is certainly not.

19,000. You take quite for granted the position of Art professors, whether of the Museum or the University, as members of the Faculty of Arts. You do not think there would be any need for constituting any distinct Faculty of Art as opposed to the Faculty of Arts?—No, I do not think there is, from my point of view, excluding, as I had proposed to do, the special and professional study of practical art from the business of a University.

19,001. It practically turns upon that?—Yes, it really practically turns upon that.

19,002. If the University undertook the practical training of art, then it would have to be a separate Faculty?—Yes, it seems to me so, and for students of that description a certain amount of historical and theoretical teaching should come in as a subordinate discipline to improve their minds.

19,003. At the same time taking the history and the circumstances into account you would not think it undesirable to give recognition and status to the Slade professor of Art of University College, because he is in the position of a teacher of practical art?—That is a point of detail. It would be quite an exception to my general idea of what a University should do.

19,004. Should the University go further in that direction, connecting the Royal Academy School with the University?—It seems to me that in that way you would make the University course unmanageably comprehensive and universal. It brings in a new set of disciplines which hitherto have not been made part of University teaching in any European University.

19,005. And in your view it is desirable that the professor of art should be a member of the Faculty of Arts, in order that he might have due influence upon the students?—Yes.

19,006. And he would lose more than he would gain by being separate from it?—Yes, I think so.

19,007. (*Mr. Anstie*). Could you tell me the nature of the instruction that is given at the Sorbonne by the Keepers?—I have not inquired definitely into the nature of the instruction. I am acquainted with the official at the head of it, and I have conversed with one of his pupils. My impression is that it consists of illustrated lectures in art-history, and the character

and affiliation of schools, with a certain amount of training of the æsthetic faculty.

19,008. That seems to come rather nearly to another branch which I meant to ask you a question about. You have treated the matter from the point of view of art as subservient to history. Do you see your way at all to treat history and archæology as subservient to art. I do not mean by establishing a practical school or giving direct instruction in the manipulation of the materials, but in instructing the minds and opening the imagination of those who are devoting themselves to the study of art?—By the study of art you mean not the practical manual study of art?

19,009. I will include that, but I mean not limiting it to that?—I think my answer to that would be this. I apprehend that there would be a certain number of students who would propose to take their degrees in the courses of archæology and of art alone—who would make that their main study. Would students of that kind be of the class your question contemplates?

19,010. Yes; but I am looking to those who are setting their faces towards art rather than towards archæology. I suppose we may infer that their studies are not without influence upon their art creations. Do you see any way of making the study which you have just described as that of the affiliation of schools treating that in an archæological and scientific sense, a valuable aid to art?—It seems to me that if your students were getting their practical training elsewhere, in an institution not belonging to the University, and if at the same place there was a University course of systematic training in archæology and Art, your practical students might come and follow this course and learn there, and be in that sense students at the University.

19,011. Would that kind of course, in your judgment, be of value in improving the character of art in this country?—I think that is a very difficult question to answer generally. The most highly trained and cultivated artists, who have most knowledge of the history of their art, have often the least practical executive power. The two things do not seem at all necessarily to go together. I think it is an extremely desirable thing that there should be among practical artists a certain number of cultured persons, acquainted with the past achievements of their art; but I do not think it can be assumed that such cultivation will have any direct effect in improving their own work. As a rule, practical power in their profession seems to be apart from this kind of historical knowledge.

19,012. But, although this knowledge will not give the artistic faculty, may it not improve the artistic faculty if it exists?—That it will improve an artist's exercise of his art seems very doubtful. You often see cases in which the spontaneity of artistic creation is lost through too much knowledge; and freshness of perception in the face of life of nature seems to be smothered by the impressions received from pictures. By knowing the Old Masters too well a man is often led to make copies and imitations of other people's pictures, rather than deal according to his own natural instincts with the visible facts of the world about him.

19,013. But would not the same observation apply to other branches of what we may call artistic activity? Is it not the case often that a literary style may be smothered and destroyed by a too great accumulation of learning?—Certainly; but men of letters must, to some extent at any rate, have a literary education, whereas it is not at all necessary for an artist to have a general knowledge of the history of art.

19,014. Would you say that a literary education is not generally valuable for the purpose of artistic productions?—I think I should say that to be a trained expert in the history of art is not likely to be more valuable to the practising artist than it is to any other person.

19,015. When you say the history of art, of course you mean treated in a concrete method, and you say you do not think it would be more valuable to an artist than to any other person?—No, I do not. In some cases it would help an artist, and in some cases it might smother what natural gifts he possessed.

19,016. (*Lord Reay.*) The youngest French academician has said, I believe, that he seldom read a book?—Yes, and one might quote other cases.

19,017. (*Mr. Anstie.*) Do you not think it would really improve the basis of art, to cultivate the imagination, and raise it, and might it not give us rather more plasticity in the handling of form than we are usually credited, or able to credit ourselves, with?—I do not feel able to say distinctly yes or no to that question. I see so many instances of what I have already described as the choking of natural faculty in artists by looking not at life and nature, but at pictures.

19,018. Might not that be the result of an education improperly conducted? Might it not be not so much the effect of the study as the effect of the study being conducted without proper guidance and in an ignorant and servile way?—I think the professional artist who is going to do much in his work must necessarily be occupied by far the greater part of his working day with it. He must be engaged in the actual manipulation and mastering of his materials by far the greater part of his time; but if he is an intelligent man, with a gift for historical study, he will easily and without special training pick up as much as he wants, especially as the materials are at his hand.

19,019. Might he not be encouraged to go and get instruction by the offer of University rewards and distinctions?—As I began by saying, I think the only form of University distinction that could be given would be apt to be given to the man who would do the least in after life—the man who imitated models; while the man of original talent, the really distinguished man, would very often in such competitions make the least show.

19,020. Would there be any harm in that? Nobody ever proposed to give a University degree to Shakespeare, or thought he would be the better for it?—I think it is as well that practical artists should be put within reach of this kind of knowledge, but I would not go further than that.

19,021. You think it might be possibly advantageous to go to that extent at least?—Yes, that is about the limit of what I should be inclined to say.

19,022. (*Sir George Humphry.*) What would be the nature of the study of art, irrespective of the accompaniments of history, and so on; I mean the study of art itself? For instance, what would be the nature of the study of gems? I suppose that would come in as an art study?—Yes. That is a very good instance, and I will take it as a concrete example. In teaching a student the study of gems one must train him in the habit of very minute and accurate observation as to the character of the workmanship, and the technical differences between genuine and imitative examples. He must be taught to recognise what belongs to a later or to an earlier date; what is an imitation of early work at a later date; the various relations of the figures upon gems to the larger and more important works of sculpture which they often reproduce in miniature. Then comes in the question of knowledge of materials. In what stone is this cut? Is it a glass imitation or a genuine thing? Was such and such a stone in use at such a time? Does the material itself require that I should be on my guard against frauds and imitations? In gems, rom the 15th to the 18th centuries, there was a great deal of such imitation. It is necessary to discriminate extremely carefully, and the student requires for that discrimination quite the same sort of faculty and training as are required to distinguish, say, between mineralogical specimens of close affinity. Then gems are of many kinds, and you would require a student to know at sight what one represents, how it is connected with other gems, and the deviations it may show from some normal type. Then there comes in the question of inscriptions. Many gems are signed, and some are fraudulent signatures; and there comes in the extremely difficult task of discriminating between

S. Colvin, Esq., M.A.

12 Jan. 1893.

fraudulent and real signatures. This single study involves a quantity of knowledge of that kind, partly matters of memory, partly matters of eye, but which together constitute a very fine training for observation, discrimination, and taste, with a large amount of historical knowledge in the background. I do not think a much better example than gems could have been chosen.

19,023. A great deal of that would be the technique of gems?—Yes.

19,024. And it would require great skill of observation and eye to carry it out in the way you have mentioned?—Certainly. It could not be possibly learnt from books alone.

19,025. I suppose also there would come in the technique of the mode of cutting gems?—Yes, that must be necessarily considered too.

19,026. Perhaps it is one of the most exquisite things that human hands have ever done?—Yes.

19,027. And the same would apply to gold plate. There would be a great deal of history associated with gold plate?—Yes.

19,028. That would come in in the history of the art itself, irrespective of the association with the general history?—Yes. All this brings out the kind of intermediate place which to my mind the study holds between the study of natural science and the study of the works of human mind.

19,029. Then the same with regard to statues. That would involve also to some extent sentiment and ideas of beauty?—Naturally; as well as the question of whether a thing belongs to a given period, and how the ideals of one race and one school differ from another.

19,030. There is a great deal in the art itself, irrespective of the associations?—Yes. I quite contemplate the existence of a school in the University in which archæology and the history of art taken together should be the main subject. I contemplate a certain class of students who would be neither classical students nor special historical students, but especially students of the visible and tangible matters of styles and technicality, with the course of their evolution from the beginning. The primary test should be the knowledge of art in itself, and not as merely illustrating generally history and culture. I think a really efficient and carefully examined school of that kind has yet to be established, and might be with great advantage. At Oxford and Cambridge it exists so far as classical archæology is concerned. Modern renaissance and mediæval art is not a subject of examination at all in either Oxford or Cambridge, but classical archæology is.

19,031. All that observation and knowledge in relation to the art subject itself would, you feel, be a worthy subject of University study?—It seems to me eminently so.

19,032. (*Lord Reay.*) Perhaps you might inform the Commission what you think on the general subject of including in the same University the double function of examining its own students, and examining outsiders?—With reference to the question in debate as to this University?

19,033. Yes.—I have not given very much thought to the subject, or had more experience than comes from my Cambridge training and work, and from being a member of the Council of University College for some time. My general impression is that an altogether new institution is desirable. If the various teaching institutions of London could be co-ordinated into one body, which should both teach and confer degrees, it would be a desirable thing. The present so-called University of London, though it is fulfilling an extremely useful work, is not at all fulfilling the work that I look forward to. It does not seem to me to be either a University, or to have anything especially to do with London, except as it happens to be quartered there. It is simply an examining body, giving degrees to students who may come from any part of the Empire or its dependencies. A resident and teaching University of London, where students could be brought into contact with teachers, and which would have common traditions and an *esprit de corps*, like the Universities of Berlin and Paris, and all the other Universities of the world, including Edinburgh and Glasgow, would be a desirable thing. I confess that in my view it would be a pity to change or alter the existing function of the so-called University of London.

19,034. You think it ought to be a separate function?—Yes.

19,035. (*Mr. Anstie.*) I understand you to say that you have given no special consideration to this point but it is only a general impression on your part?—That is putting it too strongly. I have not made it so much a matter of consideration as some people, but I have given some attention to it.

19,036. But you state this as a general impression on your part?—I state it as the view which I hold.

19,037. Have you any special knowledge of the work of the London University, and the mode of conducting it?—My knowledge is no doubt general rather than special, but I think my information, as far as it goes, is quite accurate.

19,038. You have no special knowledge?—What do you mean by special knowledge?

19,039. Have you ever examined there?—No, but I have seen many of the examination papers, and I have talked to many persons who have conducted examinations.

19,040. That is the extent of your knowledge?—Yes.

19,041. (*Professor Sidgwick.*) How far do you think that, in the subjects of which you have spoken, the examinations should be in the hands of the teachers if they are to be well conducted; or should there be external examiners?—I think the teaching body should in the main be the examining body. I do not necessarily mean that the same teachers who have taught individual students should necessarily set the same students their papers, and I do not necessarily mean to exclude external examiners such as added to the boards at Cambridge.

19,042. I suppose in the German Universities, where these Chairs have been introduced, the examination of the student is usually in the hands of the teacher who has taught him?—Yes, that is so. That is, I believe, almost the universal system in Germany, without assistance from outside at all.

19,043. The reason I ask the question is because we have had a good deal of evidence, and considerable diversity of opinion with regard to the effect of an external examination in cramping and hampering the teacher; and it would appear that it differs very much indeed in different subjects. For example, in the study of languages, pure and simple, Greek, Latin, or other languages, usually it does not seem to matter very much. On the other hand, in subjects such as those with which I am concerned, and, I understand, in the branches of natural science, it is considered that a student would be under considerable disadvantage, and (which is perhaps more important), the teacher would be greatly hampered if he had to prepare the student for an examination not determined by himself. How far do you consider that the study of archæology or the history of art belongs to the one class or the other, if we may say that there are two classes? Would you say it belongs to the class in which the external examination is especially undesirable, and in which you must make the examinations follow the variations which will inevitably exist in the teaching if they are not to exercise a paralysing and depressing effect upon the teaching, or do you think it belongs to the other class?—My only practical experience is in teaching classical archæology. I have examined in it, both when I was teaching, and when I was not teaching, and I think I have not found any practical difference. It is true that I knew by experience, after I had ceased to teach, what the character of the examinations would be, so that this part of my experience is not quite the same as that of

an outside examiner would be. On the whole I am inclined to think that the variation in the character of the examination could not be very great so far as modern, mediæval, and renaissance arts are concerned. In the first instance, at any rate, it is desirable that they should be devised by people who know on what general lines and methods the teaching has been conducted. They should be devised by people familiar with the teaching; at present the number of competent instructors having the means of illustrating these subjects is not likely to be numerous, and they would be probably engaged in teaching. For the present I am inclined to think that the examination ought probably to be in the same hands as the teaching.

19,044. (*Lord Reay.*) Did I understand you to say that you thought it would be useful for the students of archæology to have some knowledge of drawing?—Certainly it would be useful, I do not say it would be indispensable, but a practical knowledge of drawing is a most valuable aid to the whole range of studies, modern and mediæval, as well as renaissance. To be able to make a good and effective sketch of the objects examined, is, I will not say indispensable, but a useful aid.

S. Colvin, Esq., M.A.

12 Jan. 1893.

19,045. And in the examinations, would you test this knowledge?—I think it might be held to make an unfair difference between students who can draw and students who cannot, except in the case of those who made archæology and arts their main subject.

19,046. Would you require it in that case?—I should be inclined to say there that one might fairly require enough knowledge of drawing to make an effective sketch.

19,047. For the examinations you would require illustrations of objects?—Yes. The papers would necessarily have to include reproductions and illustrations of a number of objects.

19,048. And there is no difficulty in obtaining them?—No, there is not. A few years ago there was a difficulty.

19,049. That has been overcome?—Yes, modern processes have made it quite practicable to supply illustrated examination papers. They cost rather more than ordinary papers, but it is practicable.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Forty-sixth Day.

Friday, January 13th, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

The Right Hon. the LORD PLAYFAIR, K.C.B., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	JAMES ANSTIE, Esq., Q.C., B.A.
	RALPH C. PALMER, Esq., M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir RAYMOND WEST, K.C.I.E., LL.D., F.R.G.S., examined.

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

19,050. (*Lord Reay.*) You have been a Member of the Executive Council of the Bombay Presidency, Judge of the Bombay High Court, Vice-Chancellor of the University of Bombay, and, I believe, you are one of the three distinguished men who hold the honorary degree of the University of Bombay?—Those facts are correctly stated.

19,051. Perhaps the first question I may venture to put to you is, what is your general idea of the function which a University ought to fulfil?—Perhaps I should deal best with that question by stating what I, in concert with others, have endeavoured to do, and partly succeeded in doing, in regard to the University that has been under our charge from the moment of its introduction to the public. I believe I was an examiner for the University of Bombay on the first occasion upon which men were examined for the degree of that University.

19,052. (*Lord Playfair.*) What year was that?—1862. I became a member of the Senate early in 1863, and immediately afterwards a member of the Syndicate; I was about seven years Vice-Chancellor, if I remember rightly; so that my connexion with the University was very intimate. I was also on very intimate terms with Sir Alexander Grant, who took a most prominent part in connexion with the University when it was first instituted. At that time he used to honour me by consulting me a good deal as to how matters might be arranged, and with regard to how things would work. The original Act which constituted the Universities in India, an Act passed in 1857, evidently was inspired rather by the idea that the Universities should be simply examining bodies, and it admitted another influence which all the Universities have more or less tried to eject from their constitution. The Bombay University entirely succeeded in ejecting it. The Act provided that the institutions which should send up students should be declared by the Government as qualified. In Bombay that difficulty was removed out of the way of the University, and its independence in that respect was secured by obtaining the sanction of the Government, which was necessary, to a byelaw by which the recognition of an institution as qualified to give instruction to students and prepare them for examinations, was made subject to a vote of the Senate; so that from an early period no institution has been qualified to send up students for examination in the Bombay University, except such institutions as have been recognised for that purpose by the University as a body. By degrees a number of institutions have been recognised, and these amount now to, perhaps, about 20; but of those, perhaps, only three or four are recognised as completely equipped and qualified to instruct for

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

the complete course in Arts Faculty. The others have received partial recognition entitling them to send up students to this or that stage in the examinations, and it is the ambition of them all to improve their qualification, and to obtain recognition for the higher examinations. In several instances this end has been partially or wholly attained by the institutions. It is the aim they all have in view. We find in the University of Bombay that the necessity for this recognition, and the possibility also of its being withdrawn, tend very strongly to keep up a healthy rivalry amongst the institutions, and to make each of them work up to what is considered a definite and sufficient standard of education within the Faculty in which it is recognised. When I speak of the Faculty in which it is recognised, of course, that implies that there are other Faculties besides Arts. For instance, there is not a Faculty but a division of a Faculty, including Agriculture, and one college is recognised as qualified to give a course in Agriculture, but only one. Another one is recognised as qualified to give the course in Engineering for which there is a distinct Faculty, to which Agriculture, which I mentioned just now, is subordinate. In law also we have recognised a school at Poona for the first, but only for the first year's course, considering it desirable that for the more advanced course the much better instruction to be obtained in the Government Law Schools at Bombay should be the *sine quâ non* before the students can present themselves for the examination of LL.B. This is the line on which we have gone with regard to institutions, and the effect has been that while we started from being an examining body we have by this power of recognition and the power also of withdrawing the recognition of the University from the different institutions established and maintained by degrees an efficient superintendence and control really over the whole course of education in those institutions; and the purposes that we have sought to gain by this indirect control in the case of the professional colleges giving technical instruction, have been to unite with this definite and technical learning a sufficient mastery where it was required, of the science connected with the particular profession of training which was being undergone. I am speaking now more especially of law, engineering, and so on. We have endeavoured to unite with the technical training a sufficient intermixture of the science underlying these professional attainments to enable the student, after having attained his minor degree of licentiate in engineering, Bachelor of Laws, or Licentiate in Medicine, to go on with advantage to the higher degree, which involves a thoroughly scientific acquaintance with his subject. At that stage the different subjects of study become more specialised, and the student who had taken his degree, say in Arts, the ordinary B.A. Degree, with only a certain number of optional subjects as they are called amongst which to choose, when he goes on for his degree of Master of Arts has the choice of about seven different subjects, to any one of which he may apply himself, and of which when he goes up for his M.A Degree he is expected really to have such a knowledge as would enable him if necessary to become the professor of it for junior students. He is considered then to be really a doctor or master of his subject, whether it be English history and literature, which is one of the subjects, or classical languages or mathematics, or physical science or natural science. All these subjects may be taken up, and any one of them is the basis for an examination for the degree of M.A. Similarly in medicine the student who after taking his degree of licentiate of medicine wishes to become a doctor of medicine is submitted to a severe test in the science connected with his profession as well as in the practical part of it.

19,053. Is your licentiate a bachelor?—He is not. The licentiateship of medicine is not yet a bachelorship.

19,054. (*Professor Sidgwick.*) If I understand rightly you do not distinguish the Faculty of Science from Arts. The degree of M.A. includes science as well as Arts?—In the Faculty of Arts we have now the bachelor of arts course, and the bachelor of science course, a bifurcation taking place after the previous examination. The course has recently been extended from three years to four years, and after the first year's course, which terminates with what is called the previous examination, a bifurcation takes place, and those students who wish to proceed to the degree of bachelor of science take up a more purely scientific line in which there are different branches—Mathematical, Physical, and Natural Science branches. They go on in those and take the degree of bachelor of science. In the bachelor of arts course mathematics also runs nearly parallel to the mathematics for the bachelor of science course, but not quite, and there are courses in classics, languages, history, and philosophy, so there is a substantial bifurcation, although there are certain co-incidences between the courses after the previous examination.

19,055. You have no degree of Master of Science?—At present the degree of Master of Science has not been established, but there is a science examination, as you will have gathered from what I have said, for the Master of Arts. The student who has taken his degree of Bachelor of Arts or Bachelor of Science can gon on, and he can obtain the degree of M.A. on passing either in Mathematical Science, Physical Science, or the organic Sciences, Physiology, Zoology, Botany, and so on. I was going to say with reference to the Licentiateship of Medicine that we were confronted in Bombay with the necessity of meeting the case of a large number of young men whose prior education had been somewhat defective, who were occupied in various callings, or who were partly occupied in various callings, or who were too poor to bear the expense of a long course of purely scientific training before they were put in a position to earn their living, and we had as a concession to that class of men to allow them to take up the study of medicine after passing only the matriculation examination of the University. Endeavours have been made since then to push forward the general standing of learning with which a young man commences his medical course, and the professors of the Government Medical College in Bombay have several times remonstrated against the regulations by which the young men go in to begin a course of special medical instruction without their minds being formed, and without their being in a position to receive the proper instruction which it is the object of that institution to give to them. The matter has been very much debated; it is one in which I took a great deal of interest personally, and as Vice-Chancellor I several times offered to bring my whole influence to bear, and to speak in favour of a compromise between those who demanded a high education, and those who were satisfied with a low standard on this basis; that we should for some years, at any rate, be content with the first examination in arts—that is the first examination after the previous examination—or the first examination for Bachelor of Science, and allow students thence to go on with the medical course. This so far has not been carried, but it is very likely to be carried soon. The only reason that some minimum of general education higher than the matriculation has not yet been carried and made compulsory, in the University of Bombay, is this: that although a higher standard is generally recognised as necessary the parties are not yet quite agreed as to what the height should be, one party contending that it ought to be only the first examination in arts, and others that it ought at least to be the second, while there are a certain number who say that the previous examination is quite sufficient in the matter of general information. In the meantime large numbers of young men are going through the medical course. The number of licentiates in medicine who are turned out every year is considerable, and they in their professional work are certainly very proficient, but one cannot for one moment compare them with the Bachelors of Law who have been turned out for many years, without seeing how very much the profession of medicine

suffers in India generally, and especially in the Bombay Presidency, in comparison with the profession of law, through the defective preliminary education of its members. That has struck all of us from time to time, and in the Senate where debates are going on at times the way in which men who have graduated in law can present their case, as compared with the way in which a case is presented by men who have taken the medical degree affords almost a painful contrast.

19,056. (*Mr. Anstie.*) In order to get the medical degree must you have passed an Arts degree?—No. You enter on your study for the licentiateship of medicine at present after passing only the matriculation examination of the University, and all subsequent examinations students are admitted to without having taken any further instruction in arts.

19,057. Is there no proper medical degree?—Only licentiateship of medicine which is followed by the degree of Doctor of Medicine.

19,058. Then in order to be a doctor must you have taken the Arts degree?—Yes, to be a doctor, but not to be a licentiate. That introduces me to the subject of the Bachelor of Laws. For the course in law the student must be first a graduate in arts. He is not admitted to the examination for Bachelor of Law until, having taken his degree in arts, he has passed at least one year subsequent to that in specific legal instruction, but ordinarily he will have had to pass two years. One year he is allowed to take before taking his bachelor's degree if he can, but practically under the arrangements recently made he will not be able to do that. He will have to take his two years' course in specific legal instruction after taking his bachelor's degree. As an alleviation, however, to poor men, or to those who are much engaged, or who from various reasons may not find it so convenient to spend so lengthened a course at the University as is required for the Arts degree, and then also for the Bachelor of Laws the course in arts is in process of modification so as to embrace as one of its subjects general Jurisprudence and Roman Law, especially the history of Roman Law. This is to be one of the subjects in the Bachelor of Arts course in future, one of those which may be optionally taken up, and the student who passes in those subjects is excused from his year's study in the same subjects in the purely law course. So that the Bachelor of Arts student whose attention has been more particularly directed to Jurisprudence and Roman Law and the History of Constitutions gets the benefit of all the study he has given to those subjects if he has succeeded in passing the examination when he turns after obtaining his bachelor's degree to the Bachelor of Law course, and he is then put through a course (which naturally in a country where different systems of law prevail is sufficiently severe), of the Indian Codes, the English Common Law to a certain extent, Hindoo Law, and Mohammedan Law. That is for his degree of Bachelor of Laws. The result we have found has been to make our Bachelors of Laws a most efficient set of men. However, there is still room for considerable improvement. The Law School itself in Bombay is not sufficiently well organised, and my efforts to place it on a better footing in that respect have not hitherto brought the fruit which I hoped for. But I think things are looking promising at present inasmuch as the institution is a self-supporting one, and it only needs an organisation on a proper footing, which will cost the Government really nothing. When we have reached that point, the reform becomes more easy. What I have proposed is that there should be a definite head of the institution—a whole time man—at any rate for the first three years of office. I think he ought to give his whole time for three years in order that he may become thoroughly familiar with the different systems that have to be taught, the methods of teaching, and also the character of the students over whom he has to preside. After three years I think a concession might well be made to the extent of taking chamber practice, but I do not think the head of the Law School ought to go beyond that, otherwise his attention would be withdrawn, and the best men will be certain to be so drawn off from the Law School as not to be able to properly attend to it. That is the organisation of a Law School which we are approaching in Bombay. At present it forms what one may consider a branch of the Elphinstone College. The lectures are delivered there, and the professors are appointed by the Government of Bombay out of the ranks of the Bar in Bombay. We have had men as professors who have gained distinction at the Bar; for instance, Mr. Justice Farran, and Mr. Justice Green, were both Professors in the Government Law School in their day, and Mr. Jardine, who is one of the leading members of the Bar in Bombay now, has also been a professor for some time. Another instance is the native Judge, Mr. Telang, who was Professor for several years in the Government Law School, and who gave up his professorship, I believe, only on being made a judge, not that he cared for the small emoluments of his office as a professor, but he had a great affection for the work, and a great interest in the students. The result to everyone who is acquainted with native society is that the progress of legal education has been satisfactory. I can speak from experience, having been more than 14 years a judge of the High Court in Bombay. I have also heard my colleagues speak upon the point, and I can say that in the long run in the course of years the men who come out from the University with the LL.B. degree are distinctly a better type of men, better qualified for a high class of work, and more interested in keeping up a high status of their profession than the other classes who merely pass what is called the High Courts' Examination. With regard to that I may say that before the LL.B. Examination was instituted there was an examination for pleaderships, as they were called, and that was governed by the High Court, which appoints the examiners every year. That has has never been given up, although a proposal been made several times, and the High Court still examines for pleaderships for the up country course, and for the High Court course. The examination for the High Court is extremely severe—so severe that out of about 80 candidates who appear every year it is seldom that more than five or six pass the examination. But, although the examination itself is so severe, yet there are no sufficient educational tests prior to it. The men come up for it, and if they have a wonderfully good faculty of recollecting codes and sections they can pass that examination without having any very broad basis of education. The examination is in English. That is, to a certain extent, a test no doubt, but beyond that there is no test, and although the examination itself, as a law examination, is more severe than the University law examination, we have found that as time goes on, and a wider philosophy is required for dealing with more difficult cases, the men who have taken the LL.B. degree (I am speaking, of course, of the pick of them on each side), are a better class of men than those who have merely passed the High Court examination, notwithstanding the greater difficulty of the High Court examination as an examination. Therefore, we have every reason to be satisfied up to the point we have reached in the Bombay University with our endeavours to make general education and philosophy weld itself into the law course. I myself have derived much encouragement in my endeavours to push on the educational groundwork of specific studies from this result in the Law School. With regard to the Engineering School we had the same difficulties to begin with as we had with regard to the Medical School. There was a need for assistant engineers for the public service, and there was a very considerable want, as the tastes and needs of native society were rising every year, for engineers qualified up to a certain point, who, although not scientific men, looked at from any high point of view, were yet thoroughly masters of their profession in its lower grades, and able to answer the

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

wants of native society. Therefore, for a long time, students were allowed to go on in engineering after starting with only the matriculation examination of the University. But within the last few years the University has felt sufficient confidence in the possibility of raising the standard, and it has had sufficient sense also of the necessity, to advance the elementary standards of engineers to the first examination in arts. For the first two years after this advance was made there was, as one might expect, a considerable falling off in the numbers of students presenting themselves at the Engineering College. But my impression is that the defect has been completely covered now, and that as students found that there were likely to be more openings in the engineering profession through this falling off of students the next year the demand created a supply, and since then there has been no want of students with the requisite preliminary qualification, and although the time has not yet arrived to speak confidently from experience of what the result will be, the head of the Engineering College at Poona, a man of very versatile powers, and of very remarkable capacity, Dr. Theodore Cook, has assured me that he feels quite confident that the class of men they will send out in the future will be infinitely superior to the men they have sent out in the past. With regard to the men they have sent out in the past this defect in general education has made itself manifest in one respect that may be remarked upon. They have to go out in the public service and work with engineers from England, especially with Royal Engineers who are employed extensively on the public works in India, and it has been found that they do not on the whole get on well together. There is a want of power of assimilation between the two sets of minds, and there is a want of submission to discipline in these young men who have not had a regular education before they began as engineering students, which has sometimes made the carrying on the public works more or less difficult. And the students from Cooper's Hill who have gone out as engineers to Bombay especially, (I believe it is the case in the other Presidencies also, but I speak from experience as to Bombay,) are infinitely preferred by the heads of departments in the different districts of Bombay to those who under the previous course have been sent forth from the University of Bombay. We believe that is to a great extent due to the defects in general education, and, of course, a certain want of refinement and capacity to enter into educated thought which it implies on the part of engineering students no matter how well they may have prepared for the mere purposes of examination. Now, we think there is a promise of a much better state of things in that respect, and we feel confident that in the course of a few years the suggestions will cease (and it has even goneas far as proposals), that the assistant engineerships which are annually given by Government to the students of the Engineering College who succeed in taking a class in their final examination should be withdrawn on account of their practically not turning out useful public servants. We feel confident that that complaint will not be made in future, and that we shall by degrees work up our engineering students and graduates to the same point in their profession and society which our British trained engineers have already attained. Somewhat the same remarks may be made with regard to medical students who also obtain Government positions, but who on account of the lack of general education, and the refinement that a good education implies, fall somewhat short of the position we should like them to have in relation to the European doctors of medicine who go out after the examination here, and their course at Netley. The latter are very highly qualified men. As I said the present position of affairs with regard to Medical Schools is that the Faculty of Medicine, which is perhaps the most contentious Faculty of the whole University cannot agree as to what the precise point of indispensable preliminary education is. When they are once agreed upon that I have no doubt that the Senate as a body will be very glad to accept any recommendation which comes up endorsed by the Faculty, and that within the next few years that great step will have been made, and we shall have our medical degrees put on a proper footing. When that is done I think our Bombay University will be as efficient for its purposes as it is possible it should be in the existing social conditions. There is a difficulty about getting off-hand a good teacher to supply the place of one who happens to be struck down with fever or cholera, or who is ordered home. The supply of qualified men in India is not what it is in England, and occasionally, both in the Government Colleges and elsewhere, men have to be put in as professors who would not be chosen if there were a much larger field to select from. That is an inevitable difficulty until education is more widely spread amongst the native community, and education of a high class. Again, in examining the difficulty is experienced of getting men who shall not be subject to any possible objection on the ground of partiality towards their own pupils, and who at the same time shall be thoroughly qualified as examiners. In a country like India, and in the Presidency of Bombay, we have found that if you go outside the line of the professors you cannot practically get men who are fit to examine in the higher Subjects. Very often, when we had philosophy taught in the Elphinstone College by a distinguished man like Mr. Wordsworth, the head of that college, and in Poona, by Mr. Selby, both of them men of real distinction in their departments, it was impossible to form a Board of Moderators who should be fit to say whether the examinations conducted by gentlemen of these remarkably high attainments were good examinations or not. In appointing a fit examiner you exhausted your stock, and you had nobody to be examiners of the examiners. That difficulty is felt still. It certainly diminishes from time to time, but it is a difficulty, and will be a difficulty for a good while. One great reason of it is, that as your European scholars pass through their course of public service, or their service in the Scotch College, the Free Church General Assemblies Institution in Bombay, which is highly successful, or even through the Jesuits' College, by degrees the climate wears them out and they have to go away; and in the maturity of their intellect and experience, they are no longer available for University purposes. The University has done what it can to unite in its Examining Boards men who have been teaching with men who have not been teaching recently; and another principle which has been accepted and acted upon, as far as possible, has been to maintain the continuity of standard by always having on each Examining Board some one who examined the year before, and the year before that if possible, so as to preserve, as far as we can, a regular and uniform standard of requirement and of teaching. It is not always possible to avoid complaints on that ground, and one must admit that occasionally there is some reason for those complaints; but, I suppose, this is an evil incident to every human institution. However, these are the difficulties that the University has had to contend against in that particular field, and the way in which it has endeavoured to meet them. As education spreads it may be possible to do more, but in order to carry out that system thoroughly the University still needs something more, that is, it needs a means of encouraging men after they have taken their Bachelor's degree, and even after they have taken their Doctor's degree, or their Master's degree, to go on, having a special love for their subject, or special aptitude for it, and carry on thoroughly scientific investigation into original fields of research. For instance, if the subject were Sanscrit or Arabic, there is an unlimited field for study and for original work after a man has taken his degree; and it is the men who would go on in this way and make themselves not only proficient for a degree, but far superior to the examination which anyone would think of imposing upon them for a degree, who would form the best body of examiners for us in the University. The

Government contributes so little to the University that its funds have always been short, and, except by private endowment, it can hardly hope to carry out that end. It is an object which I myself have always had distinctly in view, and, when native gentlemen have been speaking about the University and expressing a desire to do something for it, I have endeavoured to turn their attention that way, but it requires a very considerable sum to endow a Chair or Studentship such as would satisfy a man who has already taken his degree, and who *ex hypothesi* must be a man of distinction. So I cannot say that anything at all adequate to the need has been done. One or two lectureships have been established; there is the Wilson lectureship in the Bombay University, and in a draft Act which I drew some years ago, for amending the constitution of the University, I endeavoured to provide for an extension of the University teaching in this way, by grafting upon it a system of what they call in Germany *Docenten*, who are licensed by the University, and who would be generally graduates of the University itself, who, desiring to make scholarship their course in life, or for some years, would yet require a subsistence, and who might get it if the University licensed them to become professors or quasi professors, and to take fees from students, and then accepted their teaching as University teaching for degrees. This I endeavoured to provide for in a draft, but this idea met with opposition, when it came to be discussed, on the part of the teaching institutions in Bombay, who did not want to have what one might call their monopoly of instruction interfered with, and that idea of mine was not accepted. It was struck out of the draft by a committee of the Senate which was appointed to sit upon it. Still it is a point which may possibly be revived, and I think if it were revived and accepted it would do something towards by degrees establishing a body of men who would be qualified to be examiners, and who not taking their own students of course generally in examinations, or at any rate not taking them by themselves to examine would yet be thoroughly qualified to sit along with other men on examining boards. So far as my experience of examining boards goes (I have been an examiner myself on many occasions), I think it is a distinctly desirable thing that men who have been teaching the course should also examine in the course. They know better what the real ins and outs of the matter are, where the real difficulties are, what a student ought to have had his attention specially directed to, and what he will have gained most by directing his attention to in the course which he has gone through, and in which he now presents himself for examination. With my general knowledge of the subjects on which I was called to examine, not being a professor, not having taught, I must say that on every occasion on which I was joined with a professor in a subject to examine I found that his specific acquaintance with the subject as one which had been taught and worked through was of very great advantage to me as an examiner; and I have heard others occupying a similar position to my own make the same remark. Also the students have greater confidence in an examining board as being less eccentric, less likely to diverge off into side lines, if a professor is one of the board. Besides this reason there are others that might be mentioned, a professor examiner is fresh in his subject, whereas a man who is called from the outside may not be fresh in it, and he may bring up in his examination the rusty lore of ten years ago instead of new views. On the whole I think it is if not indispensable, always desirable to have the professorial element represented on the examining board. Therefore we do not lose much in Bombay by the paucity of men qualified to be examiners. Yet something we do lose, and I think wealthy native gentlemen interested in the University should become impressed with the necessity of founding University Chairs, or otherwise, perhaps, giving endowments even to some of the colleges, which would enable the students who have a taste for learning to go on as learned men without forfeiting their means of subsistence, and so by degrees furnishing us with what they have in the old Universities in England, a body of men from whom you can pick examiners who are trained, and at the same time sufficiently fresh in their subject, and *en rapport* to be successful in the work of examinations. Those are the general points with regard to the University of Bombay which I thought might be interesting to the Commission, but of course there are numberless other points on which something might be said, and if questions are put to me I shall be very happy to answer them.

19,059. (*Lord Reay.*) Perhaps you would mention to the Commission how the Matriculation Examination is organised, and what value you attach to the Matriculation Examination? — The Matriculation Examination in Bombay as to its matter involves first the school course up to the seventh standard as it is called. That necessitates, perhaps, my explaining what is the school course in India generally, and in Bombay particular. The public education of Bombay is roughly speaking primary and secondary, but there are a number of schools which have primary and secondary classes. The primary course runs up to the fourth standard; the secondary course from the fourth to the seventh, and the introduction to the Matriculation Examination of the University. The first four standards may be considered vernacular standards, although in a school where instruction in the higher standards is given in English, and where the instruction in ordinary subjects is carried on in English some English is taught in the lower stages as a subject of instruction, while in the higher stages the instruction goes on in English. Then when a certain proficiency is attained, and the seventh standard is passed a student may obtain a certificate from the head master saying that he considers he is qualified to stand for the matriculation. Without that qualification no one is admitted to the Matriculation Examination. But a difficulty has been found in this; there are a certain number who have been brought up at home or who have been to private schools. If a student does not get on well in one of the Government schools or one of the schools receiving help from Government, and, therefore, organised on the Government plan, he leaves school, goes to a private tutor for a few months, and gets from him on easy terms a certificate that he is fit to present himself for the matriculation. The consequence is that a very large number of unfortunate boys are sent up for the Matriculation Examination, making their fathers still more unfortunate by paying fees, and the expense of a journey to one of the centres of examination, for nothing.

19,060. (*Mr. Anstie.*) Do you take the certificates of these unrecognised teachers?—That, again, is a difficulty in which the University has had to contend against pernicious influences. The subject has come up again and again. The answer given to those who would exact a school certificate is that you must not give the Government a monopoly of instruction by putting this certificate in the way of students who wish to come up for matriculation. That objection has prevailed so far, but endeavours are being made now to secure that at any rate no boy who has been to one of the public schools (and they are the great majority) shall be admitted on the certificate of a private tutor without some good reason being assigned for his being accepted, a reason satisfactory to the Syndicate of the University, or *primâ facie* to the Registrar of the University to whom it is sent. We have not got beyond that point at present. I think no doubt my own suggestion on that subject will eventually be adopted, that is that the examinations which take place at the Secondary school, of which there is at least one in every district (a district being the size of about two counties in England) shall be open on payment of a small fee to students coming from private tuition; and a student who passes an examination there, his character being good, shall receive what we may call a leaving certificate or

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

qualifying certificate from the head master and the examiner united with him. Then one would have a sufficient voucher for the qualification of the boy to stand for the Matriculation Examination. I believe things will come to that by-and-by, but the objection has been taken on the ground of its not being expedient to drive all education into the Government schools, but to leave a free hand to outsiders to qualify students if they like. The unfortunate result has been that hundreds of boys every year are sent up, of whom perhaps 1 in 20 passes the matriculation. They come with certificates from the private tutors with the vague idea that they can pass this matriculation. Of the others about one in three passes, which is, of course, a small proportion, but it is necessary to maintain a tolerably rigorous standard, otherwise we should have the University brought down to a low level indeed. The matriculation embraces an examination in the boy's vernacular, or whatever vernacular he says he prefers to be examined in, and of course he has become sufficiently qualified for that, as a rule, by his daily practice coupled with his course in the first four standards of the regular course of instruction, and it requires no great effort of mind for him to pass in his vernacular. Secondly, he has to pass in English, and that, especially to boys from the remote districts, is a matter of difficulty. It requires a considerable exertion of mind for a lad of 16, 17, or 18 to acquire proficiency in so difficult a language as English. However, the knowledge of English is spreading very widely. The pure pronunciation of it is not spreading quite so rapidly as the knowledge, and the schools which have been under the control of native masters for a long time have greatly lost the purity of pronunciation. One consequence of that is there is a difficulty amongst the students when they are going in subsequently for the college course in what is called audition, in understanding off-hand what lecturers say to them, and that difficulty is in some cases not got over for a whole year of University study. But knowledge of the language for working purposes, apart from this audition, is very fairly acquired, and it is a *sine quâ non* in passing the matriculation. Then there is added to that an elementary knowledge of natural science, geography, and history. On this basis a young man is allowed to commence his University studies. He is admitted as a matriculated student, and with the exception that I have mentioned it is found that the Matriculation Examinations answer the purposes pretty well. The number which present themselves is very large.

19,061. (*Professor Sidgwick.*) You have not mentioned mathematics, I think?—I ought to have mentioned that subject. Elementary mathematics comes in. I think the limit is up to simple equations in Algebra and either two or three books in Euclid. It is specified in the Bombay University Calendar. It is elementary. Of course proficiency in arithmetic is required and tested. The stumbling block to most of the students is English, because if they cannot obtain a fair number of marks in English they are not admitted to the other examination; it is thought to be of no use, because if they were admitted and passed the other examination, and do not know English, they are not in a position to take in the instruction which in the colleges affiliated to the University is necessarily conveyed in English. Anything else would be impossible, even if one had no prejudice in favour of English, because if you lecture in Marathi you are unintelligible to the Guzerathi, and if you lecture in Canarese you are unintelligible to the Sindhi. All those languages are spoken by students in the Bombay colleges, and the only central *lingua franca* which meets the case of all the students is English. Therefore, if you are to meet the wants of all, the language must be English. Upwards of 3,000 every year present themselves for matriculation, of whom one in five or six passes. But to meet the convenience of students from different parts of the country, and to avoid also the enormous crowding there used to be in Bombay, examiners are sent to certain local centres, Poona, Ahmenabad, and Karachi, who hold the examinations on almost the same methods, preserving the same answers at all the centres. Finally, those who pass have their names published in a list, and they are allowed to go and take up their further study in whichever college is convenient for them. That is our matriculation system.

19,062. (*Lord Reay.*) In your Bill I believe you introduced a clause entering the University that students who had shown a higher degree of knowledge might skip the first year and go on to the second year, which would have induced the High Schools to undertake the subjects of the first year at the University?—I did not put a clause in my Bill to that effect, but I believe I originated the discussions which have led to the extension of the University course from three years to four. My idea, or my wish was that in extending the course from three years to four, which for ordinary students prepared in the way they came up from the High Schools was necessary, an allowance should be made for those who could pass in the subjects of the first year,—that for them three years would suffice. The practical result would be that the first year's course of the University out of the four might be taken at the high school. I thought that by this we should supply a very strong stimulus to the high schools to improve their course of teaching, because, there is no doubt, that among a poor people such as the Hindoos are, and especially the learned Hindoos, those who take most interest in education, the students would flock to schools in which they hoped to attain a certain proficiency to escape going to a college and paying fees for the year. This part of my plan, for some reason which I am not able to explain definitely at present, was not adopted by the University, and in the rules which are now in force for extending the course to four years, that particular qualification of those rules which I consider to be very essential, has not so far been adopted. Why it was not adopted as the debates have been rather recent, and I was a member of the Government immersed in business of various kinds, I am not able to say, but my idea was, (and I know that a number of men to whom I spoke had the same idea,) that in extending the University course from three years to four, which was indispensable in order to have the subjects properly mastered, an allowance should be made of one year for those who in the high school were able to pass in the subjects of that first year's course; I believe too that that will be grafted on to the improved course of the University, and if it is it will serve as a most valuable stimulus to the high schools, because those schools which have pass-men in the first year's course will get a valuable accession to their numbers, which will be lost to those who do not do it.

19,063. I believe that one of the objects of your Bill was to strengthen the control of the University over the colleges?—Yes. I have stated to the Commission already how out of what was contemplated to be an examining body the University by having the power of recognising institutions and withdrawing its recognition has been able to impose terms of this kind. They have been able to say, "Your course of instruction must be so-and-so to con- "form to our examination standard, and before we "recognise you we must be satisfied that you have an "efficient staff, and that you have the prospect of per- "manence, and of keeping up that staff permanently." Also by its power of withdrawing recognition the University can in case the college falls off throw it out of the University, and practically enforce the removal of the students to another better conducted institution. The rules with regard to these subjects are embraced among the bye-laws of the University, and they are contained in the Calendar. I still felt that more was required to bind the colleges and the University together, and after a good deal of conversation with gentlemen interested in the subject, especially those who were professors and principals of the colleges themselves, I made it a part of the draft which I submitted to the Sydicate of the University

that there should be a clause tending to weld the system more completely together. I proposed to do it in this way; that the University should have the right of insisting on certain attainments or certain certificates in the case of the professors in the affiliated institutions; so that its superintendence might take a definite form. At present it is indefinite. I may tell the Commission that at present if the Syndicate of the University (the work of the University is really in the hands of the Syndicate), finds that a particular college has been appointing professors who are notoriously inefficient, and keeping them there, notwithstanding complaints on the part of the public; it may give a quiet hint to the principal of that college, "Unless you amend your ways, unless you take Mr. "So-and-So away, or put someone in beside him who "really can teach, we shall be obliged to go before the "Senate and ask it to withdraw its recognition of you "as qualified to teach up to the standard." The mere suggestion would be quite effectual. I propose to define that a little more so that the University should have the right to insist directly on the appointment of competent professors in the affiliated colleges. But in order to prevent any possible abuse of that power, I proposed also to secure that affiliated institutions should have a representation of two or three members on the Syndicate every year, which representation should go the round of the different affiliated institutions teaching up to a full standard so that there would be an effective superintendence, not only over the general course of study, but over the efficiency of the professors so far as one can judge of it by certificates and diplomas; but at the same time there should be a safeguard against any abuse of the authority by having the colleges represented in turn on the Syndicate, the practical managing body of the University. There would thus be a safeguard against mutual jealousy and mutual rivalry on the part of these institutions by their representatives coming in turn on the Syndicate. Then, if any evil turn was done by institution A. to institution B. through its representatives on the Syndicate this year, B's. turn would come next year, and it would be able to give tit for tat. We thought that in effect the working of it would be that we should get the fresh ideas and the fresh points of view arising from institutions somewhat differently constituted brought successively to bear on the general mind of the Syndicate, and we should establish a general tone and standard of feeling there as to what the professors in the different institutions ought to be so as to insure a very high standard of efficiency on their part without at any time allowing any bullying or arrogance on the part of the Syndicate, or any interference in the work of the institutions. This part was not approved by the members of the Syndicate. The members of the Syndicate, being men who were themselves very much interested in education and working gratuitously, have a certain amount of sensitiveness of feeling, and they did not like the idea of men being put on the Syndicate by right; they wanted it all to be matter of election by the Faculties as it is at present, which they felt sure would secure their own places on the Syndicate, and they very properly from their own point of view thought that the interests of the University would be best secured by their own election and re-election from year to year by the different Faculties. They said what was true enough: "If the Faculties liked to have the representatives of "the different institutions they can elect them. If "the Faculties do not want them why should they be "here"?—That was a sufficiently compact and reasonable answer. It involved not so good a system in my opinion as what I proposed, but I could not say it was unreasonable, and in deference to the opinion of my colleagues on the Syndicate I abandoned that part of my scheme and struck it out.

19,064. (*Mr. Anstie.*) Who are the Syndicate?—The Syndicate now are a body of men who are elected, three by the Faculty of Arts, one specially for science, and two each by the other Faculties, and who form the managing body, for practical purposes, of the University. There is an annual election.

19,065. (*Lord Reay.*) What is the number of its members are there?—I think the Syndicate are 11 in number, including the Vice Chancellor.

19,066. (*Lord Playfair.*) How are the Faculties constituted?—The Faculties are constituted by election out of the body of fellows. The fellows at present are named by the Government in Council, but this very year in Bombay, and last year in Calcutta, a method has been adopted of introducing the elective element in this way; that the graduates of the University propose to the Government certain names out of which they engage, unless there is some very palpable objection, to make their election of the new fellows who are appointed for the year, to a certain extent the Government reserving to itself a free hand as to the other nominations.

19,067. (*Mr. Anstie.*) How many nominations are reserved to the Government?—There is no definite number of fellows to be appointed every year, and no definite number of fellows on the Senate at present. One of the proposals in my draft was that the Senate should be a limited body; that only vacancies should be filled up every year; and that those vacancies should be filled by election to the extent of a majority, the remainder being named by Government. The elected number would be selected from the graduates of the University itself. The nominated members, that is those nominated by Government, would be selected from those who, not being members of the University, yet were men of some intellectual distinction. That was the scheme that I had drawn for the filling up of the Senate in future; but, as I said, that is at present only in embryo; it has not been carried out.

19,068. (*Sir George Humphry.*) If all the colleges were represented on the Syndicate it would make a very large body, would it not?—I proposed only to have two or three in each year. It would never do to have them all represented; that would make a body too large for a working committee. I proposed that they should be elected in rotation year by year, so that we should always have two or three on the Syndicate.

19,069. (*Lord Reay.*) You distinctly prefer the system of the Bombay University, which only examines students who have been at recognised institutions, to the system that is followed at Madras, where any one can appear for examination?—From our experience in Bombay, and especially having to deal with native boys who come very unformed to their course of instruction, we consider that residence in a college, and under the influence of the men who are there, is of the utmost importance—of far more importance as far as we have been able to judge, at any rate, in forming their character, than any mere passing of examinations. We find that the students and the professors blend together very well, and the students being, as Hindoos are, of a docile turn of mind, do take in a very remarkable degree the stamp of the men under whom they are placed. They come, of course, at an age when a plastic influence can be exercised over them, far more than it could be exercised over them when they have taken up their positions in life, and it is this plastic influence which we consider (and experience seems to justify it) working on them from day to day, and exerting its power on their whole course of thought, stamps what kind of men they will be in their future lives. We have had every reason to consider that college education as distinct from mere study, apart from college influences, has been a distinct success with us so far as we can judge. I am speaking now from the evidence of men outside our Presidency, as well as those within it. I may mention particularly one instance. Sir Richard Mead said that Bombay men who had come under him as public servants were distinctly superior men to any other class of men in India. Therefore, we have every reason to think that our college system has been a success.

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

19,070. (*Mr. Anstie.*) Does Calcutta follow your method?—Calcutta is a sort of mixture of the two. It does require, in a general way, residence, but it is not, I believe, so strict as we are in Bombay. The Madras system, so far as my knowledge extends, is one of pure examination, so that men I have known in Bombay, who could not or would not attend lectures in a college course in Bombay, have gone over to Madras, passed the examination there, and come back with their Bachelor's degree.

19,071. (*Lord Reay.*) Now I should like to leave this part of the question and come back to London, and I will ask you how you would organise the Faculty in this new University, more particularly with reference to the students who are preparing for a future judicial career in India?—It would be somewhat difficult, of course, to organise a Law Faculty, as it would a Medical Faculty, with reference to the necessities or desires of a particular and very limited class of students; but, so far as the necessities of the Indian Civil Servants and the work they have to do may enter into the designs of those who are framing the Law Faculty, there are several things to be said. I think a systematic course of instruction in the principles of law, and especially in the historical development of the law, is of the utmost importance for those who are to be administrators of the law in future in India; and I may say that even in what is called the Revenue Department, the Administrative or Ministerial Department of the Public Service in India, there is hardly a situation in which a man can be placed in which he is not occasionally called upon to exercise quasi judicial functions, and in which he is not called upon to bring to bear from time to time some knowledge of legal principles. The Codes occupy a very large place in India, and, of course, in a law school which should prepare men for the Indian career, when they have advanced beyond the general principles of jurisprudence it would be desirable that the Indian Codes, so far as they extend (and they cover a wide field now), should be made a basis of instruction. But I do not think (and, of course, my experience is pretty extensive) that the study of the Codes by themselves is by any means sufficient to make a man a good lawyer. I think that such a course as a great lawyer like Savigny, for instance, would have suggested, would be a thorough grounding in principles, but also a very large amount of study in the illustration of those principles by cases. When one compares (as I have had to) the working of the English Courts and the working of Foreign Courts, there is no doubt that in the way in which cases are dealt with as they actually arise in practice, in command of what one may call the middle principles, the English Courts are infinitely superior to Foreign Courts, notwithstanding the depth and reach of learning which is often brought to bear by foreign judges. The continued practice from day to day by English lawyers in English Courts tests every principle and calls all sound ones into practice, even without comprehensive formulas, just as good poetry was felt and embodied when Homer altered the lines on which Aristotle was afterwards able to base his theory. I have found in an Indian Court that this readinesss in applying the principles which lie very near practice, is of infinite service to the practitioner, and of very great value also to the judge. But this also I have found; that the men who had a good grounding were as advocates and as judges the most distinguished we have had. If there were something out of the common line they were able to deal with it, because where principles lying so very near to practice fail, as they will do because of their narrowness, such men have got something wider to bring to bear. I may mention as an instance Justice Green, who was my colleague on the Bench of the High Court in Bombay for some years, and who is now deceased. His distinction as a barrister and as a judge, I think, was due in a great measure to his having gone through a thorough course of jurisprudential study at Heidelberg before he engaged in the study of specific English law in London. It gave him a command of principles, as we always found in discussing cases with him, which was of great value; and, of course, in a country like India where you are not tied up to case law as much as you are in England, and where the circumstances differ from any circumstances with which we are familiar here, that knowledge of principles is of the utmost value. When we bring that to bear upon the question put by your Lordship just now, the inference I would derive from it is that it is very desirable, so far as your law Faculty is to provide for Indian students, that it should give them a very large and liberal measure of general jurisprudence, and also of the relation of jurisprudence to political institutions and the general development of the people, as a basis for their more particular studies in case law. But with regard to these studies in case law, at the same time if a man is to be not only a student but a practitioner and a man ready to bring his knowledge to bear, I think it absolutely indispensable that there should be a good deal of instruction in case law, especially in the cases arising from day to day, because it is by looking into your cases and sifting them with a competent tutor that you find your abstract converge into the concrete; by degrees you come to consider at once on looking at a case what the general principle involved in it is, and you learn from it how to deal with a number of similar if not identical cases, with much greater readiness than if you merely in an abstract way say that such and such a principle is to be accepted as true. In fact as to the general principles of law when they are once clearly stated there is generally hardly any dipute; but it is in the deductions from the simpler theorems in Euclid that the difficulties arise at a later stage, and in applying those which may be considered like the problems which are given in geometry at Cambridge, the outlying cases, the deducibles. A great deal of practice is indispensable for these, and therefore, I think it is desirable that the two courses of education should be closely combined. You should have a thorough grounding of principles, and you should have those principles illustrated not only by dead cases but by cases which are going on in the courts in England. I myself being a judge on the bench was in the habit for many years while I was in that position of conversing with native students and native practitioners, and I found that using my pretty extensive note books arranged in what I thought to be rather a systematic way for illustrating principles was certainly of very great benefit to them, and they always expressed great gratitude to me for the instruction they got in the way of treating what was presented in English cases in connexion with the greater underlying principles of jurisprudence. I have no doubt myself that it is quite as necessary or even more necessary for the Indian civilian, who often has to work 100 miles away from a law book, and who ought to have not only the principles well fixed in his mind, but who ought also to have attained by looking through a number of cases and referring to those principles a certain degree of readiness in bringing them to bear on the circumstances that arise before him. This really tells the Commission my idea of what the constitution of a law school ought to be, if it is to fit the needs of the Indian students. You should have a good course in jurisprudence, and for that I think the modern Roman law is better for Indian purposes, and for general purposes than a very close and strict study of Justinian's Institutes. Thus books such as Mackeldey, Bowyer's Commentaries, Goudsmith's book, Thibaut's book, translated by Lord Justice Lindley, are very useful for Indian students, and would form a very good basis for his instruction in English law which would of course be closely connected with the continuous daily study of case law whilst it is arising and is of living interest.

19,072. And you would have Chairs of Hindoo and Mohammedan law?—It would be necessary, but I take that as a matter that would be granted. They are

specific systems. As your Lordship is aware, I myself had to give years of study and attention to Hindoo law as a topic which I have made more particularly my own in writing upon it. There is ample room there for the work of a professor, and Mohammedan law is a subject of great extent.

17,073. For members of the Civil Service International Law should be added?—Yes. International law as a branch of law teaching is very often put at the wrong end. I see my suggestions to the Bombay University on that subject have been adopted. It is put at the latter end of the course instead of at the beginning, and it is an honour subject. It is not connected in the first year's course with jurisprudence, but it forms an honour subject for those who go up for the LL.B.

17,074. The number of native students who come to England is gradually increasing. Would you have in the University a special curriculum for such students or would you let them share the courses for English students; in either case they would attend the same lectures as the latter?—I think a native student who comes to England comes here *ex hypothesi* because association with English students and study is the best for him, and except for social purposes or satisfying the needs of his religion it is desirable that he should be thrown amongst young Englishmen and exposed to English influences as much as possible, and he should carry on his studies in manly rivalry with his English competitors. Therefore, I think, any separate course would be not only undesirable but mischievous, and would defeat the purpose for which the students are sent over here.

19,075. I believe you were a student at Galway College?—Yes.

19,076. Might I ask how the system which has since been altered, worked in your time?—Perhaps I am not altogether an unprejudiced witness on a question of that sort, but as to the mechanical working of it of course I am a good witness. There were lectures with *vivâ voce* examinations every day in some classes, and once a week in some of the other classes. In my classical course I had the advantage of the instruction of a man who rose to great distinction in Australia, Mr. Hearn, the author of some well-known books, who was my professor in Greek. In his classes an oral examination was held every day in order to probe our grasp of what he had said in the lecture before and our application of it to the book we were reading. So also in Latin, in French and German. In chemistry, which I attended, the examination was once a week, and also in physiology. The course was one of attending lectures based on or referring to particular books, and the attention paid to those lectures was tested by either daily examination or by examinations sufficiently frequent to show whether a student had been keeping to his work or not. The course had to be gone through as a necessary preliminary to presenting oneself for the University examination which was held in Dublin.

19,077. And on that examination the teachers of the various colleges have a preponderant influence?—As examiners in the University examinations it would happen sometimes that a majority of the examiners in a particular subject were outsiders, especially selected, I suppose, on account of local convenience from the staff of Trinity College, Dublin.

19,078. But they were teachers?—Yes, being Fellows of Trinity College they were also teachers. But the teachers within the Queen's University itself always held a place among the examiners, and, so far as I recollect, there hardly ever was an examination in which the teaching staff, not of a particular college, but of one or other of the colleges was not represented on the examining body.

19,079. The students had every guarantee that their own teachers were present. I do not mean the teachers of their own college, but the teachers belonging to the system of federated colleges?—It might be considered a guarantee that the teaching staff were represented at every examination, but not that that individual teacher who had been over a particular student was present.

19,080. Did you approve of the change which was introduced by the Act of 1879?—One is always rather prejudiced in favour of the system under which one was brought up oneself, but I may say that it appeared to be a disastrous and fatal mistake to change the constitution of the University, one reason for my view, and a very strong one, being that we were there students in the colleges with professors of different faiths and different religious views, students who were brought together of all classes and of all colours of religion. I myself being a member of the English Established Church, was there with Dissenters of various grades, and, of course, a preponderating number of Roman Catholics. Our professors were, some of them, Presbyterians, some members of the Established Church, and, perhaps, the majority Roman Catholics. I think the effect of that in softening prejudices, making men look charitably on one another, and promoting good fellowship, was of immense social importance. The political importance of it, of course, is not a question I can discuss at present. But in the general result the feeling it produced, in my mind, was that the Queen's University was doing a great deal of good in bringing those who were to be the leaders of thought in Ireland, at a later stage, together; in softening prejudices and reconciling them one to another, and establishing, what I hoped would be, an educated and moderate tone all through Ireland afterwards. When this was abolished, and the University was reduced to a mere examining body, it appeared to me that an irreparable loss was inflicted on society in Ireland, whatever reasons in other ways there might be for the change that was made.

19,081. I suppose if this new University is equipped in such a way as to provide for the higher stages of a University education, the native students who can afford it would, after having obtained their degree at one of the Indian Universities come here for more advanced teaching, for instance those who aspire to occupy a higher place in the service?—After obtaining the ordinary degree of Bachelor of Arts in an Indian University, there is no doubt that a young man who aspires to a higher rank in the world of learning or science or who desires even to get a thoroughly good scientific basis for his administrative and legal knowledge as a member of the public service could get better teaching, and bring himself under more stimulating and effective influences by coming here than by remaining in India; and it would be desirable on that account that young men should come to England to push on their studies further after they have obtained the degree of Bachelor of Arts. I must add, however, that I am not as at present advised hopeful that any very large number would do that. By the time a young man has taken his Bachelor of Arts degrees if he intends to become a member of the public service it is almost time for him to begin active practical work, and it would only be at a later stage when he has become entitled to furlough, say after five or seven years' work, that he could generally afford the time or the money to come and get this higher instruction.

19,082. Do you not think this would be especially desirable in the case of those natives who are looking forward to appointments in educational establishments?—Certainly, but men who take up educational employment in India are, as a rule, men of a needy class. They too when they have taken their degrees desire to earn some money, and it is only in a few instances that they could come straight off to England immediately after they have taken their Bachelor of Arts degree, and engage for any longer time in higher studies. They know not also what there own capacities are at that stage. Take a young man 20, 21, or 22 years of age, the more there is in him the less he thinks of himself. The modest able men are the very ones who would not press their parents and friends to send them to England.

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

19,083. My hypothesis was that they would go selected by the European authorities in India?—If the European authorities in India could select infallibly it would be well, but I do not think they could do that and I do not think we ought to look to a very large influx of young men going into the education department who after taking their degree are likely to come direct to England to go in for higher study. They would be more likely to do it in India itself. But still a certain number would be so evidently capable of obtaining eminence in scholarship that you might count on a certain number coming and deriving very great advantage, and I have no doubt as time goes on the wealthy men in India will feel it incumbent upon them to support students of that kind. I have pressed it upon them in private conversations more than once, and I think there is growing up an idea that it is one of the best duties a wealthy native can perform to society to support students who give promise of eminence.

19,084. There is a Parsee foundation?—Yes, at least a Hindu foundation.

19,085. And you would be in favour of encouraging this influx?—Yes.

19,086. (*Lord Playfair.*) Do you not send Gilchrist scholars?—Yes, the Bombay University elects in turn with Madras every second year.

19,087. And has that been successful?—So far as we can judge the men have profited very much by their studies in England. They go back very superior men to what they were when they left India. But one must allow for this: they would have been superior men probably if they had stayed in India. One must not push it too far.

19,088. Does the Exhibition of 1851 give you any scholarships?—I do not think so.

10,089. (*Lord Reay.*) Is there anything that you would wish to add?—Nothing occurs to me, but I should be willing to enlarge upon any point which would be of interest to the Commission.

12,090. (*Professor Sidgwick.*) I think you said there were about 20 institutions in connexion with the University, more or less?—I can give you the exact numbers from the calendar.

19,091. May I ask you where they are?—I will read out the list. They are in various parts of the Presidency of Bombay, and one or two in native States under the Presidency of Bombay. I see there are 16 institutions mentioned here recognised in the different Faculties. They are at Baroda, Ahmedabad Kolhapur, that being outside our territory, Poona, Bhavmagar, which is outside our territory, and at a few other places.

19,092. (*Lord Reay.*) Is Baroda recognised for its full courses?—In Arts for the purposes of the first B.A. and the second B.A. examinations. So it is for the full course of a Bachelor of Arts, but not for the Bachelor of Science, because they have not yet a staff sufficient to teach for the Bachelor of Science course.

19,093. (*Professor Sidgwick.*) What I wish to be informed upon is how far they practically compete amongst themselves Does each one institution supply the need of a locality without any material competition among the institutions?—There is a certain amount of competition, but it is not an acrid competition, nor so far as I can judge, (and the question has been discussed more than once,) is it a competition which makes them lower the standard, although there is a certain tendency of course, especially amongst missionary collleges who are anxious to get students in order to impress their moral precepts upon them, to be rather lenient in accepting boys of promising character and carrying them through the course. But the University standard being rigorously applied the institutions have to work up to those.

19,094. They have not now any formal control over the University, have they. They have no representation on the Senate?—No. You will find in the bye-laws that the Principal of the Elphinstone College is a necessary member of the Senate, and that the Chief Inspector of Schools in the Presidency Division is also necessarily a member of the Senate. The Director of Public Instruction is also a member of the Senate. They, of course, obtain a voice on educational matters there. Practically every Principal of an Institution is named, and generally every professor of the least distinction is made a member of the Senate at the earliest opportunity by the Governor in Council. There is a fresh nomination of Fellows of the University every year before the Convocation.

16,095. How large a body is the Senate?—It is composed of fellows of the University, and it numbers now I think nearly 300.

19,096. Then practically every institution is represented on this larger body?—Yes.

19,097. Is there practically any representation of the leading institutions on the Syndicate?—Yes, there is practically. I can give you the composition of the Syndicate for part of the time when I was Vice-Chancellor. I presided as Vice-Chancellor, and the Principal of the Elphinstone College was a member of the Syndicate; the Principal of the Free General Assembly's College in Bombay was a member of the Syndicate; the Principal of the Government College of Science at Poona, Dr. Theodore Cooke, was a member of the Syndicate at that time; the Principal for some time of the Grant Medical College at Bombay was a member of the Syndicate; and a member of the Public Works Departments of Government was a member of the Syndicate. There were other members, but those that I have mentioned may be considered representative men. They were elected, they were not *ex-officio* members. My desire was that to the number of two or three they should be *ex-officio* members, taking the place in rotation.

19,098. These were elected by the Faculties who were themselves elected by the fellows?—Yes. On a fellow being named to that place and becoming a member of the Senate he is at once named to a certain Faculty or two Faculties and there he remains for his life. He is a life member of the Faculties to which he is appointed. But the Faculties severally each year elect each of them their own representatives on the Syndicate.

19,099. I suppose the Faculty is a large body?—Yes.

19,100. The whole 300 fellows are divided up amongst the Faculties?—Yes, they are distributed amongst the four Faculties.

19,101. Is there any smaller body, any board, representing each of them?—No. There is a Dean of each Faculty and to him the application is made generally if a meeting of the Faculty is required.

19,102. How often do they meet actually?—There is no provision for meeting necessarily at periodical intervals, but some Faculties meet frequently and others very seldom. The Faculty of Civil Engineering meets seldom. The Medical Faculty meets very often, and generally breaks up without coming to any very definite decision.

19,103. Are the changes which are from time to time required in the organisation of the University or in the examinations in each department made on representations which come from the Faculties. Do the Faculties take the initiative?—They do take the initiative sometimes, but I think the more general course is this. A fellow of the University, or a group of fellows who have some particular movement at heart, talk to a member or members of the Syndicate about it, and the thing is knocked about in that way to a certain extent. Then if the gentlemen who have this matter at heart still feel interested in it and think something can be done, they send in a letter to the Syndicate stating their views and desiring that the matter may be considered. It may be that then the Syndicate sees some practical objection which had not occurred to these gentlemen looking at it from one side, and they say, "It will not fit in with our system. "Will you look into it?" Then they send in another letter with perhaps something qualified. The Syndicate thereupon refer this letter to the Faculty.

For instance it may be the Medical Faculty. We have had to refer many letters to the Medical Faculty. Or it may be the Law Faculty. When the great change which has taken place in the course of law was started, I laid my views before the Syndicate and the Syndicate referred it to the Law Faculty.

19,104. The question that I am interested in is this. From all my experience of University administration I should have thought that a Faculty as large as you describe would be a very inconvenient body to work out the details of any kind of regulation. It would not be a bad sort of body to have, say, one discussion and then refer the matter to a committee; but for the details of any kind of scheme to be hammered out it seemed to me to be too large a body. Is that found to be so at all?—It is; but the difficulty is alleviated and got over in this way, a large number of the fellows are not resident in Bombay where the meetings of the Faculties must take place, so that out of a Faculty of 80 members you can very seldom get a meeting of more than about 30. But if it is a question involving the drawing up of rules or even the discussion of rules, primarily it is always referred to a committee elected by the Faculty for that purpose.

19,105. Then one result is to throw practically a greater power into the hands of the members of the Bombay Institutions. Does that at all lead to any feeling among the other institutions that the Bombay Institutions have too much influence?—I do not think it does. On important occasions men come up from Ahmedabad and Poona to Bombay. That is an important occasion. On other occasions they do not think it is worth while to come unless some one who occupies a responsible position, such as the head of the Science Department at Poona asks them to do so. If there is any important matter coming up there is not only a pretty full attendance, but a good deal of canvassing and beating up of men to represent the different sides.

19,106. As I understand examiners are appointed by the Syndicate?—Examiners are appointed by the Syndicate who may be overruled by the Senate if necessity should arise, the power being given directly to the Senate.

19,107. They are not appointed by the Faculty?—No, they are not.

19,108. One part of your evidence was to me very impressive—your statement that the School of Law is self-supporting?—Yes, it is.

19,109. How is that brought about?—When I said self-supporting I meant in this sense, that it does not need support from the Government. The basis of it was a large sum which was collected when Sir Erskine Perry retired from the Chief Justiceship of Bombay; a large sum was collected for a memorial to him, and with that was founded a Perry Professorship of Jurisprudence, and this with a certain small sum guaranteed by Government pays one of the professors. There are two others who are paid by Government who receive rather smaller stipends because they are allowed to practise, they are not whole-time men In return for this, fees are taken from the students to the extent of, I think, about 30 rupees a term, and the number of students being now upwards of 200, these fees more than cover the whole of the expenses of the professors, of course allowing for this sum which was drawn from the Perry fund.

19,110. And the provision of teaching is found adequate for the needs of the students?—In one sense it is adequate, but if you ask me whether it could be improved that is another question. I think it could be improved, and I think it is desirable specially that the whole institution which is now of so much importance should be superintended by a gentleman of competent professional attainments giving his whole time for at any rate the first two or three years of his Principalship to this Law School.

19,111. It is the view of the American Committee who have recently held an inquiry, and who have presented a very full report on the needs of legal teaching, that a combination in a law school of professors giving their whole time to the subject with other professors who are engaged in practical work is the most desirable mode of organising a school. Would that be your view?—That is exactly what I had proposed for Bombay, the Principal giving his whole time, and the professors part only of their time. I thought that the school having become so enlarged now it would be desirable to have, perhaps, an additional professor or one or two sub-professors, being themselves distinguished students to whom a small stipend would be of very great advantage in the early part of their professional course.

19,112. I did not quite grasp the difference between the legal training of the LL.B.s on the one hand and the Pleaders of the High Court on the other. If I understood you rightly, the examination in the practical departments of the Law is more severe for the Pleaders of the High Court than it is for the LL.B.; but if I understood you the LL.B. has gone through some legal training, or at any rate training on subjects bearing on law which the High Court students are not examined in?—Yes, that is so.

19,113. Could you explain at all what the kind of difference is?—Any young man of good character is admitted to the High Court examination, his education may have been neglected, or it may have been very high; he may have attended, and in many instances he has attended, as a volunteer, the law lectures at Poona or at Bombay. There is also a course of law lectures delivered at Kolhapur at what is called the Rajaram College there. Those lectures are of an elementary kind; the aspirant to a pleadership who wants to get to the High Court examination has only to bring up a certificate of good character and pay his fee, and he is admitted to the examination. So there is no guarantee in his case. The examination of the High Court is extensive. It goes over the Codes and also into the English law of contracts and torts, and it extends also to Hindoo and Mohammedan law.

19,114. What are the subjects besides those which you have mentioned which the LL.B. will have to learn?—He will have had to pass through one year's course at least of general jurisprudence and Roman Law. Perhaps you will excuse me for saying that it is endeavoured also in the subsequent course (and the examinations point to that) to make it a little more philosophical than would be absolutely necessary for passing the strictly technical examination of the High Court.

19,115. And are the examinations also made philosophical?—The endeavour is that they should be a little more in that way. Whether it succeeds absolutely I cannot say. I do not think it does succeed absolutely, but that is the tendency.

19,116. That explains the superiority which according to you the LL.B.s have over the High Court pleaders?—The LL.B.s become High Court pleaders too when they pass the examination.

19,117. You think the superiority is due to the philosophic training and the strictly legal training together?—That is my opinion, and it is the opinion generally of my colleagues on the Bench of Bombay.

19,118. In speaking of the study of law in England which would be useful to the needs of India you laid stress on the study of the historical development of law. How far is that represented in the course for LL.B.s?—It does not form nominally and formally a part of the course; it is only implied in their study of the English law and it is an endeavour which is made by the professors to enlarge the legal conceptions of their students. It does not go beyond that at present.

19,119. Do you not think that, considering the amount of energy that the student ordinarily has it is perhaps more important that he should be taught by professors historically-minded, than that he should himself go through any very laborious study of historical facts?—A professor historically-minded will naturally throw in many fragments of historical

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

development amongst his lectures, and if the student is to weld these into a system and assimilate them with his more purely legal knowledge he ought, of course, to read up a little to the lectures. It does not go beyond that, and one must always allow in laying down a system for a large margin between aspiration and achievement.

19,120. But do you think that, having regard to the amount of time which a student can spend, it would be desirable to enlarge the amount of reading, or are you satisfied with the present amount?—What I think best is the course which will now be open, (it has only just been opened after some years of suggestion and effort). It will afford to a student a means of taking up history and also general jurisprudence and Roman Law in his arts course, and then proceeding from that to his LL.B.

19,121. (*Mr. Anstie.*) Should I be right in saying that the system of the Bombay University is this: that the University, acting practically through the Syndicate as the executive body, conducts a series of examinations for students coming from recognised and affiliated institutions and gives them the degree upon those examinations?—That is a correct statement.

19,122. The Syndicate does not enter into any criticism or review of the work carried on in the separate institutions, but accepts the fact that they have attended at those institutions as a fact entitling the candidate to present himself for the examination?—Yes.

19,123. Beyond that they have no other connexion with the institutions at present. I would say no organic or constitutional connexion?—Nothing which can be strictly called organic connexion.

19,124. The fellows are appointed by the Government. Is not that so?—Yes, at present.

19,125. And so far as the Government considers it desirable it would put on those who would speak for the interest of the institution?—Put into the Senate as fellows, you mean?

19,126. Yes?—The Government generally selects men either on the ground of their being scholars and men of some evidence in literature, or representatives of the learned professions, or specially interested in education.

19,127. Then the Government would not regard the fact of institutional representation as one that would govern their nomination?—Not as governing them, but as an important element.

19,128. The strictly educational grounds would be the more determining ones?—I think so, but one must say that the view taken by one governor may not be precisely that taken by another on matters of that kind. There are certain variations from time to time.

19,129. Where is the Law School situated which you refer to which you said was a self-paying one?—The Law School is conducted, if that is the proper phrase to use, or rather, I will say, its work is carried on in the Elphinstone College, Bombay.

19,130. Is it a branch of the Elphinstone College?—It is in one sense a branch, but it has its separate organisation, and it is only loosely connected with the Elphinstone College.

19,131. But it is not connected with the University except as a recognised school?—Not otherwise.

19,132. It is not a University school?—It is not a University school. The University does not appoint the professors, and so on; they are appointed by the Government.

19,133. The course, I think you have told us, is now extended to four years for the Arts curriculum?—Yes.

19,134. I understood you to say that what you attached great value to in the LL.B. was that men should have gone through the Arts curriculum first?—Yes, experience has impressed it upon me that they benefit very much by that.

19,135. And I understood you to say that you attached more weight to the fact that they had mastered this preliminary education than to any broad difference in the method of the legal examination?—Yes; I think going through the Arts course benefits them intellectually and enables them to take better and broader views than any mere technical reading without assistance, which is what happens to those who present themselves for the High Court examination in most cases.

19,136. You have given us the benefit of your experience as to the way in which a law school in England might be constituted so as to serve the purposes of the Indian requirements. Have you considered at all how it should be constituted in its relations to the Inns of Court?—That is a problem which involves so many points of consideration that though I have, in a casual way, considered it from time to time, I could not give the Commission any ideas on the subject which would be of value. If it were desired I should be prepared to write a note about it, but I should be afraid that it would not give information so valuable as that which you could get from persons of closer experience in the workings of the Inns of Court.

19,137. You would rather not speak upon it at present at any rate?—I do not think I could give any information which would be valuable to the Commission.

(*Mr. Anstie.*) With the sanction of the Chairman you might communicate in writing.

(*Lord Reay.*) We shall be glad to receive any written communication.

(*The witness.*) If you would formulate precisely the particular inquiry I will send you all the information I can.

19,138. (*Mr. Anstie.*) One of the most important points which has arisen here and which arises not only in this regard but in connexion with medicine, rises out of the fact, that the Inns of Court are licensing bodies by virtue of their right to make the call to the Bar, that they have large funds at their disposal, and that they have a system of education which is not fully developed, but by no means badly developed. The problem which arises out of those circumstances is what position is it desirable that they should hold in relation to a University to be constituted or reconstituted for London?—If the Commission desires to have my views on that subject, which lies a little out of the range of my personal experience, but still not beyond the principles, I have had to consider, I shall be happy to state in writing what occurs to me upon it.

19,139. Then I will not pursue that point further. Now, I should like to ask you as to what the Government Medical College does. I undesrtand that you have given some advice upon the subject?—The Government Medical College at Bombay is called the Grant Medical College, after a former Governor, and the college being closely connected with a hospital which serves as its practising school and which is a hospital on a very large scale admitting more than 1,000 patients. The Government Medical College has a principal who receives a salary of, I think, 1,800 rupees a month. There are several teachers of different subjects under him, who are all selected from the Indian Medical Service, and to obtain one of those professorships is considered for a junior man one of the prizes of the service. This practically is the only medical school in the Bombay Presidency; there are corresponding schools in the other Presidencies; but for the Bombay Presidency this is virtually the only medical school, and students come up to it from all parts of the Presidency and go through a regular course of instruction in anatomy, and from anatomy proceeding upwards to the practice of medicine in all the various branches.

19,140. Then it is a school of medicine, a teaching institution, and affiliated to the University?—Yes, affiliated to the University in the Faculty of Medicine.

19,141. It has no power of licensing?—No, that was given up. In former days there used to be license holders or diploma holders from the Grant Medical College before the University was instituted; but

from the time the University began to issue its certificate this has been abandoned, and the college, so to speak, allowed itself to be absorbed in the University as far as regards an independent existence.

19,142. Then, in effect, you as a University do two things; you issue licenses to ordinary practitioners, licentiates, and you confer a degree indicating greater attainments and a wider range of study?—Yes, the doctor's degree at a later stage.

19,143. It seemed from your evidence (correct me if I am drawing a wrong inference from it) that you have been able by occupying this position to raise, and are still engaged in raising, the licentiate qualification?—Yes. The proposal which has been for some time before the University has been to transmute the licentiate degree so-called, which is conferred by the University now into a bachelor of medicine degree, and strong opposition has been made to that on the ground that "Bachelor of Medicine" ought to imply a general cultivation and a fitness to take a position in the world suitable to a man in the position of the practitioner, which you have not in the case of your licentiates who proceed at once to the University after passing such a very rudimentary examination as the Matriculation. In the meantime the licentiates continue to take their degrees, and those, except a few doctors, or men who have passed on to a higher stage, represent medicine all through the Presidency of Bombay, and as we, who are advocates for a higher standard of education think, represent it inefficiently and do not give it a proper standing in society.

19,144. You still adhere to the system of granting licenses on the one hand and degrees on the other?—I do not know whether "on the one hand and on the other" exactly suggests the right view; what we do is this: when men have passed an examination after four years of study we make them all licentiates of medicine if they succeed, and then a licentiate in medicine may proceed after two or three years of study to a doctorate.

19,145. You treat the licentiate as a man holding a lower kind of degree?—Yes.

19,146. Although not called "M.B." it is used by you as a lower degree?—Yes, he is entitled to practise, and he takes up a position in the Government service if he requires it, the reason being that we have no other class to fall back upon, and it has not been possible up to this moment to secure such a basis of general education as one would desire.

19,147. Then, I suppose, I may perhaps infer that in exercising your function of granting licenses you consider that you are doing strictly educational work?—We are taking our part in educational work, certainly.

19,148. You would not say that that was not an educational function?—Clearly the examining is a function and the recognition of the examination as having been successfully passed is a function of education looked at as an integral whole.

19,149. Has it been your experience or do you anticipate as a difficulty that exercising those two functions has tended or would tend to depress the standard of your degree?—Which two functions?

19,150. The granting of the licenses and the granting of the degree. I will put it in this way: has it been your experience that it has tended to lower the character of the requirements for the degree?—Do you mean degree of doctor?

19,151. Yes?—No it has not.

19,152. And you do not anticipate any such consequence?—I do not so long as the present view of the requirements of a doctorate is held certainly, for the standard is fixed very high, and is so closely adhered to, that practically there are only about half-a-dozen doctors of medicine, if so many, who have taken their degree from the Bombay University.

19,153. Would it also be correct to say that this licensing function being exercised by a University body which has fixed before it a high standard tends to improve the character of the license and to raise the requirements made of the licentiate?—In so far as it operates at all I think it has some slight effect in raising the requirements of the licentiate. The matter was discussed before the Senate on one occasion, when the question was: Shall we continue a class of licentiates with their present basis of general education, that is tested only by the matriculation, and shall we also have a body of bachelors of medicine from whom we shall require a basis of really liberal education, of course tending towards their ultimate destination, but still a fairly liberal education. There were many who said, "We cannot dispense with these licentiates; they are wanted for the good of the people, and we want more of them than we can get to come up and bear the expense of the degree of Bachelor of Medicine. So there are two strains of feeling—one that the licentiate is necessarily a somewhat lower degree, and another which points to this. These are the only men we have, and the only men we can have for some time therefore we must try and keep up their standard as much as possible. A great deal depends upon the view taken of their work by the examiners and by the Syndicate reviewing the work of the examiners. One cannot say that there is either a distinct tendency to raise or depress the standard.

19,154. So far as it goes, you think it rather tends to raise than to lower?—I think, considering these are the only men you can get to represent medicine and to be practitioners, it does make the examiners keep the standard up as high as they can.

19,155. May I ask you to apply that to the question I put to you a little while ago with regard to the Inns of Court being the licensing body. I will not put the question to you if you do not like to answer it at present, but perhaps you will kindly consider that point in the communication which you are going to make to the Commission. This is the question: How far the co-operation of the Inns of Court acting as a licensing body, and not able to require from all intending practitioners a high level of University graduation would tend to interfere prejudicially with the University of which they form a part?—Assuming that the Inns of Court become a part of the University?

19,156. Yes. That, of course, implies that they furnish funds?—That implies, of course, a particular connexion between the Inns of Court and the University.

19,157. Yes, it implies an organic connexion between the Inns of Court and the University. You will perhaps consider that?—Yes.

19,158. (*Mr. Palmer.*) The Syndicate is rather an extract from the Faculties than an assembly of them?—It is not an assembly of them. It is an extract from them. Each Faculty elects its two or three representatives.

19,159. I wish to ask your opinion as to what number of individuals acting as directors of educational matters in Bombay you consider most convenient for adequately discussing and determining the question?—Do you mean practical questions in the management of the University?

19,160. Yes. Are there elements which you would say you think necessary to form a requisite assembly for responsible directors?—I think the body which responsibly directs work should not be beyond a conversational number, because in the throwing to and fro, and practically dealing with matters it is desirable that no one should be tied down by rules of debate and that no one should be tempted to make speeches. I have found myself in actual work that seven is the number best fitted for carrying on work, because there are enough there to express different opinions, and yet not so many that people do not comprehend what everyone has said; and there is no making of speeches or difficulty in withdrawing what one has said which is a very important thing in dealing with practical matters.

19,161. You would not limit it to seven, would you?—A great deel depends on the character of individual men. Sometimes if you have five men together you will have more debating and things put in a more

Sir R. West, K.C.I.E., LL.D., F.R.G.S.

13 Jan. 1893.

ceremonious form and a less practical form than if you had seven.

19,162. You would not consider that a number like 20 precludes practical discussion, would you?—I should think it would. In my opinion when you get beyond seven or nine conversation becomes almost impossible.

19,163. It is very important to consider what is the unit or number by which educational questions can be best discussed and decided. I understand that you think 20 too many?—I think 20 too many for a practical working committee, distinctly.

19,164. (*Lord Playfair.*) That is for the executive committee?—Yes. I think a number from seven to nine is the best working number.

19,165. (*Mr. Palmer.*) Assuming that we have all the four time-honoured Faculties you must have some representation of those?—Let me say what my experience has been in matters of that sort. If you have the agenda sent round say to a body of 13 and there are questions which do not interest five or six of them, those five or six do not attend that particular meeting, and the work is carried on by that part of the Syndicate (call it by what name you will) which is really interested in it. If we had questions as we have had with regard to the mathematical course, the classical members seduously abstained from presenting themselves at the meeting unless they were specially invited to do so, in order to balance conflicting votes or something of that kind. On the other hand, if we had a question as to the course in philosophy and metaphysics and so on, the men representing engineering on the Faculty did not think it worth while to attend, and so, though our numbers were larger, coming as a maximum to 11, practically although we had all the men there when wanted, (and generally speaking, they were most zealous in their attention to the affairs of the University,) our actual committee was generally only one of seven or seven to nine in carrying on the work. The Vice-Chancellor always makes a point of being present, but the others, as I say, attend if they think they can do any good, if they do not think they can do any good they do not attend.

19,166. That includes representatives of all the Faculties?—Yes.

19,167. (*Sir George Humphry.*) With regard to the question Mr. Anstie put relating to the Medical Faculty your University at present gives a license in medicine and a doctor's degree?—Yes.

19,168. You do not give a bachelor's degree, because you do not feel that the general education of the students who come up for the first examination is sufficiently good to justify you in giving a degree?—That may be considered to be the feeling of the majority, but the feeling of the University, as I think I said before, is somewhat divided. Some members of the University, especially in the Medical Faculty, are for giving a bachelor of medicine degree on the present basis of education. They say, "What you want is a man who knows his business as "a doctor: it does not matter whether he has a gene-"ral education or not." There are others who say, "Your doctor ought to be quite as highly educated a "man in general matters at least, although it may "take a more scientific turn, as a lawyer, and he "ought to represent his profession well." So that there are these conflicting schools at work in the University. There are others who take a medium course as I was inclined to do myself.

19,169. Supposing the degree were granted on either of those grounds would you consider it still desirable to retain the license?—I think not.

19,170. You are probably aware that the older Universities used to grant a license as well as a degree, but the license has been abolished and the degree only remains which confers the license as well as the degree?—I have considered that subject from a practical point of view as applied to our circumstances in India, and the conclusion I arrived at, after discussing it with many men better acquainted with it than myself, was this: that taking into consideration the needs of the poor people, for whom some kind of medical aid is required, and who cannot afford to pay high fees, it would be desirable to arrange matters thus; namely, to change the licentiate of medicine degree, so to call it, in the University, into a Bachelor of Medicine degree, and require a tolerably high standard of general education as the basis; but along with that for a certain period at any rate allow the Government Medical School—not the University, but the Government Medical School—to give a license on a lower basis of education, and so send out a number of men sufficiently proficient to be useful among the mass of population, but not pretending and not having anything to indicate that they are of the same class as the bachelors of medicine of the University.

19,171. At the present time the licentiate is required to pass the matriculation examination only not to proceed to any further examination in the University?—That is so.

19,172. Would the purpose be served supposing they were required to pass a high standard, if those who had passed a certain standard might then proceed to a degree without having to pass a second examination?—I think that would answer the purpose fairly well—not quite so well—but still it would answer the purpose. An analogous step was at one time taken by the Elphinstone College for its art students who were pressing in in large numbers. It would not admit them without their passing its own examination, which was of a rather higher grade, as well as the University Matriculation Examination. It said, "we can find plenty of students who are ready "to begin on a higher basis of school teaching than "you require in the University, and whatever you "may say we think that our teaching needs this basis "and we will not admit them without." For some time that was so, but by degrees the general level of education was raised, and now the University Matriculation Examination is so far, as I know, accepted as sufficient by the Elphinstone Arts College.

19,173. Without their requiring to show a higher standard?—Yes. There is a great difficulty in fixing the standards in matriculation, because first, the numbers are very large, and secondly, at the very best it is only elementary. But I may say that I have considered this subject which you have been kind enough to suggest to me when the arts course was under discussion. I have at different times made my proposal that one year should be struck off for those who showed proficiency equal to the first year's course of University on leaving school. I thought then and I have mentioned to many members of the Medical Faculty that if this could be carried out and the first examination was considered the proper standard for medical men to begin their specific studies upon, they would get the benefit of this first year's examination being passed either in the school or straight out of the school without their coming into the college.

19,174. By some principle of that kind the examinations in general education might perhaps be reduced if a given standard were required in a certain study?—I think it might be best attained by the standard being the preliminary examination or the first examination in arts. Then your students who desired to enter upon medical studies if they are ready to pass the first examination in arts shall be admitted as medical students, because there is a long course of instruction under professors and in quasi collegiate life afterwards for four years.

19,175. (*Mr. Anstie.*) May I ask whether the Medical College is under any Government superintendence or control?—Yes. The Medical College is manned by professors named by Government, with a Principal who occupies a distinguished position, and the whole is under the control of the Director of Public Instruction.

19,176. So that if the college were a licensing authority its act would, in fact, be the act of the Government?—If the college were a licensing authority that function would be discharged under the superintendence of Government, no doubt.

19,177. (*Lord Playfair.*) Is there any public opinion in Bombay to convert your University course into a teaching University rather than an examining board?—That feeling is very strong now amongst a pretty large class, and I may say now I think that it is the predominant feeling in Bombay society.

19,178. Have any definite proposals been made for that purpose?—There is the draft which I drew up some years ago as a means of drawing to a focus the general ideas on the subject. I drew up that draft for the re-constitution of the Bombay University by a new Act.

19,179. As I understand it it proposed the establishment of the *privat docent*, who would really be a University professor?—Yes.

19,180. He would be rather higher than the *privat docenten* in German Universities?—He would take rather the position which the *privat docent* aspires to get.

19,181. Then you are really aiming at becoming a teaching University by a post-graduate course or post-graduate courses?—Partly that, but partly also by a pre-graduate course because the *privat docenten*, so to call them—these licensed teachers—would be licensed only to give lectures and instruction in preparing for the Bachelor of Arts degree.

19,182. Would you include both?—Yes, I would include both.

19,183. Do you think you see your way at all to the rich natives appointing professors of a high class in connexion with a University?—I think the thing is likely to come about in time, and there is one conspicuous instance of the thing in the Tagore lectureship in Calcutta in which 10,000 Rs. a year are made available for the lectureship.

19,184. (*Lord Reay.*) And the Gaekwar of Baroda made one available at the Grant Medical college?—That was in medicine. I should have mentioned that, but it is not a University professorship or lectureship. It belongs to the College.

19,185. (*Lord Playfair.*) Have you any laboratory for the examination of the students at your University?—They are examined in the laboratory in the Grant College.

19,186. The University has no buildings of its own, has it?—No, it has no buildings of its own. It has a Library and a University hall. That is the extent of the University buildings as such.

19,187. Then at the present moment if you establish *privat docenten* or University professors, they would have to lecture at other institutions?—They would expect that the University hall should be made available, to a certain extent, for their lectures, as for several years before the transfer of the Elphinstone College it was made available for law lectures, the central position of the University buildings being much more convenient for law students.

19,188. Then I understand that you have felt in Bombay the same current of public opinion as that which has caused the formation of this Commission, that an examining board in itself is not sufficient without teaching functions being attached to it?—We have had that brought more and more home to our consciousness as we have gone along in the experience of our University. What has pressed itself upon us very much is that there is a great necessity for an interplay of influences between institutions and the University, as a whole, and also an interplay between the institutions severally, so as to establish a particular tone and standard of ideas amongst them, and between professors and students, the students especially in an Indian college having to receive much more than they would in Europe a particular stamp of character, a particular class of ideas, and a particular set of what I may call, middle principles, for dealing with the circumstances of life as they come up before them—a stamp of character as well as literary training, I may call it.

19,189. I understand that you would leave the colleges in affiliation with you, with perfect automatic government amongst themselves?—Yes, there is no desire to interfere with their internal arrangements in any way.

19,190. Except when there is a proposal palpable and definite, and then you will give them a hint?—Yes.

19,191. Do you not think is might be met in another way; that having recognised a college when any new professor was about to be appointed to the college the University should give its sanction?—That would answer the purpose, but it would be an amount of interference going far beyond what the University has thought of exercising, so far. In the draft which I drew up, as, I think, I mentioned, I did provide originally for this—that the University should have a sort of veto by requiring certain certificates or standards of attainment in the case of professors of the affiliated institutions.

19,192. I know that you know a good deal about Edinburgh University as well as the Irish Universities. You know that in the Edinburgh University in fact in all the Scotch Universities, before they acknowledge outside teachers as fit for training for a degree, they acknowledge him formally after an investigation as to his qualifications?—I believe that is so.

19,193. Especially that is so in medicine?—Yes. In the scheme that I laid before the University it was my idea that these licensed teachers should be men whose qualifications, although they would generally be young men, would be well-known to the Syndicate of the University, and that they should only obtain their license whether they were to teach in medicine or to teach in engineering, or law, or whatever it might be, but more especially in Arts, when the Syndicate was thoroughly satisfied that they were men of quite unusual attainments or capacity to teach.

19,194. (*Lord Reay.*) There is nothing in the Charter of the Bombay University to prevent the University appointing University professors if they wanted to appoint them?—No, there is nothing to authorise it or to prohibit it. It stands quite loose.

19,195. With regard to the licentiate of medicine what is the length of the course he attends at the Grant Medical College?—Four years at least.

19,196. Four years before he obtains the degree of licentiate?—Yes.

19,197. But there are intermediate examinations between the matriculation and the final examination?—Yes.

19,198. Do you happen to know how many intermediate examinations there are?—I think only one as far as I can recollect. There are college examinations, term examinations, and so on, but so far as I can recall at this moment only one intermediate examination.

19,199. The medical knowledge is fair; the great failure is principally in the character of general education?—The medical knowledge is fair, so far as it can be called fair without the substratum of general education.

19,200. (*Mr. Anstie.*) I do not quite understand the position of *privat docenten* which had, at any rate, the sanction of your approval. What were they to do?—They were to be licensed to take pupils.

19,201. I understood your answer to Lord Playfair to be that they were to act as professors of the University, lecturing in the halls of the college?—No, that was another case.

19,202. That is a different case is it?—Yes, the *privat docenten* would be young men who desired to go on as scholars, and to get a living by it for the time being. They would be licensed teachers, and perhaps have a University hall at their disposal for several days of the week, and perhaps they would have a recommendation from the University to the effect that rooms at the Elphinstone College should be at their disposal.

19,203. (*Sir George Humphry.*) Suppose the University entered upon the pre-graduate course you have mentioned, would it bring itself in conflict with

Sir R. West, K.C.I.E., (L.L.D.) F.R.C.S.

13 Jan. 1893.

the colleges or excite jealousy in the colleges?—Rivalry always may lead to jealousy, and the same consequence might arise in Bombay as has arisen sometimes in Germany, where the *privat docenten* are particularly clever men. You may have a professor who has been eminent in his day, but who is getting rather beyond his work, or who is lazy, and the students flow off from the regular formal professor to the *privat docent*. They have found I believe in Germany that this licensing of the *privat docent* wherever it would be necessary, keeps the formal professors very much up to their work, new light is let in; these men get the newest ideas, and they impress them upon their pupils.

19,204. One of these colleges exists in Bombay?—More than one. There are three in Bombay. There is the Medical College, the Scotch College, and the Elphinstone College.

19,205. (*Lord Reay.*) And St. Xavier; that would make four?—Yes, it would be necessary of course—and that should not be overlooked—when you are licensing your *privat docent*, so to call him, to take care that there was no unseemly rivalry and underbidding and all that sort of thing going on so as to degrade education in the eyes of the multitude.

19,206. (*Sir George Humphry.*) At present you are free from all such trouble?—Yes.

19,207. (*Lord Reay.*) Will you put in your draft bill?—I have unfortunately not been able to find my original draft, but it would be interesting to see the project as it was hammered out eventually after the interests of different people had been brought to bear upon it. It was reviewed by a committee of the Senate repeatedly. This is the shape it finally received (*handing document to Lord Reay.*) Of course I do not consider it quite so handsome as my own baby, but it retains enough of the original traits to be interesting.

19,208. (*Mr. Anstie.*) This which you are putting in comes with the approval of the Senate?—Yes.

The witness withdrew.

J. Pollen, Esq., LL.D., I.C.S.

JOHN POLLEN, Esq., LL.D., I.C.S., examined.

19,209. (*Lord Reay.*) I believe you are prepared to give us some information both as having been an examiner and as having been examined on frequent occasions?—Yes.

19,210. Your evidence will be chiefly directed to informing the Commission in what way you think the new University could be made most useful to candidates for the Civil Service of India?—Yes. Perhaps the best way to give you an idea of that would be to explain what I went through myself in preparing for the Civil Service of India. I went up to College direct from School and having entered College I went back to School in order to read for the Civil Service of India. I went back for a year and a half to my old school, Kingstown School, near Dublin, and I read with the Classical Master, John Fletcher Davies, who was afterwards Professor of Latin at Galway Royal College, in Latin and Greek, and in English with John Rowley, who is now Professor of English Literature at Clifton College. I then went up for the Indian Civil Service and passed. I read for most of my Departmental Examinations for the "Indian" in Trinity College, Dublin, at the same time keeping my terms and passing my College Examinations. I, of course, went to Grinders. I learnt Hindostani with Professor Mer Aulad Ali and Dr. Atkinson, the latter who also coached me in Marathi, one of the dialects of Bombay. For a short time I went up and read with Dr. Glasgow at Belfast until I passed the point up to which he could give me instruction. I think that in a University there should be, for the benefit of Civilians, Professors capable of giving them instruction in the vernaculars of the District of India to which they are likely to be appointed. Since I have been in India I have gone on with my study of the languages, and I have studied them alone. But then I have benefited by being able to talk constantly with the Natives and read native papers and proceedings in the Vernaculars with the aid of my Office establishment. I also think it is very desirable that in a University such as the one to be established (as I understand) there should be a good supply of Government documents for candidates to study when learning the Vernaculars of India. I remember distinctly that I had great difficulty indeed in getting any of the written characters of Bombay here in London. It was only after a long search that I unearthed in a bookseller's shop a volume of vernacular papers from which I learnt the written characters of Marathi and Guzerathi.

19,211. Then you do not think the colloquial knowledge can be acquired here. You think that what ought to be acquired here is the grammatical knowledge, and the colloquial knowledge a student will acquire in India?—Quite so. My own experience of learning languages is that the training of the tongue is very different from the training of the ear. I heard Sir Raymond West call the latter "audition." The powers of audition require constant training by talking with and listening to the people. But as a preliminary it is quite possible to obtain a sound knowledge of the language by teaching yourself as soon as you have learnt the alphabet and how the letters ought to be pronounced. I took up "Russian" about five years ago. I got my preliminary lessons in it from a wandering Jew whom I found up in Sind. I learnt the Russian grammar chiefly on camel back riding across the little deserts of Sind. At the same time profiting by the instruction I had received from this wandering Jew I tried to pronounce the sounds and learn phrases. Then, following the advice of Dr. Atkinson, who always told me that the best way to get on with a Language, was to plunge into it at once, to take up an author and learn phrases by heart at the same time. I followed that course for a year and a half in India, and I came home to England and passed the preliminary examination in Russian, which entitled me to go to Russia in order to qualify as Interpreter. I accordingly went out to Russia and spent 14 months there.

19,212. Did you find your conversations with the wandering Jew were of much use?—No. In certain respects I had to unlearn what I had already learnt in the way of pronunciation. At first I was greatly puzzled! It was the same when I went out to India first! Although I knew the language fairly well, I had the greatest difficulty in understanding different people. Some people I could understand fairly well and others I failed to understand at all. I made out considerably less than half I heard.

19,213. Would you substitute Persian and Sanscrit, for Latin and Greek in the curriculum for the Indian civilian?—I cannot speak about Sanscrit for I have no knowledge of it, but Persian I should certainly hesitate to substitute for either Latin or Greek.

19,214. What is your idea as to substituting a modern course for a classical course in the preparatory stage?—Remembering that the learning of languages is to a large extent only educational, I am strongly in favour of retaining Latin and Greek.

19,215. You do not think modern languages or literature can ever be introduced as a substitute?—Russian certainly combines in an extraordinary way the difficulties and excellencies of Greek and Latin. It is a thoroughly scientific language and built on the Greek and Latin lines, and the effort of learning it is in itself a great part of education.

19,216. Did you examine for the Bombay University while you were in India?—No. I have never ex-

amined except as Member and President of Departmental Examinations and Branch Examinations up in Sind, but I have examined many years as Member of Departmental Examinations.

19,217. And your experience has been that which has been the general experience that the natives of India have a special aptitude for passing examinations well—they have special aptitudes?—They have wonderful memories. They can learn things off by heart with wonderful facility and write them down fairly well.

19,218. (*Lord Playfair.*) And then know nothing about them?—Very often. Of course, that is a sweeping assertion. My experience is confined to Departmental Examinations.

19,219. (*Lord Reay.*) The deduction I want to draw from that has an important bearing on the educational question in India, that great care should be taken that students should be well taught?—Just so.

19,220. That the difficulty in India is not to get examinations passed, but the difficulty is to get teaching assimilated. Is that so?—That is so, that is my experience all through.

19,221. What is your view of the present system of conducting Civil Service examinations in England?—My recent experience has been confined to passing Russian Examinations under the rules laid down by Civil Service Commissioners. Speaking as an Examiner and Examinee, my feeling all through was that, though the principles were good, the time allowed for putting those principles to test was ridiculously short. I may tell you the rules of the Civil Service Commissioners with regard to the study of the Russian language are something like these. At the preliminary examination which is the same examination as the Higher Standard Examination, you compete with men who have been in Russia and who have been two or three years studying the language. You go into the room with them and get exactly the same papers, and you do your best, and if you get a certain per-centage of the marks, 200 out of the 800, you are held to have passed the preliminary examination. Speaking of the examination generally what I think is that the time allowed is far too short; everything is done in a great hurry; you work at the top of your speed, and your attention is constantly directed from your subject to the clock.

19,222. (*Mr. Anstie.*) How much time is there?—The whole examination is pushed through in a day.

19,223. How many hours?—Six hours. Then there is the *vivâ voce* which lasts for an hour or half an hour as the Examiner chooses. But I think he is limited to half an hour. I may mention this illustration of the difficulties of hearing a foreign language; it is an incident that took place when I was being examined at the Final Examination for Interpretership in Russian. The acoustic properties of the room were very bad; the examiner read out Russian dictation, which at no time is an easy thing to take down; he read it out very clearly and well, and then he proceeded to read it a second time, and perceiving that some of the candidates at the end of the room had not heard, he said, "Now, gentlemen, I will read "this a third time, rapidly, so that you may correct "any mistakes you may have made from not hear-"ing me." He began to read, and thereupon, a Civil Service Official rose and pointed out that this reading of the dictation a third time was contrary to the Rule laid down by the Commissioners, and could not be allowed. The consequence was that some men at the end of the room had an unfair hearing, so to say.

19,224. (*Lord Reay.*) What correctives would you apply?—I would let the Examiner select his own time for his paper; state the number of hours required to answer any paper, and also give a little discretion, say ten minutes or a quarter of an hour as the case may be.

19,225. You would give more discretion to the examiner?—Yes.

19,226. Then with regard to the educational system, you are of opinion that instead of concentrating everything into a final examination at the end of the one year or two years' course, whatever it may be, in a University where there is sound teaching there should be constant informal examinations, and the relations between the teacher and the individual students should lead to secure steady progress?—Yes. So far as I have thought out the subject at all, I have always thought very much what Sir Raymond West gave expression to when he described the system at Galway College. There the lecturer holds constant examinations of the students on the subject on which he has lectured with them. My own experience has been that that is the soundest Educational system; there should be constant examinations in the subjects on which the men have heard lectures.

19,227. Would it not be fair to say that one of the reasons why there has been this undoubted success of the gentlemen who are usually designated as crammers that they are very closely in touch with the gentlemen whom they instruct?—Yes.

19,228. That they take stock constantly of whatever knowledge the pupil has acquired?—Yes, and I may mention in confirmation of that that in learning Russian I attended a Russian Crammer for three days. It was just at the end of his course to his pupils, and I was an outsider, but I could not help being very much struck by the wonderful success with which he had pushed on these men in their knowledge in such a way as to show all they knew of Russian. It was considerably less than I knew, but he had shown them how they could show their knowledge to the best advantage.

19,229. That is one of the advantages of the system?—Yes. Still he knew what they knew, and he enabled them to show all that they did know.

19,230. Then you are strongly in favour of the *vivâ voce* element in examination not being neglected?—Certainly, in all examinations for the Civil Service of India. It all depends on what you want to find out about a man. I think that in *vivâ voce* examination you can find out a great deal about the executive fitness or quickness, so to speak, of the examinee that would never become apparent in a written examination.

19,231. Your theory is that the examiner should endeavour to find out whatever are the strong points of the examinee, in order to judge from that the calibre of his intellect?—Yes.

19,232. Instead of trying merely to discover his weak points?—Yes, that is my opinion.

19,233. Now with regard to the preparation for the Revenue Branch. I think you belong to the Revenue Branch of the Service?—Yes.

19,234. Besides the languages, the classical part of Oriental languages in the Oriental School common to all Civilians, the gentlemen employed in the Revenue Department in Bombay having magisterial functions to perform, would also require to be educated in law?—Yes.

19,235. With regard to those magisterial functions the Faculty of Law would be able to give them some preparation?—Yes.

19,236. How much of the lectures given in the Faculty of Law do you think would be useful to them? I quite see that they would not be able to give much attention to it, but how much do you think could be given to it?—I have a very distinct recollection of what I did learn under the Civil Service Commissioners before I went to India. I mastered most of Justinian, and I remember Mr. Saunders, who was examiner at the final examination, in complimenting me on what I knew, said: "What "a splendid time in India you will have to forget all "this." I did not think then that I should have forgotten it, but I do not remember a line now.

19,237. It was absolutely useless?—Yes, it was absolutely useless. There may have been an after-result, but I do not remember now anything about Justinian at all. I remember being deeply interested

J. Pollen, Esq., LL.D., I.C.S.

13 Jan. 1893.

in Maine's Ancient Law, the historical part of it, and some of that has remained.

19,238. Of course if lectures were given on the Indian criminal Code, and in criminal procedure it would be desirable for gentlemen in the Revenue Department to attend those lectures?—Yes. For every public purpose in India you really only require the Codes.

19,239. And the underlying principles?—You learn something of them in the Courts at home from cases.

19,240. It is desirable that the young Civilian should have seen the relations between Bench and Bar here, so that in taking his seat on the Bench in India in the presence of a Local Pleader whose knowledge naturally would be very superior to his own, he should not be awkward?—Yes, and then he would know how to comport himself.

19,241. In India we are gradually forming a body of administrative law with regard to the Land Revenue Code, and in other directions. Would it not be desirable that some member of the Civil Service should be appointed in the Law Faculty and give lectures on administrative law?—I think that would be very desirable—lecturers who could explain the principles on which we administered our land revenue out in India—the principles of the revenue survey—in fact, speaking generally, the principles of our Revenue Code.

19,242. And of course all decisions given in revenue cases for which we have a special procedure?—And the Forest Acts.

19,243. Everything that is embraced in the decisions given in the administrative cases?—Yes.

19,244. Then of course you would lay stress on political economy?—Yes.

19,245. You would also lay stress on the history of the Indian empire?—Yes.

19,246. And constitutional history?—Yes.

19,247. And now with the great development of municipal institutions any knowledge which could be gathered here from the development of our municipal institutions would also be very useful?—Yes.

19,248. And in addition a student ought to obtain as much knowledge as he can of the philosophy of politics. Would you not say that was very useful?—Yes, I should, certainly. In fact, speaking from my own experience I went out to India with a very slight knowledge of the work that would really fall to my hand to do when I got there. I certainly had a knowledge of Justinian, but I was more or less ignorant of the Revenue System that I was called upon to take part in when I reached India.

19,249. With the literature that we now have Indian administration, the development of legislative and municipal institutions in India, you can develop the course of University lectures almost indefinitely, deriving your illustrations from Indian practice.—Yes.

19,250. Would it not be very desirable that it should be developed?—It would be a very good thing indeed.

19,251. And you think it is quite practical and possible?—Yes.

19,252. It would be useful to recruit out of the Civilians who have come back here not only *privat docenten* and lecturers, but also distinguished professors whose experience would be extremely valuable to the young student?—Yes, I quite concur in that, and believe that to be so.

19,253. I do not know whether you have ever looked at the subjects that are taught at the *École libre des Sciences Politiques* in Paris?—No.

19,254. I wish you would look at them and see whether such courses would be advantageous?—I will do it with pleasure.

19,255. Have you any other thing to add?—No.

19,256. Is there any feature on which you would suggest that stress should be laid in the higher education of the Indian Civil Service?—No, I do not think so.

19,257. (*Lord Playfair.*) A subject of importance with regard to this new University which we are considering is that there should be a certain number of the vernaculars of India dealt with?—Yes.

19,258. Are you aware that in the Colonial Institute they have established a school for Eastern languages, and that our experience there is that we can get abundance of professors, but no pupils at all?—No, I was not aware of that.

19,259. That is the case just now; we are starving for pupils; we have too many professors, and our pupils the number of which began at eight or ten are now reduced to one or two, and we cannot employ the professors?—Are there no persons forthcoming who intend to make their career in India?

19,260. If there are they do not come to the school of Eastern languages, and we are in despair for pupils. We have got the organisation, but the pupils do not come to be taught. Perhaps you would think that, like a railway pushed into space in America, if the professors existed pupils would ultimately come?—I think so. Of course I can only speak of my own feeling on the subject. If I thought there were good Professors available I should certainly go and avail myself of their assistance to learn the language.

19,261. (*Mr. Anstie.*) There is one expression you used which, perhaps, went a little further than you meant, with regard to the object of the examination You would agree that the object of the examination is to see whether the candidate knows what he ought to know?—Certainly.

19,262. So that the object of the examination is not merely to test his knowledge but in a sense to test his ignorance?—My general impression (more derived from what I have heard than from what I have experienced myself), is that questions are very often put not to educe knowledge but to obtain the gratification caused by puzzling Candidates.

19,263. That may be a defect at any examination, but, speaking generally, you do not deny that the object of an examination is to do both (you can do one only by doing the other) to test knowledge and also to test ignorance?—Yes, I think it follows.

The witness withdrew.

Adjourned to Thursday, January 19th, 1893.

Forty-seventh Day.

Thursday, January 19th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
The Rev. CANON BROWNE, B.D.
Professor H. SIDGWICK, Litt. D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

HENRY ROBINSON, Esq., M. Inst. C.E., examined.

H. Robinson, Esq., M. Inst. C.E.
19 Jan. 1893.

19,264. (*Chairman.*) You have been for 25 years a member of the Institution of Civil Engineers?—Yes.

19,265. During that time you have been in practice in Westminster as a civil engineer?—Yes.

19,266. You are Professor of Civil Engineering at King's College, and for six years you have been Dean of the Department of Engineering and Applied Science?—Yes.

19,267. Would you tell us your experience during the years since 1880 that you have occupied the Chair of Civil Engineering. I believe the Council of the King's College have approved of the various recommendations you have made for the purpose of extending the teaching in connexion with civil engineering?—Yes, that is so.

19,268. Will you tell us what those recommendations were?—When I was appointed 12 years ago the Chair was called the Chair of Surveying and Levelling. For some few years I went a long way beyond that work, and practically taught and lectured upon civil engineering, taking the view that surveying and levelling were a part and only a part of the subject of civil engineering, and as there was no professor of civil engineering in the college then, I gradually developed my work until a time came when I brought before the Council the desirabiliy of giving the public to understand that the work in the Calendar was beyond merely surveying and levelling, which is a limited work, and the suggestion I made was that the name of the Chair should be altered to really cover the subjects which I was teaching. I suggested "Civil Engineering." That was adopted by the Council, and therefore the name or title of my Chair was changed from "Surveying and Levelling," to "Civil Engineering."

19,269. And, I suppose, even from the first you had a good attendance and that has gone on increasing. You have had a progressively better attendance since the beginning?—Yes, that is so. When I was first appointed the number of students was I think 50, that is in the year I began lecturing, it was not more than 50. I believe it was 49, but year by year the numbers increased. I do not suggest that it was through my own work solely, but it was in consequence of the Council making modifications in the system of teaching so as to meet the requirements of the day.

19,270. Has the profession of civil engineering itself grown larger during that time. Has the number of members increased?—There is no doubt about it. A larger number of men have taken up the profession of civil engineering, but at the same time there have been a number of new schools or training colleges, so that whereas 12 years ago we only had 50 students and less competition, we have now 110 or 112 students at the present time in the face of the competition which has sprung up from other technical schools which have the advantage of endowments, and with the exception of one Chair, Metallurgy, at King's College, there is no Chair receives any endowment at all.

19,271. Is there more feeling in the profession as to the necessity for a good fundamental education than there was?—That is so. I am speaking as the only member of the staff at King's College, who is a practising engineer, having, of course, to meet my colleagues in the profession, so I speak with a sense of the general feeling in the profession with regard to the necessity fo. the work of any teaching establishment being conducted on more perfect lines than those on which it was conducted in the past.

19,272. Do people attend your lectures who are not going to be civil engineers, but who are going to some kindred profession?—Yes, the students at King's College may be said to be going in for either civil engineering, putting that first, or mechanical engineering, or electrical engineering.

19,273. Those are the three great divisions, are they?—Yes, and then there is the chemical industry and manufacturing pursuits generally. Some students are sons of men engaged in manufacturing enterprises. We have a great number of those through the college.

19,274. And then there is architecture?—Yes, I ought to have mentioned that.

19,275. Perhaps you will give us some details of the course which a student has to go through under your management?—Does your Lordship mean with reference to my own work?

19,276. The work that each student goes through under your auspices?—The course that is laid down in the College Calendar is a three years' course, but the students do not always remain for their third year. At the present time we have, as is mentioned in the statement, over 32 students. When I wrote those notes there were 32 students out of 108, and that is the largest number of third year students we have ever had in the college.

19,277. Others drop off?—Yes, some drop off. Sometimes we advise their not continuing if they only reach a very low standard.

19,278. And would those whom you so advise give up all idea of entering the profession?—I should think so. In some cases the friends, parents, or relations of a youth may have some connexion with the profession, and therefore the lad may follow engineering in some way, with the assistance of his friends. But the view we take is that if early in his career at King's College, a young man shows that he is absolutely devoid of the intelligence necessary to make a successful or fairly successful engineer, it is better for his friends to be warned of it than to let him waste his time in the college with no result. I hope that

H. Robinson, Esq., M. Inst. C.E.

19 Jan. 1893.

will be more and more enforced, so as to prevent young men entering or trying to enter a profession for which they are not qualified.

19,279. I suppose it is an entirely open profession —anybody may enter who pleases?—It is in that sense. There is no recognised diploma in connexion with engineering.

19,280. When a student leaves you or even during the time he is attending your lectures, is there any such thing as being articled to a civil engineer? Does he become assistant to a practising engineer? Is that the way in which he enters business?—After the students leave King's College they enter the profession in very different ways. I should say that the majority of those who are going to be civil engineers become articled to civil engineers for a shorter or longer period, according to the view which the professional engineer takes of what a pupil should do. Some go into offices or practice without any previous articles. With some it is a pecuniary difficulty with regard to paying the premium; and then they must work to the front as well as they can. They are very much handicapped in some cases, because without the assistance which a young man gets from a practising engineer of experience, he has to find out a great many things for himself, which very often occupies a great amount of his time, that is to say, what he does in two years without assistance he might do in six months or a year with assistance.

19,281. I suppose there is a little prejudice against a man who starts without assistance? I suppose it will take a little pressure to drive him into the groove?—Yes; he takes a subordinate position. If he is really a clever young man he rises to the front, but if he is a youth of ordinary capacity he occupies an inferior position, and has a great difficulty in getting beyond that inferior position.

19,282. You have assistants in your work at King's College?—Yes. The duties of my Chair do not require me to have assistants, that is to say, it is not stipulated, I am not called upon to have demonstrators; but in order to carry on the work that I have to do at the college, I have found it necessary, and as I have a staff of assistants in my ordinary practice, in my case it is a very easy matter for me to have three or four assistants at certain times. I have a great number of students to deal with, and it would be quite impossible to deal with them properly, being in full practice, if I had not a number of assistants of my own. If anyone were to occupy my Chair who had not that advantage the fees or emoluments of my Chair are too small to admit of employing independent assistants, and it would be difficult to do the work efficiently without some grant from the Council. The funds of the colleges, I need scarcely say, are too limited. That is one of the difficulties that we all feel at King's College in obtaining things which it is desirable to obtain to make the work more perfect, owing to the somewhat cramped state of the funds.

19,283. With regard to the position of the professors, I suppose you have hardly time to pursue your own practice besides teaching? Teaching occupies all your time?—No, it is the reverse of that. My work at the college only takes me a short amount of time. For instance, in my earlier years at the college I had to lecture on Friday afternoons only. In order to do the work according to my view, I obtained leave to utilise Monday afternoon, that work being largely done by my assistants.

19,284. And all that time you have been able to pursue your professional practice?—Yes, that occupies the greater part of my time.

19,285. It has been represented to us that it is very desirable that professors should be practical men who have themselves a thorough knowledge of business, and it occurred to me that there would be a difficulty as to how you would get the services of such men, because they would naturally, I should fancy, be too busy to give instruction. However, what you have said rather throws light upon that?—A great deal can be done under the direction of a man in full practice, whose time is very fully occupied. That is the view I have taken. Therefore I direct my assistants to do a great amount of detail, which they can do nearly as well as I can myself, probably better, for instance, drawing.

19,286. You think that any University professors that might be appointed to the teaching of engineering ought to be practical men, and men themselves in practice?—I think it is a great advantage to have that kind of men at the head of affairs in the same way as in medicine, where the busiest physicians in London are attached to the different hospitals and colleges.

19,287. You have given us the number of students at present?—I have given you the number there was a month ago.

19,288. I suppose you may say really without any question of boasting, that the engineering teaching at King's College is among the best that is to be obtained in London?—I think so. I should not like to answer that question without being able to add to it that I have trained my two sons there. I was a student there myself 40 years ago. The sons of a great number of well-known Westminster engineers go there, and they go because it is regarded in the profession as one of the best technical schools for the training of engineers, especially of late years, since the work has been developed and improved.

19,289. King's College has an established position in this respect, and there is a feeling about King's College which it would be very desirable to maintain and a great mistake to break up?—I think it would be a great misfortune to break it up.

19,290. In anything which the University undertook, of which King's College and other institutions form part, with regard to that it would be a great mistake to interfere too much with the autonomy of King's College, or with the prestige attached to it?—I think so.

19,291. Have you a strong feeling with regard to that?—I have a very strong feeling with regard to that.

19,292. You say you are of opinion that the proposed Gresham Charter would enable improvements and extensions to be accomplished?—Yes.

19,293. I will not go deeply into the question whether we are to have one or two Universities, but I will just ask you your opinion whether you think that London University could be remodelled so as to perform the functions which are to be given to the new University under the Gresham Charter?—I had rather leave that to one or two of my colleagues who have gone very closely into it, much more closely than I have myself.

19,294. Would you tell us in what way the Gresham University, or any other University that might be established, could extend the education which is now being carried on at King's College?—One advantage would be that there would be a Degree which would be the outcome of three years' work, or so, on the part of the students. There is no such Degree obtainable now which carries with it any recognition of the work of King's College.

19,295. If your teaching all led straight up to a Degree, it would be a great advantage?—Yes; there is a great difficulty experienced in the profession as to what stage a young man has reached. At King's College, we grant a diploma called the Associateship which is very highly prized among students—the A.K.C., as it is called—which means the Associateship of King's College.

19,296. Is it given in different Faculties?—Yes, in every department, but I am speaking now of my own department.

19,297. Is it Associate of Engineering or Associate of Applied Science?—It is the same diploma, but it may be in the medical department, the theological department, or other departments. There are a number of men going away from the college, having passed through the college fairly successfully, which

quite entitles them to be looked upon as men who will succeed in life, but they carry with them no Degree.

19,298. Is it that the diploma of associate is so difficult to get?—It is. It is a very high distinction, and it is only given to those who have gained a certain number of prizes or certificates.

19,299. You contemplate that the Degree would be easier to get than this diploma?—It would be easier to get for this reason. The number of students who are second on the list of the college would be of nearly as high a standard as the men who carry off the prizes but through the misfortune of their being opposed to very clever fellows they have failed to get the Associateship.

19,300. Do any of them go for a degree in science to the London University?—Yes, some of them do, but not many, as it involves interference with their work.

19,301. You mean that they have to learn a good many things which are unnecessary?—Yes; I have had a case come to my knowledge where a student has obtained leave to go away from the college for some time, and when I have inquired I have learnt that it has been because he has been working at something to enable him to pass his examination for a degree at the London University. It causes interference with his work, and to obtain his Degree it requires him to follow subjects outside the curriculum of the department.

19,302. What you want is a degree of Applied Science which would embrace those parts of science which would be useful to him?—Yes.

19,303. And I also gather that you think the teaching and the examination for the Degree ought to be in close harmony so that the one should lead up the other?—Yes, that seems to me to be a necessity.

19,304. I suppose that the connexion between the examination and the teaching could only be maintained by the teachers having a voice in settling the details of the examination, or the general principle of it?—I think so.

19,305. And that part of the Gresham Charter which gives the different Faculties great power in recommending as to the examinations you thoroughly concur in?—I think that seems to be the right direction to work in.

19,306. You would not have a new Faculty for Applied Science; you would still keep the four Faculties, Arts and Medicine, Law and Science, but you would divide the latter into two?—That appears to me to be a way that would meet my particular points. I am speaking now entirely from an engineering point of view. I do not go beyond that. It seems to me that if you have a science degree it may be divided into two parts, Pure Science and Applied Science. If young men obtain a degree in Applied Science it would convey to my mind and to the engineering profession the idea, which it is very desirable that they should have, that they have obtained a certain position in the preliminary work which would qualify them to follow the profession.

19,307. Would you distinguish it by any particular letter after their name, or would they merely be to the outer world Masters of Science or Doctors?—I have not thought about that. I do not suggest any term. It would be convenient if in early life he could have something to distinguish him, but I would not carry that too far, because there are so many titles that a man can obtain. If he is very young I should not attach much importance to it. I should say that a young man ought to obtain this diploma at once, otherwise he would not go forward in the profession; that is, he would not succeed; he would occupy a very inferior position. I should not like to imagine that because young men have got this, they ought to put it after their names, and be arrogating a position which would, perhaps, lead them astray. I say that because, although we look upon the diploma of King's College, in my department at least, as almost indicating success on the part of a young man unless his health breaks down, sometimes there is a feeling on the part of Associates of King's College that they are engineers, and that they can go out into the world and almost demand positions. Some conceited youths take that view. I do not want to encourage young fellows in taking that view.

19,308. That general remark would apply to all the Faculties. You are of opinion that the man who distinguishes himself at College might think too much of himself in that respect, and think that his chief work was done?—It would apply to everyone else, I have no doubt.

19,309. The chief subjects, I see, are Mathematics and Natural Philosophy, and you would have those subjects taught with special reference to their practical application?—I do not say that those two are the chief subjects, but I express an opinion which I hold rather strongly that for the engineering profession, Mathematics, Mechanics, and Natural Philosophy should be taught with special reference to their practical application.

19,310. The subjects which are already being taught, or would be taught in any University, ought to be taught by professors who are practical men as civil engineers, and who would teach them with a view to that particular profession?—That is not quite what I meant. Take Mathematics; Mathematics would be taught by a man who has taken a high degree, a wrangler, say. If he is associated in teaching Mathematics with practical men like, say, myself, it would be an advantage. There are many things required by practical engineers, or which practical engineers would have cognisance of, which a theoretical mathematician would not appreciate, and the advantage of having engineering training assisted or guided by men in full practice would enable the practical and the theoretical to be in close touch, and that would prevent what sometimes happens in our experience when young men attain great proficiency in theoretical matters. I think those who teach should regard Mathematics, and Natural Philosophy, and Science as a means to an end. It is very easily done. There is no difficulty at all in doing it.

19,311. That would require a special set of lectures on Mathematics and on Natural Philosophy addressed to those who wished to enter the profession of civil engineers?—It would be part. I do not mean to say that the theoretical branches should not be dealt with in the ordinary way, but what I have indicated should be always kept in mind with regard to those who are responsible for the work of the Applied Science Department, or whatever it might be, at King's College or elsewhere. Those who are going to follow engineering require at times Applied Mathematics in a way which would not be required by a man who is not going to be an engineer.

19,312. Is there any other point on which you think you could give us information?—I think not. I wish to confine what I say to matters which come within my own practical knowledge, and to leave it to some of my colleagues, who have gone very closely into other matters, to deal with them; so my opinion, if it is of any use, is opinion offered to you from a purely civil engineering point of view.

19,313. Do you think the University should appoint professors in this department independently of any college?—I have not thought of the best method of appointing.

19,314. (*Lord Reay.*) In the University of Harvard they give a degree of Bachelor of Science in Civil Engineering, and they have a four years' course for that degree. Would you just look at the curriculum (*handing Calendar of the Harvard University to the witness*), and tell me how it compares with the programme of your studies?—I notice one thing here, German is included. We do not teach languages in connexion with the ordinary work of the department, but from looking over this hastily I think we approach very closely to it. I think we have really more subjects.

19,315. More subjects for the three years' course than they require for the four years' course?—I think

H. Robinson, Esq., M. Inst. C.E.

19 Jan. 1893.

we cover more ground rather than less ground. I do not see "workshop" here.

19,316. You have workshops?—Yes, we have workshops and a mechanical laboratory.

19,317. The workshop as distinct from the laboratory?—Yes, where we have lathes and other appliances. They begin on that as soon as they enter the college.

19,318. And you fully approve of that system?—Yes. They begin to work with their hands while they are working with their heads in another part of the college. I should say generally that I think we cover wider ground, if anything, at King's College.

19,319. Then at the Harvard University they have a separate degree for Bachelor of Science in Electrical Engineering. Are you acquainted with your course in Electrical Engineering?—Yes, generally; but Dr. Hopkinson will give better evidence upon that than I can give. He has it in charge.

19,320. You would not be in favour of sub-division?—No, I do not see how it would work out practically. It would be very difficult.

19,321. Are we going to obtain evidence with regard to the education in architecture at King's College?—I presume so. I do not know.

19,322. Could you tell me whether it is limited to the engineering side of architecture, or do you also give instruction in the art side?—The work in architecture has been altered very recently upon the retirement of the professor who had held the post for a great many years. It is now called "Architecture and "Building Construction." I can speak from my own knowledge, because at the time when the Chair was altered there was one matter that I advised the Council on. I wanted them to give instruction which would be practically useful, and that is now so. The architectural course includes practical work as well as art work.

19,323. Is there a workshop?—They have a large number of models which the professor refers to.

19,324. And is there any instruction given in fine art and drawing?—Yes, we have a professor of drawing.

19,325. The students do not go to any other art school?—No.

19,326. So King's College has a full and exhaustive school of architecture?—It has up to a certain point, but I had rather you took evidence on this part of the question from my colleague.

19,327. With regard to what you have said as to stopping a student *in limine* who does not give any promise of his studies leading to a satisfactory result, is that method of warning off the course followed in other Faculties?—It is followed to a very limited extent at King's College.

19,328. You only apply it to a perfectly hopeless subject?—Yes. There is a case which has come to my knowledge within the last few days. A student had made no progress, and the parents consulted Dr. Wace. Dr. Wace consulted me, and I advised his being withdrawn. Then there is a question of importance with regard to tests upon entering the college.

19,329. Is there a test?—It is called an examination for matriculation. The examination at the commencement of the academic year is for the purpose of exhibitions, but generally there is no test.

19,330. You are in favour of introducing one?—The question has been discussed frequently as to the desirability, so as to exclude youths who are not fairly well educated, but it should be done with very great care. Take a theoretical mathematician. He might require a higher standard of mathematics upon entering, than I should not agree to. I know that is a point which is required to be considered carefully. You should not exclude a youth because he has not reached some theoretical standard of mathematics when he might be well advanced in other subjects of equal importance, so that you could not have tests applied except after careful consideration.

19,331. Then you are in favour of differentiating the course of engineering students from the beginning of their University career and of not mixing them up with other science students?—Yes, I think so.

19,332. Differentiating them absolutely?—Yes.

19,333. Do you take any of your students into your own office afterwards?—Yes.

19,334. Of course you select the best?—I have a great number of applications. I only take three pupils, and very often I have three times that number of applicants. I take no articled pupil unless he has had some previous good training.

19,335. There is, I suppose, a great advantage in the connexion of the professor with his own office?—Yes.

19,336. An advantage to himself and to his students?—Yes. I add to what I said before on that, that in my lectures on civil engineering works, railways and waterworks, I am able to bring to the college drawings and designs of works that I or others have carried out and that give practical instruction to the students. I have heard from students who have left and who have gone to practice afterwards that that very much increases the interest. They see the practical results.

19,337. And you take no pupils except those who have had this previous theoretical training?—No; I have the opportunity of choosing and I know from what happens in engineers' offices that students who have not had the training are very troublesome. They have to be taught and they require technical knowledge to make themselves of any value.

19,338. And the profession appreciate this training?—Yes.

19,339. (*Professor Sidgwick.*) Are you acquainted with the organisation and working of other Schools of Applied Science in England besides your own?—Only to a limited extent. I know generally, but I have not made it a study to investigate the working of other places.

19,340. What other institutions are there in London?—There is University College. I know the engineering course there fairly well. It very closely approaches to King's College, in fact, I may say that the suggestion that the Chair which I occupy should have its title altered and the work increased was taken from University College. They created the Chair, if I remember rightly, and called it the Chair of Civil Engineering. What was put in their curriculum was what I had been working at for years without the name being recognised.

19,341. Then you say both with regard to your own work at King's College and the work at University College that what is wanted is a little more money to put the thing on a satisfactory footing?—No doubt that is one want.

19,342. Do you consider the want great that a large addition of new resources would be required to bring the school into what you regard as a satisfactory condition?—I do not think I should like to give any figures, because the departments are so intermingled. I could give you what would be required for my own department, but I should like to consult my colleagues as to what would be required for other Chairs. I can only speak for myself.

19,343. But still you think there is a want?—Yes. The work would be very much better and more satisfactory.

19,344. Are you acquainted with the work and organisation of the City and Guilds Central Institute?—To some extent.

19,345. That is a school on the same lines, is it not?—Yes. That is, of course, an endowed establishment

19,346. If I might ask you to compare the two systems, what are the distinctive characteristics of your system and the system that is pursued there?—I do not know that I should be prepared to compare them now.

19,347. I did not mean to suggest a close comparison, I only wanted to know whether you had a general view on the question of whether the ends were the same, whether you are aiming at the same ends, and it is a mere question of organising details,

or whether the work at one institution was different in general design from that of the other?—I should fancy that the same end is aimed at, sometimes by a rather different method.

19,348. And in the case of that institution is the teaching of engineering in the hands of persons who are also engaged in the practical work of engineering?—I speak now of South Kensington. Professor Unwin is the Professor of Engineering there. Speaking from general knowledge, I believe he is not in practice independently, but I should say that he has a close touch with the profession; he is a very gifted man, and we are always consulting him, and meeting him in practice.

19,349. The question to which I was leading up to is this. In your view it is of importance that the academic teaching of engineering should be in the hands of persons in touch with practice. Do you think that it necessarily follows from that that it is in all cases desirable that he should be actually engaged in practice, or would it in some cases be sufficient that he should have been engaged in practice?—Perhaps I might put it in this way. It might be possible that the emoluments of a Chair might be an inducement to a man who has been engaged in active practice to retire from active practice, and to take the appointment of a professor. In that case you would have the advantage of his previous practical acquaintance with the profession, although he might not be practising, and in the case of Professor Unwin he was brought up in the workshop, so that he had a practical training.

19,350. In the parallel case of medicine to which you referred it is customary, I think, to divide the subjects which a student of medicine studies, and to consider that, while the technical and professional subject would be in the hands of persons engaged in the practice of medicine, it is by no means equally desirable,—and it is widely held that it is not at all desirable—that the preliminary scientific training should be in the hands of medical practitioners. Do you accept that view?—Yes, I hope that by anything I have said I have not led the Commission to think differently.

19,351. How far would a corresponding distinction be applicable in your Department? Are there branches of teaching which a student being an engineer should go through which it might be desirable to place in the hands of persons who were not themselves engineers?—I think we take Mathematics alone. I should not suggest that Mathematics should be taught by an engineer alone. I should prefer it to be taught by a mathematician. But there are mathematicians and mathematicians. You might have a mathematician who would take a little guidance from a practical engineer. To take one instance, there is a point which engineers are always dealing with in practical railway work in setting out curves, which requires a little mathematical knowledge. The solutions of the problems and formulæ will be taught mathematically; a practical mathematician or a mathematician applying mathematics to practical problems enables a young engineer to have amongst his notes what will enable him to go into the field, and carry out in practice what is being taught theoretically.

19,352. What I understand you to hold is that Mathematics and Natural Philosophy, so far as they are taught in an engineering school, should be under the control of practical engineers who would limit and direct the teaching?—No, I do not think it would be right to those who occupy those posts now; but if you have associated with those professors men who have practical knowledge, and the system of teaching is not dictated or laid down from a purely theoretical point of view I say it is the combination of experiences which enables the teaching to be not only good theoretically, but good practically.

19,353. Your theory is that the body of teachers should contain a practical element, and that in the discussion that naturally goes on among colleagues, and that must go on in order to determine details, the practical teachers would naturally exercise an influence?—Yes, if they desire it, or those who had to define or lay down a system of teaching should listen to or take advice or obtain information which would be afforded by practical men for laying down a theoretical system.

19,354. You think that would naturally result from a combination of the two elements in the same Board of Studies?—Well, it should do so if there is a right feeling among those who are responsible. If there is a difference of opinion there should be, of course, a means of settling it. You might have a pedantic man who wished to enforce his own view of things. I do not wish to lay down any regulation as to how it should be carried out.

19,355. But you hold that if there is a disagreement the practical man ought to prevail?—It would be rather unfair for me to say that I regard myself as more important than the Professor of Mathematics or a professor of theoretical subjects. I think a happy result would be arrived at by consultation.

19,356. How are the examinations now conducted?—They are written examinations.

19,357. Who conducts them?—Each professor conducts his own examinations.

19,358. Have you any outside examiner?—No.

19,359. Do you think the introduction of an outside examiner would be a gain or not?—I have no strong opinion about it. In my own work an outside examiner would not help me to determine more accurately than I do who are the best men.

19,360. You think a system in which the examination is entirely in the hands of the professors works well?—Yes, as far as my knowledge goes it works very well.

19,361. Did I understand you that the associateship is competitive?—No, it is not competitive. It is awarded to those who attain a certain standard.

19,362. Then why is it not awarded to all who would have the degree. Why does not King's College provide what would be a substitute for degree by giving a certificate of competence?—That is given, but it does not carry the value or the weight which the diploma does.

19,363. You think the practical men are influenced by the distinction between the University degree and the college certificates?—I should not like that to be taken as being my view, because, without undervaluing a University degree for the moment, the degree which I have in my mind is one which would indicate that the youth had gone through a training which would enable him to enter the profession with a fair chance of being useful to himself and those by whom he is engaged. At Cambridge an undergraduate takes a very good degree indeed, although the work at Cambridge is developing very rapidly in connexion with practical teaching now, I understand. The degree does not convey to any engineer's mind any practical knowledge of a great many subjects which are essential, or useful, for an engineer to know.

19,364. I thought I understood you to say that you desired a degree in Applied Science?—Yes.

19,365. It was in regard to that degree that I asked my question, why would a degree be valued more than the certificate which you now give. What exactly would be the gain to your school of having a degree in Applied Science?—The certificate which is given now is given by the different professors. I give a certificate to those who pass in my subject, and every professor has liberty to give a certificate to those who pass in his. The college Diploma which I called the associateship is a very difficult thing to obtain, owing to the standard being very high. The other certificates which are given in the college do not convey to anyone's mind that the youth who has them has followed the whole course, and, as the result of it, has a good general knowledge all along the line. It conveys to one's mind only that he has been in the workshop, or engaged in chemistry work, or whatever subject it is.

H. Robinson, Esq., M. Inst. C.E.

19 Jan. 1893.

19,366. The Associateship, then, is a kind of degree in honours; and what you want is a kind of ordinary degree, a degree of not so high a standard. Is that so?—Yes, that is so practically, although I should not like you to consider that I want to have the standard a low one.

19,367. Not quite so high as the associateship?—Quite so. It would have a double effect. Students cannot become associates under three years unless they have been in the school. Some of the young men leave at the end of the second year, and do not have the full training. To remain three years, and to fail to get the Diploma is considered to be rather unsatisfactory.

19,368. I suppose if a degree were given in your department there would be various alternatives in the examination?—Civil, Mechanical, and Electrical Engineering would be the alternatives. The student would not be obliged to go through courses in all for the degree, would he?—The Applied Science degree would be a degree which would apply to any branch of the profession. I should not specialise too soon. There is a great tendency in young men to specialise as soon as they commence being taught. I should refuse to allow a young man to specialise until he had been two years in the college.

19,369. Assuming the degree to be given equally to men who were preparing for Civil Engineering, Mechanical Engineering, or Electrical Engineering, would they, in your view, still go through the same course completely during the three years?—It would be according to the period of time. I should not like to say the exact period, but the period of time should be common to every branch of the profession, Civil Engineering, Mechanical Engineering, or Electrical Engineering. It is undesirable for a young man to specialise too soon, because very often at 18 years of age he is under the impression that he is going to be an electrical engineer or a civil engineer, and by force of circumstances he is obliged to take some other branch of the profession. It is a great misfortune for a young man in that case just as it would be for a young medical man to specialise before he has had the broad training in the hospitals.

19,370. (*Rev. Canon Browne.*) Until you had assistants I think you said you used to go one afternoon in the week to King's College?—I used to lecture on a Friday afternooon, as I do now, and take field-work on Saturdays. But there are a great number of students to deal with. What was done previously was to sub-divide the students. That is a point I took interest in. It seems to me that a young fellow has so much to do that it is the duty of the professor who occupies the Chair to see that he has the opportunity of doing it continually, so instead of dividing them and taking them alternately, I made it my duty to employ my own assistants, so that they should have continuously and without interruption the full course. For field-work I have had sometimes to deal with as many as 40 or 50 in the field. I sub-divide them into small groups, and sometimes I have four assistants, so that each student who chooses to attend has the opportunity every time there is college work going on in the field of having his full amount of instruction, which would be quite impossible if I confined myself to lecturing in the college, and then taking charge of whatever work devolved upon me in the field.

19,371. When you lectured in the college on Friday afternoons you had men of three years under your charge?—Yes, one after the other.

19,372. An hour each year?—Yes.

19,373. So that at that time it would be true to say that the lecturing they received would be one hour a week for the men of each year?—Yes.

19,374. How long has that been changed?—Three years ago. When the changes were made that I have indicated with reference to the Chair of Mechanical Engineering and the Chair of Architecture there was a re-arrangement of the work of the college, and I made it a point, and urged my colleagues to support me, which they did, to give more time. Monday afternoons now are devoted to the work of my Chair in the college. About two hours on Monday afternoon are devoted to the work. Besides that, I have also introduced in the last two years a system of taking the students in the third year to works in progress in London, so that they have an opportunity of seeing practical work in progress.

19,375. Up to the time of your having these assistants did you give the men field work as well?—Yes.

19,376. They have always had field work?—Yes; since I have been in practice I have always had assistants, so that from the very first I may say that I employed my own staff. With regard to the financial part of it, I might put on record that I derive but small emoluments from King's College; and formerly the fees hardly covered my expenses.

19,377. So that as a matter of fact what King's College provides is just the one hour's lecture for each year in each week, and you provide the assistants?—No. When I pointed out to the Council the desirability of extending the teaching of Civil Engineering, that is to say, when the teaching of Civil Engineering became more developed, and I desired and advised that the work should be increased, that was at my own instigation. I have no doubt that in time the Council would have required it to be done; I should not like you to think for a moment that the Council do not take the initiative in doing the work; but of course they were influenced by recommendations coming from the Board. Is is the duty of the Board to recommend to the Council any change which they think desirable. That was the change that was recommended, and after discussion the Board agreed that my suggestions were good ones, and the suggestions went forward to the Council and were acted upon.

19,378. I was only wanting to arrive at the amount of instruction the men really got as provided at King's College. I thought you said your own assistants came, and you paid over to them practically the fees you received?—I pay my own assistants. I receive certain fees from the college, and my assistants are employed independently of the college. If I was not in practice, and, therefore, had no need of assistants, it would be quite impossible for me to pay men to come to the college occasionally to help—to pay them specially, that is. Of course having them employed otherwise the cost to me and to the college is very much less than it would be if they were specially appointed.

19,379. In the case of men of each year having one hour's lecture in the week, what guarantee have you that they are working in other parts of the week for you?—I do not quite follow you.

19,380. You have a first year's class for one hour's lecture on Friday afternoon?—Yes.

19,381. What guarantee have you that on other days of the week those students are working on your subject?—I have no control over the work in the other rooms. The college marker sees that they attend the lectures.

19,382. You have them for one hour's lecture on Friday afternoons for your subject. What guarantee have you that during the other days of the week they are doing work on that subject?—The other days are Monday afternoons for the third year, Wednesday afternoons, and Saturday mornings. Those are the times I am responsible for the students.

19,383. You had not mentioned Wednesday before?—I am in close touch. If I am not there my responsible assistants report to me those who attend, but, as a matter of fact I may say, that with very few exceptions I am in the field directing the work at the commencement until I see it all in full progress. I am there in the field to see that it starts properly, and that my assistants have everything in hand. Sometimes I do not stop more than an hour. Sometimes I stop there the whole time.

19,384. But when they are not under your own eye what guarantee have you that any work is being done? They come on Monday, Friday, and Wednesday?—I make a point of being there frequently.

19,385. For how long is it that the third year men on Monday?—They come into the college from 2 to 4.

19,386. Then what test or guarantee have you that, excepting on these occasions, the men are turning their thoughts at all to your subject?—In the course of the lectures that I give certain things are indicated to the students which it is desirable that they should do at home, drawing, designing, and so on. I do not require them to do it in such a hurry that it should overtax them if they have anything to do for other professors, but certain work is always going on at home. Instead of wasting time at the college, getting them to draw, I settle the things with them, and give them such general sketches that they can follow up their work at home, and they have to do it. If it comes to a case where a youth actually refuses to do what is required by the college staff he is expelled from the college, that is to say, he is sent down.

19,387. Have you examinations in all the subjects?—We have an examination at Christmas and one in June in all subjects, but there is not one in all subjects at Easter time.

19,388. Should you admit to that examination a man who has not done his drawings, or who has not done them satisfactorily for you?—I should only find that out at that time, some of the results of the term's work are only produced at that time.

19,389. Then they are not produced week by week, are they?—Sometimes. Sometimes I suggest that they should do work and produce it the next time. I do not treat them as schoolboys. I say: "I give "illustrations of the subject I lecture upon." I require some things to be done. That is a matter of discipline. I say, "That must be done, otherwise I "cannot form an opinion as to whether you under- "stand it. I require you to send in a description or "a calculation in order that I may be sure you "understand what I am talking about." In other cases I refer them to text-books, but I do not consider that I have to supervise their studies outside the college.

19,390. What I really wanted to ask was what preventive you have for idleness which is not found out before the examination comes on?—It is very difficult to have any check. I know the students who are idle; you cannot whip them, but they deserve to be whipped. You can turn them out of college if they are incorrigible.

19,391. But still a man could go on being idle, and you have no test?—We find him out and he is reported to me, or whoever is the Dean for the time being.

19,392. But how does the Dean know that he is idle?—The marker tells him or the professor.

19,393. How does the marker know?—If the professor does not find out what is going on in his class it may be that the student will not be found out, but as a rule those who are doing nothing are known to the professor.

19,394. Now you come to the point, how are they known?—By the absence of any results. I wish to make myself clear upon this. I know what I do myself. Occasionally students who are not doing any good at all are reported to me by other professors. Then I take them to task. I make a point of coming to the college and trying to influence them. If the thing is repeated I say it will be necessary to have some drastic remedy. But I quite admit that there is a possibility of an idle man remaining there for a time without doing himself any good.

19,395. There is no work given them time by time, week by week, which in the following week they must produce, and if they do not produce it you know they are not doing any good?—There is work given them. There is a great deal of work required to be done at home. Sometimes a student comes with an excuse which you must accept; you must treat him as a gentleman; he says he was ill, or there was something which prevented him doing it. But if I find the same man always making excuses I tell him frankly that I think he is deceiving me, and the best thing is to report him to Dr. Wace, with a view to his being removed from the college.

19,396. (*Mr. Anstie.*) In effect, I gather from what you have said that this is an unpaid Chair in the college?—When I spoke of its not paying my expenses, what I meant was more with reference to my earlier experience when the students at the college were about 50.

19,397. I think you said you handed over the fees to your assistants?—They are my own assistants. I hope I have not been misunderstood. The fees have reference to the number of students, that is to say, when there were 50 students the fees were a guinea a term for students, which represents 150 guineas a year. When I had paid my staff their salaries the result was that with my own expenses and assistants and diagrams which I had to make, it was not a lucrative appointment, but when the students are over 100 the fees are larger.

19,398. There is no fixed salary attached to the Chair?—No, it fluctuates with the number of the students.

19,399. Does it entirely depend on the number of students?—Yes.

19,400 Have you any entrance examination to the college?—There is an entrance examination which serves two purposes. The first purpose is that it enables certain money exhibitions to be awarded for excellence, but there is no test upon entrance.

18,401. There is nothing which can be broadly described as an entrance examination?—No, not in that sense. If there was a case of a youth who really had not sufficient tranining to make it likely that he would benefit by a college course he would be excluded, but I have never known a case like that.

19,402. Would you desire that there should be an entrance examination?—I am strongly in favour of it.

19,403. If there were an entrance examination would you make it common to the whole college?—I am only speaking of my own department.

19,404. Have you not considered the thing in its general aspect?—I should not like to speak beyond my own subject.

19,405. In your own subject would you like an entrance examination?—I should like it to be known that a young man ought to prepare himself. Sometimes they come with very little preparation, and then there is a great strain on the teaching staff.

19,406. But if there is no entrance examination, what was the standard to which you referred when you said that you thought the mathematical professor would require a higher entrance standard than you would wish?—What I meant to convey was that on entering, the standard that should be required should be one which would be settled in consultation with the board of professors so that the standard should not be too high.

19,407. If you had a common standard for the college that would apply to all. You have no standard in reference to which you were speaking when you said a mathematician would require a higher standard than you thought necessary?—I did not say he would. I said he might. I was putting a hypothetical case. You might have an accomplished mathematician occupying the Chair, who would look upon some part of mathematics as elementary, which every young fellow should know.

19,408. Would you desire that the examination should be one which every schoolboy who had been through a good school should be able to pass?—Certainly.

19,409. No one would think of making it higher than that on entering an institution which was next in level. Would you desire less than that?—No, I should say that any youth coming from a good public

H. Robinson, Esq., M. Inst. C.E.

19 Jan. 1893.

school who had taken pains to pass such a standard as I have in mind would be able to pass it. There are a great number of students who come from public schools who in the end become industrious; many young fellows come up with a very vague notion of what work really means, but after a time they come in contact with quite a different sort of life and settle down. Very good men have been turned out in the engineering profession within my own experience who promised at one time to turn out badly. By the help of a little good influence and good advice they have developed and found the necessity for work which at school they did not really appreciate.

19,410. I quite understand what you mean by having in the subsequent part of the career the views of the Professors of Applied Science strongly represented, but I do not quite see how that would apply to the entrance examinations. We have had some evidence given by highly scientific men, engineers and mathematicians, who date the bifurcation of the mathematical course from the day of leaving school, if not earlier. Would you date it at an earlier period than that? Would you require that the boy who is going to be an engineer should learn his mathematics in different fashion from other boys?—No, certainly not.

19,411. Then so far as relates to the entrance examination there would not seem to be much difference between the standard exacted?—I have evidently been misunderstood, because I did not mean to confine my observations to mathematics alone. I know numbers of young fellows who cannot spell properly, and who cannot write. Their previous training appears to have been neglected. I should require not merely mathematics, but some previous education which would show that the young fellow had been fairly trained.

19,412. You would be satisfied with a common entrance examination?—Yes.

19,413. If you have a standard such as a fairly well-educated schoolboy could pass, that would be sufficient?—Yes.

19,414. Am I right in thinking that speaking of the collegiate course you would desire that those who are concerned with the pure and applied mathematical branches of learning should act in concert in settling the curriculum?—Yes.

19,415. (*Sir George Humphry.*) You said that you considered a general education very important and desirable for an engineer. By general education you mean school education, and good school education?—Yes.

19,416. Which should be tested by an entrance examination?—Yes.

19,417. In reply to Lord Reay you said you would differentiate students from the beginning. I did not quite know what that meant. I supposed it to mean that you would differentiate general science from Applied Science?—That was the intention. That is what I meant.

(*Sir George Humphry.*) I did not quite know what "from the beginning" meant.

(*Lord Reay.*) The beginning of the University course.

19,418. (*Sir George Humphry.*) That is to say, that having shown themselves to possess a fair general education you would differentiate them to Applied Science at once?—I think so. It seems to me that there is a very broad distinction which may be made, and a line which may be laid down between the two. I should be sorry to have to define exactly where the line should be made, but there is a line which, in the case of a youth who is going to follow engineering, would enable his time to be spared, which could be devoted to some branch of mathematics or physics, which he would not require to follow so much as a man who was going to follow science pure and simple.

19,419. A certain amount of chemistry, mechanics and other branches of physics?—Yes.

19,420. Would you not require that they should have a fair general grounding in those subjects such as would apply to students going to follow other directions before they were specialised to Applied Science?—No doubt that would be so. I agree with that, but as I have said, I feel great difficulty in drawing the line. I know exactly what should be done; it should be to prevent a student who is going to follow a particular profession from having to devote his time to physics, or to the development of physics, which would not be of so much practical value to him as other matters. He has so much to do in the time at his disposal in the few years that he has to train for the race, that I do not want him to carry weight on his back that he would throw off directly he entered life. He would not gain by it. If he has great ability a year or two more's previous training does not matter. Of course, all knowledge is of advantage to him.

19,421. A good grounding in those several branches of science would be desirable for him before he enters upon the special work of his own science?—Undoubtedly.

19,422. You said that a degree would be a great boon in your profession. That, I suppose, would be as indicating some higher kind of knowledge?—Indicating that some results have been attained by the youth. At the present time it is all done by inquiry. When an engineer takes an articled pupil he has to ascertain what he has done, and it is mere guess work.

19,423. You would expect a degree to indicate that he had had good school knowledge to begin with; secondly, that he had a certain amount of good scientific knowledge; and, thirdly, that he had good training in the application of that scientific knowledge to his own special subject. That is what you would wish a degree should indicate?—Yes.

19,424. There is at present, I think you said, no kind of license required for a practical engineer?—No, there is not. May I explain? There are several institutions of engineers: electrical engineers, mechanical engineers, and civil engineers. The Institution of Civil Engineers, which we look upon as the head institution or, the leading institution, before they admit any student (which is the lowest grade) requires him to be either an Associate of King's College, or he must have the degree of Cambridge, or various other colleges. That is sufficient for the purpose of admission, but other branches of the profession have no such requirement, and young men who have not gone through these courses, but who have gone through the workshops, go forward in the profession, but cannot become students of the institution.

19,425. Does the institution confer upon them any kind of qualification?—If a man becomes an associate member or a full member, that in itself, from a professional point of view, gives him a status like that of M.D., although it is not conferred by examination, but according to the judgment of the council for the time being.

19,426. It is not a requirement in the profession?—No, it cannot be enforced.

19,427. It is a sort of honour?—Yes, the bulk of men in practice desire to have that.

19,428. And you would look upon a degree in the same light as an honour, but not necessary for practical engineering work?—If there was such a degree conferred, mind, I think it would be very desirable that the profession should unite in requiring the outcome of some previous training to be indicated by a degree, as a preliminary to entering upon the profession. At the present time, the gate is wide open; anyone can call himself a civil engineer. There is no bar to that.

19,429. How could you close the gate?—By having some standard.

19,430. How could that standard be introduced or enforced?—I feel the difficulty of that. A great number of young men join the profession for which they are not fitted; they waste their time, and have their future to work out independently.

19,431. So you would like that to be a further advantage obtained by a degree?—Yes, it would stop a great many.

19,432. You do not quite see your way to arrange that?—I cannot carry the matter beyond what I have stated. I see the importance of it, and I see the advantage of a degree. It would operate in this way, the bulk of young men would come for that degree, and if they did not get it, they would make up their minds to follow some other occupation. I believe that would be the practical working of it.

19,433. Your idea would be to have a degree in science with special application to engineering?—I should not call it a degree in engineering. I call it Applied Science. It might apply to architecture or other matters.

19,434. But not a special degree in engineering?—No, I do not think it is practicable to have that.

19,435. (*Lord Reay.*) If you have an entrance examination for your subject you would not require Latin and Greek?—No.

19,436. In the case of an Arts student, an entrance examination in Latin and Greek is required?—Yes, and in history, or any of those branches of education which a young fellow would learn at school.

19,437. (*Mr. Anstie.*) You would not require Latin?—If I had to go through a process of exclusion in settling an examination for students who were going to become engineers, I should exclude Latin.

19,438. Then you rather give up your view about a common entrance examination. I understood you to say in answer to me that you would like a common entrance examination for the whole of the collegiate work?—I did not mean that at all.

19,439. Did you mean for all the students in your branch?—Yes, for the engineering students.

19,440. Would you require a special entrance examination?—Yes, for those who were going to become engineering students.

19,441. (*Sir George Humphry.*) But they are not different in a University. The same preliminary examination is usually required for all, that is to say, an evidence of good school training?—We are speaking rather at cross-purposes. I was speaking with reference to the work of the department at King's College with which I am familiar.

19,442. (*Lord Reay.*) But a good school training does not imply necessarily Latin and Greek. The *Realschulen* of Germany give us a precedent?—Yes.

19,443. (*Sir George Humphry.*) You would want a good education whatever the subject might be. You would not exclude Latin provided he has adequate capacity?

(*Lord Reay.*) You do not exclude, but you do not require it. It would not be obligatory where so many other subjects are compulsory?—That is so.

19,444. (*Mr. Anstie.*) If you give up Latin would you substitute any other language for it—German, for instance?—I am afraid I am coming upon very ticklish ground. I am an engineer. I feel strongly that I would give up Latin and Greek, and let a man learn French and German. That is what I have done with my sons.

19,445. Would you give up ancient languages and let them learn modern languages?—Yes. For a man who has to go abroad, as an engineer frequently has, modern languages are a necessity. Of course, they are helped very much, as we all know, by the dead languages.

19,446. (*Professor Sidgwick.*) I was going to ask with regard to that whether you find that a knowledge of French and German is important for the books and articles that from time to time it is desirable that an engineer should read?—Yes. A great number of young men find their early life is hampered a great deal from want of knowledge of French and German, and having only the knowledge of Latin, such as is taught in the schools. In my own practice I have to send a good many abroad who have to speak the languages to get the information they want.

19,447. (*Chairman.*) Still as long as a number of schools in England give most of their time to Greek and Latin, it would be rather hard that those languages might not be taken up as a substitute for the others by those who have been taught them, and who have not been taught the others, to show that they have general culture, although you would leave a little choice?—Yes, I do not want to lay down a hard and fast rule. I mean that it is carried too far at present. That is all.

19,448. I gather from your examination that you would make the degree in Applied Science so very different from that of ordinary science, that it occurs to me to ask you whether you do not think the degree might be entirely different instead of in two branches of the same. You told me in the original examination that you would rather have the degree of science divided into two branches. Would it not be simpler to have a separate degree altogether?—I do not know exactly how to find a term for the other degree. You cannot call it a degree in engineering, because that would not convey to the mind of an engineer whether it was civil, mechanical, or electrical engineering.

19,449. Professor Huxley very much disliked the term "Applied Science," and there are people who object to any other term?—I do not feel able to speak with any weight upon that point.

19,450. But whatever it was called it would practically be an entirely different degree from that of science?—Yes, I am quite clear upon that.

The witness withdrew.

Sir Richard Webster, Q.C., M.P., examined.

19,451. (*Chairman.*) You have been good enough to come and give us your views with regard to the formation of the new teaching University, particularly with regard to the Law Faculty?—I am only too anxious to give any assistance I can, and also perhaps to have an opportunity of expressing my own views upon the matter. I think I ought to say with regard to the historical part of the matter, I can add nothing to Mr. Crackanthorpe's evidence, because, in the first place, he has for many years studied the subject from a practical point of view, and he has also expressed everything I should have wished to say so far as the history is concerned. The particular matter upon which you may possibly wish to ask me some questions occurs to me to be with regard to the possible working of the Faculty in the future, and its bearing upon the legal education of my own profession. It is to that part of the subject that I have given some consideration. I cannot help you with reference to anything bearing upon the history of the matter beyond what Mr. Crackanthorpe has said.

19,452. You endorse Mr. Crackanthorpe's evidence as being correct?—As far as I know, speaking of the historical part and of the action of the Inns of Court in the past, and that of the Council of Legal Education in the past and present, it appears to me to be perfectly accurate.

19,453. You think that a new teaching University of London ought to have a Law Faculty and to give a degree would be valuable?—There you come to the point upon which I shall be glad to have an opportunity of saying what I think. Whether it will commend itself to the Commission or not is, of course, another matter. I think that there should be a Faculty for the teaching of law in the Metropolis is a matter of immense importance, and that it should

Sir R. Webster, Q.C., M.P.

19 Jan. 1893.

be in some way or other connected with a University. In formulating any distinct plans upon that it seems to me essential to bear in mind both the position of the Inns of Court and of the Incorporated Law Society.

19,454. Do you think the Inns of Court ought to preserve the exclusive right which they now have of giving a qualification to practise?—If I may take that part of the subject first I think there are two bodies whose functions have to be considered quite independently of the great study and science of the law. Those are the Inns of Court, speaking of them as one body, and the Incorporated Law Society. The particular function of the Inns of Court has always seemed to me to be to educate men in the best possible manner with a view to the profession and practice of the law as barristers and advocates; and in the same way the Incorporated Law Society have educated, and are educating gentlemen for the practice of the law as solicitors. In considering what should be the position of the Inns of Court, assuming there to be a University with a Law Faculty, I think you must bear in mind and I submit that the primary duty of the Inns of Court is to educate for the active profession of the law not for jurists only, or principally, or for persons who study law as an abstract science, but for men who are going to practise in our Courts as advocates.

19,455. Do you think they ought to carry that on exclusively without relation to a University, or could they carry it on through the University or conjointly with the University?—I think, to a large extent, they could carry it on conjointly with the University. But what I want to bring out, if I may be permitted to say so, is that I think practical experience and practical training is of the most importance in connexion with the proper discharge of the duties of an advocate. I am rather led to make this observation, because I notice that there was a question put to Mr. Crackanthorpe (and his evidence is the only evidence I have seen in connexion with this Commission) as to whether he considered that the members of the Bar trained under the recent system of examinations and lectures—"compulsory examinations" is perhaps the more correct expression to use—were better or worse than, or different from, those who trained under the old system. I have, for many years, had a very strong view upon that matter. That the change to examination was for good, I have not the slightest doubt. It was of the first importance that men qualified to practise, or holding themselves out as qualified to practise, should have studied, and there should be proof that they had studied, but, on the other hand, no examination can take the place of seeing practical work in chambers. I say, without hesitation, that where some of the younger men have failed (and I say this in their own interest) is that they have not sufficiently regarded the extreme importance of what we should call outside the profession "knowing the ropes." I think the putting of the scientific lawyer, the jurist, however learned he may be, to conduct a case in court, or to advise persons in litigation, is very much the same thing as putting a philosopher who has studied navigation to navigate a ship, or a person extremely skilled in the theory of steam and the theory of fluids, to drive an engine. What I want respectfully to urge upon the Commission is that whatever may be the connexion between the Inns of Court and the University of London, (and I am strongly in favour of it, as I hope to be permitted to say later on,) I think the reason why the Inns of Court should be given independent action, and not act solely through the University, is because, in the interests of my profession, University men should be induced to make themselves practically acquainted with the work before they attempt to practise; and I should ask to be allowed to enforce this by reference to the kindred profession of solicitors, where it is quite as important. University men can be made solicitors now after three years, and non-University men after five years; they have practical acquaintance with the work in solicitors' offices, they must be practically articled clerks. Therefore, no man can really be admitted without having some practical knowledge, or at any rate, the great majority of men, before they are admitted must have some practical knowledge of their work; and if it were to be suggested that the Inns of Court should take the place of a mere teaching school of law and nothing else, and have no other responsibility, I cannot help thinking that there would be a tendency to under-rate the men becoming acquainted with what I have called the practical part of the profession. I noticed that upon one of the occasions questions were asked as to whether or not in old days the barristers with whom pupils read, were not very careless as to whether the students attended or not, and I think some amusing answers were given as to how some Lord Chancellor said you had no reason to suppose that they were not studying harder when away from chambers than when they were in them. I think, of late years men are extremely anxious that the pupils in their chambers should work, and would not take them unless they meant to work. The men who have proved the most useful advocates have been men, who, in addition to their book-work, have mastered to their utmost ability the ordinary details of barrister's work, before they practise; and I go so far as this, that with the tendency there now is to qualify by examination, especially in the case of men whose means are limited, I should like to see some of our scholarships, either under the University or under our Inns of Court, applied to paying the fees for men to read at chambers, because I do consider it of very great importance in dealing with the question of what the duties of the Inns of Court may be. Perhaps Mr. Anstie may elicit whether my facts are correct by some questions.

19,456. Which would come first, the theoretical training or the practical training?—Unquestionably the theoretical training.

19,457. And it would be that that a degree would be given for?—Certainly; and it might be commenced at an earlier stage than the actual training for forensic work or advocate's duties. If I may say so, I am not in favour of a man studying his profession all the time of his education. I think that is a great mistake. I think all those who have carefully considered the matter have come to the conclusion that it is better that a boy should not learn law from the time he is 16 or 18; it is much better that he should complete his education before he devotes his attention to the particular profession he is going to take up. I should only regard the law study as being one means of getting a degree, but I rather understood your question was as to whether speaking of legal study the theoretical study should precede the practical. I say certainly.

19,458. The legal degree given by the University would be more for theoretical knowledge than practical, and the practical would begin afterwards?—Yes.

19,459. If the Inns of Court work harmoniously with the University they might take the degree in law as being a proof that the theoretical part was acquired and insist after that upon a practical education in chambers?—Assuming that the standard of the University degree was sufficiently high and covered such subjects as were necessary for a rudimentary knowledge of law.

19,460. They might ensure that by being largely represented on the University?—Will your Lordship allow me to keep that question of representation separate for a moment?

19,461. Certainly. Take your own course?—With reference to the actual studies at the University I think it is very important that men should be rather encouraged to make their general law reading a part of the University course rather than an independent course. I am not personally very much in favour of a compulsory requirement of Roman Law. I am aware that there are very great differences of opinion upon the matter, and that is why I put forward my opinion with great hesitation. I noticed that it

was criticised to some extent by Mr. Crackanthorpe. Of course if a man is likely to have much practice which will involve him in the business of foreign countries and cases where civil law prevails, then a knowledge of systems founded on civil law will be useful. On the other hand speaking of our civil work even in a very varied practice it is astonishing how few cases which even touch upon Roman Law come up. I think, speaking of rudimentary knowledge, the Inns of Court might be well advised to make the compulsory subjects rather wider. There is an indication in their last scheme that they do intend to make them wider than they have been hitherto. You wish to ask me with regard to representation ?

19,462. If they were to take this degree as part of what they require in regard to all that could be learnt from the study of books and without practice, I wish to ask whether you think that, in order to satisfy themselves that the degree did fulfil their requirements, they should have a voice, and a strong voice, in settling what the examinations are to be ?—I think the consideration may be stated perhaps a little more definitely by approaching the subject from a different point of view. I think we have to consider that we are not founding a school of law in the metropolis for the first time, but we are endeavouring to suggest a method for a metropolitan University with the best possible school of law, having regard to existing circumstances, and I think we must consider that the Inns of Court have now for the last 15 or 20 years been materially altering their system, much enlarging the scope of their duties and providing much more prominently teaching elements within their own machinery. Therefore I wish to bring out as my opinion, which I respectfully submit to the Commission, that you have first to determine whether there is any fear of the Inns of Court going back into a state of apathy or neglect of their teaching duties. I agree entirely with an observation made by one member of the Commission in a question put to Mr. Crackanthorpe, to the effect that if there were any fear of that kind the University ought to have ample powers of taking up the subject itself. On the other hand, it seems to me that having regard to the difficulty of founding a University with a complete School of Law, and to the fact that the Inns of Court have vastly improved their machinery and established a system which embraces personal teaching much more than it ever did before, it would be well that the Commissioners should consider carefully whether even the teaching part of the University might not be, to a large extent, under the control of the Inns of Court. You will understand, my Lord, that I am now departing from the duty of the Inns of Court in connexion with preparing a man simply to practise as a barrister, and I am considering, as far as I can how far the Inns of Court could assist in the University work. I think that, having regard to the extension of their system and their scheme as at present constituted, fair trial should be given to it, because, to a great extent, if the University were to establish a system of teaching on complete lines I think there would be overlapping and dual efforts which might well be combined. Therefore I think the Inns of Court should be induced, if possible, to assist in the University by having a very large share in the control of the Faculty of Law. And when I say the Inns of Court I also mean the Incorporated Law Society, because I regard the teaching by the Incorporated Law Society of principles of law as also preliminary to any other method of preparation which they think desirable for their students in connexion with the practical work of a solicitor. Therefore I should be disposed to suggest that the Faculty of Law might be largely under the control of the Inns of Court, at any rate in respect of all branches, except such as in the opinion of the Council were disregarded or neglected by the Inns of Court. And in order that they might be under control I should have thought that representation on the Faculty of Law of outside members—members not representative of the Inns of Court—or, if you like to put it the other way, a strong representation on the governing body of the Inns of Court, would, in all probability establish a sufficient agency to prevent the Faculty of Law being too restricted or too narrow in its studies.

19,463. They might also be represented on the Senate of the University ?—Yes. It seems to me that that is more a question of machinery than anything else, bearing in view that your object is to utilise the existing machinery as far as you can, and at the same time provide for a thoroughly efficacious and useful system.

19,464. Do you think the Inns of Court would come in in that way, that they would be anxious and willing to co-operate with the new University ?—I speak entirely as a private individual. Though I have had the honour of having the responsible position of head of the Bar I have never been on the Council of Legal Education. But speaking of the feeling in my own Inn among men who take a deep interest in our profession I do not think there is any reluctance to assist, not only in extending the system for the benefit of our students but in letting other people who desire to study the law have the advantage of such part of our curriculum and our lectures and classes as would be useful for a scientific study of the law as distinguished from a practical study.

19,465. Of course the University would deal merely with the Inns of Court ; they would not recognise the Council of Legal Education ?—No. I understood the question was put to me with reference to the Inns of Court and my only reason for referring to the Council of Legal Education was because I had no right to speak for anybody except myself. I had no right to speak for the members of that body or any educating body in my own profession. If it does not interfere with what your Lordship desires to ask me, there is a point to which I should like to direct attention, that is, as to the importance of the connexion of legal teaching with the power of obtaining general teaching in other subjects. I notice that a question was put to Mr. Crackanthorpe founded upon an answer of Sir Henry James in some evidence which I somehow or other never had an opportunity of reading or at any rate which I have not read (that is the proceedings before the previous Royal Commission), as to some lectures that were provided by the Middle Temple, and given, I think, in one case by my friend the late Dr. Tidy, and in another case by an eminent barrister, Mr. Moulton, a gentleman of great scientific attainments, in order to give students information on general subjects. We followed it up at Lincoln's Inn on my proposition by providing some lectures on practical navigation. I daresay Mr. Anstie will think that is rather far away from Lincoln's Inn, but still we had some barristers who as we thought would like to hear them, and it was also suggested that we should have some lectures on banking and commercial bookkeeping. If I may say so, without really knowing, I think what led Sir Henry James and others to make these observations was that it has become extremely important to barristers, perhaps even more than to solicitors, to have some general knowledge of business, some little knowledge of scientific matter, and some little knowledge of practical matters. But on going into it I think if the Inns of Court were to attempt that as a branch of legal education or otherwise they would wholly fail in achieving success, and they would go far beyond their powers. That is why I should demur to the opinion rather indicated by Sir Henry James, that law might be part of general education. Perhaps I may venture to express an opinion upon this as anyone because of the extremely varied nature of the practice which I have been fortunate enough to obtain. In the first place I believe that if a barrister was to attempt to study before hand every trade, science, or art in which he might at some time be engaged he would obviously fail ; he could not learn the alphabet of the sciences or the trades, much less obtain any useful knowledge. On the other hand, if a man either thinks he has or has in fact the possibility

Sir R. Webster, Q.C., M.P.

19 Jan. 1893.

and chance of doing useful work in any particular branch, as for instance chemistry, navigation, or book-keeping, commercial work, or anything of that kind it would be of very great importance to him that without going to a separate organisation he should have the right and the power of obtaining instruction, attending lectures, or joining classes in the particular matter which was likely to be of interest to him. At present anybody who takes that view must go and read at the School of Mines or join a class at King's College. They are doing most useful work. You cannot overstate the importance of the work they are doing. On the other hand, I cannot help thinking that the advantage of the Inns of Court being induced to join in the curriculum and work of the University would be that you would have established and existing in the University opportunities for information being given on other subjects outside the law to persons who were only connected directly with the University by means of their legal studies.

19,466. Do you think that the law degree in the University ought to combine general instruction and general culture and other studies besides law?—I think it is too wide a question. It seems to me that so much must depend upon the disposition of men, if you consider that at Cambridge or Oxford a man may go out in the law degree alone and that qualifies him for examination in various matter. I do not think it is necessary to lay down a rule that a degree in law must be accompanied by other studies. You will not have forgotten the old plan at Cambridge that you could not go in for classics without qualifying for the mathematical tripos.

19,467. I was at Oxford I do not know much about Cambridge?—I cannot help thinking that it would be a little unwise to lay down as a fixed rule that a degree in law must involve a certain amount of proficiency in other studies. By all means encourage it. From the point of view of a barrister you cannot encourage it too much.

19,468. Should the law degree be such that it would be useful to people going in for professions or other businesses such as commercial work or political education?—I think that would a good deal depend upon whether your degree was of one class, or whether a man could pass by selection of several subjects which is now not an uncommon way of dealing with those matters. I can imagine a great many branches of the law would be most useful for a merchant to know, as for instance, the law of cheques, bills of exchange, bills of lading, &c., and without being troubled by the technicalities which it would be necessary that a trained lawyer should know. Then, again, there is a very important body of men who have lately been represented by a Charter, those are patent agents, men who advise persons scientifically with regard to their inventions. I think a study of law in the branches of patent law and copyright would be extremely important to them, and as Mr. Crackanthorpe said, it would be very useful, or it might be useful, for tenants for life to know how many houses and cottages they could build. I thought that was more a Lincoln's Inn view of the case. I agree that there are many circumstances of life in which the study of the law which might qualify for a degree, and yet might not be sufficient altogether for the call to the Bar, would be very useful to the citizen or the subject.

19,469. Supposing the Inns of Court to agree that for a certain part of the education they would take the degree of this University in the government of which they had part, it would not follow necessarily that they would take a degree from any other University in the same way. They might justly give a preference to this University on the governing body of which they were?—That wants a little consideration, because you will remember that for years they have allowed certain examinations to exempt from certain other examinations otherwise compulsory, and I should doubt myself whether it would be very easy for a governing body such as the Inns of Court or the Incorporated Law Society to give a preference to a London degree over a Cambridge, Oxford, Durham, or a Dublin degree, if the standards of the other degrees were considered to be equal. It seems to me that there would be difficulty in suggesting that. I should have thought preference would be more given by its being an advantage to join the University from the facilities which would be given by other classes being open. I do not think it would be right to suggest that a University such as we should get in London would ever compete with Cambridge or Oxford from their particular standpoint, and, therefore, I do not think it would be wise for the Inns of Court to contemplate their connexion with the University of London, in order th divert students from other Universities which were already in working order. I notice that by regulation 44: "The Council may "accept as an equivalent for the examination in "Roman Law—i. A degree granted by any Univer- "sity within the British dominions, for which the "qualifying examination included Roman Law; ii. "A certificate that any student has passed any such "examination, though he may not have taken the "degree for which such examination qualifies him; "and iii. The testamur of the public examiners "for the Degree of Civil Law at Oxford, that the "student has passed the necessary examination for "the Degree of Bachelor of Civil Law." What I mean is, that assuming other Universities to establish degrees or examinations which were of sufficient standard, having regard to the fact that the Inns of Court represent England, and the Incorporated Law Society represents England, and that there is a similar kind of machinery both in Scotland and in Ireland, I think it would be difficult for the Inns of Court to give any preference to the degree of the University of London.

19,470. But it would be an advantage to the new University of London, independent of anything it would gain in return, to have such an experienced and able body of men as would be provided by the Inns of Court on their Faculties and represented in their Senate?—I feel that most strongly both with reference to the representation on the Senate and the Faculty, and to the utilisation of existing machinery.

19,471. Is there any other point on which you would like to say anything?—Perhaps I might be allowed to say that I think it is very important that your Lordship and the Commission should have information as to the views of the Incorporated Law Society upon the point.

19,472. We have had evidence upon that. Some of them, at any rate, seem to be quite willing to give up their whole power to us, and to accept the University degree as sufficient in itself, and to dispense with any other examination as long as they are represented on the Faculty and the Senate?—Upon that I would make this observation. I can well understand it, and I think it is quite just of them to take that position, but it must be remembered that although, of course, there are preliminary examinations and intermediate examinations, their final examination succeeds practical work; a man has done his practical work before he is admitted as a solicitor. It does not always follow by any means that a man has done any practical work before he is called to the Bar. That is the distinction between the two cases that occurs to me.

19,473. Is there anything which you think you can usefully tell us with regard to the general subject independent of law?—I do not think I am qualified to. I do not know that to discuss the question of King's College, or anything of that kind, would be desirable. I think not.

19,474. (*Sir George Humphry.*) Of course the founding of any kind of Legal Faculty in the University, and the teaching requisite for that would be attended with very considerable expense?—Yes.

19,475. And the University at present has no funds. Do you think it probable that the Inns of Court would assist in this matter?—I had that very much in my mind when I pressed upon the Com-

mission the importance of the University as far as possible availing itself of the existing machinery, and rather inducing the Inns of Court to come in upon the terms that they should have rather greater power in the Faculty because the Four Inns do contribute a very considerable sum now for lectureships and readerships, for the holding of classes, and for scholarships, and it occurred to me as obvious that it would be a very desirable thing for the University to go to the expense of a separate Faculty. I thought the Inns of Court would certainly be inclined to let their resources and their existing machinery be available for the University.

19,476. That is to be available for the foundation of professorships and lectureships apart from those already given in the Inns of Court?—I did not quite mean that, because I think that, to a very considerable extent, the work which the University would desire to do is already covered by the readerships and the classes. I am by no means saying that they are not capable of extension. It seemed to me that it is not involved in my view that the Inns of Court should contribute money for work independently of what they are doing now. That they might contribute more money for the development of the same kind of classes is more probable, but I do not think they would be inclined to contribute money independently of their own interest, independently of their own control of the Faculty in which the studies were being carried on.

19,477. But the studies now being carried on in the Inns of Court would be sufficient to answer for University teaching?—To a large extent. Of course, we have lately made a great development, but it is so large that without by any means suggesting that it covers entirely new ground it forms the nucleus for studying a great many of the subjects that people desire to study.

19,478. And your view would be that the Inns of Court would be more likely to enlarge that area than to contribute to the University for the purpose of the University doing it?—Certainly.

19,479. And therefore there would be no direct relation between the Inns of Court and the University except that which would be provided by the representation of the Inns of Court upon the Faculty?—I think you have put compendiously the really alternative systems. I think one system might be that the University should undertake the legal work, that the Inns of Court should take representation on the Council or the Faculty, and should in return for that give up their teaching to the University. That is one scheme. The other scheme is that for the time being, subject to review, the Faculty should be put largely under the control of the Inns of Court and the Incorporated Law Society, with the addition of outside members to prevent any signs of apathy in the Faculty so governed. That is the other view. The latter view is the one that commends itself to my mind.

19,480. So that the University would have a certain controlling influence over the teaching carried on by the Inns of Court?—Certainly.

19,481. And you think, of course, that the Inns of Court would be likely to submit to that?—It is a very difficult question. Speaking, as I said before, for myself, I believe a large majority of the benchers and barristers are most anxious to see the Inns of Court fulfilling to the utmost the public duty which is cast upon them, but whether any particular form or any particular scheme would find more favour with the majority than any other I do not think anybody can say until it is formulated.

19,482. That is a very important and difficult question?—It is most difficult.

19,483. Do you feel at any rate that the licensing power, that which gives the qualification to practice, either as solicitor or as barrister, should not be given by the University in virtue of this degree, but should be given either by the Incorporated Law Society or the Inns of Court?—The Incorporated Law Society for solicitors, and the Inns of Court for barristers, I am strongly of opinion that if it was suggested that that power should be taken away from the two bodies it would be strenuously resisted, and I do not mean resisted on the ground of position, but resisted on the ground that it would be an insanitary change. I think it would be undesirable to remove from the Inns of Court the control they have at present over the men they call to the Bar, and in the same way with the solicitors.

19,484. (*Sir Wm. Savory.*) Would the license which is given for practice at the Bar be independent of the University degree, or given after it?—Independent, except in this sense, that it is contemplated that a man who had passed the University degree might be excused from passing examinations which otherwise would be considered requisite. In fact a University degree would take the place of examination by the Inns of Court in compulsory subjects.

19,485. But as far as the constitution of the University is concerned, you would have the Senate of the University supreme in all instances?—Yes, I think again you want there a little to define what you mean by the word "supreme." I am strongly in favour of the Faculty of Law, having upon it members who are not connected directly with the profession, in order that there may be a general atmosphere of control, not by lawyers alone. But when you say the Senate is to be supreme, if you mean that the Senate might override the Faculty of Law, meaning thereby the Inns of Court, I cannot help thinking that you will want to put your scheme actually down on paper before an opinion should be expressed.

19,486. Should I make my meaning clearer if I said that in all disputed questions the decision of the Senate should be final?—I think it involves too much detail.

19,487. You would not be prepared to go as far as that?—No. If I may put to you what occurs to me, it is this. Supposing there were examinations conducted by the College of Physicians and Surgeons, and the Faculty under their general superintendence, I think it would be rather a strong thing to say that of necessity the decision of the Senate should over-ride them.

19,488. Supposing this view is taken, that one would assent to that position as far as the Medical Faculty were concerned if the Medical Faculty were fairly represented on the Senate?—That is what may be termed *modus vivendi?*

19,489. Yes?—I should have thought that is a solution which lawyers might very well assent to.

19,490. No one would ask the Inns of Court or the Incorporated Law Society to be subject to any body in which they had not a voice, but assuming the Facufty of Law to be adequately represented on the Senate, then might it not be that in all matters of dispute supposing such questions arose, the decision of the Senate with that element in it might be final?—Subject to detail I think it might be. Subject to detail I see no objection.

19,491. Where should what you describe as the practical part of your profession be learnt?—There are many ways in which that question can be answered. If you are putting the case of a man who must succeed to live he can learn it in a variety of ways; he can learn it by attending at the courts and taking notes, or he can learn it by sitting regularly in court after he has been called, but in my opinion practical knowledge can only be learnt by doing the work in barrister's chambers in the same way as an articled clerk has to do it in a solicitor's office, where he sees the thing being carried on, and as I might point out to you (of course we cannot compete on the same platform), the medical profession, before they allow any one to practise require practical knowledge, which is a far greater burden on the student than we require from our students.

19,492. Then it is clear from what you have said that the practical knowledge and the tests applied should come within the scope of the University?—

Sir R. Webster, Q.C., M.P.

19 Jan. 1893.

No, I think not, because as I have suggested, the University should grant its degrees and encourage its students quite independently of whether a man means to practice as a barrister or solicitor or not.

19,493. Then it would be beyond the scope of the University, and it should come after the University degree?—There is no reason why from one point of view it might not be contemporaneous, but speaking ordinarily I should say after the University degree. But I can imagine a man qualifying for his degree and being able to pass it and yet still be working very fairly in chambers.

19,494. Would you make that a part of the University test, the practical knowledge?—I do not see how it is possible.

19,495. That would make the case much simpler. A man would pass through a certain curriculum of study prescribed by the University, he would take his University degree, and then having passed there he would go from the University to the practical study of his profession elsewhere?—I am afraid that what I have said may be misunderstood unless I give a little explanation which your question has enabled me to give. I see great difficulty in any qualifying body for the Bar imposing a condition that a man should practise in chambers. I say that the right to call to the Bar should be left to the Inns of Court, on the ground that they are the best qualified body to see whether a man is fit. But my great reason for saying that the practical qualification should be left to them is that it is more in their power to encourage persons to acquire the practical part in the best way, and it may be to establish scholarships or exhibitions which shall be devoted to that purpose.

19,496. Then I gather from that that this practical part of the work would not come within the scope of the University?—I say not.

19,497. It would perhaps more appropriately come within the scope of the Inns of Court and the Incorporated Law Society?—Certainly.

19,498. So that there would be no difficulty with regard to that matter so far as the University was concerned. It would exercise its functions short of that. It would ascertain a man's scientific, or if you like the term better, theoretical, knowledge, and then would qualify him to embark on the practical part of his profession?—The moment that you say that persons shall come in and obtain degrees who have no intention of studying for the Bar, then it seems to me that the actual qualifying advantages should be outside the scope of the University.

19,499. I have rather troubled you with this question, because at the commencement you remarked that the practical part was so important a part, and of course it is. However important it is, that would not come within the scope of the University proper?—I am obliged to you for giving me the opportunity of making my meaning clear.

19,500. Am I right in taking it to be your view that it would be something that should come after the University course?—Outside the University course. I will not say after.

19,501. And giving the utmost importance to the practical part would in no wise detract from the importance of that other part which it would be the function of the University to inquire into?—I quite agree with you. I should like to emphasize the word "outside" instead of "after," because a man might go, and many barristers now do, and sit for a year in solicitors' offices and then take the University degree. It by no means follows that the practical part must be acquired after the degree has been obtained.

19,502. And the best educated man is the man who has been educated in both parts, the scientific and the practical?—Yes, I suppose so.

19,503. You have been good enough to refer to my profession. In my profession we rather look with suspicion on a man who describes himself as nothing but practical. We like a scientific man. That is the case with law?—Yes.

19,504. (*Sir George Humphry.*) Dou you think the Inns of Court would be willing to admit solicitors to this education which you are speaking of—to these lectures, and this wider area of education which you are discussing?—I am obliged to you for putting the question. I meant to have mentioned it. If the Inns of Court undertook, in conjunction with the Incorporaled Law Society, or without the establishment of the Faculty, and the control of the Faculty for general legal studies, I think they ought and would unquestionably admit student solicitors quite independently of the other question of allowing solicitors to attend the lectures of the Inns of Court, as long as they were for the students of the Inns of Court alone, as has been the practice for the last 25 years. The two questions are entirely different, and I cannot imagine that if the Inns of Court were allowed to have the control of Faculties of the University, or a fair share of the control of the Faculties of the University for the scientific study of the law, they would hesitate for a moment to allow solicitors to attend. I have not a doubt about it.

19,505. (*Mr. Palmer.*) Your idea is that the University course for the University degree should be open to barristers, solicitors, and citizens, I think you said, and that after that the professional course would be in the hands of the Faculty which would consist mainly of the Inns of Court with a certain outside element, and also, I presume, the Incorporated Law Society?—Not quite; but the legal studies open to barristers, solicitors, subjects, or citizens, should be under the control of the Inns of Court, Incorporated Law Society, and other members who form the Faculty.

19,506. In the University?—Yes.

19,507. And beyond that, and outside that, the professional education should be entirely in the hands of professional bodies?—That is what I mean, but not of the Faculty; of the professional bodies I mean.

19,508. Your object in that was twofold: first, that the Inns of Court are the best judges of professional requirements; and, secondly, that they would be people who might advance moneys in the shape of benefactions of some kind to enable men to study in private chambers. Then there are other professions beside the law in which private study and training comes before public training almost?—Yes.

19,509. As you answered Sir George Humphry, in the giving of the lectures by the Faculty there would be no difficulty raised by the Inns of Court to the admission of solicitor students?—Personally I have a very strong feeling about it, but you will kindly take that as my personal feeling. I cannot see how it would infringe on any of our rights and it seems to me to be a very ungracious policy if we were given an important position with regard to legal education, that we should decline to allow the advantage of lectures to be participated in by men simply because they were not going to be barristers.

19,510. (*Mr. Anstie.*) You have added the word "citizens"?—Yes.

19,511. You mean the public?—Yes.

19,512. (*Mr. Palmer.*) And, of course, professional examination and qualification would not be added to by the previous University examination, but it would be left as now by the professional bodies?—Yes.

19,513. Now, I want to ask a question on a hypothesis. Supposing the Inns of Court or any other body were not to agree (which is quite unlikely) to assist the University, or supposing some other body like the Convocation of the University of London were not disposed to agree with what this Commission chooses to recommend, might I ask you on that hypothesis whether you think the ordinary procedure which a Commission of this kind might with advantage follow, would be the one that was followed by the late Public Schools' Commission and the Universities' Commission, where the bodies were given a certain time within which to form their own

schemes, and after they were to be formed for them by an executive commission?—Of course, on the hypothesis you put, and assuming that there are funds applicable for founding a school of law independently of the Inns of Court, and assuming it to be found that the Inns of Court would not come in, I can see no objection to such a machinery or such a method of pressure being brought to bear; but I cannot help pointing out that I have rather considered the question from the point of view of there being existing funds at present applied to provide the education which must, to a large extent, be provided by any new school of law, and that I should have thought a hypothesis which is so improbable that it is scarcely likely that the Commission would have to suggest that a school of law should be founded independently of the Inns of Court.

19,514. So that so far as law is concerned you think that the result might be likely to be arrived at, and to be much more likely to be arrived by negotiation and arrangement than by any other way?—Yes.

19,515. (*Mr. Anstie.*) Would you have any objection to persons who are neither intending barristers nor intending solicitors attending the lectures?—Not the slightest.

19,516. You recognise the advantage of having courses upon subjects rather remote from the ordinary practice of law, such as public law and law bearing upon diplomacy?—I do not regard those courses as being so remote as some of the courses on Roman Law. All I know is that it would have been of very great advantage to me in the work I was called upon to perform rather suddenly if I had had the advantage of attending lectures on international law; and I should say that there are many subjects in which there might be held courses of study which it would be desirable that men who were not intending to become barristers should attend, and which men desirous of widening their own experience would not be glad to attend.

19,517. Perhaps you would allow a place also in the Inns of Court course to subjects which are a little more remote from practical law, such as jurisprudence taken in its historical aspects?—I should agree with you entirely, but my only fear is where there are a very large number of subjects which have a direct bearing upon the relations of daily life both inside and outside the profession, whether it is possible to suggest as a practical scheme that every single branch can be undertaken, but do not understand me as suggesting in any way that there might not be a desirability for such studies.

19,518. I am not suggesting that every student should take every branch?—If I had thought that you would have been contending that every student should take every branch I should have gone against you at once, but I am not in the least against the University providing, as far as possible, for students of every branch.

19,519. For instance, such lectures as Sir Henry Maine's?—Jurisprudence and Legal History is the subject that is most useful, and is becoming more useful.

19,520. Going to the other extreme, I understand you to say that practical training is not a thing that can be made a subject of examination?—No.

19,521. From what one has heard, one is rather led to the conclusion that in different branches of human activity there is a difference in the degree to which the practical side of knowledge can be tested by examination. Your view is that with respect to law it cannot be tested by examination?—It cannot.

19,522. Your view is that it must be left outside the University course?—Yes.

19,523. And left, therefore, to the Inns of Court and the Incorporated Law Society?—Yes.

19,524. Bodies entrusted by the constitution of the country with the power of determining the conditions of practical efficiency?—Yes.

19,525. But you would be prepared, as a matter of fact, to accept the certificates of University for the educational side or the scientific side?—Always supposing that the Inns of Court were represented, and that the standard was such that the Inns of Court approved and assumed that the standard was sufficient.

19,526. As you have pointed out already, it would be an unreasonable thing to put other Universities at a disadvantage. These studies, as we have had it in evidence before us, and as is common knowledge, are pursued in a very successful way at Oxford and Cambridge?—Yes.

19,527. You would feel no difficulty in accepting, under some arrangement of joint examination, or any other way which seems suitable, the degree of either of those Universities as equivalent to the degree in the new University?—Personally, I should have no objection, but on the other hand, I think that there may, not unnaturally, be a difference drawn between the examinations held under a Faculty in which qualifying bodies have no representation, and one in which they have.

19,528. What I am suggesting is that, as has been already suggested by some eminent professors from Oxford who have given evidence before us, the Inns of Court should in some degree be represented on the Law Faculty at Oxford, and, of course, the same thing would apply to Cambridge. Would you have any objection to an arrangement of that kind being entered into?—No; I had no idea that such an arrangement had been mentioned before you, or I should have made my remarks more pointed with reference to the Inns of Court accepting the degree under certain circumstances.

19,529. (*Professor Sidgwick.*) Could you make clear to me why, in your view, it is not desirable that the Inns of Court, or whatever body it is that admits to the profession of a barrister, should enforce what I may call the apprenticeship in chambers, as in the case of admission to the profession of solicitors a corresponding condition is in force?—The only difficulty I see is this. It would be suggested as being to a certain extent a retrograde step. There is where the difficulty comes in. I have the strongest possible feeling about it that if in addition to examinations the Inns of Court could say that for practising barristers there should be compulsory study of six or I should say a minimum of twelve months in the chambers of a practising barrister, that is to say, a real attendance and not a paper attendance, it would be very desirable. But the difficulty has been that men do desire to be called to the Bar who do not intend to actually practise, and assuming that they have attained a sufficient amount of knowledge to qualify theoretically the Inns of Court ought not to prevent their being called. There is where the practical difficulty comes in.

19,530. Do you not think that that may be liable to involve something in the nature of an imposition on the public if a man is called to the Bar without having gone through what you would regard as the right mode of preparing for the practice of a lawyer. If we had a University in London giving a degree in law a man might prove by obtaining it that he was possessed of such knowledge as could be obtained from books and lectures, but is it desirable that the qualifications for admission to a practical career should be modified with a view to men who do not intend to practise?—Your criticism is most just, but I would point out that the phrase "imposition upon the public" is a little too strong. I think at present there has been a good deal of that imposition going on for something like centuries. One reason for that is that a barrister finds his level at once. It does not do any harm to the public. What it does do harm to is the man himself; he fails in his profession. I do not think any injury has been done to the public by the want of success of a large number of barristers.

19,531. It has been represented to us by one of the leading witnesses that one of the reasons why this practice in chambers cannot be enforced is the economical reason. It is said that the charge is too high. Does it appear to you that there is any means by which

Sir R. Webster, Q.C., M.P.
19 Jan. 1893.

practical training that would be adequate could be more economical?—I pointed to that when I said that I hoped that scholarships that would be applied for reading in chambers or for practical work might be established. The fee is 100 guineas for a year. Formerly there was a practice which ought to prevail now. In my time if a man read two years in some chambers he got the third year for nothing, but I do not know that our modern friends stick quite so strictly to the old rule as we did. I do not think it is too high a fee. However, men at the Bar are very liberal about it. I know numberless instances of men who have been taken for nothing because they have not been able to pay. I am sure Mr. Anstie will bear me out that this goes on still. I know that to many people it is a very heavy sum of money, but I cannot see my way to suggest that it is too much, assuming the work to be honestly done. It does not pay people to do it.

19,532. Do you think that the need for practice of this kind might be reduced or done away with, if any system were introduced like that which has been adopted in some law schools in the United States, of having practical training in classes?—Something of the kind was attempted in our debating societies in London, and it was attempted in a more concrete form in Gray's Inn some few years ago, when some of us were asked to go from time to time and assume or state the hypothetical facts of an action, and have it argued before us as if we were in court. I think something may be done in that sort of way, but it stops very far short of what a man learns in chambers. I will give you an instance: A man reads a brief; he learns the points of law; he learns all the facts his side has to prove, and all the facts the other side are likely to prove. Then he goes into court and sits near his friend or his master, and he hears the witnesses examined; hears the judge criticise the way in which it is done, and hears the speeches made by the counsel. I say that half-a-dozen instances of hearing that done when a man has got the case up will teach him more than any amount of book learning as far as the practical part of his profession is concerned. Something might be done in that way but I do not think it will cover the whole ground.

19,533. Do you conceive that if the Inns of Court come within the University, and constitute a main part of its Faculty of Law body, the whole of the teaching that can be given by means of lectures and tested by means of examinations would come within the province of the University; that there would not be anything to be learnt in this way after a man had gone through the University course, except what was learnt in the University?—I had that in my mind. I can conceive it as being possible that in the development of the matter the qualifying Inns, or the Incorporated Law Society, might still think that instruction might be given by means of a class or lecture on practical matters in addition to University teaching. Therefore, I should wish the qualifying body to have a free hand as far as that is concerned, and to improve in their condition with regard to the theoretical side; but it is possible in the way you have been suggesting, namely, by attending some class where questions of practice would arise. I should like to add, though it does not bear on your question, that there is a personal side of call to the Bar, that is the examining of a man's name and the inquiry into his character to see whether he is a fit person to practise as a barrister. To that I attach great importance.

19,534. That is outside the University?—And it is a duty which the University could not perform.

19,535. If I understand you, there are two ways in which the University and the Inns of Court might be combined. You are not inclined to prefer an arrangement which would leave the Inns of Court outside the University, and put a certain number of representatives from the University in the Inns of Court, rather than one which would bring the Inns of Court within the University?—No, I am rather disposed to prefer the Inns of Court and the Incorporated Law Society being induced to come into the University by being given a very large share of the control of the Faculty, adding to the Faculty whatever number of other representatives it is thought desirable, to prevent its being composed of lawyers alone.

19,536. (*Lord Reay.*) In your answers you have drawn a distinction between the scientific student and the student who frequents the University for practical purposes. If I understand you rightly, the student who studies law for proposes of mental training and who does not want to qualify for the Bar, would not be under the control of the Inns of Court?—They would claim no control at all as Inns of Court, but I have been assuming that they will be given a large share of control in the Faculty; that they will be invited and induced to come and assist the University in its establishment of a proper school of law. As Inns of Court I have not contemplated that they would have any control over a gentleman who did not desire to practice at the Bar; he would never become a student of the Inns of Court or a member of the Inns of Court.

19,537. (*Mr. Anstie.*) You reserve to the Inns of Court the practical part?—Yes.

19,538. The educational part you wish them to share with the University?—Yes.

19,539. (*Lord Reay.*) The educational in so far as it has practical aims?—I hope that the Inns of Court and the Incorporated Law Society would be induced to assist in the foundation of the Faculty; would give their money, their rooms, and their present existing machinery; and that, having a large control of the Faculty, there would be upon that Faculty outside members connected with the University on other considerations.

19,540. When you say "large control" do you not mean preponderant control?—I think I do mean preponderant control in the Faculty, that is, preponderant control in the Faculty itself; but subject to a criticism which was put in a question by Sir William Savory, that in questions of dispute the Senate might be paramount, assuming that the Inns of Court had a proper representation upon the Senate.

19,541. The Faculty would be composed of teachers only; but on the Board of Studies you desire to have representatives of the Council of Legal Education?—I have not gone into the question in detail. I was dealing with the Faculty as a whole.

19,542. You do not wish to go into the constitution of Board of Studies?—It is not that I do not want to, but I have not considered it in detail. I spoke of a Faculty, meaning thereby Board of Studies and teachers.

19,543. In that Faculty you want to give a preponderant influence to the Inns of Court over the whole range of the education of all law students, whether those students study for scientific purposes or with a view to practice?—Yes, because, I think that the aims of all persons would be the same in that connexion. There would no narrowing or limiting influence in the preparation of the curriculum.

19,544. Would you impose the same curriculum on students?—From the questions put by Mr. Anstie I should conceive that the general curriculum would be very much wider, and that a person who did not intend to practise at the Bar might take up very few subjects, and attend different lectures, it may be; but when you come to the question of what should qualify, there would be considerations of what a man ought to know which would enter into the determination of what should be studied in that case.

19,545. One, the professional student, might be satisfied with the LL.B. degree, and the other might go on to the wider course for the LL.D.?—Yes.

19,546. (*Mr. Anstie.*) And the Inns of Court might select the courses of study required for the purpose of a call to the Bar?—That is my idea.

19,547. But your idea is not that bodies like the Inns of Court should be divorced from the higher branches of legal learning?—No.

19,548. (*Mr. Palmer.*) You wish that the existing teaching material should be utilised as far as possible outside the University, confining itself to testing results?—Except this: I should contemplate that even the Faculty and School of Law in the future might be further improved, and widened in its range. My reason for preferring the existing teaching machinery is to save expense and avoid friction, not with a view of saying that the Faculty of Law in the University should be confined only to what the Inns of Court are doing at the present time.

19,549. You would utilise what exists?—Yes, to start with, at any rate.

19,550. (*Chairman.*) According to the Gresham scheme, which is before us, and the scheme which the Senate of the University of London recommended to Convocation, but which was thrown out by them, the Faculties were to consist of all the teachers in the particular subject, so that the Faculty of Law by those schemes would consist of all the teachers of law. It would, therefore, include the teachers at University College and King's College, and any other college which was affiliated. Then there would be a certain number of people on the Faculty who would be put on by the Inns of Court and also by the Incorporated Law Society, and they would form the Faculty of Law. Would that be your idea?—It was rightly pointed out to me that I had not drawn the distinction between Faculty and Board of Study. If you ask my opinion, I think a Faculty which consisted solely of the teachers would not work well. I think that the teachers themselves are not always able to take a sufficiently broad view; there may be at times a slight tendency to save themselves trouble in the way of preparation of fresh matter or fresh subjects; they do not always feel the pulse of what is required by the profession or by students quite as quickly as they might; and, therefore, if the teachers formed a large section of the Faculty I think there should be a very considerable addition of gentlemen who would be members of the Board of Legal Studies.

19,551. The idea was that each of these Faculties, including the Law Faculty, should elect a Board of Studies from their own body, and that the curricula of the examinations and everything connected with the examinations should be decided by the Senate, or by a committee of the Senate, with the advice and assistance of the Board of Studies, the Senate representing the outside world?—I had not quite completed what I wanted to say with regard to the matter, or I think I should probably have answered your point. As I understand, the reason why the Gresham Charter was framed in that way was because it was not known that the Inns of Court would be willing to surrender their exclusive privileges and come in, and therefore, it was framed in a less comprehensive way with regard to the Inns of Court than it might otherwise have been. With regard to the scheme of the University of London that was thrown out by Convocation, I am not sufficiently acquainted with the details to speak, but if I may be allowed to put it in my own way, my idea of a Faculty, if I were going to establish it of the Inns of Court, would be this: that the teachers should have a large representation upon it, but not every teacher; that there should be representatives selected by the Inns of Court who were not teachers, but gentlemen of experience and knowledge, who took an interest in legal studies; and that there should be from the University gentlemen outside, members sent in as members, qualified or nominated in any way that might be thought expedient, in order that there might be a non-legal element of competent men upon the Faculty. Whether or not the curriculum of study should be ultimately settled by the Senate or by the Faculty seems to me to be a matter of detail, requiring to be thought out when the actual working of the University comes to be considered. Speaking for myself, I believe the curriculum ought to be settled in the first instance by the Faculty, and not by the Senate.

19,552. But not by the Faculty if it consisted solely of teachers?—No, but by the Faculty constituted in the way I ventured to suggest.

19,553. You think the bringing in of outside influence would not be sufficiently done by the Senate having the power of overriding the Board of Studies. You would require the outside element to be represented on the Board of Studies itself?—It is not the way I should do it. I should certainly wish the outside element to be represented on the Board of Studies, and I think it would be a much more satisfactory way of securing useful curricula than by giving a sort of appeal from the Faculty to the Senate upon all such questions; but you might certainly combine the two by having upon your Faculty the outside representation in addition to the legal members and the teacher members, and at the same time in the event of difference allowing the Senate to be supreme in their control, representation again being given to the legal profession upon the Senate.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Forty-eighth Day.

Friday, January 20th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
The Right Hon. Lord PLAYFAIR, K.C.B., LL.D
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE RAMSAY, LL.D.
The Rev. CANON BROWNE, B.D.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Q.C., B.A.

J. LEYBOURN-GODDDARD, Esq., M.A., LL.B., *Secretary*.

J. K. Ingram, Esq., LL.D.

20 Jan. 1893.

JOHN K. INGRAM, Esq., LL.D., examined.

19,554. (*Chairman.*) Would you tell us what position you fill at Dublin?—I am a Senior Fellow of Trinity College. At present I fill the office of Senior Lecturer, which gives me the general superintendence of the examinations and lectures in arts as distinct from those in the professional schools.

19,555. Perhaps you would tell us shortly something about the government of the Dublin University?—The University is in form distinct from the college; but practically we are a college with University powers. It really comes to that.

19,556. You have never had anything but one college?—No.

19,557. Never from the beginning?—I believe early in our history there was an attempt to found a second college, but it turned out a failure.

19,558. Is the governing body of the University the same as that of the college or is there a distinction?—There is to a certain extent a distinction. The ordinary discipline of the college from day to day is carried on by the Provost and Senior Fellows of Trinity College.

19,559. And the government of the University?—The government of the University is in the hands of the Senate, but the powers which the Senate exercises are very limited. It must sanction degrees which have first passed the Provost and Senior Fellows; its sanction is necessary for the giving of degrees; and any new rules which are made with respect to conferring degrees and the conditions of obtaining degrees, must be adopted by the Senate. I ought to add that in Trinity College besides the Provost and Senior Fellows we have another body which has been recently constituted—a College Council—which is elective. It consists of 17 members, the Provost of Trinity College being the chairman, four members being appointed by the Senior Fellows of Trinity College, four by the Junior Fellows, four by the professors not being Fellows, and four by the general body of the members of the Senate.

19,560. Who appoint the professors?—The professors are nominated in the first instance by the Council, and their nomination must be confirmed by the Provost and Senior Fellows.

19,561. The College professors or the University professors?—It really is very hard in our case to draw a distinction. As I say, we are really a college with University powers.

19,562. I will not ask you any more details upon that because we can find it in print?—We publish a University calendar every year for the benefit of the students, containing all our regulations, everything they ought to know, and there is a short synopsis of the principal contents of the calendar, copies of which I have brought for the use of the Commission, if you will be good enough to accept them (*handing copies*). It will enable you to fill up anything that I may leave imperfect.

19,563. I should like particularly to ask you about what we may call the external students. You give degrees to people who do not reside in Trinity College?—I think the Commission will understand the whole matter better if I just give you an account of the course of a student in Trinity College. First of all he enters by passing an examination, and the length of the course is normally four years. A man in the first year is a Junior Freshman; then he becomes a Senior Freshman; then Junior Sophister; then Senior Sophister; and at the close of the Senior Sophister year he takes his degree.

19,564. And how many resident students are there?—I inquired before coming here, and I found there were then 214 students resident in the college, and accommodation for 11 more; 225 students can reside. The rest of the space in the college is occupied by rooms which are given either to private teachers or to fellows and professors.

19,565. Are the rooms generally full?—Yes, there is a great demand for rooms. People have to wait.

19,566. Perhaps you will give me your information in the order in which you have arranged it?—The first thing to explain is as to our terms. We have three terms which are called Hilary, Trinity, and Michaelmas, and these are about 9 or 10 weeks in length, the first two or three weeks being occupied by examinations and the remainder by lectures; those lectures having regard to the coming examinations, and being intended to prepare students who attend them for the examinations which are to succeed in the next term. The undergraduate course consists, therefore, of 12 terms, three in each of the four years. Of course, we are desirous that students should keep all the terms. They do not practically do so, but the number they must keep is eight. The terms can be kept, subject to certain limitations, in two ways; either by attendance on lectures, or by examinations. The lectures are catechetical in their nature; they are not in the nature of prelections. The students are talked to by the lecturers, and they are also examined by them. The lecturer puts questions to them, and, of course, he will not allow the term unless the answering of the student is satisfactory.

19,567. How many lectures have you in the course of the term?—The term usually lasts from six to seven weeks, and we may regard Science and Literature, or Science and Classics it is commonly, as running through the term. There is a lecture for each student in the one subject and in the other, and the lecturer in Science lectures five times a week, so that in the seven weeks he would deliver 35 lectures.

19,568. Must the student attend all the lectures?—No, three-quarters suffices. Then in Classics there is composition every Saturday, so that must be added. There are usually about 40 lectures in Classics, and three-fourths of them must be attended. There are two different sorts of students; we have non-resident students as well as resident. When I say "resident" I mean, of course, resident either within the college or in Dublin. Some of them are people who live in Dublin with their families; others come up for the purpose of attending the lectures. There are other non-resident students, students who merely come up and pass the required number of examinations; but the requirements, so far as answering at the examinations is concerned, are identical for both. We make no distinction whatever; we ask no questions at the examination whether a man is a resident or a non-resident student. It is the same for both; in fact, the intellectual conditions, so to say, of getting a degree are precisely the same for the two.

19,569. They may come from any part of the world?—They must have entered, and they must be going through the systematic course for four years. If a man comes without following our course, we do not examine him or recognise him at all.

19,570. Perhaps you will tell us what the course is for external students?—It is possible a man may be a resident and yet not attend any lectures whatever; the lectures are not at all compulsory. He might obtain his degree by keeping all his terms by examination. Though residing actually within the walls, he might choose to keep his terms by examinations instead of lectures, and arrive at his degree in that way.

19,571. Is the examination alternative with the lecture, or must the examination take place anyhow?—I will deal with that in a moment, when I state what the limitations are under which a man may obtain the degree by attending lectures. In the first year a man must have attended one examination; that is to say, in order to arrive at being a Senior Freshman, or pass into the second year, he must have kept one examination; and the examination at the close of the second year, which is called, popularly, the Little Go, must be passed by all students. Those two examinations must be passed, but the other two terms which are necessary in order to keep those two years may be kept by attendance at lectures. Exactly the same thing applies to the Sophister years. In the Junior Sophister year the man must attend one examination, otherwise he cannot rise to be a Senior Sophister. Then, at the close of the fourth year, comes the degree examination, which, of course, everyone must attend in order to get the degree.

19,572. Supposing he does not attend lectures, is there an extra examination in the third year?—Every student must have four terms within the last two years. He must keep one examination in the Junior Sophister year, and the degree examination. Those two terms he must keep by examination, and then he can, if he likes, by lectures, keep the other two. There are four necessary for the two years.

19,573. That is, anyhow?—Two of those must be kept by examinations, one being in the Junior Sophister year and the other the degree examination.

19,574. If he attends lectures does he get off any examination?—Yes; he must keep four terms; he *may* keep those four terms by examination, all of them, and he *must* keep two examinations, but the other two terms he can keep by attending courses of lectures.

19,575. (*Rev. Canon Browne.*) In the terms he keeps by examination he need not attend a lecture at all?—No.

19,576. (*Chairman.*) Those are the first two terms. The first year and the second year; the third year he may keep either by examination or by lectures?—If you will allow me, I will repeat what I have been saying. Let us consider the first two years of the course by themselves. In those two first years four terms must be kept, and of those four terms one must be kept by examination in the first year, in order that he may rise to the second year. In the second year he must keep the Final, or what we call the Little Go, at the end of the second year. That he must keep. Then besides those two examinations, he keeps, either by examinations or by lectures, the other two terms. Exactly the same thing applies to the other pair of years.

19,577. There are three terms in the year?—Yes.

19,578. (*Professor Sidgwick.*) May I put it again, there are six terms in the two years?—Yes.

19,579. Four of the terms have to be kept, and the other two need not be kept at all?—Quite right.

19,580. Of the four terms two have to be kept by examination, and the other two may be kept either by lectures or examination?—Yes, that is so; but of the two examinations which a man must keep, one must be in the first year and the other at the end of the second year.

19,581. (*Rev. Canon Browne.*) And a residence of about 14 weeks in the year is sufficient. You said seven weeks' lectures; two of those make 14 weeks; he need only keep two of the terms, so that 14 weeks' residence suffices?—More than that; a man may get his degree without ever attending a term of lectures.

19,582. But we are speaking of resident pupils now, not outside people. For a resident pupil 14 weeks in the year is the minimum, and is sufficient?—Yes, it is sufficient.

19,583. (*Professor Sidgwick.*) Might a student live outside Dublin, and come in by train?—Yes, he might.

19,584. Then he would reside for all purposes?—Yes.

19,585. (*Chairman.*) He need not come into the lectures; he may come in for the final examination?—He might do that all through his course.

19,586. (*Rev. Canon Browne.*) Then he would be non-resident?—We make no distinction between resident and non-resident.

19,587. I assure you that a very great distinction is made in other Universities. When you send a man from Dublin to Cambridge we ask at once: "Have "you obtained your degrees by residence or non-"residence"?—In that case we ascertain whether a man has been resident, in order to certify how many terms he has kept in that way.

19,588. Then a man living 10 miles from Dublin, and passing all the examinations, and doing nothing else, is a non-resident, and not a resident?—How can you distinguish them, because the man who ordinarily keeps examinations only may at any time come up and keep the term by lectures, and men often do that? A man who is in general a non-resident will very often come up and keep a term of lectures.

19,589. What is he at the end, a resident or a non-resident?—There is no such thing as a resident graduate and a non-resident. They are absolutely identical.

19,590. For the purpose of incorporation at other Universities the non-resident man is not accepted?—That is a special purpose. In order to give that certificate we ascertain whether a man has in fact resided during certain terms.

19,591. (*Lord Reay.*) You make no difference, but has a non-resident student to pass more examinaions than the resident student?—A non-resident student has to pass eight examinations out of 12.

19,592. (*Professor Sidgwick.*) Who have to pass the 12?—No one.

19,593. (*Lord Reay.*) What is the object of the 12?—We desire men to attend them, but we do not refuse a man his degree if he passes eight out of the 12. I ought to say that we do not like the non-resident system. We should be very glad indeed if we could make all our men reside and attend lectures, but we find it impossible to do so.

19,594. (*Professor Sidgwick.*) Is it an old system?—Just before coming over I made inquiries of Dr. Stubbs, who has published a history of the University, and he said he could not ascertain, but he thought it was originally instituted at the beginning of the last

J. K. Ingram, Esq., LL.D.

20 Jan. 1893.

century. The system has thus existed for a very long time; besides that, many of our students are poor men, and they fill situations elsewhere which enable them to get a University education, which otherwise they could not get. It would be regarded as a hardship if they were disabled from entering into the professions.

19,595. (*Chairman.*) You can hardly call it a University education, merely to come up for examinations every four months?—No doubt, there is a great deal to be said against it, and we feel the objections very strongly. The principal objections which occur to everyone are that in the first place the student loses the sort of intellectual friction with his contemporaries which would exist in the colleges; there is a good deal of discussion and play of intellect which he misses by not residing; then he is not brought into contact with the able men who teach. Those are the two evils. They are great evils, no doubt, but at the same time we find it impossible to insist upon students residing. The best work is done by resident students. Any man who looks forward to becoming a distinguished University student comes to reside; all the men who take honours reside. Then, again, we have 70 scholars; they have commons free, and they all reside. I have said that we do not like the system, but there are some things to be borne in mind about it; it is quite different from the case of a man coming up for one or two examinations, because a student has to come up at least eight times (I do not count his entrance) to pass his examinations; and then he goes through a regular prescribed course of studies, a regular course for each of the four years. This is also to be borne in mind: we have a system of carrying on the work from examination to examination, so that a man cannot cram and come up and pass an examination and have done with the subject. For example, take Pure Mathematics, the science business of the first year; that is carried into the second year. In the second year there come in Logic and Mechanics, and those subjects again are carried into the third year, and so on. So that a man must do more than prepare himself for a single examination; he must have a tolerably sound knowledge of his subjects in order to be able to get through. That has to be said in mitigation of the disadvantages. But we feel the disadvantages, and, as I say, we should be glad, if we could, to insist upon the residence of all our students. Almost all students, however, take professions. There are very few of them who are men of independent fortunes; they are almost all men who seek to enter into the professions. We have four professional schools, Divinity, Law, Medicine, and Engineering, and in those schools, residence is absolutely necessary. A man must reside in order to attend the lectures. The divinity student for example, has two years; the law student, three years; the engineering student, three years; the medical student had formerly four years, and under the new rules, he has five years.

19,596. This is in addition to Arts?—Yes, in addition to Arts, but to a certain extent carried on parallel with Arts.

19,597. Everybody must pass in Arts, and in one other if he likes?—Just so. As I say, during that time he must reside, so it is true to a certain extent that all our students do, for a considerable time, reside, because, seeking professions, as they almost all do, it is necessary for them to reside in order to get through the professional school. I thought the Commission might be interested in the matter, and I endeavoured to ascertain what number attended the Arts lectures in a particular term; and I found that in a given term from 470 to 500 attended Arts lectures. The total number of our students under the degree of B.A. in the Calendar for 1892 was 980.

19,598. Of whom 200 are resident?—Within the walls 214

19,599. Do most of the 900 reside in Dublin?—I endeavoured to get at that by finding the number attending Arts lectures in a given term; the number attending Arts lectures varies from 470 to 500. That gives you pretty well the proportion of those who attend lectures in a given term as compared with those who go in for the examination.

19,600. (*Professor Ramsay.*) Does that number under the B.A. include the external students?—Yes, it includes all who have not taken the degree of B.A. Three-fifths of the total number of students under the B.A. attend lectures.

19,601. (*Chairman.*) The non-residents are a very large element in your University?—Yes, but at the same time it must be borne in mind that a man is not absolutely non-resident, because during a certain period of years he resides.

19,602. (*Professor Sidgwick.*) Your figures seem to give about half attending the lectures. You say that from 470 to 500 attend the lectures, and I thought you said there were 980 undergraduates on the books; that is as nearly as possible half?—The consideration that influenced me in saying three-fifths was this. Of course the men change; the same men will not attend three terms; you must allow for a certain number of men who do not attend that particular term. 470 to 500 would represent the number if the same men attended the lectures in all the terms.

19,603. I suppose you would regard it as desirable that if students attend lectures they should attend lectures in all the terms?—Yes.

19,604. Is there any means of ascertaining the number who would do that?—I have not the means of ascertaining that here.

19,605. (*Professor Ramsay.*) The same question would be answered if you could tell us how many of the 980 never attended a lecture at all?—That would require some time to ascertain; but I could ascertain it.

19,606. You told Canon Browne that you furnished that information to Cambridge, so you could furnish it to us?—Yes. If I trace each man through his course, I can find out.

19,607. Is not the particular nature of a man's course marked in the book when he gets the degree?—Yes, I have what is called a term book, which gives me what I may call a conspectus of a man's whole course. I could see how many men there are who have never attended a lecture at all.

19,608. (*Rev. Canon Browne.*) You have a sort of ledger account for each man?—Yes. If the Commission desires it I could furnish that information.

19,609. (*Professor Ramsay.*) I think it would be desirable to know how many men never attended a lecture at all?—I will furnish you with that information. (*The witness subsequently sent a statement to the Commission. See Appendix No.* 42.) The only other point that I think is worth mentioning is this, that no degree is given in any of the professional courses, Divinity, Law, Medicine, or Engineering, except to a person who has already taken the degree of B.A. The Arts Course in one form or other is absolutely necessary, in order to a man's graduating in one of the professional subjects.

19,610. (*Chairman.*) But he may take a degree in Arts without taking anything else?—Yes.

19,611. And go away as Master of Arts of Dublin University without ever having attended lectures?—He may, but very few do so as a matter of fact.

19,612. I will ask you how the curricula of the examinations are arranged?—That is fully set out in the little book which I have handed to the Commission.

19,613. Have the teachers much to do with it?—Yes, a great deal. We have a certain number of tutors; we have at this present time 17 tutors; and formerly each tutor instructed his pupils in all the subjects of the Arts Course. In process of time it became impossible to continue that system. As knowledge widened and more thorough teaching was felt to be necessary, that plan was given up, and the teachers then combined themselves into what we call a tutorial system, that is, they undertook the teaching as a body, and they drafted off their several men to the teaching of the subject in which they were most competent, and in that way they were able to provide

lectures, not merely for the pass students, but lectures in every honour subject.

19,614. This they did themselves?—This they did themselves in the first instance and afterwards it was regularly sanctioned. It sprang up spontaneously among them and then it received sanction.

19,615. Then the teachers have a large voice in settling the examinations, have they?—Yes, they have; that is these tutors along with such of the fellows as are professors; and occasionally some of the other professors take part in the examinations.

19,616. They take part in examining their own pupils?—The men who have been attending their lectures. Yes, sometimes; but this ought to be borne in mind. I find, for example, that in the Senior Freshman class of the present year there are 249 men, not more than from 20 to 24 of those men would be lectured in any subject by one lecturer, and when they go into the examination hall they get a large number of marks for a great variety of subjects, and it is extremely improbable that a man would be examined by more than one of those who had lectured him. Very often a man is not examined at all by a lecturer whom he has attended.

19,617. But the examinations are so arranged that they should be in harmony with the lectures and the lectures should have led up to them?—Yes.

19,618. No provision is made for what we may call the outsiders, but if they are at a disadvantage they must take their chance, I suppose?—Quite so. I may mention that in one or two cases we have tried the system of bringing in external examiners and we did not find at it all satisfactory. They examined on their own ideas very much, they did not take into account the course the student had gone through and what he might be expected to know. It was a rather viewy sort of examination, instead of a solid and substantial one; at least that was the impression we got. We have in the professional schools external examiners to a certain extent, at least in medicine. There it is thought desirable to have men who are actively engaged in practice coming in and examining the students at the final examination, and they do so in the practical subjects.

19,619. Where does the science teaching come in, under what head. You have given us Arts, Divinity, Law and Medicine?—Science is included in Arts. The two sides consist of science and literature.

19,620. You have a separate Faculty for engineering?—Yes.

19,621. Do you give degrees of engineering?—Yes, Bachelor of Engineering and Master of Engineering.

19,622. That is really what some people call Applied Science?—Yes.

19,623. You call it a degree in engineering?—Yes.

19,624. That is entirely separate from the Science course?—It is entirely separate from the Science of the Arts course.

19,625. And the pupils are taught whatever is required for their profession in a different way altogether?—Yes, quite different.

19,626. Is this degree of long standing?—It is exactly 50 years old.

19,627. And it has been successful and very much sought after, has it?—Yes.

19,628. Is it taken to any extent by people who are not going to be engineers?—I think it is taken by land agents to some extent.

19,629. And architects, I suppose?—No. It occurred to me that it might be desirable to mention the numbers of students who are attending in the several professional classes. I wrote for the information, and I have it here. There are two classes in Divinity, a junior and a senior class, and there are at present in the Divinity School 62 in the junior class, and 50 in the senior; 112 altogether. There are 58 in Law. Our provision of teaching for the law students is somewhat peculiar.

19,630. I will ask you that by-and-bye. Will you give us the number at this moment?—In engineering there are three classes; in the junior class 15, in the middle class 16, and in the senior class 18; making 49 in the school at present. There are 231 students in the medical school. With reference to the medical school I ought to mention that in it there are men who are not students in Arts. That is, they come in for the purpose of attending various lectures and they get certificates at those lectures which they use with other licensing bodies. We have four licensing bodies in Ireland; Trinity College is one.

19,631. You give a license to practice?—Yes, we give a license to practice. The Royal University is another licensing body. The Conjoint Colleges of Physicians and Surgeons is a third body; and the Conjoint College of Surgeons and Apothecaries' Hall the fourth. Some men come to our lectures and attend them and get certificates, and use those certificates with the licensing bodies that they go to.

19,632. Is it supposed to be easier to get a certificate through you than through the Royal Colleges?—No, I think not. Of the 231 who are mentioned in the Calendar for 1892 as being in the medical school 196 were following the Trinity College course in arts.

19,633. (*Professor Ramsay.*) At the same time that they were medical students?—Not necessarily. A man may take up the medical course, and he very often does, in the second year of the arts course, or he may postpone it till after he has completed the arts course. That is a matter for himself.

19,634. Then you only require it for the medical degree?—Yes.

19,635. And not before he begins his course?—Not before he begins his course.

19,636. You said with regard to each of those four Faculties that every one who went in for a degree in them must also go in for a degree in arts?—Yes, he cannot get a degree in any one of those professional subjects without a degree in arts.

19,637. You do not give a qualification to practise in medicine unless a man has taken a degree in arts?—No.

19,638. (*Chairman.*) Now just to finish what I was asking about engineering. Do you think it is a thoroughly satisfactory and useful degree, and one you would be sorry to see abolished?—Yes.

19,639. You think it would be a good thing in any University to establish a degree of that kind?—Yes.

19,640. The lectures they receive in Science are entirely different and distinct from the lectures which are given in the other Science which is part of the arts?—Yes.

19,641. By different professors and entirely different?—Yes.

19,642. That you say works well and answers the purpose satisfactorily?—Yes.

19,643. Now I will ask you about the divinity. Is the divinity undenominational altogether?—No.

19,644. Is it the Established Church?—The late Established Church. But a man may get a degree in the divinity school without signing any test.

19,645. The teaching you say is in accordance with the late Established Church?—Yes. In fact in that school the clergy of the late Established Church are trained.

19,646. And do you think it would be at all possible to establish a Theological Faculty which would be undenominational. Have you turned your attention to that question?—It would be very difficult, I think.

19,647. Then with regard to the law degree. Is that very much sought after?—Yes, it is a good deal sought after; but we carry on our law education in conjunction with the benchers of King's Inns in Dublin. We have a sort of joint system; they have a certain number of professors; we have three professors, and they, I think, have also three. A student may attend some of the lectures in Trinity College and some at the King's Inns. The call to the Bar is in their hands, not in ours; we can only give the degree.

19,648. But you do it in conjunction with them?—Yes, we give the education in conjunction with them.

Prof. J. K. Ingram, LL.D.

20 Jan. 1893.

19,649. Do they insist on a degree?—No, there are men called to the Bar who take no degree at all.

19,650. Is your degree any advantage in the way of getting a qualification?—It saves a certain amount of time or an examination.

19,651. The benchers allow it?—Yes. I cannot say at the moment what the advantage is.

19,652. But there is some allowance made?—Yes.

19,653. And the alliance between the two works well; there is no friction?—No; no friction whatever.

19,654. It is a mere amicable alliance?—Yes.

19,655. They have no representation in the University?—No; but from time to time when it is considered desirable to revise the course, or anything of that kind, they appoint a sub-committee, and we do the same.

19,656. And you find that works well?—Yes.

19,657. With regard to medicine do you work in harmony with the Colleges of Physicians and Surgeons?—The government of our school belongs to our Provost and Senior Fellows in conjunction, to some extent, with the College of Physicians, but we have no connexion with the College of Surgeons. We appoint certain professors and they appoint certain professors in the school. The medical school is considered eminently successful.

19,658. You work in complete harmony with the college?—Yes, in complete harmony.

19,659. It is an amicable arrangement not confirmed by Act of Parliament or by Charter?—There is an Act of Parliament which gives them power to appoint certain professors.

19,660. In conjunction with the University?—Yes. They have that power under Act of Parliament.

19,661. And you have power to appoint in conjunction with them?—Yes.

19,662. It required an Act of Parliament?—Yes, but the *locale* of the teaching is the property of the Provost and Senior Fellows. All the arrangements are made by them, and all the necessary appliances are provided by them.

19,663. And there is no friction?—No friction whatever.

19,664. Is there any other point in connexion with the working of the University which you think would be useful to us in considering the establishment of a new one?—None occurs to me. Of course it is quite understood that our arts education is entirely undenominational. Since Mr. Fawcett's Act was passed there is no test of any kind whatever.

19,665. Do many Roman Catholics go there now?—No, not a great number; they are shy of coming to us; we should be very glad indeed to have them; nothing would give us more pleasure than to have a large number of Roman Catholics coming to us, but they will not come.

19,666. You have some?—I have not looked into the matter recently, but some years ago I had occasion to look into it, and I found there were 10 per cent. only.

19,667. Are there many Presbyterians from the North?—There are some. I should say in all probability somewhat more than 10 per cent. I have not thought it necessary to speak about it, but we have a system of what we call catechetical lectures in religious knowledge.

19,668. Are those denominational?—No student is required to attend them who is not a member of the late Established Church. We have got into communication with the Presbyterians, and they also have appointed lecturers, and they give religious instruction to members of their own body.

19,669. You could not attempt to give instruction which would admit more bodies than one?—No, I do not think it would be possible. They are quite distinct. They appoint their own lecturers, Presbyterian ministers, who come in and give instruction and hold examinations from time to time in religious knowledge for those who are members of their own Church.

19,670. And the Roman Catholics might do the same?—Yes, the Roman Catholics might do the same. We should be very glad if they would; but they stand aloof.

19,671. (*Lord Reay.*) The non-resident students are only in the Arts Faculty, I understand?—Only in the Arts Faculty.

19,672. When they proceed to the Law Faculty or to the Medical Faculty, that system ceases; they are all resident students?—They must reside.

19,673. Now with regard to the science students in the Arts Faculty. How do they manage with regard to laboratories if they are non-resident. Are there any science students who are non-resident?—You say science students. We have no science students as such. Every one of our students must carry on both branches. During the first two years, for example, he must follow the mathematical course, and he must follow the classical course.

19,674. But I understand you to say there are two sides in the Arts Faculty?—Yes, two sides, but I did not mean that the courses were different. The course is the same for all.

19,675. There is not a strictly Science student and a strictly Arts student?—In the first two years every one must attend the lectures and the examinations in both Science and Classics; but in the third year and the fourth a certain amount of optional subjects enters. In the Sophister years, the third and fourth years, there are altogether seven subjects of examination: astronomy, then what we call ethics and logics, that is to say, Mental and Moral Philosophy, Mathematical Physics, Experimental Science, Natural Science, Languages, and English, that is English composition mainly. There are those seven courses. All students must answer in Astronomy, Ethics and Logics and English composition, and every student must, besides, answer in one (at least) of the optional courses. For example, he can take, if he likes, Experimental Science, that is Heat, Light, Electricity, and similar subjects, or he can take Natural Science such as Biology and Geology, or he may take languages—he may take any two of the four languages, Greek, Latin, French, and German.

19,676. He may take French and German?—Yes, he may take French and German, and so after the first two years he may drop his classics altogether, and a good many do it.

19,677. You say Astronomy is obligatory upon all?—Yes, Astronomy comes in in the third year, and by our system of examination it is still examined in in the fourth year. Astronomy is a compulsory subject.

19,678. But not compulsory for the classical students?—It is compulsory on every one. Every member of a class in the Sophister years must take Astronomy.

19,679. It would be difficult for a student taking up chemistry to continue to be non-resident?—Yes. Some men who are fortunately situated can.

19,680. So you say distinctly that in the case of Science students it is almost necessary for them to come and reside?—Certainly; to be successful students it is quite necessary for them to come and reside.

19,681. Might I ask whether in the engineering department you have a workshop or only a laboratory?—I do not think there is a workshop. You will understand that I am connected only with Arts, so that it is only in a general way as one of the Senior Fellows that I can speak with regard to the professional schools.

19,682. Most of your students are at the University with the distinct purpose of following a profession?—Yes.

19,683. They attend with the view of being prepared for professions?—Yes, almost all.

19,684. The number of students for purely scientific purposes or purposes of research is very limited?—Yes, very limited.

19,685. So that in your organisation you scarcely take any account of them?—Of course, those who have special talent bring out the talent. They form voluntary associations. We have a Biological Society

and an Experimental Science Society. The students who like those subjects follow them up and work with special zeal.

19,686. Are there special degrees for such students, or do they follow the same course of examinations?—The only special degrees are these. Within the last two years we have established a doctorate in science and a doctorate in letters. Those are the only special degrees we have outside the professional degrees.

19,687. Those would be higher?—Yes.

19,688. And would require more knowledge?—We give them on this plan. We require three years to elapse after a man takes his B.A. Then we require him to send in either a published work or a memoir from the proceedings of some learned society, or something of that sort, and then he is liable to be examined on the subject orally.

19,689. You require some original work?—Yes, that is absolutely necessary.

19,690. Do any of the students who have obtained the lower degree continue attendance at the college afterwards?—Yes. We have some cases where they do remain, but I think generally they seek positions elsewhere, and they are able to get them.

19,691. That degree would, as a rule, be given to non-residents. I mean for work they have done after they left the college?—Do you mean during those three years they remain with us?

19,692. Yes?—They generally remain with us three years. I thought you meant what did they do afterwards.

19,693. I am now speaking of the three years between the B.A. and the special degree?—They generally remain with us.

19,694. Do they attend lectures?—They are generally in relation with the lecturers and the professors of the school, and they go there and pursue their studies.

19,695. But are there special lectures for them?—No.

19,696. And have they as a rule any professional work outside the college?—Yes, sometimes they have.

19,697. (*Professor Sidgwick.*) I thought you said that of the whole length of the term, which, I think you said, was nine or ten weeks, two or three weeks were occupied with examination?—Yes, from two to three.

19,698. Do you mean that all the students are being examined, and going into examinations every day for two or three weeks?—Not absolutely every day.

19,699. The whole of that time is occupied?—Yes, the whole of that time is occupied. You must bear in mind that in every term, besides the pass examinations, there are honour examinations in a great variety of subjects, and we endeavour to group them so as to occupy as little time as we can.

19,700. There are no lectures during that period?—No lectures during that period.

19,701. Is there not a good deal of idleness among the students who do not happen to be going in for the more advanced examinations. If they are not occupied in the examinations they are not occupied in anything else, are they, during that time?—No, if they are not going in for that examination.

19,702. For instance, you would say that the ordinary student is not actually being examined six hours a day for a fortnight, is he?—No.

19,703. How much, about?—Ordinarily about two days. Each class is examined on two days. Then there are the honour examinations besides.

19,704. When that examination is over before the lectures begin, they are left entirely to themselves?—Yes. It is only a short time, and they require a little breathing space.

19,705. And you do not find that there is anything unsatisfactory in that arrangement?—No, I think not.

19,706. It diverges very much from the practice of all other Universities with which I am acquainted in respect to the proportion borne by what I may call the examination time to the teaching time. I think that both to a Cambridge or an Oxford man the proportion of time spent in examinations would seem to be very large?—Some of us think there is too much examination.

19,707. This is really the question that I was leading up to. Do you think that this large proportion of time devoted to examination is at all due to the fact that you are obliged to deal with external students as well as students who are residing and attending lectures?—I think it is.

19,708. And probably, therefore, the necessity of examining these external students has rather a hampering effect. The University obliged to arrange its terms in a way that it would not, if it considered only the resident students?—If we could make all our students reside, we could divide the whole year quite differently. We might have two terms instead of three, or an entire session with a few breaks.

19,709. How many lectures is a man who keeps his term by lectures required to attend?—Three-fourths of the total number.

19,710. How long a course is required for the professional students?—Two years in Divinity, three in Law, three in Engineering, and five in Medicine.

19,711. And as regards those courses, they may he kept along with the Arts course?—Yes.

19,712. To what extent is that thought desirable?—It is thought undesirable to make them coincide during the early part of the Arts course. Sometimes men join the professional school after their Arts course. In medicine, in consequence of the length of the medical course—five years—they generally join in the second or third year of the Arts course.

19,713. And you do not find that that is thought to interfere with their work in Arts?—A tutor, I think, always advises his students to postpone as far as possible the professional course, and to attend to Arts exclusively for some time.

19,714. But not for the whole?—No.

19,715. Would a man who was aiming at honours be able to carry it on?—No, he would not.

19,716. It is only the candidate for the ordinary degree?—Yes. In the course I mentioned before as belonging to the senior Sophister year we have seven Moderatorships given at the Degree Examination, and sometimes a man goes out with two gold medals. A man attending to that would find it quite impossible to attend to his professional work at the same time.

19,717. Do you require attendance for all three terms of the year?—Yes, all the three. I may mention that, besides that, there are examinations, for example, in Divinity, when a man has passed through his first year, before he enters on the second year.

19,718. He is required to attend lectures every term?—Yes.

19,719. Is a medical student required to attend five years in Dublin?—For the future he will be, as I understand, under the new rules of the Medical Council.

19,720. So that he will be in a very complete sense a resident?—Yes, thoroughly. The medical students are now resident in the fullest sense of the word for four years.

19,721. Then what becomes of the large number of undergraduates who keep their terms by examination? Do they usually become professional men?—Yes, and they come up.

19,722. Do they come up after their Arts course, as a rule?—Either after their Arts course or when they have advanced some way in their Arts course. They come up in their second, third, or fourth year.

19,723. So that as a matter of fact you do not turn out any very large number who have not been resident for at least the two years required?—No; very few.

19,724. Do I understand you that practically all, or almost all, those who are preparing for honours are amongst the residents?—Yes, I think I may say all.

19,725. With regard to that, I have made one or two enquiries; and one informant gave the answer

Prof. J. K. Ingram, L.L.D.

20 Jan. 1893.

that in the course of six years he had known one case of honours being won by a non-resident man. That is an exceptional case?—Yes. Of course there are men who under any circumstances would get honours.

19,726. Can you tell me how the students who keep terms by examination are actually prepared?—Some of them work alone, and of course they avail themselves of any opportunities that occur in their neighbourhood.

19,727. You have no institution, such as has recently appeared in connexion with the London University system, of instruction by correspondence?—No.

19,728. Have you heard of that?—I have heard of it, but we have not got it.

19,729. You have no institution outside Dublin?—No, we have nothing of that kind. We have been trying of late to do something in the way of University extension, but we find that very difficult. The religious prejudice of the country is very much in the way. We should be glad to establish a system of that sort, if possible.

19,730. (*Rev. Canon Browne.*) You told us that in the Science course, for instance, there were five lectures a week. Does that mean five lectures a week for each year?—Yes.

19,731. So that there are three sets of five lectures a week?—Yes, three sets of five lectures a week in Science.

19,732. Given by the same professor? Take Chemistry?—Chemistry is a special course. If you confine yourself to the old University courses in Classics and Science, they are arranged for by the tutors under the tutorial system that I spoke of, and different men are set to lecture in different terms; but in a case like Chemistry, where we have a professor of Chemistry, a laboratory, and all that, the teacher is usually the same throughout.

19,733. So that the men of each year have five lectures a week?—Yes.

19,734. You spoke about the Roman Catholics. Are you aware of any order given by the authorities of the Roman Catholic Church that men shall not attend the Dublin University?—We understand that the fact is so, but we have not heard it in any definite official form.

19,735. In the same way that it is with regard to Oxford and Cambridge?—There is a second University in Dublin, the Royal University, and the Roman Catholics have a considerable share in the working of it. There is a Senate there; they are represented on that Senate, and they prefer that their students should go there.

19,736. I did not mean to raise that question, but it is understood that they should not go to the University of Dublin?—Yes.

19,737. Are you aware of the information published in the papers some years ago that the same order had been given with regard to Oxford and Cambridge?—No, I am not aware of that.

19,738. (*Mr. Anstie.*) Could you tell me in what method the honours are ascertained? Are they ascertained only by the result of the final examination, or are they, as from your description I rather gathered they were, ascertained by the courses of the students?—Honours are awarded in every term, and in every class during the term.

19,739. Are there special honours connected with the final examination?—Yes, there are. Those are what we call Moderatorships.

19,740. And are the honours which are awarded every term reckoned in?—No. They are nottaken account of at all in the final.

19,741. The degree when conferred, of course, is simply a degree. You do not give it any special title because it is an honour degree?—No.

19,742. That is a fact which is known, but it is not expressed in the letters?—No. It would be necessary to look into the University calendar, or otherwise ascertain the fact that a man had graduated in honours.

19,743. You follow the usual practice in that respect?—Yes.

19,744. You said that the burden of examination is considerably increased by the non-resident students?—I think that if we had not the non-resident students we might divide the year differently, and have fewer examinations. We could carry the teaching all through, or divide the year into two terms instead of three.

19,745. Without going into detail you have, I understand, certain examinations which are compulsory for all, and certain other examinations which are compulsory only for the external students?—No, that is not so. We have certain examinations which all students must attend.

19,746. Those are what I call the compulsory ones. They are compulsory on all?—Yes.

19,747. Those you mentioned in answer to his Lordship. Then you have certain others which you do not require the residents to go through, but which are compulsory on the non-residents. Is that not so?—No, that is not so. We make absolutely no distinction between residents and non-residents during their course. Every student must attend the Little Go, every one without exception.

19,748. The non-resident student must attend more examinations than the resident?—The resident might attend examinations alone and never attend lectures, if he thought proper.

19,749. Then you would be obliged to have the same quantity of examinations, because you must provide for those who, although they may keep the term by residence, choose to keep it by examination?—If we had a system of residents we should insist upon their keeping terms by lectures to a greater extent than we do. We have three sets of examination every year. I think that is an unnecessary number, and if all our students were resident we should diminish the number of examinations, and require more work to be done by attendance on lectures.

19,750. Assuming that you continued the system of giving degrees to non-residents, did it ever occur to you to separate the examinations in such a way that there might be some examinations required to be passed by the non-residents distinct from those that might be passed by the residents?—No, we have not thought of it.

19,751. That is not a proposal?—No. Would you contemplate giving them different degrees?

19,752. No, but simply for the purpose of providing for what you seem to think it necessary to provide for viz., the testing by examination of that which you do do not test, if I may say so, by attendances and the ordinary terminal examinations. You say, I think, also that you have to some extent attempted University extension, but owing to local circumstances you have not been able to carry it out?—It is only quite recently that we have set about it. The Council appointed a committee to consider the matter; we had several meetings, and we made efforts in the south and north of Ireland. We may succeed, but the thing is still only at its very beginning.

19,753. Do you at all contemplate under a carefully arranged system of University extension making the lectures or instruction given under that system equivalent to the college instruction?—We do not contemplate that.

19,754. Then what is the precise relation which you think it would hold to the college work?—We meant to use it merely as a means of general culture in the country. We did not mean to incorporate it into the University system.

19,755. You did not mean to make attendance on something of that kind a condition to be complied with by those who are not residents?—No.

19,756. That was not part of your plan?—The thing was very much in the rough; we had not gone into it very carefully; we had only been making

inquiries and endeavouring to find competent lecturers and getting ourselves into communication with local centres. We had not gone very far.

19,757. Have you ever heard it objected to the degree in engineering that it purports too much to certify the man who possesses the degree as a competent engineer; that it has too professional a character about it?—No, I do not know that I have heard that. A number of our men (I suppose the great majority of them) obtain practical employment outside after having passed through the school.

19,758. You find it useful for that purpose?—Yes.

19,759. Now one word with respect to the medical question. I gather that your college and the College of Physicians act conjointly in the instruction given?—Yes, that is, we provide certain professors and they provide certain professors in the same school.

19,760. It is one school in fact made by the two colleges?—They simply send in professors. The school belongs to Trinity College, but they send in certain professors, and those professors of course take part in the examinations.

19,761. Are there any means of instruction provided by the other licensing bodies?—Yes, the College of Surgeons, for example, provides regular instruction.

19,762. A course of instruction?—Yes.

19,763. Would it be fair to ask whether that is on the same rank with yours?—I should not like to give an opinion upon that matter.

19,764. Has it ever occurred to you whether it might be an advantage educationally to combine the whole of the licensing under one board or head by union with those licensing authorities?—Union with them all you mean?

19,765. Yes?—No, I cannot say that I have considered the question.

19,766. (*Sir George Humphry.*) Your non-resident students are occupied chiefly, indeed exclusively, in the earlier and preliminary work of education?—Do you mean in teaching?

19,767. The non-resident students are only occupied or concerned in the earlier part of education. None of them are proceeding in any other Faculties and hardly any of them are proceeding to honours so they are all occupied with what we may call the preliminary or ground work of education?—Yes, that is so.

19,768. You do not on the whole like them?—No.

19,769. Because they somewhat interfere with your University arrangements?—And besides that, of course, we think a man would get a larger culture by living in college.

19,770. You think it would be better if they could be resident?—Yes, that is our general feeling.

19,771. But the practical effect is that half your students belong to the non-resident class?—Well, a large number.

19,772. Now taking the broad view of the education of the country, which, of course is an important point to consider, with reference to a University, do you think that on the whole the education of Ireland is improved by the fact of your having non-resident students connected with the University?—I have no doubt of it.

19,773. So that really there is a great practical gain to the education of the country by this plan?—I think so beyond doubt.

19,774. Therefore as a University you would not wish to relinquish them?—Certainly not, I should not wish to cast them off unless we could provide for them a residential system.

19,775. Although you would be glad that they should all be resident, you feel that a great benefit is done by the fact of their existence?—Yes, I think so.

19,776. With regard to engineering you do not, I suppose, complete the engineering study. Your graduate in engineering is not a fully competent engineer, is he?—I should say not. The best men we have ever had have gone to practical work afterwards.

19,777. You give the rudimentary, or fundamental, or scientific part of engineering?—The scientific part of engineering.

19,778. But the practical part you do not attempt?—No.

19,779. So that your degree signifies that a man is a scientific engineer?—Yes.

19,780. Not that he is a competent practical engineer?—No.

19,781. Now with regard to the union between Trinity College and the College of Physicians, it is a union of examination as well as union of teaching?—Yes.

19,782. So that the University and the college combine in the examination for graduation?—Quite so.

19,783. But there is no such union with the College of Surgeons?—No.

19,784. How comes it that there has been a union with the College of Physicians and not a union with the College of Surgeons?—It was a Legislative act It dates from the time of George III.; it is an old arrangement.

19,785. You do examine in surgery at the University?—Yes.

19,786. So there is the examination in surgery at the University, and the examination in surgery at the College of Surgeons?—Yes.

19,787. And though the College of Physicians combine with you in the examination they do give their own diploma?—As I mentioned, there are four licensing bodies. They act in conjunction with the College of Surgeons, and give a license.

19,788. So that the College of Physicians acts in conjunction with the College of Surgeons, and acts in conjunction also with the University?—Yes.

19,789. Therefore there are two separate diplomas given?—Yes.

19,790. But one the diploma of the Colleges of Physicians and Surgeons, the other the diploma of the University and the College of Physicians?—Yes.

19,791. Do you think it would be advisable that the College of Surgeons should combine also with the College of Physicians and yourselves?—I do not like to speak of that. I have not sufficient professional knowledge. I have not sufficient knowledge of the circumstances of the profession and what would be considered desirable from the professional point of view.

19,792. You have mentioned that the medical students pass their whole five years in the University. I suppose it is not compulsory with them to pass the whole five years of medical study at the University?—You mean in the University School?

19,793. In Trinity College School. They might pass part of the time elsewhere, I suppose?—There are certain hospitals, attendance at which is recognised.

19,794. London, Liverpool, part in Galway, and part elsewhere?—I cannot undertake to say what they are, but there are certain hospitals which are recognised by the University.

19,795. So it is not compulsory that the whole of the five years should be spent in the school of Trinity College, Dublin?—No.

19,796. You mentioned that they all take the degree in Arts?—Yes.

19,797. And that they are pursuing the study of Arts at the same time with the study of medicine, many of them?—Yes, they often are.

19,798. I suppose the real fact being that the study in Arts which they pursue is part of the study of medicine. For instance, Chemistry and Physiology?—Yes.

19,799. Those various subjects are medical subjects?—Yes.

19,800. So that they are pursuing medical subjects during their preparation for the Arts degree?—Yes. There is one point which I omitted which I ought to have mentioned; that is, that in the Sophister years there are what we call professional privileges allowed in Arts. I mentioned that in the Senior Sophister

Prof. J. K. Ingram, LL.D.

20 Jan. 1893.

year, there were three courses that every student was required to answer in: Astronomy, Ethics and Logics, and English Composition, and several optional courses. Now a professional student—a student who is in full professional attendance at one of the schools—is allowed to answer in only one of the optional subjects in addition to the others. That is what we call "professional privilege"; it lightens the work, it lightens the labour in Arts of a man who is really in full work at the professional school that he belongs to.

19,801. The degree in Divinity is not necessary or the Established Church, is it?—I think the Bishops generally require it now.

19,802. You do not carry on the work of University extension, that is, lectures given in different parts of the country?—No, we have never done it.

19,803. You could scarcely judge whether attendance at such University extension lectures might count as part of the University system?—No, I cannot judge, but I should not think it probable. It would be very difficult, I think, to make those lectures of a really high scientific order. There certainly ought to be an examination to ascertain whether the person attending the lectures had profited by them. There would be a danger, I think, of the lectures assuming too popular a character.

19,804. Do you find that the non-resident students are rejected more largely at those examinations than the resident?—I cannot say.

19,805. (*Professor Ramsay.*) One or two points about the ordinary Arts course I do not quite understand. You began by saying that the normal course of Arts was four years?—Yes.

19,806. Did you mean that it could be abridged?—Yes.

19,807. Would you explain by what means?—I mentioned that it is necessary for men in order to rise to the Senior Freshman class to have kept one examination in the Junior Freshman class.

19,808. That is in the first year?—Yes, in the first year. We have a number of entrance examinations through the year, and suppose him to enter at the end of October.

19,809. Is that the usual time?—There are various times through the year. Suppose him to enter in the early part of October, and suppose him afterwards to keep the October examination, he has satisfied the condition which enables him to rise to the Senior Freshman class.

19,810. At the end of one year?—Yes, at the end of one year. He has saved himself, in fact, in that way the greater part of the first year; he has passed the first examination immediately after his entrance.

19,811. You mean in the same October in which he goes up?—Yes.

18,812. He may take two examinations in one year and thereby become a student with only a three year course?—Yes.

19,813. And so cut out the necessity of any further examination during what you call the first of the four years. The point I wish to understand is, how many more examinations has the external student to pass than the resident student. We understand that during the first year the resident student who has attended lectures has to pass precisely the same examination that you have just described as being taken by a good first year man when he comes up?—Yes.

19,814. That is to say that the resident student during his first year gets excused no examinations, there is no distinction. The resident student has had a year of attendance *plus* an October examination?—Not necessarily an October examination. For a student in the first year there must be one examination, Hilary, Trinity, or Michaelmas.

19,815. Similar to the one you have described as taken by the good student who comes up?—Yes.

19,816. The examinations, as you have explained, are precisely the same for all. There are examinations at the end of every term and for anyone of these either resident students or non-resident students may be presenting themselves?—Yes.

19,817. And the examination papers are identical?—Yes.

19,818. Are there in all the subjects, or at any rate in those subjects which admit of it, books prescribed?—In general there are books prescribed.

19,819. In Classics and Modern Languages?—In Classics there is a text prescribed for each examination or rather two texts—Greek and Latin.

19,820. Do they last for all the year?—No, they are different for every examination.

19,821. But the general character and complexion of the papers is the same?—Yes.

19,822. How long beforehand are those subjects announced?—In the main they remain unchanged, but occasionally there are alterations and those are announced in the beginning of the year.

19,823. They are announced a year beforehand, are they?—Not necessarily. They are known for about six months beforehand.

19,824. Does the external student know as ong beforehand as the resident student what the subjects of the examination will be?—Yes, quite as long.

19,825. There are schedules published?—Yes.

19,826. I suppose in the case of books the resident tutors make a point of lecturing upon particular books prescribed?—Yes.

19,827. There is one set of books prescribed for pass examinations and one for honour examinations?—Yes, the honour examination course includes the ordinary, but adds a great deal.

19,828. It is additional?—Yes.

19,829. At any rate the conditions are precisely the same for both sets of students?—Yes.

19,830. With regard to the other scientific subjects where you do not prescribe books the examination, I suppose, is by syllabus?—Yes, that is generally, but it is not always the case. Sometimes there is a fixed book prescribed.

19,831. But whether text-books or syllabus, the external student has the same means of knowing beforehand what will be the subjects of examination?—Yes.

19,832. And the external teacher knows as soon as the tutor on what subjects the candidates have to be prepared?—Yes.

19,833. What is your own subject?—I was Professor of Greek.

19,834. Then of course you have had great experience in classical examinations?—I have had a great deal. I was first of all a tutor and acted habitually as examiner in the hall both for the ordinary examinations and for honours. Then I became Professor of Greek, and as Professor of Greek I had of course the higher teaching. The ordinary teaching is done very much by the Fellows under the tutorial system of which I spoke. As professor I was expected to take the higher men, the men who are seeking moderatorships and who will ultimately be Fellowship candidates, and the like.

19,835. In the languages are unseen passages prescribed for the ordinary examinations as well as the honours examination?—No.

19,836. In the honour examination are there unseen passages?—Yes; unseen passages there make the greater part of the examination.

19,837. And at all examinations, both honour and pass, there are composition papers?—Yes.

19,838. Is composition required in all the branches?—Latin composition for the ordinary student, and Greek and Latin composition for honours.

19,839. I suppose for honours, verse also?—Yes.

19,840. Are the papers set on this principle, that the student is required to reach a certain per-centage of marks, or are they marked on the general impression principle?—I think they are marked on the general impression principle. It is left to the examiner to decide for himself. There is no direction.

19,841. There is no definite standard required?—No.

19,842. Have you ever heard complaints on the part of external students, or those who have taught

them, that there is anything in the mode of setting the papers that is unduly favourable to the residentia student?—No. I have heard complaints that such a paper was unreasonable, or something of that sort, but never a complaint founded on the conception that the residential student had an advantage.

19,843. You never heard it said that the paper was differentiated specially to suit the residential student?—No.

19,844. The teachers who have conducted the lectures are, to some extent, the examiners?—Yes.

19,845. But only to a small proportion?—Only to a small proportion.

19,846. You say it has never been made the subject of complaint that an examiner sets questions in a particular way which is favourable to those who have been specially taught by him?—I have never heard complaints. I think it is natural to expect that if a man has been preparing himself for honours, it should be an advantage to him at the examination to know in what line of thought the lecturer has been himself engaged.

19,847. Of course, in subjects like history and philosophy, that will apply more than in classics or mathematics?—True.

19,848. But there has been nothing alleged in the way of unfairness in the examination?—I have never heard of it.

19,849. In Arts, have you any external examiners at all?—No.

19,850. They are taken from what body?—In the ordinary examinations they are taken from the body of the fellows.

19,851. The whole body of the tutors?—Yes. We have always one or two non-tutors in the body. The fellows are the men who do the ordinary work of training the pass students. Then a certain number of the fellows are selected, as specially fitted for the purpose, to conduct the honour lectures, and with them are associated in particular cases, as, for example, in the case of chemistry and other modern subjects, some of the professors who are not fellows. But the fellows do the bulk of the Arts teaching and examining.

19,852. The professors who are not fellows have also been teaching some of the candidates for examination?—Yes.

19,853. Has the question of appointing external examiners been mooted?—No, I think not, but the idea has been mooted, and it has been even tried, of introducing a certain number of external examiners.

19,854. A certain number along with the others?—Yes.

19,855. You have external examiners in medicine?—Yes.

19,856. I understand that they do not take part in the examination on exactly equal terms with the tutors or the internal examiners?—That is not so, I think. I think they are on quite the same footing at the medical examinations.

19,857. I think there are some portions of the medical examination at which it is not the custom for the external examiner to have anything to do?—There are certain subjects to be examined in on each occasion. I speak here of what is not exactly my own province, but, I think, the external examiner has some one of the practical subjects assigned to him, and has complete control of that part.

19,858. Then your general opinion with regard to the whole system of external students is that it to some extent disturbs your University arrangements, and that you have to make more examinations than you think necessary in order to provide for the external students?—Yes, I think so.

19,859. On the other hand, it is a privilege which is within reach of all students who are unable to come up to the University. If they cannot do that, they have the chance of getting the same degree and the same intellectual certification wherever their education has been obtained?—Quite so, but observe that though "wherever their education has been obtained" is quite correct, one has to bear in mind that we have a systematic course that they must go through.

19,860. But they may obtain their education at home. I quite follow that it is the same system of examination. Now can you tell me where these students come from. Are they almost all Irish?—We have a good many from England.

19,861. Have you not a kind of student you call a steamboat student?—I do not know the name. I never heard of it. But we have men who come over from England, and very often, I will say, they are highly creditable students; they are good men, who know their work well, and do it honestly.

19,862. Can you state what per-centage of the non-residential students comes from other countries than Ireland?—No, I cannot.

19,863. Would it be in your power to give us a list of the students who fail in those examinations, showing us for a whole year the total number of entrances for each of those examinations; the total number who pass it; and the total who were entirely non-resident, and those who were resident?—It would be quite possible to do that, but it should be done with reference to the term, because the same men do not come up to every term. Sometimes a man comes up and attends a single term or a couple of terms at a time, and goes back to the country. That often happens.

19,864. But the proportion would be the same?—Yes, but you cannot part off the students by any system that I can imagine into residents and non-residents. It would be impossible to do that. But I can see how many men attending a particular examination prepared themselves for that examination by attending lectures previously.

19,865. If we could have that for a complete set of examinations it would be very useful?—I shall be very glad to furnish that.

19,866. Do I understand you to say that there are honours examination in each of the three terms?—Yes.

19,867. Every time there is a pass examination, there is also an honour examination?—Yes. Of course there are a great many scattered examinations as well for prizes and so on, and they occupy some time. There are various foundations, medals, and the like within the college which have to be examined for quite separately. Of course, I have been speaking about the term examinations—the regular examinations in the course.

19,868. Are there examinations for each course of lectures or are all the examinations you speak of University examinations? If a tutor lectures on science or some particular classical author during the term, does he examine his class at the end of the term. Is it the custom for the tutor to have a special examination for his own class?—No, he must sift out from the class the men who deserve to pass. Suppose, for example, I am lecturing on a classical author; I take the man at random; I have 24 to lecture to; I fix on a man by chance, and tell him to go on with his work. If he breaks down, I say, "I regret to say that I cannot allow you this lecture." I strike out the lecture, and if a certain number are struck out the man loses his term; if at the end of a term I find a man has not been making progress, I say "I cannot allow you the term."

19,869. He does not get a certificate of having done the work in that particular lecture?—No.

19,870. Therefore he loses the opportunity of producing that *pro tanto* as part of a University examination?—Yes.

19,871. I understand that there was an examination by visitors appointed by the Medical Council to inspect the medical examinations held in Dublin last July?—Yes.

19,872. Are the results of that report published?—I think they are.

19,873. I think Dr. Tuke was the principal visitor commissioned by the Medical Council?—I am afraid to speak upon that.

Prof. J. K. Ingram, LL.D.

20 Jan. 1893.

19,874. Have you seen the Report yourself?—I have seen a Report, and I think it is the one to which you refer.

19,875. It is a report upon the whole system of examining for medical degrees in the three different branches of medical knowledge. There are also remarks made upon the literary qualifications of the candidates. I think you said all medical candidates are required to have the B.A. Have you read that report?—I think I have read the one to which you refer. I have read a report of that character, and I think it is the one you speak of.

19,876. I believe there has been an answer prepared to it by the examiners concerned?—I think so.

19,877. Do you know whether it is in our power to obtain those documents?—I should say so.

19,878. They have been presented to the Medical Council, and they are at this moment, I believe, under consideration by the Medical Council. Probably we could get those documents in time?—I cannot say, but I should think so.

19,879. (*Professor Sidgwick.*) Professor Ramsay asked as to whether there had been any complaint of the examinations alleging that undue advantage was afforded to the resident students, and you said no. Do you not think it is an important element in considering that point that, as I understood you to say, there is practically no competition in the honour examination by the non-residents, or hardly any?—Hardly any.

19,880. If a man wishes to prepare for honours he comes as a matter of course to attend the lectures?—Yes.

19,881. So that that would tend to prevent the occasion arising for the complaints of unfairness, as the part of the examination in which complaints of that kind would be most likely to occur would be the competitive part. We may say there would be no competition between the residents and the non-residents?—No.

19,882. (*Mr. Anstie.*) Do you mean the non-residents never sit for honours?—Hardly ever. Sometimes a very bright man reading in the country may succeed in getting honours, but it is a rare case. Then I ought to add that besides the lectures a man in Dublin has the advantage of having a private teacher if he can afford to get one.

19,883. (*Professor Ramsay.*) I suppose your examination papers are published?—Yes.

19,884. And would it be possible for us to get them and compare them with the examination papers of the University of London?—Yes We bring out two volumes annually; a University Calendar containing all the rules, courses, and so on, and a volume of examination papers. All the examination papers of the least importance are printed annually.

19,885. (*Lord Reay.*) Are you in favour of an entrance examination?—Yes.

19,886. Is your entrance examinations of a pretty high standard?—Not a very high standard. What we set ourselves to ascertain is whether or not a man is likely to be able to go on satisfactorily with his course.

19,887. (*Professor Ramsay.*) Would you tell us what the examination consists of?—There are two Greek and Latin books prescribed. I should not say absolutely prescribed, because there is a list from which he can choose.

19,888. There is no unseen work, is there?—No, except for high places, of which I will speak presently. for the ordinary examination there are two Latin and two Greek books; a Latin composition, an English composition, an examination in English history and modern geography, an examination in Euclid, and one in arithmetic.

19,889. How much Euclid?—The first three books. In algebra the first four rules, fractions and simple equations.

19,890. Does science not come in as an option?—Every one must answer in Euclid, arithmetic and algebra, but no further.

19,891. Are modern languages optional?—It is quite lately that a thought has been introduced of having an element of modern languages in the entrance examination. I myself moved in the matter in the Council. We have two what are called public entrance examinations; they are public in this sense, that the men are selected for high places; there is a second examination after the ordinary examination, and the men who have done best at it get high places, and have the irnames published along with the names of the schools from which they have come. At those publie examinations a man has to answer in addition to the subjects I have mentioned either in French or German; but at the rest of the entrance examinations a man can answer without those subjects. I desired to have French and German at every entrance examination, but the Council would not agree to that. They stopped short as regards those two modern languages at two examinations, the October and June.

19,892. Must the student do Latin and Greek?—Yes.

19,893. Do you allow in that examination one subject to compensate for another?—To a certain extent, but if a man is utterly ignorant in a subject I should reject him.

19,894. He cannot escape without Greek and Latin?—It lies with me as Senior Lecturer to say whether a man is to be allowed to become a student or not. Certain deficiency in one subject would be compensated by superior answering in another. If a man were weak in his Greek, but at the same time strong in his Euclid and algebra, I should be disposed to receive him, but if he could not answer at all in Greek I should not admit nim.

19,895. He must pass both in Greek and Latin?—Yes. The consideration we keep before us is this: is a man competent to go on in his course? A man utterly ignorant of Greek could not go on.

19,896. He cannot leave out Greek in his subsequent examinations?—No, he cannot in his freshman years. Afterwards there is a certain amount of option, and a man can drop languages and go on with the scientific course.

The witness withdrew.

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

W. Grylls Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S., examined.

19,897. (*Chairman to Professor Adams.*) Will you tell us what position you occupy at King's College?—I am Professor of Natural Philosophy at King's College, where I have been professsor for 28 years.

19,898. Will you be kind enough to give us your views as to the constitution of the new teaching University?—The paper on the Constitution of the Teaching University represents my views, and also the views of a committee of the professors of King's College, who are interested in its scientific work, and as chairman of that committee, I have signed the document.

19,899. Which you put in?—Which I put in as a paper giving the general heads on which we wish information to be conveyed to the Commission.

19,900. We are very glad to receive this paper. Now, perhaps, you will give us shortly your own views on the matter and lay stress on those points to which you attach most importance?—There are several questions connected with the constitution of a teaching University. No doubt many of them have been already before the Commission, but here are stated the views which this committee of professors hold upon those points.

19,901. Does this committee represent the whole of the body of professors at King's College?—No, not the whole of the body of professors. It is a committee of about ten persons, but five were selected to appear before the Commission if the Commission require it.

19,902. How many professors are there in the college?—There are 40 or 50 throughout the college in all the different departments of the college. I should say that this committee is more especially connected with the scientific and the engineering parts of the college.

19,903. From this document I see that you are strongly in favour of keeping up the autonomy of King's College and the other colleges, and against the idea of their being absorbed in a professorial University?—We think that University work of the highest kind must certainly be done within colleges of some sort. We have at present University College and King's College, and other colleges which may be created to carry on work of the same sort; but if it is to be the highest kind of University work there must be some college in which that work is carried on, and that would become a college of the University. We hold with the idea that the University should consist of constituent colleges, in fact such colleges as are sketched out in the Gresham Charter, and we think that what is put forward in the Gresham Charter would agree with our views of what the highest kind of teaching ought to be in London. We want a teaching University in London. That is our aim, and we think that the Gresham scheme supplies or will supply the need better than any other system that we have seen proposed.

19,904. You think the present London University has enough work to do without being called upon to do any more?—The present London University, of course, has no connexion whatever with what is the most important thing in connexion with any University, that is to say, (1) the teaching and the training of the undergraduates in the University, and (2) the carrying on of the highest work, that is to say, giving the graduates the opportunity of higher teaching and of carrying on researches.

19,905. And you think it would be impossible to remodel the present University so as to make it do this new work without sacrificing something of its present work?—After having seen all the various recommendations which have been put forward by the Senate, and I think we may include now Convocation, of the University of London, we can see no prospect of any practically good teaching of the highest kind coming out of the present proposals, and we do not see any prospect of getting any new teaching University in connexion with the present London University unless it becomes modified so as to be something like what is sketched out in the Gresham Charter.

19,906. But if it becomes remodelled so as to be something like the Gresham Charter, and to have colleges affiliated to it without sacrificing autonomy, and to have other things of that kind, you would have no reason to object, except that you think it would do injury to the work it is doing now?—And we think there would be an impossibility of producing that transformation in the present London University. Now, of course, we do not regard it as a University in the highest sense. The degrees are given entirely by the examinations; to that we object very strongly indeed; we do not believe in the merit of giving degrees by examinations alone; examinations are simply helps to test to a certain extent (and they are not a very complete test) the knowledge gained by the students. We do not think that the University should give degrees by examination alone. We are afraid that the history of the past would prevent the London University from being converted into such a University as we should like to see. We think it would probably be easier to start afresh with a teaching University than to attempt to make the University of London what a teaching University ought to be. It is not at all because we want two Universities in London, but we are afraid the other idea is impracticable.

19,907. What are your views with regard to the distinction between general and elementary University work and the highest teaching or research?—There is a distinction between elementary work and higher work. The two questiona are distinct (1) whether for the elementary teaching college work is necessary, and (2) whether also for the highest work college teaching is necessary. We consider that both elementary work and the highest research work ought to be carried on in the colleges of the University, and carried on under the same professors, though not in the same classes.

19,908. By college professors?—Yes. We think there should be no distinct classes of professors. Professors should be professors of the University, carrying on their work within the colleges; we think that is a very important point in the scheme, that there shall not be different grades of professors.

19,909. One of your objections to the University professors would be that you think they would be of a higher grade, and might throw the college professors into the shade?—If there were two grades of professors there might be a tendency to regard one of them as higher than the other. There is no reason whatever why there should be two kinds of professors. A professor who carries on his work in college ought to be the best professor that can be got for the elementary and for the higher teaching.

19,910. An objection has been made with regard to duplication of apparatus and overlapping. What have you to say with regard to that?—I hold it to be absolutely necessary that the apparatus should be duplicated whether the work is carried on in different places or not. In order that a number of students should be educated it is absolutely necessary to duplicate the apparatus. The different parts of a subject might be under different professors. If this duplication of apparatus is necessary, there is no reason why it should not be spread about in different colleges rather than be attached to one central institution. For elementary work, there must be great repetition of apparatus, but in the higher advanced work each professor may take his own line of research. The same single professor cannot carry on researches in different branches of subjects. One professor will take his line; another professor will not be distinguished in the same line of reearch, and the conditions which are looked upon as inconvenient will practically never occur.

19,911. You would want several professors for every subject anyhow, and they would not clash with one another?—They would not clash with one another.

19,912. Would this apply to the Medical Schools. For instance, it has been represented to us that it would be necessary to have ten professors of anatomy if the Medical Schools were affiliated to the University. I will take that as an extreme instance as it was given to us. Do you think that your remark would apply to the Medical Schools?—With regard to the Science subjects connected with medical education, we think four or five distinct separate Science colleges, including those in connexion with the Medical Schools, would be sufficient for the needs of London.

19,913. Does each Medical School at present teach its own Science?—Only a few teach Science at all. St. Bartholomew's and some of the larger schools.

19,914. Four or five schools that exist now in connexion with with the larger hospitals?—Yes.

19,915. And the students of the smaller schools already go elsewhere?—Yes.

19,916. It appears to be sanctioned in what goes on already?—To a certain extent I think we should regard as satisfactory what goes on at present. We should rather look for a union amongst the smaller Medical Schools, and expect each large Medical School to do it own teaching in Science. I should like to draw attention to what we consider to be the needs of London, and to do that in connexion

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

with certain propositions which have been put forward before the Commission, especially by Professor Huxley. Suggestions were put forward by the Association in favour of what is called a Professorial University. As regards the Arts and Science we consider that some of these suggestions are satisfactory. First, we agree with Professor Huxley, that the teaching University must be entirely free from any department of the State, and unfettered. One of our objections to the present London University is that it is closely attached and bound to the State, and has no freedom with regard even to its own fees. (*a.*) The prestige of the London University is not what it might have been if the Senate had not thrown away the power of making it a teaching University in the highest sense. The Senate forfeited their right to the position of a University, and became simply an examining body (as regards Arts and Science), when they accepted the Charter of 1858 in opposition to the almost unanimous opinion of its graduates, and without the approval of any one of its colleges. The action of the Senate as regards Arts and Science is condemned by their action as regards Medicine; yet if in Medicine it is well to recognise the methods of teaching as well as success in examinations, then surely in Arts and in Science there should be the same security as regards the methods of teaching, in order to obtain the best results. Then Professor Huxley makes some suggestion with regard to examinations by the colleges themselves, and would allow the colleges themselves to grant degrees. I should say that we do not desire anything of the sort, nor does the Gresham Charter contemplate anything of the kind. Professor Huxley's suggestion (*b*) provides a less stringent and independent form of examination than the Gresham Charter, and in that respect the Gresham Charter would be far more satisfactory. It is not proposed that the colleges shall examine their own candidates for degrees, but, with the view of satisfying a public demand for it, they desire that there should be assessors or outside examiners combined with the professors in the examination work. The professors would not be examining their own students any more than they now do under the present system of the London University. With regard to suggestion (*c*) of Professor Huxley, we think it is objectionable because it may give a means of letting in institutions which are not sufficiently qualified to become colleges in the University. Such a clause might in time place the teaching University where the London University now is, that is, without any constituent colleges at all. Then there is another suggestion of Professor Huxley's, which, if modified, we should be in favour of. That ample means should be provided in the colleges of the University for the higher teaching and the advancement of learning in Arts and in Science, as well as in the other Faculties of the University.

19,917. You wish the teacher to be attached to a college, and he wishes them to be University professors. Is that it?—I think he says whether in colleges or not; but we think it should "within the colleges."

19,918. That is your modification?—Yes. Professorships and teacherships in London which might be connected with the University, but not connected with any college, would be attached to no buildings where the teaching could be given or researches carried on. If buildings and a proper equipment for a complete Faculty were provided, then these new buildings would become a college within the University, as contemplated under the Gresham Charter.

19,919. Does that exhaust your answers to Professor Huxley?—Yes.

19,920. Then with regard to the best method of carrying on the more elementary work in the separate college laboratories?—We think that in each college of convenient size there should be one professor of a subject, and that under him and entirely under his control and direction there should be lecturers and demonstrators in sufficient number to carry on the work successfully.

19,921. Is that the system pursued at King's College now?—Yes, the professor is the responsible representative of his subject, and as such he should be recognised by the University; the demonstrators, and lecturers being appointed on the recommendation of the professor.

19,922. Taking the Gresham scheme would those lecturers and demonstrators be members of the Faculty or not?—Under the Gresham scheme there is a proposition that they should be included, but we think that the Gresham Charter should be modified in this respect, and that the professors in a Faculty should constitute the Faculty, for instance, the professors in Science should constitute the Faculty of Science and they should be the teachers recognised by the University.

19,923. One professor of each subject in each college?—Yes; but where a subject has different branches, or different practical applications, there may be a different professor for each branch. Our lecturers and demonstrators are very numerous, and we should probably swamp most institutions if all lecturers and demonstrators were introduced into the Faculties as well as professors; and we consider it is better that the professors alone should constitute the Faculty.

19,924. Then you say: "The competition between "different thoroughly appointed colleges will not be "injurious or wasteful, but will act as a stimulus, and "will have the same effect as extra-mural or indepen- "dent teachers"?—At the present time there is competition, and it is useful that there should be competition. In Germany there are *privat docenten* recognised by the University as extra-mural teachers, and they are supposed to act as a sort of stimulus to keep the work up to the proper standard. I fear that with us in London extra-mural teachers would become crammers for examinations, and I take it to be one of the greatest evils of the London University that it creates a class of men whose sole object seems to be to cram others for degrees, which they themselves have gained.

19,925. It does not have the same effect in Germany?—No, it works entirely in a different way in Germany, where the examination, I take it, is not of the utmost importance in regard to degrees.

19,926. Then we come to your proposed modifications of the Gresham Charter?—One of the modifications is with regard to assessors. As regards medicine, the principal teacher of each subject, although he may not be called professor, ought to be a member of the Faculty of Medicine in the University. There would be one teacher at the head of each subject who would be recognised by the University and who would be responsible for that subject.

19,927. The Faculty of Science you divide into two divisions?—Yes; we divide the Faculty of Science into two divisions, one embracing natural science, that is the one corresponding to the present degree of natural science at the University of Cambridge, so the examination for it would probably be somewhat similar to the examination for the degree of Bachelor of Science at the University of London. But also, we propose that there should be a science degree given especially for branches of Science connected with engineering. We think this is most important, as at King's College we have a very important school of engineering which has gone on for a great number of years, where there is provision made for the education in scientific subjects of civil engineers, mechanical engineers, electric engineers, and other branches of practical science; we think that it would be well that a teaching University should recognise this line of work as qualifying for a degree in science.

19,928. Would you have an entirely separate Faculty?—Not a separate Faculty, but we should prefer to divide the Faculty of Science into two parts. The Faculty of Science would then embrace (1) Natural

Science and (2) Applied Science bearing upon engineering.

19,929. How far would the students who are going in for these different branches of science, work together and be educated together; would there be a certain number of lectures which they could all attend?—In certain subjects there would be no very great difference in their work, but in other subjects the classes would be entirely distinct. In mathematics, mechanics, and other scientific subjects, physics, for instance, they would run somewhat together; but taking mechanics, there would be distinct parts which the engineering student would do, and which the Natural Science student would not do. The same would apply possibly to some branches of physics. The particular branch of physics that the engineering student would pay attention to would probably be not the same as those which the Natural Science student would follow. We think there should be only one degree, the Science degree, but that it should be given for either of these two distinct branches.

19,930. And would you have any great objection to the two being entirely separate, and there being a degree of engineering by itself?—We cannot at King's College give a certificate that a student is an engineer, and therefore I think we should object to give a degree of engineering. That is the reason why we should prefer to give a degree in science, meaning those scientific subjects which bear upon engineering. At the same time we do not wish to keep the man who is going to be an engineer from the position he would get as graduate of a University when in passing through a college which is practically a teaching University, he has practically as high an education as the other who gets the degree.

19,931. That is your opinion deliberately thought out?—Yes.

19,932. Not two different degrees, but one degree divided into two branches?—Yes. I have had the opportunity of reading Professor Hudson Beare's evidence, which was given before this Commission, and I must say that I agree very much on this point with the answers given by him, with regard to the two kinds of mathematics which have been referred to. It may be that the engineering student would pay attention to one particular kind of mathematics which bears directly on his work, whereas another student would pay attention to another branch of mathematics which may be equally wide and equally deep, but he may not require the same training. The one training is as good as the other, and very much of the same character, but they go rather on different lines with especial view to the aims of the particular student.

19,933. Would mathematics have to be taught by the same professor or by a different one?—I think the same professor is perfectly capable of teaching the mathematics for both classes of students. In fact there is no difference in the mathematics; the difference is only in the particular branch of mathematics which is put before the student.

19,934. You think it would not be necessary to have them taught by a man who was himself a practising engineer?—No, I think it would be a mistake.

19,935. That is your view about what I may call the subject of the engineering degree?—Yes.

19,936. Then you say "In subjects where there "are few students, so that repetition might be wasteful "there would be no greater difficulty than has been "experienced at Cambridge, in introducing the inter-"collegiate system of lectures which has been there "established." You would get over the difficulty by a system of inter-collegiate lectures?—Yes.

19,937. Have they been established at all between University College and King's College?—They have not yet been established except for Oriental subjects, but I feel quite sure that there would be no difficulty in establishing them where necessary. I imagine it would be only in the subjects attended by a small number of students that there would be any inter-collegiate system, as, for instance, political economy, where there might be two professors, one at King's College, and one at University College, where one might take one branch of the subject, and another a different branch.

19,938. With regard to the medical colleges, there are, as you say, a certain amount of inter-collegiate lectures, that is to say, the smaller colleges get their lectures from the larger ones?—That has been the case in past years to a small extent. I think latterly it has been the wish of the larger Medical Schools to have science colleges of their own, entirely distinct from the other Medical Schools of the University. I should like to see a combination of the Medical Schools together for the Science teaching, and some of them possibly (and I think to the best advantage) might for science unite with King's College, or with University College for their mutual benefit.

19,939. Or with some of the larger schools like St. Bartholomew's?—Yes.

19,940. You do not see your way to associating the Royal College of Science in any way with the University?—I think there is force in Professor Huxley's suggestion that the teaching University should be free and unfettered. The Royal College of Science is a Government institution which has been created and endowed for a special object. It is not that I have any objection to the teaching given by the professors of the Science College at South Kensington—not for a moment. The school at South Kensington might be one of the colleges of the University if it were not a branch of the State. We think it would be better to have a University with constituent colleges and not a State University.

19,941. You would not object to State endowment?—No, certainly not, nor should we object to endowments from other sources.

19,942. Except as to its endowment, could the Royal College be cut adrift from the Government, and be made self-governing, and in that way be made constituent?—Supposing it were, I imagine it might be made a constituent college of the University, and forming such a constituent body, I should have no objection.

19,943. But it could not be under the Government and a constituent college at the same time?—I think all colleges of the University should be put on the same footing in such a case. It is on the ground of equality that I speak upon this rather than on the ground of any opposition at all to the present Royal College of Science. I wish that the colleges of the University should be put upon the same footing, whatever that may be.

19,944. (*Lord Reay.*) What is the difference between the object of University teaching and the special object for which that school was created?—I take it they are appointed specially for the training of science teachers, and they are supported by the State for that special purpose.

19,945. (*Lord Playfair.*) Would you say that the mining part of it is created for that special purpose?—That is a part which is distinct from every other part. Mining and metallurgy of course stand on a separate footing.

19,946. They are separate professors?—All the other part I take it has simply grown out of the connexion with the Department of Science and Art at South Kensington. That is connected with the science examination, and out of that the whole college has grown. But it has never been separated in any way from the State, and, in fact, it is supported by the State for that special object. I think that is the only difficulty with regard to their forming part of the teaching University of London. At the same time their teaching one would desire to include under the University of London.

19,947. (*Lord Reay.*) The teaching is distinctly of University rank?—Unquestionably the teaching in that institution is of University rank, at least I should imagine so. I have no doubt it is.

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

19,948. Therefore the objection does not affect the teaching?—No, quite so.

19,949. (*Chairman.*) Do all the people who pass through the Royal College of Science become or do the majority of them become teachers?—I assume that the majority of them are science teachers throughout the country. I know that in connexion with the examinations they have science teachers from the country who have special privileges in connexion with attending the School at South Kensington.

19,950. (*Lord Playfair.*) Are you under the impression that what they call graduates or associates are men who are chiefly teachers?—I really do not know. I am afraid I could not give you evidence on that point.

19,951. It is not so, very few of them are teachers?—I was not aware that the Science Schools were so much in competition with King's College and University College for the same class of students as they seem to be.

19,952. (*Chairman.*) You have put down here the claims of King's College. Having put the paper in do you wish to enlarge upon that all?—No, I think not, unless there are any points at all upon which the Commission think further details might be given. I wish to give certain details with regard to the teaching in Physics.

19,953. You say the physical laboratory was a very early institution. I see you say it was before Oxford or Cambridge or Germany had established a physical laboratory?—It was very early indeed.

19,954. Have you been connected with it long?—I was appointed professor in 1865, and three years afterwards a very strong representation was made through our Council by the late Professor Miller and myself, and supported by certain members of the Council, the late Archbishop of York and Dr. Acland, and the physical laboratory of King's College was established in the year 1868, before there was a physical laboratory either at Oxford or Cambridge. I searched about to find where there were any physical laboratories for the training of students, and found that in Germany there were none, and I could only find one of any considerable dimensions; that was in Paris at the Sorbonne, under M. Jamin.

19,955. Do you find yours enough for your needs?—It has been increased, and I find our Council do the best they can in providing more room when it is required. At the present time the numbers are so large that it is very difficult indeed to find room notwithstanding the addition. I have two large laboratories, a large lecture room, two other small lecture rooms, one of which I sometimes convert into a laboratory for additional use, and we do a great amount of work. At the present time altogether in the different classes there are about 90 students.

19,956. (*Lord Playfair.*) Actually working in the laboratory?—Yes; in all the different departments there about 90 students working in my laboratory at the present time.

19,957. And this, you say, is as against 40 at Strasbourg and 20 at Berlin?—I was astonished to find when I went to Strasbourg in 1891, that there were so few students working in that remarkably fine laboratory. I found there were very few indeed working, at the utmost about 40, and most of them were Americans. Also I have heard that there are only about 20 physical students in the grand physical laboratory of the Berlin University.

19,958. Were they occupied in research or obtaining instruction merely?—I think, probably, they were doing higher work; but I am afraid I cannot answer for that. I have drawn out here certain curves indicating, as far as numbers will show it, the success of my laboratory from the time of its foundation. We began with 20 students in the physical laboratory in 1868, and from that time onwards this diagram will show the progress which has been made as regards numbers from 1868 to 1892. The increase has been rapid during the last three years and we have now 90 students in the laboratory (*producing a diagram*).

19,959. I see the main rise was about 1882 or 1883?—Yes. I have also drawn out a curve which I thought would show clearly the progress of our engineering department from 1855 down to the present time (*producing another diagram*). The lower line indicates the attendance at the engineering department of the college, and that also shows a very satisfactory state of expansion at the present time. Above that is a line indicating the attendance at Natural Philosophy lectures from 1867. All the engineering students attend Natural Philosophy, but in addition there are others not belonging to the engineering department. The diagram shows the number attending the lectures on Natural Philosophy from 1867 to the present time.

19,960. (*Chairman.*) Professor Robinson, the head of the engineering department, gave us some evidence yesterday. With regard to that, and the other things, you would only speak to a certain degree second-hand. Do you care to speak to anything in addition to what is in print before us?—I should like to draw attention to the question of honour and pass degrees. I think the conditions for our Associateship in the engineering department show that it is equivalent to an honour degree in the University. It may be said that we conduct our own examinations. That is partially the case, but not entirely. For instance, in physics I have four demonstrators; the demonstrators and the professor divide the examinations between them, so that the professor is not examining his own students, but he is examining in a certain subject the whole of the students in that department. Where we are examining 100 students the competition between the different students is quite sufficient to bring the standard up, so that when we say a man must obtain 75 per cent. of the marks it really means that he must do exceedingly good work in the examinations, whoever looks over the papers, so that, although we may not have an outside examiner, the competition ensures that the Associateship is equal to an honour degree.

19,961. We have heard that the certificate of King's College is very highly thought of by civil engineers?—Yes, that is so.

19,962. And it has a good deal of prestige attached to it?—Yes.

19,963. If you formed part of a University, I suppose you would wish to continue the power of making Associates?—I should rather see this drawn into the system of the University; that, in fact, the honour degree of the University should be something equivalent to the Associateship. I should like to see a closer connexion between the colleges of the University than is indicated by our giving an Associateship separately.

19,964. (*Lord Playfair.*) Do you give an Associateship in science or in anything else?—We give an Associateship in each separate department of the college.

19,965. (*Chairman.*) But generally it is only known that a man is Associate. He puts the same letters after his name?—Yes.

19,966. They are all supposed to be of equal value?—Yes. As a matter of fact, they are looked after separately in each department by the professors in that department, and therefore there is no evidence that the qualification is absolutely the same in the different departments.

19,967. You tell us you retain some of those men by making them Associates?—After students have passed through our three years' course, we keep some of them for post-graduate work, and to assist in the teaching, and in that respect our work resembles a good deal the work of the Johns Hopkins University. There are many points of similarity between the system which we have and the system of the Johns Hopkins University, and I should like to point out that such is the case. First, there is a close connexion between the professors and students such as can only be obtained within the walls of the college. That is

a point which I think appears very strongly at Baltimore, and it certainly is the case with us. Then the examination is closely in relation with the teaching. At Baltimore it is carried out by the professors who have the confidence of the public. It may be necessary that we should have assessors to help us in the examination, and to that we have no objection.

19,968. That is in the new University?—Yes. I do not think the examinations will be improved or made fairer by admitting the assessors. But we are quite willing to admit them.

19,969. You think you would do as well without them?—Yes. I think the examinations now are as satisfactory as they could be, and I do not think an assessor could make them more satisfactory There is no distinct examination at Baltimore for the pass and for honours, but first-class is held to be deserving of honours. I should certainly wish to see this the case in the teaching University for London that we should not have distinct examinations for pass and for honours, but that a man who distinguishes himself in the examination which is held, if he comes out a first-class, should be regarded as an honours man, and then the lower man should be allowed to have his pass degree. I think there are two great advantages in that case. You diminish the number of examinations, also you mark the man who comes out in the first-class as thoroughly deserving of honours.

19,970. That is in all the Faculties, not only in Arts?—In all the Faculties.

19,971. All pass through the same examinations?—All examine in the same examination in the particular subject. There should be no distinction in the examination for pass and honours.

19,972. Would not the honour man have to take up many more subjects?—He would take up the more advanced parts of a subject I was thinking more especially of my own subject, where the examination would consist partly of paper work and partly of practical examinations.

19,973. That is in science?—Yes, and I think that will apply to all branches of science.

19,974. But in classics it would be difficult to arrange. However, that would be a detail?—I was considering the matter especially in connexion with science.

19,975. Then you admit graduates from Oxford and Cambridge to carry on work in your laboratory, and you would continue to do so? Yes, any who wished to come to study in our laboratories might do so. I have some from Oxford and Cambridge, and one or two from Dublin, who have prepared for the Dublin degree, who have worked at practical physics in my laboratory.

19,976. Then with regard to the physiological laboratory. Is that under Dr. Halliburton?—Yes. With your Lordship's permission, there is just one more point I should like to mention with regard to Baltimore. There there are excellent arrangements for making the whole year's work count for the degree. At King's College, for our certificates in physics, I have tried that system, and found it to work well. That is the system for taking into account the year's work in addition to examinations. It may be very difficult to arrange, but the evidence as to progress is very often more satisfactory than the evidence given by examinations alone.

19,977. (*Lord Playfair.*) Does not that go rather in favour of Professor Huxley's suggestion, that the college examinations should count towards the college degrees?—I suppose the college examinations would become the University examinations and would be carried on by an outside examiner.

19,978. I do not know. I do not even say that; but if you really do as well, what is the use of a second examination outside?—I certainly would not multiply examinations.

19,979. Do not you think that you are arguing very much for Professor Huxley's suggestion, that the college work, under competent supervision, should count for degrees?—I think the system that I should prefer would be that the college examinations should, if necessary, be carried on by outside examiners, and those should be regarded as the University examinations.

19,980. (*Chairman.*) Then we go to the evening classes. We have had evidence on that subject. You wish to encourage the students to become day students in your colleges?—Evening students can only carry on work for about two hours in an evening and therefore, although the work is precisely of the same character, it is very small in quantity and would have to be extended over a long period to qualify for a University degree. In the case of students, who distinguish themselves in the evening classes, it would be well that there should be a system by which they could pass to the day classes for a year or two, that is to say, for a less time than for all ordinary students.

19,981. That might be done by a scholarship, I suppose?—Yes.

19,982. I suppose the class of students who attend the evening lectures, could not, as a rule, give up the whole of the day?—Usually they have occupation in the daytime, and they could only come in the evening, and in the vast majority of cases I imagine there would be no attempt to get the degree, because it would mean giving up more time than can be spared by evening class students.

19,983. You do not think anybody could take a degree that would be of any value by mere evening work?—If it is spread over a long time he might possibly. What I should doubt would be whether he is spending his time in the best way possible in pursuing the degree up to an age when he should be doing other useful work.

19,984. You think that study in the evening might be allowed to count as a certain amount of residence and a part of the preliminary degree like it is at Cambridge?—Yes.

19,985. You do not see your way to go further than that?—No.

19,986. And the same thing would apply to the University extension?—Precisely the same would apply to the University extension. I think the work would certainly not be of sufficient importance to warrant a degree being given for that work in say less than eight or nine years.

19,987. But you think University extension work should be encouraged?—It should be encouraged and certainly the students who succeed in this evening work under the Society for the Extension of University teaching should be induced to join constituent colleges of the University to get the degree in cases where it would be profitable for them to do so.

19,988. And their work should be allowed to count?—Their work should be allowed to count for a certain period; in fact it might be reduced from three years to two.

19,989. (*To Dr. Halliburton.*) You have heard the answers given by Professor Adams. Do you agree with them as a whole?—Yes. There is only just one point that I should like to amplify and that is with regard to the question as to whether 10 professors of anatomy and physiology would be wanted. I think Professor Adams was under a misapprehension when he said there was not any great amount of union between Medical Schools at present. A few years ago three schools combined, Charing Cross, Westminster, and one other to get their science teaching at South Kensington. But that fell through, and there has been no attempt at union since then; and although there may be some students going to other colleges to get instruction in any particular subject which is well taught there, that is done at their own expense, and against the wish of the Dean of their school in most cases, because the schools do not like it to be supposed that they are not able to teach everything there. I certainly think that some attempt at centralisation should be made in the teaching of the preliminary subjects of medical study, for instance, in such subjects as my own physiology, or such a subject as biology, which can be taught independently of hospitals.

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

By that I mean that there is not too much clinical material in London. That is contrasting the number of beds in hospitals and the number of students I think there is room for the 11 or 12 metropolitan hospitals at present, but it is different with these preliminary subjects like biology and physiology. Those subjects are taught during the students first two years at a time when he is hardly at all in the hospital wards, and at some schools, not at all in the hospital wards. To spread the teaching of such subjects as physiology and biology over 12 metropolitan schools is disadvantageous for these reasons: first, the laboratories are very often incomplete and are without endowment as a rule, and in great measure they are presided over by those who do not devote the whole of their time to these subjects. They are often presided over by physicians and surgeons who have their private practice to attend to, and who are not able to give their time, and who cannot afford to live upon the small amount of remuneration that they could get if they devoted the whole of their time to science, pure and simple.

19,990. The schools would be grouped together, would they?—I should not suggest that they should be grouped together in one large establishment. That would be impracticable. I should think the different metropolitan districts might be mapped out in some way so that you might have some three or four together.

19,991. Geographically?—Yes.

19,992. (*Professor Sidgwick.*) Might I ask a question for explanation. Do I understand that you think this would be carried out voluntarily by arrangement among the colleges, or that it is desirable that the University should exercise pressure in order to carry it out?—I should think it would be advisable that the University should exercise pressure to carry it out.

19,993. And if so, do you consider that the University, as constituted in the Gresham Charter, has already powers that would enable it to exercise pressure?—They are not specially mentioned in the Charter.

19,994. Could you say what power you would give the University with a view to that effect?—I should say that the University should have power to make institutions combine together for the teaching of preliminary subjects, which they are not able to teach on account of insufficient laboratory accommodation of their own.

19,995. (*To Professor Adams.*) I observe that in this draft it is said that the professors in the colleges should be professors in the University. Do I understand that to mean that each college should have the right of appointing persons who would occupy the position of professors in the University?—That each professor should be recognised as professor of the University.

19,996. The college shall have the power of saying whether an individual who is appointed to be professor in a college should also be professor in the University?—I think it would be difficult for the University to stamp one professor in a college as a professor of the University, and to refuse to give the same distinction to another professor in the same or in any other constituent college of the University.

19,997. I only asked the question in order to understand your view as to whether you thought, for instance, that King's College should have the right to give, and should give, to the teacher whom it appoints the title and position of professor of the University, and should give that without any control by the University?—Of course, the University is the only body who could give that title of professor of the University.

19,998. Then, perhaps, its power of refusing the title might be a means of exercising pressure: the University, for instance, in a case in which they thought the teaching of physiology was inadequately provided for could exercise adequate pressure; they could refuse to recognise the teaching?

(*Dr. Halliburton.*) Yes; but if the new University were to actually endow 12 physiological laboratories they would find 12 physiologists.

19,999. (*To Dr. Halliburton.*) They might say, "In this medical school there is no adequate pro- "vision made for teaching physiology, and therefore "we shall not appoint the teacher of the school pro- "fessor of physiology." Do you conceive that that is a way in which it might be arranged?—It would be a case of the survival of the fittest. The smaller schools would be not exterminated, but they would not get the professors.

20,000. Are the smaller schools to devote themselves entirely to medical work?—Yes, that is to say, to practical work.

20,001. To devote themselves entirely to medical work; that part of the work would be increased in efficiency?—Yes, certainly; but the preliminary subjects as taught during the first years should be taught in properly-equipped laboratories, and by people who had devoted their whole time to those subjects.

20,002. (*Chairman to Dr. Halliburton.*) Is there anything you wish to add?—The physiological department at King's College is on the footing that it does provide adequate teaching, and means for carrying on research.

20,003. (*Lord Playfair.*) Advanced teaching?—Yes, advanced teaching and research.

20,004. (*Chairman.*) Have you many students who are outside the college who come from other schools?—Yes.

20,005. What sort of proportion?—In the present advanced practical class or engaged in research work I have 20 students, and 10 of those are from other schools. It was generally very much the same proportion at University College. I was there under Professor Schäfer as assistant professor. That again is a college where the professor devotes his entire time to physiology, and there in our advanced classes we used to get students who had a little go in them, and who wanted extra teaching more than they could get in their own schools.

20,006. These two colleges are doing very much the work that you wish to be done by dividing London into districts, and having central schools there?—Yes.

20,007. (*Lord Reay.*) Could you tell us from what schools the outside students you have at present come?—I have three from Edinburgh, two from St. Thomas', two from the London Hospital, one from Westminster, one from St. Bartholomew's, and one from Middlesex.

20,008. (*Lord Playfair to Professor Adams.*) Is it not a fact that very many of the students of King's College do not go up to take degrees in the University of London. They do not go up to any large numbers, do they?—Comparatively few go up for the London University examination.

20,009. Is it your opinion that the cause of that is that they are satisfied with your own examination, and consider that an equal honour?—They come to us at the age of 16 or 17. At that time if they were going for the University examination, they should have passed the matriculation. If they pass the matriculation before they come to us they will go on for the examinations and the degree of the London University. But if they have not gone in for the matriculation at that age they are hardly likely to go for it. In fact it would mean spending their first year with us over exceedingly elementary work. Then, again, the object before many of them is some practical object which they are aiming at, quite apart from getting a degree. I am speaking, more especially of science and engineering. Their object is to get a position in life.

20,010. In all three of the Faculties, or at least of the one class of Faculties, arts, science, and medicine it is a fact practically, is it not, that they do not go much for degrees in the London University?—Yes, we have not very many.

20,011. Do they go up in large proportion for say we will call it the degree of Associate?—Yes, a large number of them remain for the whole three years and aim at the Associateship of the college.

20,012. In all the three divisions?—In the engineering department at the present time we have 100 which is the usual number, and 35 have remained for the three years' course with the view of getting the Associateship.

20,013. Will all those 35 or a large proportion of them pass as Associates?—Not so many as half certainly will pass as Associates at the end.

20,014. Do you happen to recollect how many Associateships you count a year in the different Faculties?—I should think it is on the average about 10 or 12.

20,015. Is that in each of the Faculties, Medicine and so on, or Arts and Science?—In the Faculty of Applied Science. I could not say with regard to Medicine, and I am not able to give the number in Arts. Our numbers in Arts I should say are small.

20,016. Perhaps you might get us that information and put it in evidence?—Yes, I will.

20,017. I ask you this question because if it is the case that your examinations for the Associateship are are really equivalent to the honour degree of the University of London, as I think you say they are, is it not an argument that if the University of London sent you extra assessors to be present at your examinations the examinations for the University degree might as well take place in your college as take place externally in any other place?—Yes.

20,018. Are you aware that speaking of the German Universities while each German University possesses its own degree, for State purposes the Government sends assessors to see that the examinations are fairly conducted, and then give the State licenses?—Yes.

20,019. Is not that all that Professor Huxley meant when he said that he thought that the University of London might act by recognising the examinations of the colleges with independent assessor examiners?—I do not quite understand that that was Professor Huxley's meaning. On this point, perhaps, I may say that I see no difficulty as regards paper work in having the same examination in different colleges if the work is on the same lines. For instance, at University College and King's College, I should imagine that there would be no difficulty with regard to that. It is with regard to practical examinations that there is the difficulty of examining students out of their own colleges. In practical examinations the examination in their own colleges will be more satisfactory than any University examination can be. I imagine that with their want of a proper laboratory the present London University could not hold a practical examination which would compare with our practical examinations in the colleges.

20,020. Such a system could only be carried out in colleges of University rank and fully equipped?—Quite so.

20,021. You could not apply that to small institutions such as separate medical schools when they are not well equipped?—No, only the larger Medical Schools. I would add that in the past the practical examinations of the London University have been carried on in our college laboratories. The London University has examined in my laboratory at King's College frequently.

20,022. Not your own pupils, but others?—All have been examined, some my own pupils, and pupils from other colleges also have been examined in my laboratory by examiners of the London University, and they have found the laboratory fully equipped for their purposes.

20,023. When you said there should be only one professor of each subject in the Faculty, I suppose you did not mean to say a single professor of physics, or a single professor of chemistry for sciences so large as those, but that the sciences might be split in the department, one for physics, another for organic chemistry, and so on?—Yes.

20,024. And it was not one professor, but "responsible professors?"—Responsible professors—each responsible for his own part of the work. There may be two or three professors of physics in the same institution. I should imagine that in that case one would be professor of physics, meaning by that general physics, and that others would be professors in special branches, as for instance electrical engineering or mechanical engineering, and so on; they would be in applied portions of physics rather than in general subjects.

20,025. You say you are carrying on now a certain amount of post-graduate teaching?—Yes, that is so. It has been introduced lately, and it is a very satisfactory element in our college work.

20,026. Supposing that the new University, whether called the "Gresham University" or the "University of London," or whatever it was called, appointed professors for the purpose of post-graduate teaching could they not have their prelections and their teaching in well-equipped colleges, as well as in a different institution. Might not they come to you, for instance, at King's College, or go to University College?—Certainly. I should certainly think it would be the better system to have the separate colleges, and that each professor should carry on the work in his own college and be responsible for both the post-graduate teaching and also for the elementary work.

20,027. In the case of the College of Science, of which you spoke, it really arose out of the College of Mining. The College of Mining existed first, and the supplement to it has been the training of teachers. That has been rather the supplement than the original purpose of the college, and its graduates are mainly graduates in mining, geology, metallurgy, and such subjects as those?—Yes.

20,028. If that is so, would it not be possible, so far as science is represented in those colleges, that their pupils might become part of the University of London in regard to the particular degree?—They might. The teaching would be quite what is required for University teaching.

20,029. (*Professor Ramsay.*) I wish to ask you to explain one point in your paper. You say a distinction must be drawn between elementary work and the higher teaching, or research?—Yes.

20,030. That would lead one to suppose that the arrangement you mean to propose with the colleges for research should be different from the other arrangements, but four or five paragraphs further on the distinction is abolished, because, if I understand you, your idea is that the higher teaching should be carried on in every subject where the lower teaching is carried on?—With regard to the distinction drawn, the elementary, or general University work, is, of course, far more widely spread than the higher teaching, or research, that is to say, it is demanded by a great many more students, and consequently the reason why the work should be carried on, and the apparatus duplicated, and so on, in different colleges, is because there is such a large number of students to be taught that the classes must be duplicated, and therefore the subjects can be quite as well taught in the separate colleges as in one central institution. That is as far as regards the elementary work. As regards the higher work it is putting the professor in a college in a wrong position to put him on a lower grade, and not to give him the opportunity of carrying on higher teaching and research. That would tend to lower the whole teaching of the college. The elementary work would not be done so well if the higher teaching is not carried on in the same institution. I think it is very important indeed that both should be carried on in the same institution. The distinction is drawn because the reasons are different in the two cases. In one case there are a large number of students to be taught as distinct from the reason in the other case, namely, that the higher teaching and research by the college professors may be encouraged,

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

20,031. That is to say, you do not see any reason why the higher research teaching should be concentrated in a few centres rather than elementary teaching?—I see every reason against it.

20,032. Then with regard to the connexion between King's College and the London University degree, we have had it in evidence from Dr. Wace, that very few of your students do prepare for the degree of London University. He was quite unable to tell us how many there were, or whether there were any. Therefore, I gather that you do not consider it to be part of the business of the college to suggest to students that it would be a good thing to aim at the London University degree?—I would not go so far as that. That would be direct opposition to the London University. I think there is at the very beginning a very great barrier to the London University system in the Matriculation Examination. I must say that I think the reason why there is no great encouragement in that direction, is because we consider that the Matriculation Examination at the beginning leads students wrong. It leads them into a way of getting up their subject which has the effect upon them that afterwards they will not do their work so thoroughly as they would if they had not been led astray by that examination. The Matriculation Examination is over a wide range. In Mathematics, for instance, the candidates have to go up to a certain point; in Algebra, simple Equations; three or four books of Euclid; and quite elementary Mathematics. Then there are subjects which candidates may take for that examination which imply a far higher knowledge of Mathematics than is contained in that part of Mathematics which is required for that examination. For instance, in Electricity and Magnetism they are expected to know something in Magnetism about the dip, and the declination; not knowing anything about the exact measurement of angles, and never having seen a book on Trigonometry. I say that to expect students who only know Algebra up to quadratic Equations to do subjects like Magnetism and Electricity, which involve much higher Mathematics, is entirely misleading the candidates. They can only do it by "cram," because they cannot possibly understand the Mathematics which is required for those subjects.

20,033. Are those compulsory on all candidates?—No. Mechanics is a compulsory subject, and there the amount of Mathematics required is what they are likely to know.

20,034. That is a very good reason why candidates should prefer some of the subjects to others, but the fact remains that the Matriculation Examination, as it stands, can be passed by boys who have had a good education at a school; and yet such boys may go as medical students to King's College, and never be told till too late that there is such a goal as the University of London degree to work for. Whatever may be said against that degree it is valuable to a medical man, and yet there are many students at King's College who have never heard of it, or when they have heard of it they have been told, "It is so "very difficult, you had better not think of it." Is not that general?—No, it is not general. I have in my own class medical students in the college who are going for the London University degrees. It is perfectly well known in the college that there is such a class, and, in fact, the number of students is sufficient to make it known to every medical student in the college that there is such a class in existence. This applies also to other subjects for the London University degrees. But I say that the barrier at the beginning in the case of a great many medical students, as well as others, is a very formidable barrier, indeed, and I think the great objection to the London University is really that objection, that the Matriculation Examination is not the kind of examination it ought to be to lead to a high degree. It is spread so widely that the amount of knowledge in each subject must be very small. I know very well that when I was examiner at the London University the amount required in my particular subject for the pass was exceedingly little, and yet the results were somewhat disastrous.

20,035. Still it is a fact that no special pains are taken at King's College to connect the college with the London University, whose degree is within the reach of many students, if they had only been helped forward to it from the beginning?—How far it is desirable for a medical student to turn aside from his medical course during his education I am sure I cannot say, but I think if they are all to go in for that the Matriculation should be passed before they come to the college, that is to say, at the age of 16.

20,036. (*Sir George Humphry.*) Your objection is not to a matriculation examination altogether?—Not at all.

20,037. But to the kind of matriculation examination which is carried on in the University of London?—I personally should have no objection to a matriculation in the college for students entering it.

20,038. I mean almost all the persons who have come before us have spoken very highly of the advantages and importance of a good examination in general education as preliminary to a study of their several subjects. Would you agree with that?—Certainly. The knowledge is important.

20,039. Your students come to you at the age of 16, a great many of them?—Yes.

20,040. And therefore they are a younger class than those who generally go to the University?—To the Universities of Oxford and Cambridge.

20,041. Or to the University of London?—I think not, 16 is the age for matriculation.

20,042. The number who are going up for the matriculation of the University of London is very greatly increasing?—Certainly.

20,043. What you feel is that there ought to be a teaching University in London?—Yes.

20,044. And your idea of a teaching University would be a University which should supervise, co-ordinate, and regulate the several colleges?—Yes.

20,045. Rather than a University which should undertake the special teaching itself?—Yes.

20,046. And provided that any University did that, you would feel that such a University fulfilled your requirements?—Yes.

20,047. You would not so much care what the name of the University was, whether the "Gresham University," or the "University of London," as at present?—No.

20,048. The great fault you find with the present University of London is, that it is not in that sense a teaching University?—Certainly.

20,049. That, in fact, it is only an examining University?—Yes.

20,050. And that it is a great defect in a large University in the Metropolis of London, that it should be devoid of the quality of its being a teaching University?—Certainly.

20,051. Does it not seem a great pity to leave the University of London high and dry in its present unfortunate condition?—Yes.

20,052. Would it not be far better to add on to it this teaching quality, and if this teaching quality be added on to the University of London fulfilling these requirements, that would be all that you would wish?—The question would be whether it should be added on as separate from the colleges, or in connexion with the colleges. That, I think, would be a great distinction. I should not be in favour of appointing professors of the University quite apart from any institution.

20,053. Provided that that was carried out, and that the University of London was made a teaching University in connexion with the colleges, and in connexion with teaching institutions supervising, controlling and directing them, and admitting them to its degrees, that would be all that you would require?—Yes.

20,054. Whether it be called the "Gresham University," or whether it be called the "University of London"?—Certainly.

20,055. The present University of London, furthermore, is an examining University for the Empire. It examines students from all quarters?—Certainly.

20,056. Do you see any objection to its continuing to do that, providing it has carried out its other function as well?—Arrangements might be made for the same body to carry on the two different kinds of work. They would be two different kinds of work.

20,057. No, they would not be two different kinds of work. The work would be this; they would be examining students trained in London in the several colleges, and they would, in addition, examine, in the same manner as we have heard to-day that they do at Dublin, students who have not been trained in these special colleges?—If it implies giving the degrees by examinations alone, I think there is an objection to that system.

20,058. It would be requiring the degree given by examination, with, of course, evidences of study in other parts, but not necessarily in these particular colleges. There would be no objection to that, would there?—I think these would be an objection, that is to say, I think the place where the student is educated is a matter of considerable importance.

20,059. Provided there were places recognised by the University as educational institutions?—It depends of course upon the character of the institutions. The present University, I suppose, would recognise any institution whatsoever. The quality of the degree will depend entirely upon the range.

20,060. I am speaking in a general way; providing of course that they took proper pains to ascertain that there was proper teaching?—I expressly say that the University should consist of constituent colleges, and the first qualification that I put in is this: "The "University should consist of colleges of University "rank, and no college should be included which does "not supply efficient teaching in all the subjects of "the Faculty for which it claims a place in the "University." I think that is very important.

20,061. I do not know that it is necessarily a University consisting of colleges, but a University exercising certain influence over the colleges co-ordinating and regulating them, and co-ordinating and regulating other institutions in a wider range than colleges?—I do not think I could agree to any not very intimate connexion between the colleges and the University.

20,062. We have had put before us a very important function of the University, not simply to regulate the special colleges of a higher order, but also to exercise some regulating influence over what is called "Secondary Education in London"?—I cannot see quite in what way the present University, judging by their past action, would carry that out.

20,063. I do not think you ought to judge by the past action, but what is possible in future years. We now want one University as well as another to be able to carry out work of that kind. Do not judge the London University by what it has been, but by what it may be?—It must not be liable to the same danger that the past University of London was subject to, namely, the danger of extending the colleges so widely that there was no object in making any distinction whatever, and therefore it was thrown open. That occurred in 1858. If there is any danger of following that course I should say that would not be the proper constitution of the teaching University that we want now.

20,064. But it might exercise an influence over secondary education of London as well as what is called the "Primary Education." Is it not very desirable that its range of influence should be as wide as possible over these evening lectures. There is a great range of teaching in that direction over which it is desirable that there should be some co-ordinating influence?—It becomes a question of what is University teaching. We might extend it so widely that probably the teaching it would take cognizance of could hardly be called University teaching. I should be disposed to think that would be the case.

20,065. But attendance at the evening lectures might be reckoned to a certain extent as University teaching, might it not?—For the first year if the evening class course is sufficiently extensive. With regard to our college, our evening class work is of the same character as the day work. It is carried on in an institution where it is possible, but I should imagine that the number of institutions where that is possible is very limited.

20,066. I suppose the University recognition would be limited?—You extended it just now, I think, to other kinds of teaching, such as University extension, and other work. I imagine that University extension work is carried on in places where there would not be the possibility of having that efficient teaching, because it is carried on, in fact, wherever there can be a class all over London. It is a very great and important work, but it is not work of the kind that I should say would naturally lead to a University degree.

20,067. It is not practical work?—No; it cannot be practical out of colleges like King's College. Therefore, at King's College, we have tried to supply a place even for University extension work by putting on practical classes to which University extension students after passing through a proper University extension course may come and study practically.

20,068. But as regards the relation to the University, you would not be very particular whether it was the University of London or the Gresham University if it fulfilled your requirements?—There is very little in the name. I think "Gresham" would distinguish it from the present University of London which I should not like to see eclipsed.

20,069. But on the whole, it would be desirable to have one University instead of two, if one could do the work well?—I am afraid there I could not quite attach the meaning to the word "University" which one would like to see attached to it. One cannot detach the name of "University" from London University, because they have carried it on so long, but at the same time it is not a University in the highest sense, because it is simply doing examination work. I am sorry that "University" should convey any more than the highest meaning of it, that is to say, including teaching.

20,070. Providing that under the new constitution that is entirely altered, and that, in addition to examining, the University of London takes the other ground of being a teaching University which you have described and wish, that would fulfil the requirements?—I must say that I do not quite see how the two would go on together. I look upon the two things as more distinct than your question would seem to imply.

20,071. You think that the two should combine?—They should go together.

20,072. That a University with the one and with out the other is defective?—Yes.

20,073. And, therefore, it is an important thing to render London University an effective teaching as well as an examining University. Would not that be a great point to effect?—If it continues to be, or if it extends itself to be an Imperial University as Convocation would seem now, at this moment to wish, it seems to me that it would be impossible for such a University to satisfy our requirements in London. I think we want something local.

20,074. I do not quite see how that would diminish the capacity of the University to work well in London. It might do its work in London equally well?—As a separate work.

20,075. (*To Dr. Halliburton.*) With regard to the fusion of medical schools you are well aware what difficulties would attend it. I presume one of the difficulties is want of funds. They are all very much crippled for funds, and they would find it very difficult on that ground to institute any new and con-

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

siderable schools and laboratories for physiology, anatomy, and so on?—I think it would be in their favour rather, because at present they have to pay each anatomical lecturer and each physiological lecturer and biologist. If they were all collected together they would have to pay one instead of four.

20,076. They will have to erect buildings and laboratories, and they would have to pay, I suppose, an additional number of lecturers and teachers. That is one of the difficulties connected with the medical schools?—Yes, and there is a certain amount of vested interest.

20,077. The vested interest is very little?—It is an advantage to a physician to have a position as lecturer.

20,078. I believe lectures on physiology are becoming much more detached from medical work?—Yes, that has improved of late years.

20,079. It is possibly too much detached, for we want in all the various branches of science specialization, that is to say, the teaching of the science in reference to the future work which has to be carried on, from a comparatively early period, and that the teaching both of anatomy and of physiology has to be carried on to no small extent in relation to the work which the medical man has subsequently to do?—I do not at all urge that the lecturers on those subjects should not have received a medical training. I think that in order to have any sympathy between this elementary and the practical side it is necessary that physiologists, and perhaps even biologists, should have received a medical training.

20,080. Physiology is becoming so very wide a subject that there is some danger of the teaching becoming disconnected a little too much, perhaps, from the after-work of the medical student?—Yes; there is a little danger of going to that extreme.

20,081. Then another difficulty that has been suggested is that they should combine, perhaps in King's College or University College, certain existing medical schools, and that, of course, would be objected to by the hospitals, which are at present connected with medical schools. It would drain their students away from the hospitals, would it not?—Supposing they were to enter at those colleges, you mean?

20,082. Yes; they would stick to them?—Yes.

20,083. (*Mr. Anstie to Professor Adams.*) With reference to this question of the Empire, which we hear so much about, what do you understand by the "Empire"? Do you mean the parts of the world outside the United Kingdom?—I suppose there is simply no limitation; it may be colonial.

20,084. Do you know that the number of degrees taken from the Colonies is somewhere less than one per cent.?—I do not know what the numbers are.

20,085. At the same time you say that the London University has no special relation to the needs of London. Are you aware that, as a matter of fact, the medical degrees taken from the London colleges are six to one of those taken from provincial schools?—I have no connexion at all with the medical part myself. I know no details with regard to medicine. What I say has no relation to medicine because I have no connexion with the medical school.

20,086. You state here as a general proposition that it has no connexion with the needs of London?—The needs of London with regard to what I am speaking of, that is to say, what London wants as regards a teaching University in Science and Arts.

20,087. Then that sentence has to be qualified by saying the needs of London in regard to the particular subjects which you mention?—The subjects we are speaking of, namely, the teaching University, and especially with regard to Arts and Science.

20,088. Of course, you are aware that the great bulk of examiners are teachers, especially teachers in London schools?—Of course, I know that they are principally teachers.

20,089. And teachers in London schools almost exclusively?—In arts and science?

20,090. Medicine, I am speaking of particularly; but your "proposition" here is quite general. When you speak of the danger which the London University had experienced, you are aware, of course, that the London University never at any time had any organic connexion with any colleges at all. The only connexion of any kind was with the students who had come from there. There was no organic connexion between the governing body of the London University and the teaching institutions themselves?—I am afraid I do not understand the spreading of the University which occurred in 1858, if that was the case. I was under the impression that up to that time care had been taken that the candidates should be trained at an institution which was recognised by the University.

20,091. That is what I am pointing out, that the only relation between the colleges and the University at that time was that the students must have come from a certain list of named colleges, and that there was no organic connexion between the University and the teaching portion of the colleges?—I suppose that must have been the case.

20,092. So that if a University were created, with an organic connexion between the governing body and the colleges, the state of facts would be totally different?—Yes, that is so.

20,093. Will you tell me why you make the condition in your first clause that no college should be included which does not supply efficient teaching in all the subjects of the Faculty for which it claims a place in the University having reference especially to what you say later on, that the Faculty of Science is to consist of two distinct divisions. Why should you require that every college to be admitted should teach the whole of the subjects of the Faculty?—I mean that any candidate coming to the college intending to obtain the degree of the University shall be able to get in that college all the work that he would require for that degree. That would not be the case unless the college is able to give all the teaching, that is to say, shall be efficient.

20,094. That is a little inconsistent, is it not, with what you propose on the second page of your paper:—"The Faculty of Science may consist of two distinct divisions, one embracing those branches of "pure and applied Science which bear more directly "upon medical education, commonly called Natural "Science, and the other embracing those branches "of pure and applied Science which bear more "directly on engineering." If you distinguish in that way, why should you require that each college should answer both purposes?—I do not say that each college should require both. I say I regard the Natural Science course as complete, and the engineering as complete; and the two may be distinguished from one another.

20,095. Then we must read your first clause, with that qualification?—Yes, with that limitation. The question of giving degrees to engineering students is one which has arisen since the Gresham Charter was drawn up. It was not contemplated at the time, and in fact only quite recently has it been contemplated at all, but I think it would be quite an appropriate thing that there should be a degree in Science, for the branches of science, which a student goes through to prepare for engineering.

20,096. Then there is another point arising out of this. Of course the view you would take would be that the Gresham Charter was wrong in making the two Colleges Colleges in the Faculty of Law?

20,097. That has no bearing on my question at all. Your first clause, judging by the evidence we have had, and also by the implied declaration of the Colleges before the Privy Council, would exclude University College and King's College from being admitted in the Faculty of Law?—I cannot answer for anything connected with the education in law because I have not looked into the matter at all.

20,098. You are aware that before the Privy Council it was distinctly stated by Mr. Rigby that as a matter

of fact they did not ask for a degree in law on the ground that they were not adequately equipped?—Do you mean that the Gresham Charter did not.

20,099. The petitioners did not?—I know nothing whatever about the question.

20,100. At any rate, your view would be to exclude those colleges from the position of colleges in the Faculty of Law?—I have no view upon the matter at all.

20,101. I am directing your attention to the fact that your proposition would exclude University College and King's College from being colleges in the Faculty of Law?—I have no opinion at all on the matter, because I have never touched the question of law, and it is not my business.

20,102. You make your proposition very general here?—No; it extends as far as any proposition contained in the whole paper. I have nothing to do with regard to law at all.

20,103. Then may I take it that this paper is intended to apply only to the branch which you yourself preside over?—It only applies to those subjects which I understand something of, and I do not profess at all to know anything of what the education for a law student should be, and I would rather not give any evidence at all to the Commission on the subject.

20,104. Then may I take it that your evidence is really to be read in its application, and is limited in its application, to those subjects with which you have more particularly to deal?—Of which I have some knowledge. Of course I have only to deal specially with my own subject of natural philosophy, but I may be supposed to have some knowledge of the qualifications for a degree in Arts or in Science.

20,105. Now with regard to this A.K.C., which we have heard a good deal about, do you say that the A.K.C. in all departments is the same as in yours?—No, I do not. I said that in each department the value of the associateship depends on the professors of that department.

20,106. Then it would be a little misleading to take the A.K.C. in your department as a test of the value of the A.K.C. in other departments?—Yes.

20,107. I observe that in the last six years the matter stands thus: in 1886, there were 62 A.K.C.'s 7 out of the theological department; seven out of the evening classes; 12 out of the medical department, and 11 out of the applied science, which, I suppose, is engineering?—Yes.

20,108. In the next year, 1887, there were 59 A.K.C.'s, of whom 28 were theological, 8 evening classes, 10 medical, and 12 applied science; in the next year, 1888, there were 61 A.K.C.'s, of whom 23 and were theological, 8 evening classes, 16 medical, 12 applied science; in the next year, 1889, there were 48 A.K.C.'s, of whom 28 were theological, 2 evening classes, 11 medical, and 5 applied science; in 1890, there were 48 A.K.C.'s, of whom 22 were theological, 5 evening classes, 4 medical, and 7 applied science; in 1891, which is the last year I have, there were 39 A.K.C.'s, of whom 20 were theological, 4 evening classes, 10 medical, and 5 engineering. Taking that list as a whole, would you assert that the A.K.C. is equivalent to an honour degree at the University of London?—I only assert what is pointed out in that paper.

20,109. I want to know whether you think that is so?—I assert nothing.

20,110. It may be true of your own department?—I can only answer for my own department. I cannot pretend to answer for other departments with which I have no connexion whatever. I cannot answer for a moment for the action of other professors in other departments with which I have no connexion whatever; in fact, it would be absurd for me to do so.

20,111. You would not be disposed to lay down broadly that the A.K.C. was to be reckoned as equivalent to an honour degree?—No, certainly not.

20,112. Or even to a degree in all cases?—I lay down nothing with regard to the subject.

20,113. Now one other subject. I do not wish to question at all what you have said with regard to matriculation; I should probably agree with a great deal of it. But are you prepared to say that in the first year's course at King's College they go beyond quadratic equations?—Yes; far beyond.

20,114. May I ask if in mathematics—speaking of your own department only—the standard has lately been greatly raised?—No.

20,115. It would be surely true to say that the first year's course at King's College did not go beyond quadratic equations at a former period. I have a little knowledge because I have been there myself?—It is a long time ago, and I am not aware that our standard in mathematics was ever so low as you imply.

20,116. That is why I put the question. Has it been altered of late years? When students come to us first we get a good many who, before they enter upon our course, have gone far beyond quadratic equations, and gone through the whole of algebra, and gone through trigonometry, and who will, therefore, not be put back to do quadratic equations in the first year's course, but go on to do advanced mathematics, who have the capability of going to the highest mathematics that can possibly be taught.

20,117. That may be, but that is not my question. What I am asking about is the first year's course. A man may take the first year's course who is competent to become senior wrangler, but that is not the question I am asking. I am speaking of the ordinary first year's course?—We teach the students who come to us. Students come to us prepared with the whole of algebra, and in some cases with a knowledge of trigonometry and mechanics. Do not suppose that we put those students back to the A B C to begin with. In the first year's course we have four or five distinct classes in mathematics, and two or three distinct classes in natural philosophy, so that we classify the students who come to us, and put a student where it is best that he should be, and where he will best learn his subject. Therefore we have a first year's class in mathematics, ready for any advanced student who may come to us. At any rate we have four distinct classes of mathematics, all consisting of first year students, and, therefore, to say that our work is below quadratic equations is altogether misleading, and it is not the fact at all.

20,118. In fact, it is true to say that you have organised the education at King's College of late in a more efficient way than it was organised formerly?—No. It has been so as long as I can remember.

20,119. How long ago is that?—I have been connected with the College for about 30 years.

20,120. My memory goes back further than that?—If we have things straight during the period of the last 30 years we need not go back further.

20,121. You do not deal with the medical question at all, I understand?—No; Dr. Halliburton will answer for that.

20,122. (*To Dr. Halliburton.*) Following up Lord Playfair's question, will you tell me whether you can account for the fact that, having such large resources as King's College has in the way of scientific equipment, so very few students take degrees in the London University?—I don't know that so very few do. I think it is a large proportion. Considering the somewhat small size of the school in comparison with St. Bartholomew's and St. Thomas', I think a very fair proportion go in for the University degree.

20,123. Is it not a rare thing to see more than one or two in the list?—Taking the list of the last final M.B. examination I think there were half a dozen.

(*Mr. Anstie.*) In the two lists, first and second.

20,214. (*Rev. Canon Browne.*) The final M.B.?—(*Professor Adams.*) I think I have heard it stated by our professors on that side that of those who go in the per-centage who pass well is remarkably good.

20,125. (*Mr. Anstie to Dr. Halliburton.*) That is quite possible, but why do so small a number go in. If so large a per-centage of those who go in do so well, how is it that such a small number go in?—I think it is

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

in a great measure because they have not passed the matriculation beforehand. You could not expect them to go back to matriculation work.

20,126. There was a time, perhaps going back to to the time to which Professor Adams referred, when King's College held one of the highest places in the medical list. They passed as many men perhaps as any other school. Can you tell me why it is that of late years they have diminished in number?—No.

20,127. (*Rev. Canon Browne to Professor Adams.*) I think your men take the associateship at the age of 19?—Yes.

20,128. That is about the time that our undergraduate at Cambridge is in his first year?—Yes, I said so.

20,129. I understand you to say that you consider the associateship is quite equal to a degree in honours. Do you mean the degrees in the same subjects as at Cambridge, where the men are 21 or 22?—I was looking rather to the age of the student coming into the London University. They usually come in at 16 and take degrees at 19. I was not alluding to Oxford and Cambridge, where the age is beyond the age at our college.

20,130. Then you would not make the A.K.C. compare with an honour degree at Cambridge or Oxford?—No.

20,131. I understood you to say that the A.K.C. was equivalent to a degree in honours, but at the same time you told us that you thought an evening student could not at all prepare for a degree from his evening study alone?—Except in a long time.

20,132. But we are told that in six years 33 evening students alone have obtained the A.K.C.?—It is attached distinctly to the evening classes, and it is stated so.

20,133. A man writes himself A.K.C., and no one can tell the difference?—Anyone who wants to enquire about his degree or what the value of it is cannot be content with the A.K.C. any more than one can be content with the B.A. of Cambridge. No one knows what it means.

20,134. You can get it by the evening class as fully as in any other way so far as regards the right to use the letters?—Yes.

20,135. Then does that agree with your statement that you do not think an evening student can prepare for the degree?—I mean he cannot possibly reach the same standard working two or three hours in the evening as another student who works six or seven hours a day at University work.

20,136. I only confine myself to the letters?—We give no degrees whatever. I do not regard the A.K.C. as the degree, but in speaking of that I am speaking of getting some degree of the teaching University. Of course you could get some degree of the teaching University which implies doing the same work.

20,137. I thought you told us broadly that the A.K.C. was equivalent to a degree?—I was not speaking of the A.K.C. at all when I was speaking of what the qualification for a degree should be in the teaching University.

20,138. Nor am I now. However, we can leave that open, and I will go to another question. Have you the undivided attention of your students, or do they go at the same time to other professors?—They go at the same time to other professors.

20,139. To about how many do they go?—I suppose about six at the same time.

20,140. Does that mean that they are attending six professors at the same time?—Yes.

20,141. How many hours a day can you expect them to devote to your work if they are attending six others?—They would attend in my own work about four lectures a week, and mathematics about the same.

20,142. How many hours a day do you think you yourself can claim from them for your own work?—From six to eight hours a week probably.

20,143. Are your students precluded from earning their own living?—Are you speaking of the day students or evening students?

20,144. Students of any kind?—There is no limitation as long as a student attends our classes.

20,145. As a matter of fact do not a great many of them obtain a considerable part of their living by taking extra work in the evening?—As a matter of fact it is impossible for the day students; their time is so fully occupied that they could not possibly do it.

20,146. None of them eke out their living?—No, I should think not.

20,147. Now with regard to overcrowding men with subjects, you say they are attending six professors at the same time. It sounds to me to be a little heavy. At Cambridge, both for the abler and weaker men, we have been subdividing of late; that is to say, we let them take their examinations more frequently in order that they will not be required to carry so much at a time?—We have so many subjects connected with the education which a student receives. We have either to follow the system, which we do, of having the subjects going at one time; or we may follow another course, of trying to pour in a great amount of mathematics at one time, and a great amount of natural philosophy at another time, leaving off the mathematics, and then other subjects at another time, and so try to do the work piece-meal. I do not think that the education in the latter case is equal to the education carried out as we give it, because one subject requires the knowledge of another subject, and it is well if they can be, to a certain extent, carried on together. It is a difficulty, of course, which is not easy to get over.

20,148. You feel distinctly crowded; there is no question about it?—Distinctly crowded.

20,149. You and I had three and a half years at Cambridge, and they now have three years?—Yes.

20,150. That is a disadvantage because it crowds them more?—Yes.

20,151. Without allowing for the fact that there are more subjects?—Yes.

20,152. So that you think a four years' course is better than a three years' course?—Yes.

20,153. The old plan, when there was very much less crowding, was a seven years' course. Considering the crowding of subjects one can imagine a seven years' course to be much better than a three years or three and a half years' course?—Yes?

20,154. So that to increase the time to a considerable extent would be a decided advantage as things now are?

20,155. With regard to the character of lectures now; you are younger than I am, and the lectures may have been improved in your time. There were these difficulties: first of all no one thought of asking a question of the lecturer because there was no endeavour on the part of the lecturer to ascertain whether one had ever looked at a book from one lecture to another. Next the laziest and most studious were sent in to one examination. How do you deal with those points: first, the point that no one cares to occupy the time of a limited hour in asking questions?—In our teaching we have not only lecturing, but class work, which we consider as important as the lecture in those subjects in which class work can be carried on. In fact I regard it as more important in a great many subjects. Lecturing may simply draw attention to the subject, but the class work becomes far more important, and beyond that in a subject in which practical work is possible one or two undergraduates working together at practical work may derive great benefit from the individual teaching of the professor—learn a great deal more than his teaching.

20,156. Have you any idea how long it has been the practice for lecturers in languages to have class work as well as oral lectures?—I am afraid I could not answer with regard to languages.

20,157. A professor gives an hour's lecture to his class. Does he divide that in order to give time for

them to ask him questions?—I think probably it would be done without specifying any definite time, but he would encourage the students to come and ask him questions on the subject and talk with him over the subjects, after the lecture or at any convenient time. With regard to languages I am afraid I can hardly answer, but with regard to Science I should certainly say this would be his method of teaching.

20,158. How do you deal with the endeavour to ascertain whether a man has done any work since you last saw him?—There is a great difficulty in compelling a man to work, but at the same time there are class examinations which he must pass. Take the subject of chemistry, for instance. Probably once a month there would be a class examination, and a student who does nothing in that class examination will very soon hear of it from the professor, and so be driven to work, if anything could drive him.

20,159. You have no weekly test?—No, except where there is class work to be done.

20,160. How do you deal with the difficulty that the laziest men are allowed to go in for the examination, and if they can get marks get through. How do you let them in? Unless they are bad enough to be expelled they come in?—Of course. The only merit of one above another is seen in the position taken in the examination.

20,161. You have heard of a system called the Cambridge Local Lectures, meaning lectures given in different localities?—Yes.

20,162. Your distinguished brother helped us in our arrangements. We set ourselves resolutely to work to meet those difficulties. You know how they have been met?—Yes.

20,163. First of all, with regard to asking questions, we have after a lecture an hour for nothing but asking questions. Have you at King's College anything corresponding to that?—No, except that after a lecture or at some convenient time a professor will stay in and receive students, but there is no definie time set apart which must be devoted to questioning. In subjects like my own that is most conveniently done in the course of work in the laboratory.

20,164. Then we require anyone who is going in for the examination at all to do weekly papers in answering the questions set; and that is done. So that we meet there the question, not do you know certain things, but are you doing certain work? Then we grapple with the question of sending in the laziest men. Unless a man does the weekly paper work he is not allowed to enter at all. Have you anything corresponding to that in King's College?—No, we have not.

20,165. Then we give no direct weight to the teacher at all. We appoint an absolute outsider examiner; do you do anything like that?—We may.

20,166. The sole examiner is an outsider?—Sometimes for certain special purposes, but usually the examination is conducted by those who are in the College.

20,167. We appoint an absolute outsider, but we give weight to the teachers in this way. We say that no one shall have the mark of distinction assigned to him unless the outside examiner and the teacher agree; and no one shall be plucked unless the outside examiner and the teacher agree. Have you anything like that in King's College? Do you put it in the hands of an outsider absolutely to refuse the A.K.C. to one of your students?—As I say, it is only for special objects that we have an outside examiner.

20,168. So you have nothing corresponding to that in King's College?—No.

20,169. I have been describing the course of University Extension, as it is called, against which you put out an extremely strong paper (*see Appendix No.* 37); and yet every one of those fundamental features, which you allow to be admirable in themselves, you are without in King's College?—With regard to the way you put the question in respect to the laziest, I think you libel those who attend the University Extension lectures. I think a great many of those who attend University Extension lectures are not serious students at all, and it is not supposed that they are, but it does them a vast amount of good to attend and know something about the subject on which the lecturer is lecturing. I should not regard those as having any parallel in our teaching institutions. The regular students are those who do attend the class as well as the lecture.

20,170. Your paper goes entirely upon the certificate, and a man cannot sit for a certificate unless he has done the weekly paper, and done all the things I have described. So we have nothing to do with the people you describe. Those things, you say, are exceedingly admirable, and no one of them have you in King's College?—I would not say a word against the importance of the system for the extension of University teaching. From its very commencement I have been on the Universities' joint board. I have taken an active part in it, and it was in consequence of this that the Council of the University Extension Society appointed me a member of their body, as I have been for many years. I do not wish at all to condemn the work, but I entirely approve of the work for the extension of University teaching. At the same time I cannot agree to the statement which has been made that this teaching is University teaching or that it should qualify for a degree in a teaching University. I produced this paper to show the actual facts with regard to the connexion between University extension teaching and University work.

20,171. All these things you have allowed to be admirable, and none of them is at King's College. We have got as far as that. Did you authorise Dr. Wace to put in the paper to this Commission?—No, I did not.

20,172. But you do not disapprove of it?—No.

20,173. Did you authorise "Verax" to write to the "Times"?—No.

20,174. "Verax" writes thus: "Sir, In the remarks which Lord Ripon addressed to Lord Salisbury, at the deputation respecting the Gresham University, he spoke of the London Society for the Extension of University Teaching, as having 'now attending its courses in the district, 13,000 persons.'" Does your statement touch the question whether 1,000 attended?—Not at all.

20,175. Then the letter goes on, "and added that 'if they might judge from the reports of the examiners, the students passed in a manner which 'showed that they were qualified for University 'degrees.'" Does your paper touch that?—The paper simply describes what the work is, from which people can judge whether it is qualifying for University degrees or not.

20,176. The point is this; "Verax" says that Lord Ripon said that "if they might judge from the reports "of the examiners, the students passed in a manner "which showed that they were qualified for Univer-"sity degrees." Does your paper touch the reports of the examiners?—No.

20,177. Then in neither of these two respects does your paper in the least touch what "Verax" says?—No; but with regard to the second point, I think it is a matter of importance if it is supposed that the University extension course does qualify for degrees in a teaching University. I think, these being the facts with regard to the extension of University teaching in London, this will show pretty clearly that it does not qualify for degrees in the University of London.

20,178. We shall save time if we keep to statements which have been made, and not to statements which have not been made. The statement is that the reports of examiners show this?—I agree with that, but I do not agree with the representation as to the reports of the examiners, because I know of instances in which the examiners distinctly report that the work done is not University work.

20,179. How does that touch the reports in which they say it does?—I am speaking of reports by examiners of the University Extension classes.

20,180. As a matter of fact, your paper does not touch either of those two question. Then at the end

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

of your paper you say, "seeing that the certificate of "continuous study has not yet been gained by any "student, and, in fact, has only just been prepared, it "is somewhat early to lay down how many courses of "continuous study of 120 lectures and classes each, or "how many such four-year periods may be regarded "as qualifying for a University degree. It is clear "that either the degree must be given for insufficient "work, or the time of getting it must be spread over "such a lengthened period that the candidates might "have been spending his years more profitably than "in striving after a degree." That is signed W. G. Adams, ember of the Universities Joint Board of the London Society of the Extension of University Teaching. What body has ever said that this qualifies for a University degree?—I thought from what Lord Ripon said as to the statement of the examiners, it would appear to be so. If it is stated by the authorities that they have done work which is equivalent to getting a University degree, I should say you cannot fairly refuse to give those men degrees.

20,181. Really this is only wasting time. Who ever says that one examination paper gives the University degree?—Not one paper, but a number of examination papers. If there are a number of courses of study, which are intended to lead up to the granting of a University degree, the University would say, "If these men are qualified for a University degree, they can demand it."

20,182. So far as that subject is concerned?—I am speaking of continuous study, extending over a considerable period. What I wish to point out, is the actual value of the work from a University point of view, and to say, that in fact any degree so given in a limited period would certainly not be equal, as regards work done on the part of the students to degrees which would be given, or which I hope would be given in a teaching University. I should regret very much to see the degrees so lowered in any University whatever that they should be given for any such qualifications as are represented by University extension work. I think, in fact, that the work has been magnified beyond what it should have been. It is a very important work, I entirely hold, but I think the position which has been assumed for it, is far beyond the position which it can take.

20,183. I entirely agree with you, but I want to know what body has been foolish enough to suggest, that this University extension should give a degree?—I am afraid that in London we must not quite look at it in that way, because in some quarters it is not looked upon as ridiculous.

20,184. But what responsible body has suggested it? The London Society for University extension has not?—I think a good many members connected with that society——

20,185. Pardon me, I am asking what body? What responsible person has said it?—It seems to me that the gathering of Lord Ripon's remarks is in that direction.

20,186. We must not talk about gathering or in what direction the gathering is. My question is, what responsible person has suggested that the University extension should give a University degree. I have never heard it said?—I gather from some remarks by Dr. Roberts, that his view of the matter would be that this extension work should lead on to a University degree.

20,187. Certainly "lead on to" but not "qualify for"?—I mean by "qualifying for," having a sufficient number of certificates of continuous study going on for a sufficient period, and that that should be held to qualify for a degree.

20,188. No?—In that case I read Dr. Roberts wrongly. I understand that to be the effect of his evidence, which was given to the previous Commission.

20,189. Professor Stuart has been here before us, and he was asked, "Are you familiar with this phrase: "'So far as this subject is concerned, this student "'would pass in honours the final examination of the "'University of Cambridge.'" That is what Lord Ripon is referring to. Professor Stuart said, "I am "thoroughly familiar with it, and Mr. Roberts has "here a number of reports of examiners taken at "random, in which you will find a considerable "number of such phrases. We not only have that "statement, but we have that statement from ex-"aminers, who are exceedingly skilled examiners. "Take for instance, Professor Garnett, who has "examined in every kind of examination—tripos "and everything else—and who is, therefore, well "capable of judging." That is the sort of basis upon which Lord Ripon speaks. But that says nothing about this admirable work in a particular subject qualifying for a degree?—It is admirable work in a particular subject at one time, followed by admirable work in another subject at another time, so that a candidate may go over a considerable range of subjects, and he will have to take eight or nine years in order to do the same amount of work that a student who has his whole time to devote to the work may do. I wished to correct what seemed to me a mistake, into which people are likely to fall—the public especially—that the work actually done at the present time by the Society for the Extension of University Teaching is of sufficient depth to qualify for a degree.

20,190. You said eight or nine years. Why not say seven years, and then you would arrive at the number which you and I agree would be an admirable arrangement for the length of course?—Excuse me, I did not quite mean that that would be an admirable time for a University course. When you made that statement the thought passed through my mind at once, this man cannot do anything else in life but prepare for a University degree; he must spend his time and must be going to live in Oxford or Cambridge all the days of his life if he takes seven years from the age of 19 to 26 to get a degree.

20,191. You gave an indication of that when I put the question?—No, I did not express assent nor dissent.

20,192. I on my part, on behalf of the University extension, deny that any responsible person has claimed for the work done by them, without any final examination on the part of the University or anything of that kind, a degree?—As a member of the Universities' Joint Board I entirely agree that no such claim should be made.

20,193. Now, with regard to the sessional certificates. You say three were granted in 1889, and you say, "Neither of the candidates who gained them "proceeded any further." When your letter was drawn up I do not know, it is not dated?—It was drawn up in the spring of 1891.

20,194. It was published by "Verax," in the "Times," of March 5th, 1892, without any hint that it was an old paper. The statement is absolute that these are the facts. I am entitled to take March 5th, 1892, as the date. The statement then made by you through the mouth of "Verax" is, "Of these ses-"sional certificates three were granted in 1889, "neither of the candidates who gained them proceed-"ing any further." On March 5th, 1892, Tozer, Sumner, and Weekes, who had gained the sessional certificates in 1889, had among them received three more sessional certificates and five more terminal certificates, and you say here, "Neither of the candi-"dates who gained them proceeding any further." It is no use saying now that that was true the year before. You say, "Neither of the candi-"dates who gained them proceeding any further"; and, as I have already said, three did proceed further, and had obtained three more sessional certificates and five more terminal certificates?—Allow me to say that this paper was distributed to the members of the Council of the Society for the Extension of University Teaching long before that time. Copies were sent to Dr. Roberts for every member of the Council, and it was, in fact, communicated by him to the Council long before that period in 1892.

20,195. Still the paper is put in by Dr. Wace to us even much later than March 1892, and put in without any date upon it. You see I should have

cared nothing about the paper, but it has gone into the Report of the Commission. An undated paper deliverd by Dr. Wace in the autumn of last year is put in containing these statements, and my business is to have in the evidence of the Commission also, an absolute contradiction of the statements. I am bound to to obtain that. Personally it is unpleasant; we are old friends and I hope we shall always continue to be old friends. Then the next statement is this: "In 1890, 26 sessional certificates were granted"; at the time that was published in the "Times" one of those, Bradford has since obtained two sessional certificates, three others have obtaided five sessional certificates and another has obtained a certificate with distinction. Then the next statement is this. Of the 20 other certificate holders only 10 obtained certificates of study during the next Michaelmas Term, and of these only one completed the course so as to get his second sessional certificate in the summer of 1891." Of those 20, four got sessional certificates instead of only one?—Might I in self-defence ask the period when the certificates were given because, as this paper was issued in 1891 to the Council of the University Extension Society I think it is right that the Commission should have evidence as to whether my statements are correct up to the time when I put this statement out.

20,196. Would it not be the simplest plan to have it put on the evidence that you give us the date of this paper as early in 1891, and we of course accept it as accurate at that time?—My object is this. When Dr. Wace put it in, the thing was entirely past history.

20,197. (*Mr. Anstie.*) I do not quite understand the meaning of the words?—The fact is that this paper was placed in the hands of every member of the Council of the Society for the Extention of University Teaching, or should have been, by the Secretary, but no answer has ever appeared since, on the part of Dr. Roberts or anyone else.

20,198. Does it mean that it has only just been obtained and that the man has not now gone on or that some reasonable period has elapsed?—He has not gone on further with his education. He has ceased altogether to become a University Extension Student. He has not attended any further classes.

20,199. (*Rev. Canon Browne.*) He had not then?—In the summer of 1891.

20,200. You say only one had completed the course, four had. Then in 1891 the certificate of continuous study you stated had not yet been obtained by any student. There had been a certificate of continuous study for some time requiring a three years' course, and 13 persons had obtained that long before your paper was written. Then it was changed to requiring a four year's course, and that is the one of which you are speaking?—Yes.

20,201. On March 5th of last year, two persons had obtained that. Now I have taken all the facts. I accept your paper as correct at the time you tell us it was written. My object is accomplished if I get down on the evidence a correction of these statements. The document which was put in without date by Dr. Wace was in fact drawn up early in 1891?—I wish to make a correction on my own account with regard to one point. Since the accompanying memorandum was printed in 1891, two women candidates have been awarded certificates of continuous study. Each of them appears to have obtained at least two sessional certificates in one session. No man candidate has, as yet, obtained a certificate of continuous study. That is December 1892. I should be glad if that could be put in as my evidence, showing the dates upon which it was printed, and also the facts as to certificates of continuous study up to the present time.

20,202. Then one more point with regard to the number of lectures, which is rather important. You say—taking for instance modern history—in a college there would be at least 60 lectures a year And you say "the certificate of continuous study is given for attending at 120 lectures once a week." Do you mean by that 120 lectures and classes?—A lecture and the class are taken together on the same subject. The class is simply a conversational class where a student may get very important information from a lecturer, but it cannot be called a lecture, nor can a lecture be called a class. I have stated what they are. The lecture and class coming together might occupy two hours.

20,203. Of course attending at 120 lectures once a week would be a physical difficulty. It is what you say, but you do not mean that. It is attending at 120 lectures and classes one a week. Then they would get 240 hours. Take modern history. For this there would be at least 60 lectures a year in a college, you say. Would your man in King's College go on for the whole of three years in modern history?—I suppose they would. In any University they would.

20,204. But at King's College?—At King's College he would go on.

20,205. At King's College there are men going on in modern history for 60 lectures a year for three years, are there?—Yes, and more than that in some subjects, but we have no degrees. In a University I thought that would probably be the natural period.

20,206. Are the 60 lectures to be multiplied by two or three?—For modern history for the degree of a University surely he would go on for the whole three years' course.

20,207. And yet in Cambridge where we give a degree in modern history, first year, Little Go, second year, general examination; there has been only the third year given to modern history for the degree?—He passes the Little Go in the first term when he enters the University.

20,208. For a pass degree in the University of Cambridge, in modern history, he spends his last year in modern history, and I have calculated how many lectuees he would attend?—I am really not taking a pass degree in connexion with the University as of any great importance at all.

20,209. You think this would be so in any college which puts itself forward as qualifying for those subjects in a degree. Do you mean that or not?—Yes.

20,210. At Cambridge he would only have 24 weeks at the outside for his study in modern history. If he attended two courses of three hours a week, that would give him 144 hours under instruction for getting the degree of modern history. But your continuous course of study man has had 240 hours besides the whole of the weekly paper work; so that the continuous course of study man has had 240 hours under the eye of his teacher, and at least two hours a week preparing the necessary weekly paper, meaning 480 hours to the knowledge of his teacher. In Cambridge he would have 144 hours to the knowledge of his teacher as the maximum. I should have thought that would compare very unfavourably to Cambridge?—Does the University of Cambridge give its degree in modern history alone without any other knowledge?

20,211. No; but we were comparing the preparation in modern history which would qualify for his degree. When he comes to the end of his third year he is examined on nothing but modern history, and on that he gets his degree?—I am afraid it is so much the worse for the University of Cambridge. It is not training him very much if he is required to pass in modern history alone.

20,212. I do not understand this. That is all I care to say about lectures; but I have no question whatever that the University extension students get very much more from their teacher than some students at the University of Cambridge do. These facts seem to show that?—I should say, with regard to the points which are contained in this paper, my authority is the "University Extension Society's Journal."

20,213. (*Lord Reay to Dr. Halliburton.*) I believe you know University College as well as you know King's College. You know them both?—I know University College a good deal better, I think.

W. G. Adams, Esq., D.Sc., F.R.S., and W. D. Halliburton, Esq., M.D., F.R.S.

20 Jan. 1893.

20,214. You know the two colleges from personal experience?—Yes.

20,215. I want to ask you whether you see any insuperable objection, or whether you see considerable advantage in some arrangement between the two colleges which would lead to a redistribution of work?—That is rather a difficult question to answer off hand.

20,216. Whether from the academic point of view you would see any advantage in that?—I should think so, certainly.

20,217. You think that in many respects at the present moment there is waste by needless duplication, and that by concentration expansion might be given to research?—I do not wish to speak of any subjects which I am not competent to speak about, but I can imagine in languages and subjects of that kind it would be a waste of energy to have two professors.

20,218. One of the objects which the Gresham Charter contemplated was that there should be some inter-collegiate arrangements?—Yes.

20,219. I know that there are practical difficulties, but would you think it desirable that the medical student should have obtained the degree of Bachelor of Science?—No, I should not.

20,220. Do you think that would be making too heavy a demand?—Yes, the course is such a long one at present.

20,221. I am not alluding to the degree of Bachelor of Science of the University of London?—You mean a simpler degree of Bachelor of Science?

20,222. Yes, modified and connected with a special entrance examination for medical students in which science would take a foremost place?—I think the preliminary scientific studies should always be carried out.

20,223. Which of the preliminary scientific lectures should be given by science professors, and which of them should be given by medical professors: for instance, taking your own subject, physiology?—It could be given by a pure science man. Many of the men who teach medical students are pure science men, but I think one gets more sympathy with medical students if one has previously had a medical training. If the teacher has had a medical training he could see what parts of the science are applicable to the actual life of practice.

20,224. Therefore you require a medical man devoting himself to the pursuit of scientific knowledge?—Yes.

20,225. That he should give up practice?—Yes. I think the taking care of a laboratory would take all one's time if it were done well.

20,226. That applies to botany and biology?—I think there are very few medical men who are chemists.

20,227. It would not apply to chemistry?—Chemistry must be taught by a chemist.

20,228. Do you include other sciences in the medical curriculum?—He must know something of physics.

20,229. And physics would be taught in the pure science?—Yes.

20,230. (*To Professor Adams.*) I think you can tell me whether this curriculum for the Bachelor of Science in electrical engineering at the Harvard University, represents more or less the course which you follow at King's College?—That will be, I think, very nearly the course which we follow. I see there are languages included in the course, but in our engineering course there are no languages included. Generally, the course is very much the same as is sketched out here for electrical engineering and also for the general course in science. There is a general course in science which would also embrace what we should regard as a suitable course in natural science for the new University.

20,231. Your course would not be very different from that?—No; it would not be very different from that.

20,232. Then with regard to your Associateship, you contemplate under the Gresham Charter a degree which would be superior to the Associateship?—I had rather see the Associateship disappear in the honour degree. I should like very much to see such a close connexion between the college and the University that the Associateship would give way to the honour degree.

20,233. You do not wish that the degree under the Gresham Charter should be a lower degree, though it might be a degree different in kind; you do not wish that it should represent less knowledge than the degrees which are given by the present University of London?—No; I am not in favour of lowering degrees in arts or science.

20,234. The object of the movement with which you have been associated was not the lowering in any way of the standard of the degree, but to obtain degrees of a different kind?—Yes, and to have a very high standard.

20,235. To have no separate examination for pass degrees, and to give honours to those who deserved them; you would not differentiate between the two; you would have one examination for all?—If it were practicable at all in connexion with the University to do away with pass degrees and to have nothing but honour degrees, I think that would be a state of very considerable perfection, and I should like to see work in that direction rather than in the other direction of lowering degrees. But I think at the present time we put too much value on simply getting a pass degree, and I rather wish to aim at equality of position than the actual degree itself, that is to say, if some institutions give degrees and others do not, those that do not are put in a very inferior position; I should rather see equality in one direction or in another; either in wiping away degrees or giving degrees on the same conditions in all cases.

20,236. The mere passing of such an examination would in itself be a distinction?—I am afraid I was not quite understood.

20,237. Will you make it clear?—I am afraid it would be impracticable to do away with the pass degree, that is a degree which a man gets by attaining a certain standard, but I wish to distinguish between this degree and the degree obtained by the man who comes out first class in perhaps the same examinations which have been passed by a candidate going in for the pass degree. That is what I meant by distinguishing the honour degree from the pass degree.

20,238. Would the honours man and the pass man be examined in the same subjects?—In the same subjects.

20,239. Therefore the distinction will be that one man will pass without honours and the other man will pass with honours?—Yes.

(*Rev. Canon Browne.*) It is the old Cambridge plan; the pass men were the tail of the honour men.

20,240. (*Lord Reay.*) And the great object of those who with you advocate this teaching University is that the teachers in this University should not be in any way cramped in their teaching by outside influences?—Quite so.

20,241. That the standard should be kept up in the University, not by outsiders but by the scientific standing of the teachers who in a teaching University are the chief elements of success?—Yes.

The witnesses withdrew.

Adjourned to Thursday, the 26th January 1893, at 12 o'clock.

Forty-ninth Day.

Thursday, January 26th, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

The Right Hon. Lord PLAYFAIR, K.C.B., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

W. G. Adams, Esq., F.R.S.

26 Jan. 1893.

W. G. ADAMS, Esq., F.R.S., further examined.

20,242. (*Chairman.*) I believe you wish to supplement the evidence which you gave last Friday?—I wish to make one or two points a little more complete. I thought that the answers I gave at the last examination were not complete, and I should like to add to them one or two points.

20,243. We had better begin with your objections to the Matriculation Examination of the University of London?—With regard to that examination, I wish to make a further statement. In making mechanics compulsory and in separating it from other branches of physics, it may be presumed that the examination in mechanics will be somewhat deeper, and therefore more satisfactory. A matriculation candidate is only required to know four books of Euclid and algebra to quadratic equations, yet he may take *Light* as one of his subjects, which involves the geometry of similar figures. He may take *Electricity* and Magnetism in place of *Chemistry*, but cannot take both *Chemistry* and *Electricity*. Now every student who studies electricity must know something of chemistry, but he cannot study both at the same time, and do all that is required besides, for this examination, so that it would have been better to have required chemistry for this examination. Again the use of galvanometers and magnetic needles implies the use of logarithms and the exact measurement of angles, that is, the first principles of trigonometry. This Matriculation Examination at the beginning of the University career gives direct encouragement to cramming."

20,244. Then I gather you also wish to supplement your evidence with regard to the question of examinations?—I wish to draw the attention of the Commission to points which have been brought forward, which are matters of history, and which may possibly have been brought before the Commission already, but they seem to me to be very important, and if they have not been brought before the Commission I should wish to draw attention to them. The testing of progress or of merit by frequent examination has called forth a set of men who undertake the task of preparing the student often without any view to his real mental progress. With regard to the result of the system pursued at Dublin where there are both resident and non-resident candidates for degrees. There are statistics of different periods of five years from 1860 onwards from which it appears that out of 279 undergraduates who matriculated 270 proceeded further, of whom 186 were resident and 84 non-resident; 115, or 62 per cent., were resident students; whereas 26, or 31 per cent. of non-resident students proceeded to the B.A.; 49 resident students were first class, but no non-resident student obtained the first class.

20,245. (*Mr. Anstie.*) Is this London or Dublin?—Dublin. Taking another five years the result comes out nearly the same: 38 resident students obtained the first class, being about 62 per cent., and no non-resident student first class; only 28, that is to say 23 per cent. of them proceeding to the B.A. Then there is a very important point connected with this matter in a letter communicated by Professor Fitzgerald to "Nature," bearing upon this question of a teaching University for London, which has appeared quite recently and to which I wish to draw attention. He says:—"There is a matter of great importance to "which I fear sufficient importance is not attached by "those who are directing the matter, and that is the "great objections there are to mixing up Universities "and colleges with examining boards. All our students have not that education got by friction with "their fellows and by contact with trained intellects "which no examination can test and which is such a "valuable training, and in consequence our degrees "are the less valuable. London would suffer in this "way. In addition to this London would suffer from "the inordinate importance that would be attached to "external examiners if the University examined "London and external students. The student will "seek a coach whose whole view of learning will be "of the passing an examination type, and who will "infect his pupil with this miserable disease. Gradually the professor himself will be involved in the "vortex, and the whole University will gradually "look upon the passing of examinations as the end of "life for students." I agree in principle with Professor Fitzgerald, who is speaking from his experience as examiner at the London University, as well as from his position in Dublin.

20,246. (*Lord Reay.*) He is one of the Trinity College professors?—Yes; and for some years past he has been examiner in physics at the London University. I also agree with him in his remarks against centralising even the large research works in large laboratories. He says:—"It is to be hoped that those "who will have the privilege of learning in the "greatest city in the world will not be deprived of the "personal influence of its greatest men by relegating "these to some haven of laboratories where no bracing "breath of students shall interfere with the inmates."

20,247. (*Mr. Anstie.*) You seem to be quoting letters written by various other people to the public press. It is not your own evidence?—That is simply a quotation I refer to because I agree with it. Of course, I do not wish to put this before the Commission if it is not desired.

(*Lord Reay.*) I think you had better go on.

20,248. (*Lord Playfair.*) You coincide with that, do you not?—Yes, I wish to state the fact that I coincide with that opinion. With regard to the question of having the same examinations for the teaching Universities and for outside candidates, I think there are objections, as candidates come from all parts of the country. The Senate of the present University have

W. G. Adams, Esq., F.R.S.

26 Jan. 1893.

to draw up regulations intended to impose definite limits upon examiners in their choice of questions, and this will apply even more to practical work, and there will be a danger that it will render the practical examination useless when it is found out that the range of the practical examination is limited.

20,249. (*Lord Reay.*) Then you also want to supplement the answers given to questions put to you by Canon Browne with regard to the extension of University teaching?—There was just one question. I was under a strong impression that there had been an intention to urge the giving of University degrees of the Teaching University where the teaching was given by University Extension Lectures alone. Canon Browne stated to the Commission, that he was not aware that that was the case, but I was under a very strong impression indeed that some years ago it had been urged strongly, and referring to Lord Ripon's evidence before the previous Royal Commission on this subject, and also to Dr. Roberts' evidence, I find that there was ground for the conclusion to which I had come; at least, I thought so, and I should like to answer that question of Canon Browne's if I might be allowed to put it in. I find this answer to question No. 1759, from Lord Ripon:—"One of our objects "in wishing for a teaching University in London is "that our students may have the hope of obtaining a "degree." And again at the end of the same answer:—"I should hope that if a teaching Univer- "sity were established in London it might in the end, "as it saw its way, go beyond that, and make these "lectures, under proper conditions for the strict "maintenance of the very highest standard of educa- "tion, the means of obtaining a degree altogether." Also Questions. Nos. 1762 and 1763 by Dr. Ball seem to me to imply that Dr. Ball understood Lord Ripon as desiring to give University degrees on the lectures of the University Extension Society alone. On the same subject I would also refer to the answer to Question 1802 given by Dr. Roberts to Dr. Ball before the previous Commission. "We believe that "it would be possible to arrange a curriculum of "study in such a way that a student working in the "evening for a period of six or seven, or eight years "might cover the same ground which a student "during three years at the University can cover, "doing the work quite as thoroughly, only that it "would have to be done in sections instead of all at "once, the opening up of an opportunity of that kind "to go through a course of study, which would mean "a broad liberal education with the stamp of a degree "at the end of it." See also answers 1843 and 1846, which I think clearly bear out my contention. That some of the influential authorities connected with the Society for the Extension of University Teaching in London, including Lord Ripon and Dr. Roberts, advocated the giving of University degrees on the results of the lectures and teaching given under that society. It was with a view of showing what that work really was that I distributed my memorandum to the Council of the society. In fact, if there had not been the impression I should not have prepared that memorandum probably, because it was with a view of not allowing degrees to be given at too low a standard that I thought it necessary to produce it.

20,250. My impression is that there is some misunderstanding. Canon Browne maintained that no one wanted to have a degree for University Extension Lectures as given *at present.* That was the point. But what you have read there shows that Lord Ripon and Dr. Roberts, and I think we may add Professor Stuart, contemplated a *modified* course of University lectures which would entitle persons who had attended that modified course to a degree. I think you will admit that there is some difference?—Certainly.

20,251. As Canon Browne is not present I wished to make that observation?—There was one point put by a member of the Commission as regards the distribution of work in the Science Department of King's College. May I put in this table which represents the number of hours spent both in the Natural Science section and also in the Applied Science section. It will give the Commission clearer ideas as to what the work is. It is really the substance of the time table of the prospectus but arranged in a different way, giving the number of hours per week. (*For this document see Appendix No.* 43.)

20,252. Is there anything you wish to add?—No.

20,253. (*Lord Playfair.*) With the large attention which you give to science in King's College, could you explain what is the reason for so few graduates going up to London University?—I think it is, as I stated when I was examined before, that the barrier in our way is the Matriculation Examination. If men come to us for only three years, taking up the first year to pass the Matriculation takes up a great deal of time and more than they can afford to give. If they would give four years then taking one year as a preliminary we have all the means of giving them what they want for the Matriculation, and then they might go on for our three years' course in Science afterwards.

20,254. If the Matriculation was suited to your teaching and was actually really preliminary to it instead of running along with it, do you think many of your students would go up for degrees?—I think they would; I do not see any reason why they should not, because we have all the means for them to prepare for the examinations.

20,255. At the present moment they take your certificate as preferable to the degree of the London University for their purposes?—For their purposes in connexion with Applied Science I daresay it is preferable, but I should not like to say that our certificate will take the place of any degree that they could get—certainly not. The table I have drawn up with regard to Natural Science will, I think, illustrate that point. There we have all the subjects required for the Bachelor of Science or the preliminary science examinations of the University of London; but if we include the teaching for Matriculation we should require an extra year and we should want to make four instead of three years for our whole course.

20,256. Take this year. Your chemical laboratory practice does not seem to be any in winter and after all only 4½ hours in summer—not an hour a day?—Not an hour a day. That is in one year.

20,257. There cannot be very much in that?—No, they cannot do very much. But it is the work for the Bachelor of Science; it is about the standard of the work for the intermediate science examination and for the Bachelor of Science; but if a man goes for the final examination of Bachelor of Science at the University of London he would specialise after the intermediate science, and he would go on working, if he took chemistry, for two or it may be three years, taking practical chemistry in the laboratory for about three hours a day.

20,258. I see, for instance, you give two hours to physics, and two hours to chemistry?—Lectures?

20,259. Two hours a week, that is, is it not?—Yes.

20,260. That is very small?—That is for the first year.

20,261. And 5½ to drawing?—That is the Applied Science or engineering section. What we should consider would be the universal section would be rather what is indicated by "Natural Science" at at the top of the document, the two branches in fact, practically of Science.

20,262. (*Lord Reay.*) These are the day students?—Yes the day students.

20,263. (*Sir George Humphry.*) With regard to what you have said as to the non-resident students at the University of Dublin, quoting I think from Professor Fitzgerald, we had evidence the other day from Dr. Ingram on the same point, and it appears that the numbers are very large; they equal the numbers of the resident students and although the University authorities do not like the non-resident students, and although they do not constitute by any means the best

students, and also because those who are proceeding to any kind of profession must reside, yet in answer to a question which I put to him he said that the influence exerted throughout Ireland by the University of Dublin through its non-resident system was of very great importance and valuable, and that he would not by any means wish that it should be discontinued; so that although as regards the studies at the University it might not be so important yet as regards its educational influence it is very important. That is a thing to bear in mind?—Yes.

20,264. With regard to the examination you mentioned that the examination would be likely to suffer from the admission of non-resident students to them?—Yes.

20,265. I think he said that that was not at all the case; that they gave their examinations quite irrespective of the non-resident students. If the non-resident students came up to the test, well and good; if they did not come up to the test it was their own look out; that did not influence the University examinations. Therefore one does not see that it need influence University examinations in the University of London or elsewhere. The examinations need not be influenced?—Of course at Dublin it is the Dublin University and the residents who manage the whole of the examinations; but if we have a system which has connexion with the country as well as London, of course the provincial candidates must be treated fairly and therefore the examinations must be made to fit them as well as to fit London; otherwise there would be unfairness on one side or the other.

20,266. That is at present the case in Dublin. The examination is conducted by the authorities of the Dublin University and the provincial students come to it. The Dublin examiners make no difference in their examination with respect to the provincial students. They have the option of coming to it and preparing for it. If they can do so, well and good; it is all to their advantage?—It would be parallel, I think, if in London we had our college system established, and then we were to admit to that system without any alteration whatever, all provincial candidates; but in this case I take it if it is a University like the present University of London the provincial candidates already have their rights which must be attended to and therefore there must be a control of the teaching by the syllabus of examinations. I object that the syllabus of the examinations shall govern the syllabus of teaching in the colleges. It seems to me that that is a very distinct point indeed.

20,267. The syllabus of the examination of the University of London could be fixed, and then, if provincial students could come to it, well and good; and then if the examination were a good and high examination, it would lead to improvement in the teaching in the provinces?—It would still mean giving degrees by examinations alone under the syllabus of the examination, and the syllabus of the professors in the colleges would be entirely bound by the examination syllabus; therefore, I think it would leave us probably, as regards teaching, in a worse position than the one we are in at present, when we have no connexion with the University.

20,268. But the syllabus need have no relation to the provinces to be a syllabus in relation to a teaching University in London. The syllabus might be open possibly. I do not see that any harm would result in its being open to provincial students if they chose to come to it. They would see what the position was; they would see that there was no unfairness with reference to them, because it would be quite open to them to come in or not as they please; and the influence of such a syllabus, if a high one would be beneficial to provincial teachers; and in that case a central influence emanating from London might diffuse an important and good effect on the country at large?—It might be good to them, but they might question whether it is doing to them what is justice, by not paying more attention to their wants than is conveyed really in examining them in the subjects which the London colleges teach. I object to the giving of degrees by examination alone.

20,269. I do not see why they should have any ground for complaint about injustice if they knew perfectly clearly and saw beforehand what the position of affairs was, and that if the provincial teachers chose to adapt themselves to it and to improve their course in relation to it, it would be a great advantage to the provinces without in any way doing damage, as far as one can see, to London?—Yes; as far as examinations are concerned.

20,270. (*Lord Playfair.*) I see that you find in training a man to be an engineer through your engineering course for two out of three years, you do not require to teach him chemistry, and for another two half sessions you do not require to teach him physics. Is that so? Have you found that by experience?—We teach chemistry during two years.

20,271. Chemistry one year, and the chemical laboratory the second year?—Yes.

20,272. Then with regard to the other three divisions?—That means two years out of three. The course of lectures and study during the first and second years is the same for all students in the engineering department, during the third year we have a special course for each separate branch of engineering or Applied Sciences, and this is indicated in the time table.

20,273. You have no time to make them go through all the science throughout the course?—No, we have not.

20,274. How is it that you have time for Divinity every week when you cannot spend an hour upon the sciences which immediately apply to the profession that the man is about to adopt?—It is simply three quarters of an hour a week which goes through the whole course. It is one of the regulations of the college with which I have nothing to do.

20,275. But we may not be satisfied with the regulation; we may think that if you cannot afford to give in one of the important Applied Sciences an hour a week, on account of the time, possibly it might be spared from Divinity?—Well, I think I must leave that to the Principal to deal with.

20,276. (*Mr Anstie.*) I do not propose to go into the general question of policy that you have agitated to-day, but with respect to the question of University extension, are you aware that we have received evidence, which of course is the official and conclusive evidence, from Professor Stuart and Dr. Roberts, and that they both agree that the University extension course should not qualify for a degree without final examination?—I am glad to hear it. The point I wished to urge was that the education at present given at the University extension courses was not University education, and could not be recognised as such in a teaching University.

20,277. (*Professor Sidgwick.*) I should like to get your view rather more clearly with regard to the relation of outside examination to teaching upon which Sir George Humphry was questioning you. As I understand, you consider that the experience in the University of Dublin is only partly relevant to the new situation that would be created?—Yes.

20,278. If I understand you, your ground is that the University of Dublin is in a position of granting a favour by opening its examinations?—Yes.

20,279. Whereas in the other case the institutions over the country who prepare for the existing examining Board called the London University, would have a claim to a strict impartiality of treatment?—Yes, I think so. I think the Senate would be bound to put a restriction upon the examinations in accordance with past history.

20,280. Then a question of great educational interest upon which I should like your answer is, how far this condition of strict impartiality would tend in different departments of study to a divergence between the examinations adapted to those who had

W. G. Adams, Esq., F.R.S.

26 Jan. 1893.

been taught by a particular certificated teacher, as compared with a strictly impartial examination. Before you answer, let me explain my reason for asking the question in that form. As far as my experience goes, this degree of divergence would vary considerably in different departments. For instance, in Greek and Latin as I learnt them at Cambridge, it appears to me that there is no particular ground for securing impartiality as long as the examination is a good one; on the other hand, in the subject of moral science, which I have been for some years engaged in teaching, it appears to me that the conditions of preparing for an external examination, may be more or less hampering and paralysing to a teacher. Therefore under those circumstances we have those two extremes?—With regard to the scientific subjects, I think our teaching in the elementary part certainly must be very much the same. When it comes to the higher branches it is possible that the teaching in different institutions may strike out rather in different directions; but I think our teaching will be limited by the demand which there is for the particular kind of teaching, and that we should be as it were, governed to a great extent by what people ask from us; and our teaching therefore will be kept closer together in the different colleges, in consequence of the demand which will be made for the particular kinds of teaching required; and that when we come to the higher teaching which perhaps will be less ultimately connected with examinations, it would be rather an advantage than otherwise, that different institutions shall take different branches of the higher teaching. There is no reason why it should be of the same character in different institutions.

20,281. What I rather had in view was this point; assume two things; assume that you have a teaching University in London, and that you have a demand which is recognised for impartiality in examinations; then we may assume a reasonable amount of good will on the part of the professors of the teaching University. Suppose they control the examinations, how far will examinations such as they would make, adapted for their own course of teaching, be really wanting in this characteristic of impartiality? That seems to me to be the exact point which Sir George Humphry was putting; is it true that examinations conducted by reasonable men in one University would not be really impartial? It seemed to me, as I was saying, that the danger is much greater in some subjects than in others?—I see no reason whatever why even if the examination is limited to a particular college, it should not be entirely impartial, so that an outside candidate going in for that examination should be treated quite fairly; in fact, I hold that at the present time our college examinations are distinctly impartial, and it is not necessary that they should be carried on by any one else than the professor in order to be made impartial.

20,282. What I mean is would they be impartial as between students taught in the college and students taught elsewhere?—In the same subjects I think they would be perfectly fair, otherwise there must be some defect in the teaching. The subject cannot be properly taught unless that is the case.

20,283. Then you would not think that in the subjects with which you have to deal there would be any unfairness to the outside students in advising them to go into an examination controlled by you and adapted to the needs of your students?—No, I do no think there would. Possibly in Applied Science, some branches of which are studied more in one part of the country than in another, the amount of attention given to one branch and the examination in it in one place might not suit a candidate from another part of the country. In fact, his demand would be for teaching in particular branches to which in one of our London colleges attention might not be so fully given. There might be a question of unfairness, and the man might say, "You are not giving what I want, "I must go elsewhere for it."

The witness withdrew.

J. A. Baines, Esq., I.C.S.

J. A. Baines, Esq., I.C.S., examined.

20,284. (*Lord Reay.*) You are a member of the Bombay branch of the Indian Civil Service, and you are still Census Commissioner for India?—Yes.

20,285. You wish to give us some evidence with regard to the usefulness of a London teaching University in preparing gentlemen who wish to pass the entrance examination for the Indian Civil Service?—Yes. I do not know whether the Commissioners are in possession of the new rules regarding the entrance examination for the open competition of the Civil Service. The choice of subjects is very wide, and is admittedly framed in conformity with the ordinary course of University study. Speaking generally, classics, mathematics, physical science, history, law, logic, and moral philosophy, and political science, all appear to me to have a fair chance, and to come well within the scope of teaching already available in all the principal Universities. If there be any bias in the curriculum, it is in favour of the course provided at Oxford, and this is, I am aware, the opinion of many of the members of that University. But I cannot say that the marks given for mathematics and science place Cambridge or London at a disadvantage, whilst in the matter of law and history, they are probably all on a level. I see that some of the branches of law and political economy that used to be compulsory after the open competition, are now optional for that examination, so the existing University training is thus brought into extended use. The only subjects, therefore, that appear to me to be at all beyond the limits of the ordinary course, are French and German, in which, judging from the first year's papers the examination seems to imply somewhat more special preparation than is, or, I should say was, in my day, available at the University at least in the colloquial portion of the subject as distinguished from the academical. On the whole, I am of opinion, so far as my acquaintance with this part of the subject goes, that little or no change is required in University teaching, to give any averagely studious and intelligent member of the University a fair chance of success in the competition.

20,286. You do not think any change need be made, to put it plainly, in order to enable the University to enter into competition with those gentlemen who are usually called crammers?—No, certainly not. Perhaps I ought to qualify that so far as to say that in French and German I think, from what I know of the course of studies at the crammers, they have an advantage, but in the greater portion of the Syllabus in the new rules they would have no advantage.

20,287. Then you think the Syllabus in the new rules is distinctly so framed that it gives the University students an advantage?—Yes. I think that was the original intention in altering the rules judging from what I saw of the correspondence at the time.

20,288. And you think that object has on the whole been attained?—Yes, I think so, certainly.

20,289. What you have stated has reference to the entrance examination. Now we come to the selection of candidates after they have passed the entrance examination. Of course there is a programme laid down for that?—Yes.

20,290. Perhaps you will tell us how the University will affect their interests. Perhaps you will give us something of your views on that subject?—The rules under the present system are very materially different from those that were in force up to this year. Under the rules now in force one year's training in special subjects is now prescribed,

instead of two ; the compulsory subjects are limited to three, so that the test is presumably very severe. A premium is placed on residence at a University, and the two London Colleges, University and King's, are amongst those prescribed. In my opinion, there are certain great advantages to be gained by membership of the University of London, in the circumstances of a selected candidate. To confirm me in this view I may perhaps quote an experience of my own in 1868. At the end of my second year at Cambridge, a couple of months after I had passed in the open competition, I received a letter from the Civil Service Commissioners pointing out that the special subjects in which we were to be examined every six months were of a nature to require, in the opinion of the Commissioners, my full time, and it was also pointed out that especially in Law and Oriental Languages, facilities for instruction existed in London which were not available elsewhere. Quoting from memory I may say that that is almost verbatim the letter I received. I accordingly withdrew from the University, on the advice of my father, and I had no reason, so far as my studies are concerned, to regret the step. But I must add that several of my contemporaries who passed with me, disregarded the suggestion of the Commissioners, and managed to complete the course for their degree without injuring, so far as I know, their position in the examination which passed us into the Civil Service. I mention this episode to show what was at that time the opinion of the Civil Service Commissioners on the merits of London training. Nor do I think that with the raising of the age of competition there is likely to be found a loss of the special advantages of University life, as it is lived at Oxford or Cambridge, which can be held to outweigh the corresponding gain, in certain directions, of a year in London. In the first place, the rules allow full time for the candidate to have taken his degree, even if he present himself for honours. He will thus have enjoyed all the social and moral advantages that residence at a college affords, and he will be of an age when the comparative freedom from supervision of London life will be less felt than under the late rules, when a boy was practically segregated in some instances from the rest of the University if he joined after passing, even if he had not previously enjoyed London under the comparative immunity from corporate opinion and supervision afforded by a course of study under a private tutor. From another point of view, London, as the Commissioners told me, has its advantages in the matter of study for the second or final examination. In respect of learning the vernacular languages, which is a subject to which the Commissioners attribute great importance, the indirect aid obtainable in London is considerable. I am not in a position to speak as to the efficiency of the teaching of the vernaculars at Oxford or Cambridge, but in London there are always to be got together a fair number of natives of India studying for the Bar or going through their course of Medicine or Engineering. It is through them only that the tyro in Eastern pronunciation can pick up the correct accent and the exact distinctions between sounds in which the shading is so delicate that a foreign teacher is apt to exaggerate it when trying to impart it to his pupil. In turn, again, the constant intercourse with British students of education and good breeding will help to correct the native pronunciation of English, which is growing, in my experience, worse and worse, in consequence of the absence of proper instruction at starting. Sir Raymond West, I recollect, casually touched on this point in connexion with the freshmen in the University of Bombay, and I am able to confirm his opinion by my own experience as educational inspector, and also as an amateur, when visiting district schools. A class writes very good dictation from the mouth of a native assistant master, but is scarcely able to get down a word correctly from the mouth of a European. This is partly corrected at college, but I am not alone by any means in thinking that the bad habit instilled in the first standard clings to the graduate. I would also just cursorily mention that it seems to me a good way of bringing the two classes, European and Native, together in a friendly way that is useful to the young civilian, as well as the native student, and both have much to learn from, and to teach, each other. London, again, has its great advantages for the study of law, in its practical aspect. The attendance at the various courts of law, which was prescribed when there was a two-years' course of special training, has been abandoned in the shorter course. I think, however, that no civilian should neglect to attend at intervals a few courts, criminal and civil, in London. If there be time for him to take notes for the inspection of his lecturer, so much the better, but I think it is very important for him to have learnt something of the procedure of a court, still more, that he should appreciate the relations that subsist between the Bench and the Bar. For as soon as he has passed an examination in a vernacular language, in India, he will be set to try minor cases under the criminal law which he has learnt in England, and with the present spread of law studies, of which Sir Raymond West spoke the other day, there is seldom a case so petty that in a head-quarter town, at all events, there will not be a legal practitioner engaged. So it is important that the young magistrate should be able to hold head against perhaps a practised lawyer, from the very first. Then there is a subsidiary point in connexion with the University in London for the training of students in India. I think it would be worth considering whether a special officer should not be nominated, to act as general adviser on the course of study and the best means of following it, in the case of each individual. As a rule, I believe, there is the very natural tendency on the part of lecturers to single out for advice or attention the students that they find most appreciative of their teaching, and to let the rest get whatever benefit they can from the lectures. An adviser on Indian studies, or whatever he may be called, would go further than this, of course, and his functions would not be confined merely to the candidates for the Civil Service, but to Natives and others from India, engaged in other branches of study. He would be the means of bringing the men together, and of arranging in various ways for some useful or interesting information to be imparted in supplement of the regular course required for their examinations. For example, he would be able to get men of experience in the different parts of India to deliver informal addresses two or three times a term on such subjects as the general work of a junior civilian; the land administration in the different provinces, and such like topics. He might even go into practical matters of every-day life, such as outfit, shooting, intercourse with the Native Chiefs, and so on, all of which fall outside the prescribed subjects, but are none the less useful. In the case of native students the want of such a mentor is still more felt, and many of them come to grief, I hear, for want of sympathetic assistance and advice. Besides, as they come over in greater numbers they are the more likely to herd together in coteries of their own, and thus to lose the indirect advantages of an education under English influences. There is a tendency, I understand, to encourage a native youth to retain in London as much of his own ways and peculiarities as possible, in order that he may return to India as little changed as possible from the standard of his caste, but with all the advantage of an English degree. This is a tendency that I think should be counteracted, as the main object of encouraging these students to come to England at all, is not that they may turn out merely what the Germans term "*brodgelehrt*," but that they should avail themselves of all the means within their reach of profiting by trituration against British youths of their own age and pursuits in life. Then I have here a few notes about the special subjects which are required for examination. The most important of these sub-

J. A. Baines, Esq., I.C.S.

26 Jan. 1893.

jects according to the Commissioners' Syllabus, is a practical knowledge of the rudiments of the vernacular of the province in which the selected candidate is to be employed, if he passes the final test. This test is likely to be, as I have said, a severe one. It includes sound grammatical knowledge, facility of translation, and of conducting a simple conversation. The grammatical and translational parts of the course can easily be arranged for, no doubt, but as to the rest, the lecture should be supplemented by opportunities for conversation, and for learning not only the words but the expression, and what is called in music, the phrasing, of native speech. Besides the aid of native students which should be enlisted, as I have already said, to read aloud and talk with the others, it would be a help, I would suggest, to have at hand a supply of revenue and magisterial cases, such as come up every day before a junior officer, written in a fair vernacular hand. The ordinary official phraseology will be acquired along with the character, whilst the magisterial record is of use, too, in exhibiting in actual operation the criminal codes, which have to be mastered. I should say that these cases can always be got from the Government on application, because a certain number of them are kept for only a limited period, and then destroyed. The next subject is Indian law, but only two of the codes are compulsory, namely, those dealing with magisterial and the higher criminal practice. These suffice for the junior civilian, except, perhaps, in a few of the non-regulation provinces, where a little civil work has to be also done in early years. As far as the criminal codes are in question, annotated editions are invariably used by lecturers, I believe, and though Sir Raymond West spoke of the case-law of India as comparatively insignificant, it is yet already enough in bulk to render it necessary for the young magistrate to know not only the letter of the law, but also what the High Court have decided is the meaning of that letter. This adds to the task of learning up these codes, but the addition is worth the trouble. The optional subjects under this head are the Civil Code, the Contract Act, and Hindu and Muhammadan law, on the last two of which special lectures will no doubt be available, and the examination will probably be confined, to the text-books. Then follows a subject called the history of British India. It entails also a competent knowledge of the history of the former periods as well as of the geography of the country, so far as it is involved in learning the subsequent history. There is also the volume known as Hunter's Indian Empire, on which can be hung a general description of almost all the special branches of the public administration if it be found that the time allowed is sufficient. The subject, however, is a very wide one as it is. There is an optional subject allied to this which is closed to those who present themselves for examination in it at the open competition. This is political economy. It includes, it is true, the works of Marshall and Walker, but the five remaining works deal chiefly with finance and the currency topics requiring special teaching. Amongst the optional subjects are included Sanskrit and Arabic, under the same restrictions as political economy in relation to the open competition, and Persian. The test in all of these is purely literary, so it can be preceded by lectures only, without the need of colloquial aid by the natives of the country. I should say that as far as regards the colloquial knowledge of languages I quite agree with Major-General Plunkett who gave evidence before the Commission, that any Arabic book-work can be taught by a European professor, but in order to get good pronunciation it should be taught by the natives of the country. There are five or six languages prescribed, and, speaking more especially of Burmese, it is almost impossible for a man to acquire it without hearing a native speak it.

20,291. I gather from the information you have given us that most of the subjects which a young civilian would have to get up, are included in the Arts Faculty?—I think most of them.

20,292. The law is, of course, a most important element, but not a predominant one?—When I said at the beginning of my evidence that all the subjects appeared to me to have a fair chance, I was going on the marks that are given to each. I looked at the subjects that might be brought together by a man coming from the University, and it seemed to me that any student whose bent was in a particular line might follow up that bent and have as good a chance of passing the examination as any one else. The Arts course includes English language and Literature; English Composition; Greek and Latin Language and Literature; English History. This goes rather beyond the ordinary course. Greek and Roman History, General Modern History (period to be selected by the Commissioners); Political Economy and Economical History, Logic, and Mental Philosophy and Moral Philosophy, which are the points which I see from the examination papers led me to think that the Oxford curriculum had been very carefully provided for. Roman Law, English Law, and Political Science, including Analytical Jurisprudence, the early History of Institutions, and the Theory of Legislation. Then there come Mathematics of two descriptions, Pure and Applied, under two grades, ordinary Mathematics and Advanced Mathematical subjects. Then seven branches of Natural Science, including the Organic, Botany and Zoology, Physiology, as well as Elementary Chemistry and Physics, Higher Chemistry and Higher Physics. I should mention that the English Law, the Political Science and Political Economy, and Economical History are all subjects which, when I was a candidate, were in the subsequent examination; so that now, unless a candidate has taken up those subjects for the open competition, he will not have any training in them in the subsequent year.

20,293. They are optional for the open examination?—Yes, and they are omitted from the subsequent course.

20,294. So that he can do absolutely without them?—Yes, he can pass examinations and go out to India without a knowledge of them.

20,295. I suppose you would say that is undesirable?—I am not prepared to criticise the Syllabus. I could give a personal opinion.

20,296. I should be glad if you would give your personal opinion?—My personal opinion is that the Theory of Legislation and the History of Constitutions is extremely valuable to a young civilian, but the opinion must be taken for what it is worth, being merely a personal one.

20,297. The University would have no difficulty whatever in providing courses of instruction for a young civilian (the candidate for this examination) which would fit this examination absolutely?—Perfectly. I think that both in the Arts and the Science course there would be no difficulty whatever—and Law.

20,298. The Faculties would have to appoint a joint committee. That would probably be the best form of a Board of Studies for these Indian Civil Service students. I include the Faculties of Arts, Science, and Law?—Yes, if it is necessary to appoint a Board at all.

20,299. I think it is necessary from what you have pointed out, that the student should have an adviser. If there is to be an adviser he in his turn would find it very convenient to fall back on a Board of Studies. Such an adviser might be selected from the ranks of retired civilians?—A retired civilian officer of Indian experience. I would include a Judge of the High Court, in that term.

20,300. Of course civilians are the greater number?—Yes.

20,301. And you distinctly hold that it would be well for a young civilian to reside in London, and to attend the various Faculties from the beginning for both examinations—for the open competition and for the after examination of selected candidates?—My opinion is restricted to the subsequent examination after passing the open competition. I do not think

the advantages of London University would be so great for the open competition as for the subsequent.

20,302. The only advantage would be that if he comes to London for the subsequent examination, it would be an advantage to him to have studied there for the open competition?—It would be one advantage, but I do not think that would be more especially enjoyed by London than other Universities. I think that is a point which is open to question; but my opinion is restricted simply to the subsequent examinations.

20,303. Another advantage would be that some of the subjects which he must take for the subsequent examination, he might take whilst he is studying for the earlier one, which would reduce the number of subjects which he has to take up for the second examination?—Are you referring to the case of the London University having tho facilities over the others?

20,304. I am referring to the University giving these facilities for both examinations. If he only finds in London advantages for the second examination he, if he could find all he needs in London, would be compelled to attend elsewhere for the open competition. I do not lay much stress upon it, but it would be an advantage?—It would be an advantage, but he might take them up elsewhere than in London.

20,305. Your contention is that he must come to London for the second examination. From that I drew the conclusion that if he is in London for the open competition he will be able to take up some of the subjects of the subsequent course whilst he is reading for the first course?—That would be one advantage.

20,306. Native students are composed of two classes: one is the class who come to be trained for the Civil Service, or as lawyers, medical practitioners, and engineers. For those students you contemplate a similar course to that for the English students; but there is another class of which the number is now limited, but which will certainly be a growing class—the sons of Chiefs?—Yes.

20,307. For them it would be an advantage to lay down a special course. What do you suggest?—I think a special course might take in any of the subjects that it would be advisable for them to be grounded in.

20,308. Political economy?—Yes; political economy; the Theory of Constitution; the Origin and Theory of Early Institutions. I think Jurisprudence also, to a certain extent.

20,309. And Indian History?—Yes; Indian History. I should include in Jurisprudence the outlines of International Law, but not taking it up in detail. In most of the Standard works on Jurisprudence, I think International law is touched upon in quite sufficient detail to be useful to students of that class. I should also think that the ordinary course in English literature would be of great advantage to them.

20,310. And in their case the adviser of whom you have spoken would be of very great importance?—He would be himself a scholar, and experienced in the circumstances of these Chiefs in India, and would be the best possible adviser as to what course they should pursue.

20,311. Is there anything you would like to add?—No; there is nothing more. I only wish to make it quite clear with regard to the open competition, that, as far as I am acquainted with, the course of studies at Oxford and Cambridge at present, the advantages of London are not greater than the students would receive there, though they are certainly equal to them, and perhaps in Physical Science a little greater. But for the Arts course, Law, and Modern History, I fancy the older Universities would hold their own. I wish to make that quite clear.

20,312. We are comparing Faculties in existing Universities with those of a University which does not exist?—I was judging that from the nature of the examination papers.

20,313. (*Sir George Humphry.*) I was not quite clear in what points you feel that the Oxford and Cambridge students would be at a disadvantage as compared with London?—I think that in the points of Law and Science, speaking generally, the teaching in London would probably be more practical than at Oxford and Cambridge.

20,314. Those are the two points?—Those are the two points that I had chiefly in my mind in giving the answer. It was with reference specially to English and certain branches of Physical Science.

20,315. Law, of course. There would be opportunities of attending the Law Courts especially?—For the subsequent examination most especially.

20,316. And Science?—For the open competition.

20,317. I do not know in what respect the advantage in Science ought to be greater?—My knowledge of the University dates from some years back. Of course there may be great advantages in Cambridge since my time.

20,318. I was going to say almost that, if your knowledge is confined so far back, it is scarcely knowledge at all now?—I have heard that said since I have been back in England.

20,319. You ought to pay Cambridge a visit, and Oxford, perhaps, also. There have been enormous advances made in the scientific teaching in both Universities. In what points do you wish the University to modify itself so as to adapt it more fully to the teaching you require for the Civil Service of India? I do not quite know what were the special points you want to urge?—I was speaking rather at a disadvantage from not knowing the facilities for teaching at present in modern languages.

20,320. I am not speaking now of the relative advantages of London and the other Universities, but in what respect would you wish a University in London to be modified so as to adapt itself to the teaching for the Civil Service of India? I want to know why you would wish it to depart from the ordinary and regular teaching, such, for instance, as takes place usually in Universities?—I think I would rather leave that question to be answered by those who are more conversant with the actual teaching of the University than I am myself.

20,321. You think that what you call the preliminary examination—the matriculation at the University of London, and the preliminary examination at the Universities of Oxford and Cambridge—would be suitable examinations, that is to say, in Classics and Mathematics?—I certainly think they would form a good basis.

20,322. In some of the branches of science?—They would form a good basis, but they would not be sufficient.

20,323. What would you want in addition?—It seems to me that the examination for the open competition now is rather for a man in his third year.

20,324. Such subjects as——?—Physics and Mathematics.

20,325. Mathematics, with a physical application?—Yes.

20,326. What you wish would be that there should be instruction. (I do not quite know what special instruction you would wish) added to the ordinary instruction given at the University?—I do not think that any addition is needed. I said that, on the whole, I am of opinion, so far as my acquaintance with this part of the subject goes, that little or no change is required in University teaching to give any averagely studious and intelligent member of the University a fair chance of success in the competition. It seems to me from a comparison of the papers which are given in the University Calendars, and what I remember from my own course of studies, that at the end of his second year or the beginning of his third, any averagely studious man would have a fair chance of success.

20,327. For the special competitions you would desire that an addition should be made to University teaching, such, for instance, as the languages?—Yes. The languages most certainly.

20,328. The vernaculars?—Yes.

J. A. Baines, Esq., I.C.S.

26 Jan. 1893.

20,329. With regard to the vernaculars it appears that they are so very various and extremely different that even Hindoos coming from different parts of India cannot communicate with one another?—That is so.

20,330. And therefore it would be impossible almost to have teaching. I do not know how many vernaculars there are?—I think there are six prescribed. There are 110, according to my census figures, but the ones taken up and prescribed for a candidate are Hindostani for the upper provinces; Bengali for the lower; Tamil for Madras; Marathi for Bombay; and Burmese for Burmah. Hindostani, Bengali, and Marathi are three more or less allied languages; and Tamil and Burmese are respectively separate.

20,331. How many vernaculars for each student?—No student takes up more than one.

20,332. But still they are all taken by different ones?—Yes.

30,333. There would have to be teaching in each of these several vernaculars?—Yes, there should be. That is absolutely necessary. It is a point upon which the Commissioners lay great stress.

30,334. And that you think ought to be attended to by a University?—Yes. A University which undertakes to train candidates before they are passed into the service.

20,335. You mentioned that the natives who come to London are liable to form coteries, and in this enormous population to become rather isolated?—That is my opinion.

20,336. In the older Universities, where they enter a particular college, that is not so much the case; they are perhaps more thrown into the way of English students, and so become acquainted with English habits and get more English education. That is an advantage perhaps in the older Universities?—I think the education they get in London is of a rather wider character. They come rather older than they used to do, and the knowledge of English life they get is more that of a man of the world. I am not prepared to say that the intercourse with the University members would not be closer (in fact I am pretty certain that it would be) in Oxford and Cambridge than in London.

20,337. They would not be induced to form such coteries?—No.

20,338. But on the whole Universities at present are sufficiently well organised to prepare students for the first stages of their work in India; but when you come to special students they would require some alteration and extension?—Yes. One advantage to native students coming to London, from what I have heard from several of them on their return to India, is that they pick up what is to them a considerable pecuniary addition to their income by giving lessons in languages.

20,339. (*Mr. Palmer.*) I see there are 56 appointments announced in the paper for next summer?—Yes.

20,340. I was going to ask you about how many candidates would there be, roughly speaking, for that competition?—We have nothing to go on yet in that respect, because the new rules came into operation only for the examination of August 1892, and very few candidates appeared for that. There were a little over two candidates for each place, but judging from previous experience I should say one would expect over three for each place.

20,341. And these candidates would be partly native students and partly English. What would be the proportion of native students coming to England to take part in the competition?—That is a point on which I have heard very varying opinions expressed. I have not enough to go upon to give any opinion. Some people think that raising the age will enable more students to come; others think that the additional expense will deter them from coming.

20,342. You could not give me the relative number of students, English and native, who would be influenced by any course of instruction given by the University for the Indian civil appointments for the open competition?—Altogether one might count them as 200.

20,343. I rather gathered that it was your opinion that London from its position as a metropolis would attract native students rather than the older Universities of Oxford and Cambridge?—That is my opinion.

20,344. And you think that London University if it were metropolitan in character ought to make provision, not so much for the first examination but for those subjects which would be brought into the second or final examination of students before they proceeded to India?—Yes.

20,345. The existing examinations of the older Universities you consider sufficient for the preliminary examination at present?—Yes.

20,346. Can you say how many of those who present themselves as candidates are either members of the University or private students?—I cannot say There has been considerable discussion about it since the examination in August, I think, from the fact that 18 candidates out of the 30 or so were at one or other of the Universities for what may be considered the whole of their education except the final polish, when they would spend some months under a private tutor in London. It was doubtful whether they should be credited to him or to the University. I mentioned the number of 18 from having seen it in the papers. I am not quite sure about the real figure that the great private teachers in London claim.

20,347. However that might be in a University situate in a metropolis like London, there would be ample opportunity for those studies which required special treatment, receiving some such special treatment under the University for the advantage of Civil Service candidates?—I think so, certainly.

20,348. Those particular subjects in which a Board of Studies in any of the Faculties would have to consider the needs of Civil Service students, I think you particularised were mostly in languages and some branches of science?—Languages and law chiefly.

20,349. (*Professor Sidgwick.*) I regret that I was unable to be present during the first part of your evidence, but, if I have understood rightly, your evidence relates only in a secondary way to any preparation that a new University might attempt to give towards the open examination, and it is not with that that you are primarily concerned?—I think with regard to the open competition the course already provided is enough; but my evidence has been chiefly directed towards the subsequent preparation, for the final examination.

20,350. There is also another point in regard to the open examination. I have not heard any allusion made to the existence of certain persons called crammers; but that is, of course, a consideration of very great importance in dealing with preparation for an outside examination of this kind; that is, that it is not improbable that teachers who prepare entirely for that examination will win the day in competition with the University that cannot, and ought not to, aim at preparing for an outside examination. In the case of Oxford and Cambridge the competition is less close because, of course, a considerable number of those who desire to obtain Civil Service appointments would also be glad, for various reasons, to reside at Oxford and Cambridge, and obtain a degree there. Therefore, the crammers do not compete so closely, but they would be very severe competitors for the new University if it tried to prepare for the open examinations. Do you not think it is most probable that in that kind of competition, speaking broadly, the University would not succeed?—I think the new rules rather provide against that. The examination seems to me to be based more on the regular course of study at the University and less on the knowledge that can be best acquired under special training. I think the competition of private tutors with Universities, which was undoubtedly very much in favour of

private tutors under the old rules, has now been rather biassed in favour of the University.

20,351. But suppose that a student is in London and not in Oxford or Cambridge, which is what we have to consider, and suppose he has the alternative of going to private tutors whose whole aim is to prepare for those examinations, who study all the conditions of obtaining marks, and whose career in life depends upon their success in preparing for examinations, do you not think it is, in the long run, probable that the students for examination will rather go to these crammers. Will not the University be always under the disadvantage that the teachers do not aim at preparing for a particular examination, and it would be undesirable that they should aim at it?—I think that, directly, the change has been against the private tutors, because the student who goes up for the competitive examination, not very confident of his own success, would like to have another string to his bow in getting a University degree; whereas, if he had devoted his whole time to private tuition he might have to go through the University course; so that if he devoted himself to a learned profession, he might be thrown back two or three years, and enter it at a later stage than his contemporaries. It seems to me that that is one of the advantages that the Universities have under the new rules; that a member of a University has had an opportunity of studying in such a way, that on failing for the open competition he can at once devote himself to another profession, and enter that almost at the same age as that at which he would have entered the Indian Civil Service.

20,352. And you think that even in the case of London that will enable the University of London to compete successfully with private tutors?—I had rather confine my observations to the subsequent training of the University of London.

20,353. With regard to that, I suppose, that the University might expect to get assistance from Government with a view to this training?—I think that is provided for in the rules. There are certain selected Universities in which Oxford, Cambridge, Dublin, University College, and King's College are included already; that is, they have been prescribed for residence of students, and that being so, logically it seems to follow that the Government would favour them in the same way.

20,354. As I understand now there is a fund of 2,000*l.* a year appropriated to giving endowments to Universities that prepare selected candidates. It is entirely within the discretion of the Government to what Universities the sum should be given, under the condition that they may not give more than 500*l.* a year to any one?—I believe that is so.

20,355. Then you would conceive that the University of London might fairly claim to have 500*l.* a year?—In my opinion its claim would be as good as, and personally speaking I think better than, that of the other Universities.

20,356. In fact, from the advantages of the metropolis it ought to succeed in drawing candidates there?—I think it should be the training ground for the subsequent examination.

The witness withdrew.

EDMUND WHITE, Esq., I.C.S., examined.

20,357. (*Lord Reay.*) I think you have retired from the Bengal Service?—I have recently retired.

20,358. You were Director of Public Instruction in the North-West Provinces?—The last post I held was Director of Public Instruction in Allahabad.

20,359. You were intimately associated with the movement in favour of a University at Allahabad?—Yes, it was initiated soon after I took office.

20,360. Some account of the constitution of the Allahabad University where it resembles the constitution of the Bombay University would be useful as we have had evidence with regard to the Bombay University?—Under the Act by which the Allahabad University was constituted its lines were laid down almost identically with those of the Calcutta, Madras, and the Bombay Universities which, as probably the Commissioners are aware, were originally founded on the lines of the University of London. Under that Act the University was simply an examining body. There was no special recognition of the existence of any colleges; the University undertook to examine students who came up, provided they had passed a certain matriculation examination, and had kept terms in an affiliated college, but there was nothing in the constitution which provided that these affiliated colleges should be recognised in any way as part of the University governing body. When the Act came down to us in Allahabad to be given effect to, we were of opinion—when I say "we" I refer myself as a representative of the Government and the leading persons who were concerned with working out the University Act—that measures should be taken in the constitution of the University to recognise the corporate existence of colleges as forming an essential part of the University government. We therefore proceeded under a certain section of the Act, by which we were required to draw up rules and regulations, to build up a regular constitution for the University. We provided that the principal colleges should be *ex officio* represented by by their principals upon the governing body of the University. It was also provided that certain other officials, the Director of Public Instruction and certain officers in his department, who were specially occupied with higher education, should be *ex officio* members of the governing body. By these means we secured the representation of an element which had a permanent interest in the educational work of the provinces, and we made the great change, that whereas in the Calcutta University the executive or Syndicate had been simply elected from the members of the Senate without any special means being taken to secure the representation of the colleges, we provided that the first element to be considered in the University government was the colleges themselves, which really made up the life of the University. The constitution referred to is embodied in the regulations and sanctioned by the Government. The University executive therefore practically consisted of the principals of executive colleges associated with certain permanent officials, and a very strong sprinkling of competent outsiders. That is the general outline.

20,361. And the programme for the examinations is laid down by the governing body of the University?—The programme of examination is laid down in the first place by the Faculties.

20,362. Perhaps you will explain how the Faculties are constituted?—The University at present consists of two Faculties, Arts and Law. The Faculty of Arts consists of a limited number of fellows elected from the Senate. The number was restricted to 25, and includes the principals of the colleges, and the leading professors in these colleges. The Faculty therefore consists almost exclusively of professional men. The scheme of the examination and courses of study were, in the first place, drawn up by the Faculty, which thus consisted of experts and professional men. They are then presented to the Syndicate where they are discussed and finally laid before the Senate for approval and discussion. The Senate consists of a numerous body of educated men of all classes. By the above method we insured that in the first place the elaboration of the courses of study should be in the hands of principals and professors of colleges who would have to teach the courses.

E. White, Esq., I.C.S.

25 Jan. 1893.

20,363. Therefore the preponderating influence in drawing up the programme of the examinations rested with the teachers of the colleges?—Yes, that is the main point.

20,364. And it was very seldom that their suggestions were set aside I suppose by the Senate?—In substance up to the time I left India they had never been set aside. Of course suggestions were made, but substantially the schemes of the Faculty were always accepted.

20,365. Had you any difficulty in finding competent examiners?—Our rules required that in each subject there should be one external examiner, the other examiner being a professor in an affiliated college. As we were enabled to get examiners from either of the Universities, Calcutta, Bombay, or Madras, we had no difficulty in obtaining competent examiners. During the last year we employed examiners from Calcutta, Bombay, and Madras as external examiners.

20,366. Your affiliated colleges were partly Government colleges and partly colleges independent of any Government influence except that they had Government aid?—There were two Government colleges and three were aided colleges, but the chief income of those aided colleges was the Government grant. Consequently the Government had potentially a very strong voice in the management of those colleges.

20,367. Did the Government exercise a considerable influence over those three colleges?—The management of those colleges was to a very great extent in the hands of the Principals. The Principals consulted with me as Director of Public Instruction to a great extent, as to any important change that they proposed to introduce. I do not know any instance whilst I held the office of Director of Public Instruction of any orders being sent from Government to the aided colleges to adopt any special measures. We carried on the government in consultation with the Principals. It was a matter of discretion.

20,368. You cannot recollect any case in which the Government interfered, for instance, in the appointment of a teacher in an aided college?—No. The sanction of the Government was required for the appointment of professors in all colleges which were aided, but in no case was it necessary for Government during the time I held the office to veto an appointment.

20,369. But the Principal of an aided college always informed you of any new appointment on his staff?—Yes.

20,370. The information was given as a matter of course?—Yes.

20,371. Your experience is the same as mine in Bombay, that interference was an exception, and that when you consulted the Principal in an informal way matters were easily settled?—Yes. During the time I was in office we had highly competent Principals in charge of the colleges, in whom we had every confidence; so that the question never arose of disallowing a professor nominated.

20,372. In the Faculties the Principals of the Government Colleges and the Principals of the aided Colleges formed a harmonious body?—Yes.

20,373. There was never any dividing line between the rights of Government colleges and the rights of aided colleges?—No, none during my time. Of course considerable differences of opinion arose as to the courses of study, but there was no question of the Government colleges on the one side and the aided colleges on the other, except in one point. There was a central college at Allahabad. Allahabad is the headquarters of the Government, and located in the town where the University is. Muir College has a stronger staff than that of any of the other colleges, and in consequence of that larger staff and in consequence of its being at the head-quarters, it had greater weight in the University than any of the other colleges. Consequently there was a certain amount of jealousy between the outlying colleges and that college. But the central college was a Government college.

20,374. Were the same subjects taught in the Government colleges as in the aided colleges. Were the curricula the same?—Roughly speaking they were. There was this difference: that in some of our colleges they had special arrangements for teaching Physical Science. They had a special Professor and special laboratories, whereas in the aided colleges the appliances were not so complete. Muir College had a special Professor of Physics, Aligarh College had none.

20,375. You said that there were two Faculties, Arts and Law. I suppose Arts included Science?—Yes?—There was no special Faculty of Science.

20,376. I suppose the degree of B.A. was given either on a Science curriculum or on an Arts curriculum?—Yes, it was, and there was nothing in the designation to distinguish the two. There were two branches known as the A and B courses. In the A course Philosophy was the main subject, and in the B course Mathematics and Physical Science; so that although nominally there was one course, there were really two courses: one a Science course and the other what is known as an Arts course.

20,377. What was the constitution of the Law Faculty?—The Law Faculty was composed of the Judges of the High Court and the leading members of the Bar at Allahabad.

20,378. And who were the teachers of the Law Faculty?—We had a law lecturer in Allahabad, who was a barrister, and there were similar lecturers in law in the four other colleges, who were practising barristers.

20,379. So you had more than one school of law?—We had five schools of law when I left, that is to say, there were five colleges in which courses of lectures were delivered.

20,380. Full courses leading on to the degree?—Yes.

20,381. In all the five colleges?—Yes.

20,382. May I ask were all your colleges recognised as teaching up to the full B.A. degree, or were some of them recognised only for the earlier stages?—There were some only affiliated up to the first Arts examination: that is an examination which takes place two years after matriculation.

20,383. Did the University exercise any direct influence on the teaching of the colleges in the colleges themselves?—No, none whatever.

20,384. And as you have said, the direct influence exercised by Government was also insignificant?—It was almost entirely restricted to such influence as the Director of Public Instruction had through the University itself. In fact, our policy was to work with the colleges through the University.

20,385. You have heard Mr. Baines' evidence and what he has said as to the desirability of young civilians being prepared at the University. I suppose your opinion would coincide with his?—Yes, I think pretty well. Do you mean for the open competition?

20,386. For both?—For the open competition,—I do not know whether it is a point to bring forth,—but I should say that the University should prepare its own examinations. I do not know whether that is a point for discussion now. As a member of the University, I should strongly object to make any arrangements for preparing students for any but our own examinations. But with regard to the detailed question of the open competition, the course that is laid down is that of a general liberal education; and it seems to me that there is no special course required in any University for that. The candidate should go through their ordinary University course, and compete at the open competition upon that course. If any other special preparation is required I should say that the best preparation is that of crammers.

20,387. You lay great stress on this, that the University should not enter into competition with the crammers?—I think it would be a mistake to do so, because the University cannot give what the crammer can, that is, individual attention. The success of the crammer consists in this: he pays special attention

to the qualification and weaknesses of each student, and is able to keep him hard at work, which they cannot do at at a University; so that the ordinary candidate at Civil Service examinations stands a much better chance if he goes to a crammer than if he goes to a University. I do not think the University should compete with the crammers.

20,388. Perhaps you are not aware how that difficulty was met in a very sagacious manner by the founders of the *École Libre des Sciences Politiques* in Paris. By a very ingenious arrangement they secured all the advantages of a University education to their pupils, and at the same time prepared them for the Civil Service examinations?—I am very glad that they were able to do it. I do not maintain, of course, that the education of the crammer as an institution is a very good one; it has only been found the most efficient for passing examinations.

20,389. Is there any other point which I have omitted on which you wish to give any evidence to the Commission? For instance, with regard to the education of the natives who come here?—My own idea is that for the young native gentlemen who come for the sake of a University education, the best place for them is the University of Oxford or the University of Cambridge where they live in the colleges and become thoroughly associated with young Englishmen. It is that association which is probably more valuable to them than the actual knowledge they acquire in the classes. It is the mental and moral training which they get from their associations which is valuable. In a city like London that is likely to be lost, unless of course you can build up colleges with the residence and associations which they have at the older Universities.

20,390. Of course the question of private residence is a very important one?—Yes.

20,391. (*Professor Sidgwick.*) A student requires in the University system to go through three bodies, the Faculty, the Syndicate and the Senate?—Yes.

20,392. The Senate is the supreme governing body, I understand?—Yes.

20,393. Could you tell me what proportion of control the teachers have in it?—There is no rule laid down (nor was it possible under the Act) requiring any special class of persons to belong to the Senate, and consequently in the Senate any one whom Government thinks fit may be appointed.

20,394. Is the Senate entirely appointed by the Government?—The Senate is appointed by Government and by co-optation. The Senate itself may elect a Fellow for every one nominated by Government.

20,395. And how large is the whole body?—There is no limit to the number of the Senate. When I left I should say, speaking roughly, that there were about 60 Fellows. The University, of course, is a young one.

20,396. How often does the Senate meet?—The Senate holds an annual meeting and perhaps meets as often as two or three times a year.

20,397. And I suppose it passes amendments on the schemes laid before it sometimes?—It is competent to do so.

20,398. If the amendments are passed, is the scheme referred again to the Faculty?—I do not remember any instance in which it has been referred back. They might refer back; it is competent to them to do so, but there is no rule requiring them to do so.

20,399. They may amend any scheme?—Yes.

20,400. And are they bound to allow the Faculty to initiate, or may they initiate and pass any scheme?—The Senate cannot consider any subject that has not been already dealt with in the Syndicate.

20,401. How is the Syndicate constituted?—The Syndicate is constituted of the Vice-Chancellor, the Principals of the five affiliated colleges, the Director of Public Instruction, an Inspector of Schools, and, I think, seven other Fellows, I am not sure as to the number, but seven is near enough, elected by the Senate from amongst their body.

20,402. So that there is no provision made for representing the teachers, as such, upon this Syndicate; they are represented by their Principals?—Yes, by their Principals, but as a matter of fact the leading professors in the colleges have always been elected to the Syndicate.

20,403. By the Senate?—Yes, by the Senate.

20,404. Do the Principals themselves usually take part in the work of teaching?—Yes, always. A principal of an Indian college is a professor as well as the manager of the college.

20,405. And the Syndicate may initiate; it is not bound to follow the initiative of the Faculty?—No, the Faculty is only empowered to recommend to the Syndicate.

20,406. The Syndicate is not bound to require a report from the Faculty?—No, not bound to, it may.

20,407. Has it usually required such reports?—It refers to the Faculties and the Boards of Studies all questions connected with the University curricula, for report.

20,408. And how is the Board of Study appointed?—The Board of Study is made up from the Faculty. The Faculties elect the several Boards of Studies.

20,409. How many Boards of Studies are there?—We had a Board of Study in each subject; we had Philosophy, English, Mathematics, Science.

20,410. The number of Boards of Studies and their constitution are determined from time to time by the Senate?—Yes.

20,411. They are not determined once for all?—The Boards of Studies were constituted by the Faculty itself, that is to say, what really happened was that the Faculty, in order to give special consideration to details of subjects, formed itself into certain sub-committees which were called Boards of Studies, and any question coming up before the Syndicate which affected the course of study in any particular subjects, as, for instance, text-books of philosophy, would be passed on to the Faculty, and then to the Syndicate.

20,412. And to the Senate?—It might go to the Senate. In that particular instance it would not have gone to the Senate, because the text-books are determined by the Syndicate absolutely.

20,413. The Syndicate have the power of regulating studies?—Yes. Practically the whole executive power of the University was vested in the hands of the Syndicate. The general rules and principles were laid down by the Senate, and carried out by the Syndicate. For instance, in philosophy, the general course, as laid down by the Senate, is carried out by the Syndicate, and the special text-books required for it are selected by the Syndicate without any reference to the Senate.

20,414. And this whole scheme appears to work well, does it?—It has been working now for four or five years, and it has worked well. It had very great advantages in giving vitality, I may say, to the colleges. In their work they were carrying out courses of instruction which they themselves had either laid down, or in which they themselves had a voice. Previously the colleges had been absolutely dependent upon the Calcutta University, which laid down a course of study in which they had no voice whatever. They had to prepare their students for it, and accept text-books which they possibly disapproved.

20,415. As I understand the professors are practically selected by the Principal in each case, though they are formally appointed by the Government?—In the Government colleges Principals are appointed by Government. In the aided colleges they are appointed by the managing committee, but as a rule the managing committee have left the actual selection of professors in the hands of the principals, the managing committees consisting generally of a number of native gentlemen who have no means of selecting the proper men.

20,416. (*Lord Reay.*) The English professors are sent out to you by the Secretary of State as they were to us, in Bombay?—Yes, occasionally.

E. White, Esq., I.C.S.

26 Jan. 1893.

20,417. (*Mr. Palmer.*) In answer to Lord Reay you spoke of the inadvisability of the University entering into competition with the crammer as not quite a just view of the true functions of the University. There are some subjects, notably in mechanical arts, which are best taught by the private teacher, and the private pupil system, and there are other subjects which may be more conveniently taught in a class; but whether you teach by private pupil system or by public school system, is not the true function of the University limited to testing and to influencing, and possibly supplementing the teaching which may be wanted, so that the University would not come into competition either with schools or with private teaching, but afford the same tests and the same influence, and if need be, the same supplementary teaching to both. Is not that a fair statement of it?—Yes.

20,418. Then as between private teaching and public school teaching it must be admitted that in a great many subjects private cramming in mechanical arts, for instance, engineering, goldsmith's work, farming, and so on, is the normal natural state of teaching, and the class is merely supplementary?—Yes, but that does not affect the special course of the Indian Civil Service.

20,419. No, but the University may have its Chairs, for instance, of Sanscrit, or foreign languages, it might do that to influence teaching, and it might test the teaching by examination, and it might possibly endow some particular Chair of Arts or Science or Languages which might be specially needed?—Yes.

20,420. And in those things would it be coming into competition, as it were, either with private crammers or with public teaching?—The Chairs and courses, I presume, would be restricted to the examinations which the University held or which it approved of.

20,421. Yes, or in some cases the Chairs might be endowed with the sole purpose of supplementing teaching?—That would be rather the function of a college than a University, would it not?

20,422. Yes, but I am taking it as an extreme view of the function of the University?—The University has surely to test in the same way the courses of study that are carried on under its sanction. It may have funds at its disposal and endow many Chairs for teaching Chinese or Mechanics, but that is rather outside the function of a University.

20,423. (*Sir George Humphry.*) The examinations of the University of Allahabad are not any of them conducted by the University itself, are they?—They are conducted by the University itself by means of examiners from affiliated colleges and external examiners.

20,424. The examinations take place at the colleges?—The examinations in the matriculation courses take place at the colleges, but the final examination for the degree takes place only in the central colleges at Allahabad.

20,425. And all the students go to the University to be examined?—All the students go to the University to be examined for the degree.

20,426. The University is at Allahabad?—Yes, the University is at Allahabad.

20,427. How do you secure equality of test in the examinations which are conducted at the several colleges?—Because they are all conducted by printed papers, and there is no oral examination. In the preliminary examination there is no oral examination whatever.

20,428. The printed papers would indicate what the questions were, but not what the answers were? The papers are sent in to the central examiners to be examined. It does not matter where the examiner is, he may be in Bombay or he may be in Calcutta; the answers are all collected and sent to the examiners.

20,429. Of all the examinations?—Yes.

20,430. So that really the examinations are all conducted by the University?—Well, they are conducted by University examiners.

20,431. The whole affair?—Yes.

20,432. The examiners are all provided by the University?—Absolutely.

20,433. And of course partly from the colleges. They are the professors of the colleges?—Yes, partly professors of the colleges which are not affiliated to the University.

20,434. Are the rejections very large?—Yes, a considerable proportion.

20,435. As much as —— ?—I should say that at the last examination for a degree about 45 per cent. failed. I speak from memory.

20,436. And in the entrance examination?—In the entrance examination I think at least 50 per cent. failed last time.

20,437. (*Lord Reay.*) Are any students examined who have not been educated at one of the affiliated colleges, or is it that only those are admitted to the examinations who have been educated at one of the recognised institutions?—Only those who have studied at an affiliated college can be admitted to the University examinations for a degree.

20,438. With regard to matriculation do you admit those who have had the benefit of private study or only those who have been at a recognised high school?—We do not ask any questions. I may state, however, that the question is under discussion, or it was when I left, of only admitting to the matriculation examination students from an approved high school.

20,439. Is it contemplated to have a Medical Faculty?—Not at present, there would be no room for it. The demand for medical education was met sufficiently by the medical schools in Lahore and Calcutta; there was no room for another in Allahabad.

20,440. You have no hospital used as a medical school?—No.

20,441. Then all the students of the North-West who want to be prepared for a medical degree have to attend elsewhere?—Lahore or Calcutta.

20,442. Is there anything you wish to add?—No.

The witness withdrew.

V. Smith, Esq., B.A., I.C.S.

VINCENT SMITH, Esq., B.A., I.C.S., examined.

20,443. (*Lord Reay.*) You belong to the Bengal Service?—Yes.

20,444. In the North-West Provinces?—Yes, I passed at the open competition in 1869, and went out in 1871.

20,445. You passed from Trinity College, Dublin?—Yes, I passed direct from Trinity College, Dublin.

20,446. Perhaps you will go over the same ground as Mr. Baines?—With pleasure. I have not prepared anything in writing, as Mr. Baines had, but I will try and arrange what I have to say as well as I can. With regard to the open competition, under the new regulations, it seems to me that the list of subjects is well chosen so as to give any well-educated young man from any University a very good chance in the examinations. He can hardly fail to find something to suit him; and, looking over the papers, and also remembering my own experience in 1869, I should say that any University—London, Oxford, or Cambridge, or any other—could teach almost all the subjects that are in the list for the open competition. The special subjects like Sanscrit and Arabic may be taught better in some places than others, but with regard to the range of other subjects for the open competition I think sufficient education in them can be got at any of these places—London, Dublin, Oxford,

Cambridge, or in Scotland. If it would not be thought egotistical I might mention my own experience: I took my degree at an early age at the University of Dublin, in November 1868, and went up, immediately after taking my degree, for the open competition in March 1869, without any special preparation at all, and passed second at it. In that year there were 50 appointments; and I know that several of the successful candidates, I think seven or eight, though I forget the exact number, went up without any preparation by crammers.

20,447. Your point is that a special preparation is not necessary?—It was not then, and, so far as I can see from looking through the papers, it would not be necessary now; and a man who had had a good training at any of the Universities would have a very good chance of passing. I know there were several men of my year who passed in the same way, without any special preparation. To go on with the same subject, I may say that any particular examination, such as that for the Indian Civil Service, no matter how carefully it may be arranged, so as to suit a very general education, still is an examination of a distinctive character; and an expert teacher (call him a crammer or anything else) who makes a special study of the papers of the Indian Civil Service for, 20 years say, and of all the peculiarities of that examination as distinguished from others, and who also has studied the individual characters of each pupil in various details, will have a very great advantage over a teacher of even a well-equipped University. I think the man going from a well-equipped University has a good chance, and would be very likely to pass, but he will always gain more or less advantage if he supplements the University course by a certain amount of more or less expert teaching, that is, teaching specially directed to that examination. As regards the place of preparation for candidates for the open competition more especially, I have already said that I think any well-equipped University will give a young man a good chance, and, from what I know of the advantages offered, I should say that London and Oxford are about equal in the advantages they offer—that they give perhaps the best teaching of the Universities. As regards the training for the further examination—the professional training after passing the open competition—we must lay stress on what Mr. Baines also pointed out, that the present course for the selected candidates is a mere trifle compared with what it was in our own time. The course now comprises only, compulsory, one language, a very small amount of Indian Criminal Law only, namely, the Penal code, and part of the Criminal Procedure Code, and some Indian history and geography. In our time, 1871, every candidate had to take up two languages compulsorily. There was a great mass of Law including Blackstone's Commentaries, Taylor on Evidence, two huge volumes, the Institutes of Justinian, Austin's Jurisprudence, Maine's Ancient Law, Bentham's Jurisprudence, Hindu and Mohammadan Law, the Civil Procedure Code, and a great deal of practical case work and case reporting. That was a very serious Law course, and it might be considered what special arrangements might be desirable for teaching men a course like that; but now that the course has been whittled down to merely the Penal Code and portions of the Criminal Code, it makes very little matter, so far as that goes, where the selected candidate is, because anybody may learn anywhere the amount of Law which is now required. The same observation applies to the third compulsory subject, the History and Geography of India. The few text-books that are prescribed for that subject any man of ordinary intelligence can make up in a few months anywhere, and the place makes very little difference. There remains then the single Oriental language which he will have to learn, the Hindustani, Marathi, Tamil, Burmese, or Bengali. There, too, London and Oxford offer the best advantages for the teaching of those Oriental languages. I may mention, if the Commission are not aware of it, that the Rev. Mr. Davies wrote a paper in 1891 on the facilities for Oriental studies in Great Britain and Ireland, which gives full details of the number of professors in all the Oriental Languages throughout the three kingdoms, England, Ireland, and Scotland, and shows that Oxford and London are decidedly the best places for these Oriental languages.

20,448. You agree with Mr. Baines that the colloquial element is a very important element?—Yes, I do.

20,449. And the best way is to get into communication with a young native of the province speaking its dialect?—Yes, but there are several professional native teachers in London, or there used to be.

20,450. But they have not got the dialect perhaps?—No, perhaps not. You can get that teaching, I believe, to some extent in Oxford. There are a good many Indian students in Oxford and the Indian Institute there gives some facilities for them, I understand.

20,451. It is simply a question of where they happen to teach for the time being?—I think University College here has four Oriental professors and King's College three. In the Rev. Mr. Davies' paper he gives the details.

20,452. You are aware that King's College and University College joined their courses of Oriental studies, and lectures are given under the auspices of the two colleges?—I was not aware of that, but between them they are able to provide for the small amount that would be required.

20,453. You yourself have paid much attention to Sanskrit?—I have during the two years I was studying for the Civil Service.

20,454. I gather from your evidence, that the study for the second of the two years is very much curtailed?—Yes, the authorities formerly went into the other extreme; they kept us two years at home and gave us half-yearly examinations, so that we had the open competition and four professional examinations afterwards. I think that was going into the other extreme; so that it was overdone, and the course was weighted with Roman Law and other things which were quite unnecessary. Now I think the law course has been whittled down too much, and there is no instruction in jurisprudence at all, which I think is a mistake. The best books to be used would be a matter for experts to decide. I certainly should not recommend our old friend Austin. I do not think that is very interesting, but works like those of Sir Henry Maine and others that qualified people would recommend, I think would be much better in the course. We used to do Sir Henry Maine's Ancient Law in my time and I found it a decidedly stimulating study.

20,445. Have you anything to add?—Mr. Baines, I think, spoke of lectures on subjects outside the range of the examination. I may add that I think also, that such lectures would be a very good thing to have arranged, and the number of subjects connected with India, and on which such lectures should be given is, of course, almost infinite—the habits and customs of, and modes of dealing with, the people, and so on. And I might add, also, that I think Mr. Baines' suggestion that a sort of standing counsel or adviser for students be appointed, both for natives and Europeans about to proceed to India, is a very useful suggestion. It occurred to me that it might possibly be advantageously worked in connexion with the Imperial Institute rooms and the organisation that I understand is provided there.

20,456. (*Mr. Anstie.*) I understand you to say that there never was in Dublin any special preparation for the Indian Civil Service?—I did not exactly say that. What I said was that I went in on my degree reading; but my case in that respect was exceptional. We had a very good Sanscrit professor there, and a native professor of Arabic and Hindustani, so that there were tolerable facilities for special studies. There was no very organised arrangement on behalf of the University for Indian students, but certain facilities were provided.

V. Smith, Esq., B.A., I.C.S.

26 Jan. 1893.

20,457. It has never affected the general University course there, has it?—No, the University course has not been directed towards Indian studies at all.

20,458. The general students at Dublin have been remarkably successful, I think?—Yes; I know in my year there were 50 appointments, and seven or eight of us were Trinity College men, or perhaps more—nine, I think. One of the members of the Commission asked about the numbers of the candidates for the Civil Service. In my time, in 1869, there were 50 places and 300 candidates. I remember that distinctly. Then of late years the number of appointments given has been usually about 30, or from 30 to 35. At the last competition, whether owing to the change of age, or owing to the change in the value of the rupee, or what, I do not know, but I was informed that the number of competitors for 30 places was only 69, and that even those were got together with a certain amount of whipping up. This year there are, I believe, 56 places offered. That is a sudden change, and it is impossible to say how many will go up, but I suppose, as Mr. Baines said, you might ordinarily reckon on about 200 candidates being interested in the Indian competition. So far as can be judged I think Mr. Baines' estimate is a reasonable one.

20,459. (*Professor Sidgwick.*) We are here concerned with the relation of a teaching University, if one is established in London, to the Indian Civil Service examination. I understand your view to be that there is no special reason for concerning ourselves with the open examination, because that is so arranged, that the ordinary preparation for the courses of study in a well-equipped University ought to prepare for this examination also?—Yes, I understand so.

20,460. But it is your opinion that London ought to certainly take part in the preparation for the final examination, and that it would attempt that under favourable circumstances?—Yes, but I also said that the course has been so whittled down that there is very little left to be arranged for.

20,461. Still it would remain the duty of any University which undertook this work, to appoint teachers in five vernaculars, besides anything else they did?—Yes, I think it would be desirable.

20,462. And you think that London would have a fair prospect of taking a fair share of the candidates?—Certainly.

20,463. That then five teachers in London would have a fair prospect of obtaining pupils?—Yes. In the case of a man of 22 having been selected for the open competition, I do not see an advantage in his going to a University. There is no use in going to a University for a year.

20,464. In your criticism with respect to the extent to which the examination is cut down, I presume you are not taking into account the amount of time. You do not say that the amount to be learnt is too small, considering the time in which they have to learn?—I think that even in the time allowed by the new rules the addition of one or two books upon jurisprudence, of the nature I indicated, would still be an advantage and would not overburden the men. I do not think they ought to be crushed with heavy work, because it is apt to injure men's physique when they are going out, and after the strain of the open competition, I think it would be disadvantageous to them to have extremely heavy book work before sailing to India.

20,465. In considering this we have to take into account, have we not, what your analysis of examination appears to leave out of account: that there are a number of optional subjects, for instance, political economy?—Yes.

20,466. And perhaps we may say that in view of his work in India, it is desirable that a selected candidate should have time to take up that?—Yes. I only referred to compulsory subjects.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Fiftieth Day.

Friday, January 27th, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

The Right Hon. LORD PLAYFAIR, K.C.B., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

Sir WILLIAM ANSON, Bart., D.C.L., examined.

20,467. (*Lord Reay.*) You are Warden of All Souls, Oxford?—I am.

20,468. Might I, in the first place, ask you what your opinion is about the paramount power in the University. The paramount power in the University may be exercised as in France, by the State, or it may be exercised as in Germany, by its own professorial or teaching staff. Although the State has the nominal power, the virtual power is in its own staff. It can also be exercised by the body of graduates; it can be exercised by outside corporations or by the representatives of professional corporations inside the University, or by non-professional corporations, or it can be exercised by a body of examiners in whose appointment the University has no share. Will you tell us what your view is?—That is a general question, which I do not come prepared to answer offhand, but I should be inclined to say that legislative power should reside in the body of graduates, with general or special limitations as to the introduction of measures of change by a central executive body, something like what, I believe, there is at Cambridge, and what there certainly is at Oxford—a council, to whom is entrusted the chief executive

functions of the University. For legislative purposes I should say that the body of graduates ought to govern.

20,469. And for executive purposes you think there ought to be a small body?—A small central body, responsible to the body of graduates, and liable to change from time to time by election.

20,470. And in which the teachers should be largely represented?—In which the teachers should certainly be represented.

20,471. You wish to give evidence, I believe, on the organisation of the Faculty of Law?—That is the point about which I understood I was to give evidence.

20,472. Will you tell the Commission what your views are with regard to the composition of a Faculty of Law; whether you would have a Faculty Law constituted only by the professors and teachers of the University, or whether you would associate with them any other persons representing the profession?—I think it is desirable that the practical work of the Faculty should be done by professors and teachers associated with some persons who would keep them in touch with the practical side of the profession. I may say that on the Faculty Board of Law at Oxford professors have places *ex officio*, teachers are elected, and we co-opt distinguished persons who are connected with the practice of the legal profession—at present Lord Herschell and Lord Justice Bowen who are, of course, not able to attend our meetings, but who advise us from time to time.

20,473. But the ordinary routine of the work is dealt with, and the questions which are constantly cropping up are decided by the teachers?—By the professors and teachers. The professors are a very large body. The two bodies are practically balanced on the Faculty Board.

20,474. Now, I will ask you what subjects you think should be taught in the Faculty of Law?—That would mean the subjects which it would be proper for a teaching University to teach?

20,475. Yes.—First and foremost jurisprudence, historical and analytical, and, in connexion with it, the theory of legislation. Then I should say certain branches of English law. The most teachable parts of English law, I think, are the Law of Contract and Wrong, the Law of the Constitution, and the Law of Real Property. Then Roman Law.

20,476. (*Professor Sidgwick.*) Did you intentionally leave out Criminal Law?—No. I did not intend to leave it out. I was thinking of the more obvious subjects. I should say that Criminal Law would be a very good subject, but the fact is, that for the purpose of teaching law the teacher depends upon having books which he can put into the hands of students, and which do not take him into the region of practice. I do not think that Criminal Law has been dealt with in a way that brings it within the reach of a student. He would have to be taught by lectures.

20,477. It would be necessary for the Indian Civil Service students?—They would have to learn the Criminal Code.

20,478. (*Lord Reay.*) Would you have International Law represented in the Faculty of Law?—Yes.

20,479. Public and private?—Private international law is a very difficult subject. It is rather an advanced subject. It would depend upon whether or not you meant to make your law school in the first instance an educational school, that is to say, a school which would give a general education, one which you could connect with history so far as the law of the Constitution and Roman Law were concerned, and possibly with political science so far as jurisprudence and the theory of legislation is concerned. I should always have in view the distinction between law as an educational and law as a practical subject, and there, I think, I should draw the line at the subjects which admitted of historical or scientific discussion, and the subjects which led more directly to practical application.

20,480. That leads us to another question which is one of the greatest importance. The connexion which should exist between the Faculty of Law of the University and the Inns of Court?—It would be a very great advantage if the Inns of Court would combine with the Universities and consider what the Universities can best teach, and what they themselves can best teach. There is no doubt, I think, that it is quite possible to draw the line and to come to an agreement that we should teach that which would be an education such as a University ought to give; such as would be of practical value to the student when he came into chambers, and yet would leave plenty of work for the Inns of Court to take up when the student quits the University and goes into chambers, or for the Incorporated Law Society when he becomes articled to a solicitor.

20,481. You do not contemplate the absorption by the University of the lectures which are at present given under the influence of the Inns of Court?—I have not sufficiently in my mind the lectures now given, but I should think there might be an economy of trouble and expense.

20,482. A redistribution?—Yes; a redistribution.

20,483. But not an amalgamation?—No; not an amalgamation. I think we should keep the two distinct. In each case I would begin with the law as it is, but for educational purposes I should insist rather upon questions of general principle and history, whereas in the case of practical teaching you would at once show how the law with regard to the particular topic with which one was dealing is actually applied. For instance,—take the case of a bill of exchange, or a policy of marine insurance. I should exhibit the document to the student in teaching him the law of contract, but I should take him back to the general character of a policy of marine insurance, or the history and nature of negotiable instruments; whereas when he was being taught for practical purposes he would be referred at once to text books of a practical character, and to the Law Reports to the Bills of Exchange Act, and to cases decided upon it. And it would be the same with constitutional questions, and questions of real property, in fact all the departments in which the law is at work before our eyes.

20,484. And you would leave to the students a large option in the subjects which they might take up?—I would leave them a larger option as they advanced further. It is important that when the student first begins to study law, and imbibe ideas which are new to him, there should be a number of students learning the same thing with him. They assist one another, and it makes teaching easier. Of course, it must be borne in mind how very new legal ideas are to the student who is just giving up the classical or other subjects which may have furnished his rudimentary education.

20,485. And certain subjects at the commencement of the course should be compulsory on all the students?—Yes.

20,486. Will you tell the Commission which subjects those are?—I would make Roman Law compulsory, I would make jurisprudence compulsory, and I would make certain departments of English Law compulsory, selecting those which admitted most easily of teaching, and that depends much upon the provision of books.

20,487. Then, with regard to the examinations, you would have a variety of examinations, except for the subjects you make compulsory at the beginning. After that you would have a differentiation?—After that I would have an examination in certain common topics and in other subjects which the student might offer at his discretion.

20,488. The student might offer some subjects as his principal subjects, and others as auxiliary subjects. Would that meet your views?—Yes.

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

20,489. That is what we are told happens in the Johns Hopkins University?—Yes.

20,490. In France everything is systematically graded. They give the Bachelor of Laws after a two years' course: they give the Licentiate of Laws on a three years' course; and then, after three further examinations and a thesis, the student is granted the degree of Doctor, which only a limited number of them, as you know, obtain, on original work and we might call it research work. Without exactly copying it, would that, to a certain extent, meet your views?—Our system at Oxford has those three grades. There is an examination for the degree of Bachelor of Arts, which may be obtained by taking honours in the jurisprudence school; there is the post-graduate examination for the Faculty of Law; and then the doctorate is obtained by the writing of a thesis.

20,491. What amount of preliminary education do you think one may legitimately require for a student before he enters the Faculty of Law?—Between the first degree and the second do you mean?

20,492. No. I mean before he enters the Faculty of Law. Do you think one might require an intermediate examination, or that matriculation (supposing there is an efficient matriculation examination) would be sufficient? In France they enter after having obtained the Baccalaureat, which is the universal matriculation examination?—A great deal would depend upon the nature of the matriculation examination.

20,493. A sufficient amount of general knowledge?—Yes.

20,494. Would you lay stress upon history?—Yes, I certainly should lay stress upon history.

20,495. Are you acquainted with the *École Libre des Sciences Politiques* in Paris?—No.

20,496. But from what you have said, I see that you contemplate a Law Faculty useful also to students reading for other professions?—I should endeavour to make the first stage a stage which would give a thoroughly good general education; which would be connected with political science, and such matters as would be of value to a man, whether he went into the legal profession or not.

20,497. Such subjects as administrative and constitutional law, for instance, would be eminently useful to men intended for the magistracy and exercising functions of that kind?—Yes; I think in that way the second stage, which your Lordship has suggested, might very fairly include questions of administrative and constitutional law of an advanced character.

20,498. In the French Faculty of Law they have political economy?—Yes; we have never admitted that into our Law School at Oxford. They deal with it in the school of history, but we did not see our way to connect it with any of our legal subjects.

20,499. The French assign a very prominent part to commercial law?—That would, of course, come in the later stage; but to endeavour to teach mercantile law as an educational subject, I think, would result in failure in England. I do not think one could treat it as an educational subject.

20,500. But as a law subject?—Not in the educational stage.

20,501. I am alluding now to the later stage?—Then you could take certain departments of commercial law and treat them for educational purposes; but our commercial law is not sufficiently arranged as a whole, to make it possible to treat commercial law as one subject.

20,502. The French also take what they call the science of finance in the advanced course—the fourth year. That might also be taken as a subject in the second stage?—I should have thought that would be rather outside legal topics.

20,503. It is due to the fact that in France the Faculty of Law is the Faculty for students who have no very definite or professional aim, and that naturally influences the curriculum; and with 30 professors in the Paris Law Faculty they can afford a very comprehensive curriculum?—I do not quite understand what the science of finance would mean. We teach in the Law School the mode in which the revenue of the country is collected, and the various checks there are upon the expenditure of public money when once it has got into the Bank of England; but beyond that we do not pretend to teach a man how to be a good Chancellor of the Exchequer.

20,504. Of course that would be impossible. What they understand in France by the Science of Finance, I believe, is rather the comparative financial history of various countries, and in that respect, of course, it would form a part of the history of the economic condition of different peoples and their relative prosperity?—We only deal with it in connexion with institutions.

20,505. And the theory of taxation and its incidents would come under the head of "Science of Finance"?—Yes, that, I should have said, was an extra legal subject.

20,506. Would you rather put that in another Faculty?—I think so. I think if you extend your Legal Faculty too widely it alters its character.

20,507. In what Faculty would you put Political Ecomomy, the Faculty of Arts?—The Faculty of Arts is susceptible of various combinations. We might make it a part of the subject of Political Science.

20,508. You might have a separate Faculty of Political Science just as the *École Libre des Sciences Politiques* practically forms a separate Faculty in Paris, only it is a Faculty which is outside the University?—Yes. I should be disposed to take actual law and jurisdrudence, law present and past, English and Roman, and see what sort of education you could make out of it, but I should not begin by introducing extra legal subjects, and endeavouring to connect them with the Faculty of Law.

20,509. But you would have all subjects connected with public law represented; as distinct from civil law?—Yes, and history, I should think, would be a valuable element in the first stage.

20,510. The history of English Law?—Yes.

20,511. There are very few books?—There, again, there is the difficulty about the books. You can deal with the different topics historically, but I think the students would feel it a hardship to have to read Mr. Reeves' history of English Law, as it has now grown out of its original compass.

20,512. The difficulty about books would render it all the more necessary to have the subject taught?—I have known subjects which had to be learned entirely by oral teaching.

20,513. Is there anything you would like to add?—I should only like to add that if a teaching University with a Legal Faculty is now being started *de novo*, there is an opportunity, which the older Universities have sought in vain, for University teaching generally, to come to some understanding with the Inns of Court as to an economy of labour, and to induce the Inns of Court to regard University teaching not as an interference with their province but as offering something which they are too near to practice for them to do satisfactorily. It strikes me as almost impossible to induce a student who has gone up to town, and who is reading in chambers to take up law as a study, and to work at things which lie some way behind practice, when the Courts are going on so close to him. Therefore the student, while he is still at the University, can be made to learn a good deal of law in a way in which he will never learn it afterwards. If the Inns of Court could be induced to consider that this would really be a saving of time and money to them, and an assistance to their students, and that it would at the same time leave a large field of practical teaching to them, I think we should get a fair recognition by the Inns of Court of what is done in the University, and at the same time it would put the academical study of law on a higher and better footing this it has hitherto occupied. It is rather apt to be

treated with a certain amount of scorn as an attempt to teach a practical thing in an unpracticable and academical way, whereas I think experience shows that the academical teaching of law is, later on, of practical value, and is a thing quite distinct from the practical teaching of law which might be given in the immediate neighbourhood of the Courts.

20,514. There is no interference with the Inns of Court, but rather co-operation?—Yes.

20,515. A sound foundation for the subsequent instruction they give?—Yes, and a great saving of time to the students.

20,516. (*Lord Playfair.*) Your conception of the duties of Universities in regard to the teaching of law is more educational and less professional than in the Faculty of Medicine, is it not?—What I mean is from your University a licentiate can go out and he can practise at once; from your law courses I suppose no one could go and practise at once in the Courts, by the education which you give?—No, he could not practise at once. Do I understand your Lordship to say that he would be capable of practising, or that he would be permitted to practise?

20,517. You do not aim at it, do you?—I certainly should not aim at turning out a practising barrister from the jurisprudence school.

20,518. Then it is a little different from the profession of medicine, which you teach also inside your University, where a man goes out at once as a licentiate or doctor of medicine?—Yes, that is so in the School of Medicine; it would be different in the School of Law.

20,519. I mean it is from the University. I do not say that the schools can license, but the University can give the degree of Bachelor of Medicine or Doctor of Medicine, on which he at once practises?—That is, the University can confer a license to practise in medicine, but it cannot confer a license to practise at the Bar.

20,520. That is what I wanted. Your idea is different. In the one case the Universities train for a profession such as medicine, and launch licentiates out immediately to undertake the care of the human body, but you do not profess to do so with regard to law?—No; we do not.

20,521. Therefore, it would be more easy to make that division which you have recommended, that the Universities should look after the science of law, and let the Inns of Court supplement that with the practice of law?—It would be easier; but I should say that the study of medicine in Oxford, I believe, begins at a very much later stage than the work done in the jurisprudence school; that the student must have graduated before he can begin his courses of medicine. I think he must have passed through the stages of the School of Natural Science.

20,522. He must have taken his Bachelorship in the Science School?—He must at any rate have taken his degree; whereas the jurisprudence school is one of the avenues to the bachelor's degree.

20,523. But you have higher classes than that also?—Yes. There is an examination in the Faculty of Law, for which we do not teach specially, but for which the professors are willing to give assistance, and for which we provide the libraries and give such assistance as we can. The students residing in Oxford and working for that school are not sufficiently numerous to call for the provision of regular courses of lectures.

20,524. Have your graduates in law any special privileges to save them from any other examination before they go into practise?—The Inns of Court recognise our examination to some extent, but not to the full extent. They recognise the jurisprudence school for Roman Law, they recognise some part of the examination in the Law Faculty, to excuse from another part of the examination, but they treat it in rather a piecemeal way. They knock off a few subjects I think, but they will not recognise our work as a whole.

20,525. Do you think it would be an important matter for legal education if this Commission were to recommend a division, such as you have supposed, would be right, of scientific study in the University and practical study in the Inns of Court?—I think it would be an advantage. I think it would give greater life and animation to the study of law at the Universities, and I think It would also lead to something like a practical education in law in London, which would be valuable to students also.

20,526. To which division, the Inns of Court or the University, would you recommend post-graduate courses to be attached? I mean, to try and stimulate invention and high education in the subject of law. Would you attach those to the University or to the Inns of Court?—I think the more advanced students might do their work best at the Inns of Court when they have grasped the general principles in the various departments of law. They would work better when they could get constant illustrations of what they were studying in the courts.

20,527. And higher post-graduate courses had better be attached to the Inns of Court?—I should have said so. That would not be inconsistent with lectures being given on the same subjects at the University to men who wished to remain another year; but I should have said that would be a part which the Inns of Court should take up—the higher work, and work which admitted of a practical illustration.

20,528. But the Inns of Court, for examining purposes, might become part of the University, might they not, just as in Oxford and Cambridge, or in the University of London, you can carry a doctor to his full licensing practice, so might not you take the second division of practice, and, joining it to the first, which you think the University should do, make it all one part of a University course?—I should have thought that we might have carried on the second part concurrently with the Inns of Court, but that the Inns of Court would there have the advantage of us from the practical illustrations that they could give to their teaching, and, as regards examinations, it would be a very great thing if we could come to some common arrangement. Universities have long practice in examinations, and, I should think, would very likely examine better than the Inns of Court.

20,529. You mentioned at the beginning of your examination that you thought the sovereignty of the University should exist in the body of graduates. As a Liberal, I am inclined to agree with you that that is the sort of sovereignty that one would like theoretically; but do you not find that in practice Convocation becomes, after a time, a barrier to progress?—There is always the question of the resident and non-resident graduates. I should have thought that in a new University you would have retained the power among the resident graduates.

20,530. And not among the non-residents?—Not among the non-residents.

20,531. Is it not a fact that, practically, both with regard to the Universities of England and the Universities of Scotland and Ireland, Parliament has constantly, or every few years, to intervene to force progress on account of that resistance?—I think that Parliament has intervened in the case of the Universities not so much to force progress as to regulate the employment of endowments; and, so far as Oxford and Cambridge are concerned, the interference of Parliament has resulted in the employment of the revenues of colleges so as to be of some assistance to the Universities.

20,532. Because the colleges would not do it?—I think in some cases the colleges would have done it, but it was thought desirable to have some systematic re-arrangement of college revenues in the year 1877. I do not think that has arisen from the conservative character of Convocation.

20,533. (*Professor Sidgwick.*) Might I suggest that the colleges are not governed by the graduates?—(*Lord Playfair.*) No, they are not, but I was thinking more with reference to Ireland where the Convocation of Queen's University absolutely refused

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

the reforms which Parliament desired, and they put them aside altogether by Act of Parliament.

20,534. (*Mr. Anstie.*) They did the same at Oxford in 1850?—Yes; in 1850 power lay so entirely in the hands of the colleges, and the idea of any interference with the property of corporations I think was such a shock to members of the University that there was some resistance to change

20,535. (*Lord Playfair.*) All the time in giving complete sovereignty you would give some safety valve at all events that they shall not be detrimental to the public good?—There would always be Parliament behind.

20,536. But Parliament is a machine that ought not to be brought in more than can be helped to interfere with academic autonomy. It is a rude instrument in interfering with academic autonomy at all?—The alternative, I suppose, would be to have a permanent Government department—a University Committee of the Privy Council before which schemes of reform might be brought by a sufficiently representative number of the graduates, and there argued, discussed, and settled.

20,537. You know that is the case in the Scotch Universities?—Yes. That would obviate any necessity for these occasional Parliamentary Commissions which have a very unsettling effect, and sometimes endeavour to make far-reaching reforms of which they cannot forecast the effect.

20,538. And cannot follow up?—No.

20,539. (*Mr. Anstie.*) With regard to the question Lord Playfair has just raised as to the sovereignty of Convocation, you draw a distinction between resident and non-resident graduates and are apparently disposed to limit the power to the resident graduates. May I ask what you mean by resident graduates? Do you mean that, in the case of London for instance, those who happen to have been residing for a certain period within the limits of the metropolis would have that power?—I am on very unfamiliar ground when I am dealing with a University in London, because, of course, the residents there might be wholly unconnected, as far as any practical connexion goes, with the University. What I meant by "resident" was that they would be interested in some way or other with the University, or with colleges connected with the University; that they would be engaged either on the teaching or the administrative staff.

20,540. Then, practically, what you mean comes to this, does it not, that the power of the University has to be exercised, broadly speaking, by those who are engaged in teaching?—In teaching or in administration?

20,541. You are, in fact, excluding the large body of Convocation, and vesting the power in those who are practically concerned with its administration?—Yes.

20,542. That puts the thing upon a very different footing. You are not prepared to accept the view that Convocation at large, which is a body scattered over the world, should have the power, by a vote, to displace the whole course and system of Boards of Studies, and what not, now existing in the University?—No, I think it would be an inconvenient form of government to be always liable to have a large non-resident body, or even a body scattered all over London, brought up to vote on practical questions connected with the University.

20,543. In fact the accident whether a man, being a graduate, lives in London or lives beyond the boundaries of London is a matter of no sufficient moment to found a distinction upon, in respect to powers of legislation?—No.

20,544. What you mean by "resident" is, connected with the teaching work of the University?—Yes, that is what I meant; I was unfortunate in using the word "resident." I was thinking of a different state of things.

20,545. With respect to the subjects which you mapped out for the University course, you make as a principal and essential, Jurisprudence and Roman Law?—For educational purposes I should say.

20,546. And you rather regard the teaching of those branches and of kindred branches as things to be retained in the hands of a University authority in London, as distinct from the Inns of Court. With reference to that I should like to call your attention to the history of the attempts that have been made in that direction in London. You are well aware, no doubt, that at University College Chairs were founded, which, at one time, had considerable celebrity and attendance, but at so early a time as 1846 which was the date of the Committee of the House of Commons on legal education it appeared that those Chairs were already becoming deserted; and we know quite well (it is a matter of common knowledge) that, practically speaking, they are now extinct. Does that seem to you to present a very favourable augury for a similar state of things now, or rather for creating a new state of things on similar lines?—For creating a new teaching body to teach law from that point of view.

20,547. A body to that extent, divorced or separated from the Inns of Court and the Incorporated Law Society who, practically speaking, must supply the whole of the funds as well as the students?—If the study of law leads to a University degree, and if it not only leads to a University degree, but is one stage towards a call to the Bar, or being admitted to the other branch of the profession, I should have said that the teaching would not die away, as it did in the previous case.

20,548. But you are assuming, are you not, that for call to the Bar, or admission to the profession of a solicitor, a degree should be made a requisite? Can you reckon on any such alteration in the law, which at present vests the power of call to the Bar in the Inns of Court, and admission to the solicitors' profession in the Incorporated Law Society under the control of the judges?—I was not thinking that the degree would be made a requisite, but that it would absolve the person who had got the degree from some part of the course, which would otherwise be required.

20,549. But it would not absolve him from any part of the practical course, would it?—He would have to have his practical teaching anyhow.

20,550. Then what part would it absolve him from?—There are a number of examinations in both cases—I think there are three for the solicitors, and the Inns of Court have examinations which are of a general character. I would divide the two sorts of examination, and ask the Inns of Court and the Incorporated Law Society to say, where a man has taken his degree in the University, "We will give him one sort of examination, and we will remit the other sort."

20,551. That still supposes the Inns of Court do give that sort of examination to which the other is to be equivalent?—I think it would be possible to induce the Inns of Court to recognise the sort of law, which might be properly taught in the Universities, and that then, although they might say that this examination was necessary, they might drop the teaching, and then in the natural course of things, their more educational examination would die away, because people would get what they wanted in the way of teaching and examination for that particular stage, in the University.

20,552. But is there any reason to suppose they would give up, or is it desirable in the public interest that they should give up the maintenance of a system of education, which they have for a very long time pursued, and which they are willing still to pursue and to develop?—The Inns of Court go on the assumption that a man goes through a long course of study there, just like a University course. That is shown by the fact that a man is required to eat dinners for three years, before he can be called to the Bar, and during that time, in theory, a man is attending lectures at the Inns of Court, and preparing for his profession. The whole thing is a fiction,

because the man is all the time in most cases, I should say, at one of the Universities; the dinners are merely an occasion for coming to town, and he may learn his law at the University. He finds that if he attends lectures supplied by the Inns of Court, he is very often learning the same thing over again, so he does not attend them. When he is examined by the Inns of Court, if he does not get let off some part of the work he has already done, he is examined over again, and does the same thing over again.

20,553. I am speaking of the legal education which the Inns of Court have now maintained for nearly half a century, and in which some of the most eminent names have taken the part of instructors. They are still continuing the work, and are apparently disposed to develop it. That is what I am speaking of, not dinners at the Inns of Court. Now, considering that they have done that, and are doing it, and are disposed to continue it, and considering also the fact that not everybody can be assumed to go to Oxford or Cambridge, why do you suggest that the Inns of Court should be released from the obligation of providing and maintaining by their funds all branches of legal instruction?—Because I do not think it is a great succes as it stands, and in the nature of things it is very difficult to get a man who is in chambers to go and study the purely academical and educational side of the Law as taught by the Inns of Court. He is too near to practice to care about it.

20,554. The assumption would not be that he is in chambers. Supposing he went through, as, of course, he must go through, the course of three years one way or another, it does not follow that he is in chambers all the time, nor is it at all likely that he would be. He would be part of the time reading, and attending lectures, and qualifying himself for the necessary examination; during what part, whether at the beginning or the end, or when, would be regulated very much by his individual inclination and opportunity?—I should say that a man who goes through the whole three years' course of study in London, to whom that course is his whole education, wants something rather different from anything that the Inns of Court can give. He wants to be surrounded with the appliances of a general education, and not to have a purely legal education, which is all that he would get by lectures at the Inns of Court.

20,555. Are you assuming that a man can get no general education except at Oxford and Cambridge?—I am assuming that you are proposing to give him a general education at the new University of London.

20,556. It is desirable that he should have a general education; but I am not suggesting that that should be given by the Inns of Court. A few days ago we had evidence as to the Dublin course which shows that a man in that University must first take a degree in Arts, and that in order to qualify himself for the degree in law, he must have that degree; but the Law School is something distinct from, and in them posterior to, though in practice to a certain extent concurrent with, his Arts course?—At Oxford, and, I believe, also at Cambridge, and I assume in the present case which is under discussion, I was endeavouring to frame a system of legal teaching which would be part of the Arts course; which should be an education such as a man might work upon from the time he first entered the University.

20,557. It would be rather a mistake, would it not, to confound the professional law course with a course of general education?—I am endeavouring to keep them distinct. There are certain parts of the department of law which in themselves constitute a general education—Jurisprudence, the historical part of English Law, Roman Law, all those things would turn out an educated man.

20,558. I have been a little struck by the divergence which is presented between the evidence which you are now giving and that which was given by some of your colleagues a little while ago, who repudiated with some strength the distinction between theoretical and practical law. That distinction, I may say, has been repudiated by most of the witnesses who have come before us on the question of legal education. You seem to be making the distinction a very marked one indeed?—Not between theoretical and practical law, but between that part of law which I consider to be educational in its character and that which is the practical application of principles. Legal principles and legal history may afford a good material for an education.

20,559. Take, for instance, Roman Law. We had a gentleman before us yesterday who said that he had been compelled to go through Roman Law for the Indian Civil Service examination, and he had forgotten it all since he had read it. Would you say that Roman Law is a thing which is desirable or necessary that people should take up except as a branch of Roman History on the one hand, or on the other hand as a branch of jurisprudence?—It is a valuable thing in any case to be able to compare two systems of law; one helps the other.

20,560. That is comparative jurisprudence. I admit the value of Roman Law in comparative jurisprudence but on the legal side is not that its real value?—It is part of the education of a lawyer, I should have said.

20,561. In what sense is it part of the education of a lawyer, except as an element of comparative jurisprudence. The lawyers whom we have had before us, including some of your colleagues, hardly admitted that it was?—Do you say they would not admit that Roman Law was part of the stock-in-trade of the educated lawyer?

20,562. No; I do not think they would have admitted that, except as an element of comparative jurisprudence?—I should have thought that they would have said that an English lawyer would be a better lawyer for knowing Roman Law.

20,563. As part of comparative jurisprudence, do you mean?—Really, it is difficult to map out the things which make an educated man in different professions. In every profession an educated man is better than an uneducated man, and the man who has had the opportunity of comparing different systems of law is a better lawyer, I should have said, than the man who has only learned one.

20,564. Then it is as an element of comparative jurisprudence that you value Roman Law?—I would rather say that I value it as a part of the education of a lawyer of the best quality.

20,565. Putting aside Roman Law for the moment, would you say that historical and analytical jurisprudence was an easy subject?—No, it is not an easy subject.

20,566. Might I go so far as to say that really to understand the matter, historical and analytical jurisprudence is very difficult?—No doubt, it requires thinking. It is not a matter of memory.

20,567. Is it not a fact that to really understand the problems of those subjects, a man needs a very considerable experience in, and knowledge of, practical law, and the state of facts to which the practical law relates, and what were called before us a little while ago, "the middle principles of jurisprudence?"—No doubt he will understand the principles of jurisprudence, which he has learned, very much better when he has had an opportunity of applying the rules of law in practice; but if he has to wait to learn historical and analytical jurisprudence, until he has had great practical experience in law, I am afraid that jurisprudence would go to the wall.

20,568. You say great practical experience?—Well, enough practical experience.

20,569. I am not speaking of a man who has gone through a long course of practical life. Is it not the fact that you frequently find that those who have studied what they call analytical and historical jurisprudence, have, for want of a practical experience in the matter of law, really no grasp of the subject?—I do not suppose that a man who has studied analytical jurisprudence merely would be capable of dealing with the problems presented to him in a barrister's Chambers.

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

20,570. That is rather reversing my question. My question is not whether a man who had an analytical training could deal with those problems, but whether a man, could deal solidly with theoretical jurisprudence unless he has enough practical experience to illustrate it by?—You can give him enough practical experience to illustrate his analytical jurisprudence out of the books and the cases which you would use as part of what I call the educational course in law. In teaching a man the elements of the law of real property, the elements of the law of contracts, or the elements of the law of torts, you can illustrate the analytical jurisprudence as you go on. I agree that it is a very difficult and heart-breaking subject to learn as an abstract subject, but I think it could be learned as an educational subject with the assistance of cases and text-books and without the necessity of illustration by chamber work.

20,571. You desire, I suppose, that that should be one of the subjects which would enter into a post-graduate course?—I think that it should certainly be retained in the post-graduate course. But I would make it also a part of the first course.

20,572. And that is a course which you associate with the Inns of Court?—They might, I think, undertake the teaching for the post-graduate course, working some parts of it concurrently with the Universities.

20,573. Does it not look rather an unseemly and bad piece of work. You ask the Inns of Court to limit themselves to merely practical work, and then you put the most important post-graduate work again into their hands?—I do not quite follow you.

20,574. You desire the Inns of Court to exclude themselves from the theoretical side of law and the more liberal branches of law during their course of education, and to give facilities and provide means for the study of post-graduate subjects in those same matters?—I have a clear idea in my own mind what the Inns of Court ought to do. They ought to show the practical application of the principles which the man has learnt, and has applied for himself, as best he could, with the text-books given him in the Universities. They ought to provide tuition which should illustrate these principles in practice. They should examine upon this, but they should accept our examination and our teaching for the earlier stage.

20,575. I am entirely with you on the question of the propriety of the Inns of Court accepting, under such limitations as have been suggested by one or two of your own colleagues, the Oxford, Cambridge, or the Victoria course, as equivalents for their own in certain branches; but may I not venture to suggest to you that you are taking rather an Oxford view of this question. What we have to consider is the need of London, and we have to provide for those who do not go to Oxford or Cambridge, but who desire to have a complete legal education given to them in London, both theoretical and practical. And is it not more desirable that that should be in the hands of the persons who provide the funds and offer the inducements, and, to some extent, I may say, even put on the pressure which is wanted?—I was speaking on the assumption that I was dealing with a University which proposed to have a Faculty of Law of its own and not of a University which proposed to incorporate the Inns of Court as its Faculty of Law. I was assuming that you wished to have a Faculty of Law which should give an education of such a character that you could put the students into the Faculty from the first.

20,576. But why do you assume, as part of the condition of your consideration, that the Inns of Court do not come in and form part of that Legal Faculty?—Because I have no reason to suppose that they do.

20,577. Then you are assuming the exclusion of a very important point. If you assume for a moment what has been put before us with considerable strength and force, that the Inns of Court should and do come in as the Legal Faculty, and take part in the whole system, would not that be a much better and more consistent manner of dealing with the whole subject?—They forming a branch of the University?

20,578. Yes, for this purpose, retaining their powers of admission, of course, and retaining in their own hands the right of requiring any evidence of practical efficiency which, to do their duty to the State, they might think right; but in the broad field of legal education that they should come in as part of the University?—I should have thought that the new London University, in taking over the Inns of Court as their Faculty of Law, would rather put the teaching of law out of the control of the University and into the hands of the Inns of Court entirely. They would lose control over the teaching in law whether as an educational or as a practical subject.

20,579. Of course, I am supposing the fact that they would be under the control of the governing body of the University, and that is not to be composed of the Inns of Court alone, but open to the influence of other branches of learning and other Faculties?—I do not think that would affect my view as to the way in which the University should provide for the teaching of law; that it should divide the subject into an educational course in which the student might begin at once, and get a good education from it; and a practical course; and that the Inns of Court should recognise the two stages, whether in the London University, of which they formed a part, or in the case of the older Universities where they have at present no direct *locus standi*.

20,580. Are you still assuming that the Inns of Court are to provide a general educational qualification for a man, and that no one is educated unless he comes from Oxford or Cambridge. There are a great number of members of the Bar who do not come from Oxford or Cambridge, but from Scotland and the London University and elsewhere?—I am not assuming that no one is educated who does not come from Oxford or Cambridge; what I am assuming is that there are a certain number of men who cannot afford to spend the whole of their University career in the classical or philosophical or historical education, but who wish at once when they enter the University to begin doing something which will have some bearing upon the profession they are going to adopt. Therefore in providing your Law School you must have regard to the needs of men who are to get their University education out of the Law School. And therefore it becomes important that your Law School should have an educational bearing as well as a practical bearing. You must try and work the two things together; and I believe it is possible to do so. When you get to the end of this stage, and the candidate is admitted to the degree, whether it be in the Faculty of Law or in the legal department of the Faculty of Arts, then the Inns of Court, whether a man comes from London, or from Oxford, or from Cambridge, should recognise that he has attained a certain standard and is absolved from a certain amount of examination.

20,581. Then you suppose that the Inns of Court do conduct a course of teaching, and carry on a course of examination from which a man is to be absolved by that done elsewhere, which therefore must be equivalent with it?—If the Inns of Court would recognise these matters they in their turn would be absolved from offering the education. If it is going on in the University of London at their doors, why should they do it too? Why should they keep these concurrent lectures and courses of study?

20,582. Then why should they require the absolution? If the Inns of Court do not teach and do not require examination in those matters, it would follow that they do not require any absolution for their students. At present, as the matter stands, the Inns of Court can require that a man should be adequately educated, and can enter into any arrangements with any body which they consider is doing sufficiently good work. You think that this pressure should be taken off and that there should be less inducement to a man going to the Bar to study syste-

matically than there is now?—I think that the Inns of Court should recognise a definite course of study up to a certain point as being proper to University teaching in law, and that they should take up the teaching of law at that point, and require a certain further advance to be tested by examination before they admit the candidate to practice.

20,583. Do you consider it a practical thing that the Inns of Court should be compelled to require for call to the Bar the certificate of a foreign body. Do you think that is a practical thing to expect?—They still hold the door to the Bar.

20,584. But you say that they should require the certificate of a foreign body?—Yes; but I think they might have some voice in the character of the education given. If they would make common cause with the various Universities they might save themselves trouble, and they might increase the strength of the Legal Faculties in the various Universities.

20,585. It hardly seems to be a question of saving themselves trouble. Some think that they save themselves more trouble than they ought to do, and that the object of any alteration should be not to save them trouble but to stimulate them to action?—When I say saving themselves trouble they are constantly changing their *modus operandi*, and they are constantly taking pains to alter their system, and I believe the system might be better arranged if instead of regarding the Universities as interfering with their province they would recognise that the province of the University teaching of law is something distinct from that which is proper to them.

20,586. To secure permanence, method, system, and completeness is the very object with which one would desire to see the Inns of Court united with the University system?—Yes.

20,587. You are proposing to dissever them from the University system?—No; I want to bring them into connexion with the University system. I would give them a voice in the character of the University system of examination and say, "If you approve of "this take our certificate, and so far as teaching in "this subject goes you can let it alone, for we will "do it."

20,588. (*Sir George Humphry.*) What I think Mr. Anstie rather means is that the Inns of Court have funds, and that they are carrying on to a certain extent a system of that general education which you desire; and would it not be well that the Inns of Court should be induced through the medium of their funds to carry out that system of general education more fully and in a University manner, and in an academical spirit; and that that should be the teaching of the University, the Inns of Court being so connected with the University by representation on the Faculty that they would become an item in the University, and the University thereby would exercise a controlling influence over this general teaching of the Inns of Court. That is the idea; the basis of the point being that the Inns of Court have the money?—I quite realise Mr. Anstie's position, that the University of London is to have a Faculty of Law and the Inns of Court are to pay for it.

20,589. Something of that kind?—Then I should say that I have no objection whatever to accepting Mr. Anstie's view; only I should ask that all Universities should act together in the matter of the teaching of law, and that if you do treat it as an educational subject there should not be one system in London and another in Oxford and Cambridge. Of course as being interested in one of the older Universities I cannot help bearing this in mind, that if the University of London takes possession of the Inns of Court it will kill the Law Schools at the other Universities.

20,590. (*Mr. Anstie.*) No; I think the view that has been presented to us is not at all that, but that, on the other hand, the Inns of Court should accept the examinations of the other Universities as equivalent to the London University's examinations in those subjects?—There can be no doubt that a law school of the University which held the Inns of Court in its grasp, in which the Inns of Court was only a Faculty, would certainly knock on the head the other schools, unless you would make such a division between the University teaching of law and the practical teaching as would enable the other Universities to come in and get recognition of their work.

20,591. Surely, there will always be a large number of persons with the necessary means who would prefer to go to the older Universities with their greater advantages and emoluments, and make their study of law there?—I am not sure of that, when they see that the students of the London University obtain considerable privileges.

20,592. I am not suggesting that they should get privileges, but that they should be taken on the same footing?—If the Inns of Court take over the Faculty of Law they would provide the machinery for the call to the Bar within the University.

20,593. No, certainly not; that has not been suggested, in fact it has been most strenuously denied by those who have spoken on behalf of either the University or the Inns of Court. The Inns of Court are supposed to keep entirely in their own hands the conditions of call to the Bar. It has been put before us lately that the Inns of Court should retain in their own hands the conditions of call including any conditions of practical efficiency which could not be tested by examination or imparted by lectures and classes, and so far as lectures and classes are concerned they should form the Faculty in the University; and that so far as lectures and classes are concerned the lectures and classes of other Universities competently taught should be taken as equivalent?—That would enable us to work together, no doubt.

20,594. (*Mr. Palmer.*) I gather that you feel the difference or the distinction between academical teaching of law and the professional teaching of law?—Yes.

20,595. That assumption underlies a great deal of the difference between those who represent the professional character of the Inns of Court and the people who represent Universities?—Yes.

20,596. It is very strongly shown, when you consider the position of solicitors in the Incorporated Law Society, how necessary it is that they should cling to the professional side of law teaching being in the hands of the body who will give the certificate of proficiency?—Yes.

20,597. And if in any Faculty of Law, be it the University in London or Oxford or Cambridge, you have to provide for barristers, solicitors, and for citizens, as it was expressed the other day, and you must bear in mind not only each class, but the relations of those three classes to one another; and whilst the School of Law in the University would be represented by, we will say those bodies who hold the funds and who are now the representatives of professional teaching in the University, it is quite clear that they must be allowed to retain what they consider the professional conditions of the call, whether to the Bar or to act as solicitors?—That would be so.

20,598. Therefore, all that is desired apparently is that the Faculty of Law, in a University we will say in London, should be very largely represented by the professional element, whether the Inns of Court or the Incorporated Law Society. Some of the witnesses have gone so far as to say that it should consist exclusively of them, but at any rate they must be largely represented for the purposes mainly of the University and the academical teaching of law?—Yes, that would be my view.

20,599. Do you see any real difficulty in this. Assuming that the professional classes (by the "professional classes" I mean the Inns of Court and the Incorporated Law Society) were adequately represented upon the Faculty of a given University, we will not say whether London or Oxford, would there be any great practical difficulty in your mind in in sufficient academical teaching of law being provided in that way?—In London?

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

20,600. Yes, we will say in London?—I should say there would be some difficulty. I think the risk of academical teaching of law in London is, that it is so near the courts that there is a risk of its becoming too practical. It appears to me that it is not the business of the University to turn out a man who is at once capable of going into court and arguing a case, but to turn out a man who is capable of becoming an educated lawyer of the highest class; but if you keep a strong hand on the academical character of the teaching of law in London, I do not see why you should not do that as well in Universities which are more remote from the courts.

20,601. Of course London will be for that reason in a very favoured position, and although it will be assumed that other Universities will have the same facilities as a University in London, that is to say, the same facilities would be allowed for their examination, it will be reasonable that the facilities of the courts and the practical learning there is there, would make the formation of a Faculty of Law in London expressly desirable?—Yes; it would be much easier to teach law in its advanced and practical stages in London than at Oxford or Cambridge, where it is almost impossible.

20,602. Therefore such bodies as the Incorporated Law Society and the Inns of Court would be more likely to marry the University of London than Oxford or Cambridge, but the same facilities might be allowed?—Yes.

20,603. (*Professor Sidgwick.*) I should like to enter a little further into the line which you wish to draw between academical and professional teaching. I think there is no reason why I should not tell you what you may have begun to conjecture, that your view is somewhat opposed to that of the majority of the witnesses on this question?—Yes.

20,604. I speak from recollection, but I think the great majority of those who have given evidence before us on this subject, either expressly stated or inclined to the conclusion that a University may properly give all the teaching in law which can be given by means of lectures; that no doubt there is a further practical training in law required, but that that must be given in the case of barristers by practical work in chambers. If I have made myself clear you will see that the line is drawn differently. In each case there is a distinction drawn between academical work and supplementary professional training; but, in the view, which I think is the view of the majority, all that can be taught by lectures, can be thoroughly taught and ought to be taught in a thoroughly equipped academical school of law. I understand that your view is opposed to that, and that you think that there is an important part of the teaching which should be conveyed by means of lectures and classes which a University ought not to give?—Yes; I should have thought that there was a good deal that could be better done in the more immediate neighbourhood of the courts and the practice.

20,605. With regard to that there is a slight complication. One question is whether a University in a town like Oxford or Cambridge can as well teach this; and the other is, whether, supposing we have a University in the Metropolis, and therefore the special advantages of having a law school in the neighbourhood of the Courts (assuming a combination can be effected with the Inns of Court), there is any reason there to draw the line which you are now drawing. It may be that your line of reasoning would lead us to the conclusion that a law school forming part of the University of London should attempt more than a law school at Oxford and Cambridge. But if we may both of us dismiss the traditions of our respective Universities and consider only what would be desirable in a law school having the advantages of a law school in London, and assuming it to be connected with the Inns of Court, would you still be inclined to draw the line as you now do?—I should draw the line thus. The business of the University is to ensure that those who receive its degrees are educated men; and I believe that it is possible to provide such a course of legal study and examination as would meet this requirement. Beyond that I should have said, so far as legal training is concerned the Inns of Court might take the matter up, whether by lectures or by providing for more practical teaching. But no doubt the University in London would have opportunities which the other Universities do not possess for carrying out the later teaching, more especially if it comes into immediate connexion with the Inns of Court.

20,606. It is not too much to say, that in the view certainly of witnesses of weight, the advice we have received is that it is not worth while to try to make a Law Faculty unless we can get the Inns of Court to come into the University and supply the machinery. Suppose we adopt that view and make the combination, would you still say it would be desirable to keep two kinds of lectures, Academic London Law Lectures, and Inns of Court Law Lectures, outside the University?—I should have thought it was desirable to keep apart the lectures which it was thought led up to and were sufficient for the University degree in law, and the lectures which led up to the call to the Bar and admission to the practical branches of the profession.

20,607. Another point occurred to me. In Oxford, I believe, as well as in Cambridge, law is one of the studies preparatory to the degree in Arts?—Yes.

20,608. And you think that is desirable, do you?—That is the part in which I have been interested during the 16 years or so that I have been teaching law.

20,609. You think it is desirable in a University, and if you were organising a new University would you still make a training in law one of the means of obtaining a degree in Arts?—I think I should for this reason; there are so many men who want, as I was saying just now, to have some teaching in the profession which they are going to adopt all through their University career, and who, from circumstances, have never learnt classics enough to make it worth while for them to continue in that subject.

20,610. I suppose if a student in Oxford has obtained a degree in Arts through law, there is still a certain department of legal study which he has to go through before he takes a degree in the Faculty of Law?—Yes. We have never come to the practical organisation of that course, because the students who pass on to that degree are not very numerous, and they mostly pursue their work in London. Sometimes they spend a short time reading in the Law Library in Oxford and consulting the professors, but, as a rule, they go to London, and come up from London to pass a degree in the Faculty of Law, and that is why I say there is a stage of teaching which might consist in lectures of a practical character, and which might be properly done by the Inns of Court.

20,611. In organising a University in London, then, you would have a certain amount of preparation in law, admitted as a means for obtaining a degree in Arts?—Yes.

20,612. Then you would have a further training in law, after the degree in Arts had been obtained, which should have to be gone through in order to obtain a degree in law?—Yes.

20,613. Do you not think that in that further training you might include all that a man would have to turn in, except what he learns from practice in chambers?—I think so, and I see no reason why the examination for the degree in the Faculty of Law should not be made identical with the examination for call to the Bar.

20,614. Then, after all, it appears to me that if we consider the special conditions of London, your view would not be so much opposed to the other view put forward. If the Inns of Court combine with the University and supply the lectures required for the degree in law, they would supply all the lectures required for the call to the Bar?—They would, in that case, supply the lectures required for the call to the Bar, and we could come to terms with

them as to the conduct of the examination, when the examination led to the call to the Bar.

20,615. It had occurred to me, as an objection which you seem to feel, that the association of the Inns of Court with the new University of London might be viewed with jealousy by Oxford and Cambridge. Suppose it was accompanied with an endeavour to enter into relations with the other Universities, which I think witnesses who have urged this combination have always recognised as desirable (there is no desire on the part of any of our witnesses to interfere with the schools in Oxford and Cambridge,) do you think that the mere fact that the Inns of Court were specially connected with the University of London would be an objection ?—No ; I think it would entirely depend on the amount of recognition given to the examinations. No doubt, the Law School in the University of London would have great advantages, but I think if our examinations were similarly recognised, our Law School might continue to thrive.

20,616. Then if the scheme that has been suggested to us is carried out, it will involve a cordial co-operation with the other Universities, at the same time as connexion with the University of London, and you do not think that that would be opposed by the older Universities ?—I think not. I think we should rather welcome the opportunity given, to get a systematic recognition by the Inns of Court, together with the London University.

20,617. Turning to the general question of University organisation, it is, I believe, the case at Oxford as at Cambridge, that the body of resident graduates, which has certain powers, includes a numerically important element, which is not connected with University work ; professional men residing in Oxford ?—That has become an increasing difficulty, and is now I think, to some extent a matter of complaint. Oxford is getting so large that persons take part in the business of Congregation, in elections to Council and to other offices, and in voting on Statutes, who have no connexion either with the teaching or administration of colleges or the University.

20,618. I think you have answered the question I was leading up to, as to whether, not at Oxford, but if a University is being organised *de novo*, you think the presence of this non-teaching element is a good thing or not. You rather imply that it is, at any rate, a dangerous element if it is at all large ?—I think it is unsettling. If the executive knows that it is directly responsible to the teaching and administrative body I think it is strengthened.

20,619. So your view, as founded upon the experience of Oxford, would be that if in the sovereign body there is to be an element of graduates who are not connected, either administrative or in the way of teaching with the University, it ought, at any rate, to be a small one ?—I think it ought.

20,620. With regard to the desirability of the legal Chairs in a University being held by men actually engaged in professional work, the view that I think has been usually held, and this is held by the American Committee of Inquiry, is that the two elements ought to be combined; but that there ought to be on the professoriate, in a well-equipped school of law, some professors who are able to devote their whole time to the work, and that there ought to be also an element of persons actually engaged in the profession, and, therefore, in closer touch with what is actually going on. Would you agree with that view ?—I should, most decidedly, always supposing that there are the two elements, the professor whose business it is to give regular courses of lectures uninterrupted by liabilities to his clients, and the professor who is in practical dealing with the profession, and who gives practical character and colour to his work.

20,621. You think the best arrangement is to combine the two elements ?—I think it is, decidedly.

20,622. (*Lord Reay.*) Your view I take it, is that you do not wish the Faculty of Law to degenerate into a professional school, giving a minimum of knowledge in a short time, in order that the student may enter speedily on his professional work ; but provided that you have a guarantee against such degeneration you see no objection whatever to a cordial co-operation with the Inns of Court, and with the Incorporated Law Society, for the attainment by the University of its more distinctly academic aims which do not exclude and still less militate against the attainment of professional efficiency ?—No, I see no objection, always provided that it is not considered to be the business of the University to turn out a practising barrister.

20,623. (*Professor Sidgwick.*) I wanted to draw attention to the question as regards the distinction between scientific and practical training. I think there, again, your opinion somewhat differs from that of one or two witnesses who have given evidence before us. Sir Frederick Pollock, I think, for instance, was unable to see any difference between scientific and practical training, and Professor Holland rather emphasises the practical character of the teaching given in Oxford. He says :—"I may say that at "Oxford the man who learns English law does not "learn it in the air, but he learns it with constant "reference to cases. He is always considering the "cases reported every month, and he is posted up in "the latest decisions of the courts." It would seem to me that when a man is taught in that way, with constant reference to cases, including even the latest cases, it is difficult to see what more he wants, except what he gets from the practical work in chambers ?—You see he is only taught the cases in certain subjects which are regarded as educational. Perhaps I speak of these things from a rather different point of view, because Sir Frederick Pollock and Mr. Holland are professors, and they have never done what I should call college teaching, whereas I have always had charge of a certain number of young students, and have conducted their course of study individually. This constant introduction of cases is really in subjects which we consider proper to be taught, for instance, cases in the law of contracts.

20,624. Could you tell me what would remain. Suppose a man had learned in his academic work the law of contracts and torts, constitutional law, and the law of real property—what would he be taught further before he was called to the Bar ?—We do not teach equity in a general way ; we do not teach the special sorts of contracts, such as sale.

20,625. Could you explain to me at all, as far as an outsider can have it explained to him, why the rules of Equity are less adapted for academic training than the rules of Common Law ?—I think that if we tried to teach Equity generally, we should touch on so great a variety of topics as to confuse and discourage a student at that early stage of his legal study. The subject is too large to be taught in a general way, and if we were to go into detail we should at once become practical and not educational. Some subjects admit of a general treatment, such as the law of real property and of contract, and these admit of practical illustration from the newest cases. But here also we have to be careful lest we become too special.

20,626. Could you tell me what subjects that are now included in the examination of the Inns of Court with a view to the call to the Bar are not regarded by you as educational. What subjects must a man know in order to be called to the Bar and yet which you do not think it is desirable to teach ?—Shortly, I think, he is supposed to know the general rules of Common Law and Equity, the procedure of the High Court, and Criminal Law.

20,627. Then you do not give him a general view of the law of England if I may say so, including Common Law and Equity ?—No, we try and explain to him the difference between legal and equitable rules.

20,628. You do not think that it is desirable that a man should try and get a general view of the law of the land ?—I think if we did that, it would be so general that it would not be of much value, or we should distract him by a great number of small points, and so lose the educational value of the teaching.

Sir W. Anson, Bart., D.C.L.

27 Jan. 1893.

20,629. So that in respect of the general rules of the Common Law and Equity he has a considerable amount of work to go through after getting his degree?—Yes, no doubt.

20,630. Does he require this additional knowledge for a degree in law?—He requires that knowledge. We have brought it as far as possible into conformity with the Inns of Court.

20,631. You do not happen to give in Oxford the teaching required for your own degree in law?—That is so.

20,632. I suppose it is part of the ideal work of a University to prepare for its own degrees?—Yes.

20,633. If you did give him that you would give him what he would require for the call to the Bar?—Yes.

The witness withdrew.

J. M. Thomson, Esq., F.R.S.

JOHN M. THOMSON, Esq., F.R.S. Ed., examined.

20,634. (*Lord Reay.*) You are Professor of Chemistry in King's College?—Yes, and also Lecturer on Photography in the Department of Engineering.

20,635. I believe that generally you agree with the statement which Professor Adams laid before us?—Yes. In fact I assisted as a member of the Committee which drew up the statement which I believe the Commission have in their hands. I thought it would save the time of the Commission if I simply stated that.

20,636. What is the number of students in the Chemical Department at King's College?—We have at the present time a total of nearly 200; in the day department we have over 170; the remainder are in the evening department.

20,637. Do you teach in both?—No, I teach only in the day department.

20,638. Who teaches in the evening?—My senior demonstrator, Mr. Stillingfleet Johnson.

20,639. Do the evening students attend every class?—There are students who attend the regular course in the evening class department, and there are also students who attend specially chemistry only.

20,640. Do those who attend during the day belong to the engineering department chiefly?—They belong to the engineering department, the medical department, and the science department.

20,641. Do you associate all these students?—No, they receive separate lectures.

20,642. You divide your chemical lectures into classes?—Yes, into two classes. The science students have gone with the medical students up to the present time, the engineering students are separate.

20,643. Then how are you situated with regard to the nature and extent of the laboratory accommodation?—At the present time we have two laboratories which I call the elementary and the analytical or advanced laboratories. In the elementary laboratory we have accommodation for practically 60 students; but that is, in my mind, overcrowded. We can put 60 men in, but it is overcrowding.

20,644. Have you 60 basins?—No, the basins are divided between two students on account of the arrangement of tables. There are 30. In that laboratory we teach in practical classes. The men only work a specified time—not all day. They work generally for nearly two hours, and in that laboratory we teach the engineers in the second year, and the medical students. In the analytical or advanced laboratory, for those who are going to be professional chemists the students work all day, in many cases every day in the week—sometimes three days per week—and some of them will stay with me in that department for practically three years. We can only accommodate 22 men in the analytical or advanced laboratory.

20,645. And there you have some original research work?—There we encourage original research as much as we possibly can.

20,646. Do any of the engineering students frequent the advanced laboratory?—No, they are taught in the practical class room, that is to say, the elementary laboratory; but facilities are given to them to do a certain amount of advanced work. That advanced work is limited from the necessities of the laboratory. We have not the room or the opportunity to give that advantage to many students.

20,647. Then may we conclude from your evidence that a great want is felt of increased accommodation?—In my department I want increased accommodation certainly. We have done, I think, very fairly well with what we have had, but it has been a very great push sometimes.

20,648. Perhaps you would like to give us some further information about the original work?—The original work has been done to a very considerable extent in the college. In my own time the present staff have undertaken original work. The names of the former professors, I think, are almost sufficient to indicate the quality of the work which was done. Professor Daniel was the first professor; his work is very well known. Then Professor William Allen Miller; my predecessor, Professor Bloxam, and my colleague for some time Professor Hartley, who is now at the Royal College of Science in Dublin; but whilst he was at King's College a very great portion of his work was done there, and it was very valuable work. Then I should also like to state that we have the Daniel Scholarship for original research done in the analytical laboratory. This scholarship, I may say, has been taken, within my own knowledge since 1860, twelve times by the students. It is a scholarship for students, and the researches in those cases have been published to a very considerable extent. I do not think they have all been published, but to a very considerable extent they have been published in the Journal of the Chemical Society. The scholarship is only given to a student who has been eighteen months in the laboratory. That is the minimum limit of time that he must attend; and of course, as you well know, he attends longer, because they take, in some cases, a very long time to carry out those researches. That is one of the reasons, perhaps, why it cannot be given oftener. I do not think I need amplify that point as to original work.

20,649. Then you wish to point out the specific need for a teaching University as bearing upon your subject?—Yes; at the present moment we find that the students are very much under the influence of working for examination pure and simple. The professor has very little opportunity of using freedom in his teaching; he must have in view to a very great extent the final examination for which the student is going, and as those examinations in London are very much taken out of his control (he has very little voice in the arrangements for those examinations) it cramps the freedom of teaching. I think with a teaching University arranged to some extent like the Scotch Universities the professor would have a stronger voice in the education of the student. There is one point which appears to me to be an important point in the matter, namely, that it would increase training more than mere examination. The training of the student would be taken into account to a greater extent, and less would depend upon the final examination. At the same time one would hope that with a thoroughly organised teaching University we might be able to obtain endowments for laboratories and advanced teaching. I think those are the chief points.

20,650. Then with regard to the question of a degree in engineering as separate from a degree in science, what is your view?—I would not advocate a separate degree for engineering. I would have a B.Sc. degree and allow a man in his final examination to take his degree in engineering subjects; but I

would not propose to have an absolutely separate degree. It should come under the ordinary science degree.

20,651. A suggestion has been made in favour of an Applied Science degree. That, I understand, you do not advocate?—No, unless it was a portion of the true B.Sc. degree.

20,652. You would have one degree only, with various avenues?—Yes.

20,653. Then what is the object of your Department of Photography?—First, I should like to mention this. That Department of Photography is the oldest teaching Department of Photography in existence, I believe. The lectureship was instituted in 1857, and a great deal of work has been done in that department. There are very famous names connected with it, for instance, Professor Hardwick, who carried out a large number of experiments there, and made very interesting and important inventions in the department. We have just built at King's College within the last two years a new photographic department, the old one being too small; and I have at the present time over 30 students in the department. The education given there is very systematic. It consists of courses of lectures, and afterwards practical work in the laboratory. The course is given to the engineering students chiefly, but others have facilities for entering the department. The course extends from the month of October to the middle of July. The lectures and practical work are once a week, unless the class rises to such an extent as it has done this year, that I have had to divide it, so that there are two days a week.

20,654. Two parallel classes?—Yes, I cannot accommodate the whole of the 32 men.

20,655. Is it a very popular subject?—Apparently it is, but it is dealt with in a scientific manner. The division of the course I might mention is this; lectures come in the early part of the course between October and Christmas, and in those lectures, or rather demonstrations as they are, I review the scientific principles, and the chemical principles, which underlie the art. Then after Christmas, the students take their own photographs and practise the development and printing processes.

20,656. You have a studio?—Yes. They also take the sensitive plates away with them, expose them in the country, and bring them back for work at the next lecture.

20,657. Have you any evening students?—No; not in photography.

20,658. Are the students all in the engineering department?—Generally they are, but I have had from time to time a few outsiders, and one or two from the other departments.

20,659. It is taken as an auxiliary subject, I suppose, not as a principal subject?—You cannot regard it as a principal subject, but it is in the regular curriculum in the third year of the engineering.

20,660. As a compulsory subject?—It is compulsory, unless the student applies to the Dean for exemption.

20,661. Can you tell me whether that is the case in any other engineering department?—I do not know that photography is systematically taught to the extent it is at King's College in any other college that I know of. I mean by that that it is a practical part of the course in engineering.

20,662. And your students have found a practical advantage in having this course?—In many cases. I have had evidence from abroad on that point. If there are any points which the Commission would like to amplify with regard to Professor Adams' evidence, or upon the whole of this printed scheme, I shall be very pleased to answer any questions as far as I possibly can. I may say that I agree with it, having been one of those who assisted in drawing the scheme up.

20,663. Is there anything you would like to add to it, or to say in explanation?—No. The only point that I would have spoken upon, had you not yourself brought it up, was the question of the science degree with regard to not having a separate degree in engineering. That is a point upon which I am perfectly distinct.

20,664. (*Mr. Anstie.*) You speak of the teaching being cramped by some of the examinations, what are the examinations which you would describe as cramping?—Those examinations in the nature of the London University examinations.

20,665. What are the others, what is the nature of them?—Those depending upon pure examination.

20,666. What are the other examinations you refer to?—I refer principally to the London University.

20,667. That does not cramp you to any great extent, does it; because I do not observe that you send in many students to it?—The reason of that I attribute to this fact: from the very establishment of King's College the Applied Science Department, as it was then called, was one of the chief departments of the college. In consequence of that the men who come to King's College come more particularly for an education in the principles of the science which they are going afterwards to apply, and, therefore, they have not the tendency to go to the London University, at least for a science degree.

20,668. Then, as a matter of fact, it does not cramp you?—It does when we have the men.

20,669. But you do not seem ever to have any men, or very rarely?—In the Medical Department we have, and we have had several B.Sc.'s.

20,670. I have been looking through the list of B.Sc.'s, and they do not seem to be numerous. I see very few?—They are not very few.

20,671. The amount of cramping cannot be very large. Out of 200 students the cramping would be brought within very narrow limits?—It is not cramped for the Applied Science students. We may leave them out of the question. It is only the medical and the science.

20,672. The preliminary scientific?—Yes. It is well known that if a man is a certain examiner the men will pay more attention to his text-books than those which may be advised by the professor.

20,673. That is more on the medical side than on the scientific side?—Yes; I rather mentioned it in connexion with general principles of education.

20,674. Not so much from experience as from general principles?—A general principle which has arisen in my mind from the fact that I have observed the tendency to attach themselves very closely to the special text-books approved of at the time being by the examiner. I might state that having been educated in Scotland myself; the system there is entirely different from the London system. Then there is another reason, you ask about the few going in——

20,675. That was with reference to the cramping effect. I wanted to ascertain how far it exercised a cramping effect upon the teaching?—Having such a large number of Applied Science students, if I may call them so, in the college, the science degree at the London University contains animal and vegetable biology, botany, and zoology, which are not required by such students. These subjects, of course, Applied Science students have hardly the time to study, because they have so many other subjects.

20,676. So that they do not go in for it, and to that extent it does not cramp your teaching?—That is one of the reasons, however, why few take the degree. If that degree was divided, as I understand Professor Carey Foster wishes it should be, I am not certain about that, but I understood that he had brought forward some idea of the sort——

20,677. Divided by the exclusion of what?—By doubling; giving one such as it is given now after the preliminary scientific, but also giving one, a science degree, in which a man could go out in engineering.

20,678. Excluding subjects which are not germane to engineering?—Yes.

20,679. Such as organic chemistry?—I do not know about that. You might exclude animal and vegetable

J. M. Thomson, Esq., F.R.S.

27 Jan. 1893.

biology, botany, and geology. I should not like to put out organic chemistry.

20,680. Those subjects are not compulsory, are they?—They are compulsory for the preliminary scientific and the intermediate B.Sc.

20,681. The necessary subjects appear to be experimental physics, pure and mixed mathematics, and pure and general biology?—Not geology.

20,682. No?—I beg your pardon, I thought they were.

20,683. Would you wish to exclude that?—I think so for the engineering.

20,684. You desire a degree in which that branch of science should not be made imperative?—Yes; so that an engineer student might be induced to take the B.Sc., which he does not feel inclined to do now.

The witness withdrew.

D. S. Capper, Esq., M.A. (Edin.), M.I.C.E., M.I.M.E.

D. S. Capper, Esq., M.A. (Edin.), M.I.C.E., M.I.M.E., examined.

20,685. (*Lord Reay.*) You are Professor of Mechanical Engineering at King's College?—Yes.

20,686. Would you give us your views about the claims of applied science to recognition as distinguished from pure science?—I think Professor Beare has already gone into the question of the present recognition of applied science as distinct from pure, and I simply wish to emphasise the fact that, in my opinion, applied science ought to be strongly recognised as a part of any scheme for a teaching University, because, for one reason, the scientific knowledge which an engineer requires at the present day is of a very high order, and is the application of the principles of pure science to his professional needs, which would not be ordinarily dealt with in a pure science course; at any rate, not in the way he requires. You can only get that advanced knowledge when you are in conjunction with a University course where the pure sciences are taught.

20,687. Then you consider that the scientific training of an engineer must be of a high order?—Of a very high order, in order to compete at the present day. Engineering is a very wide subject, embracing electrical engineering, which is a high scientific subject, mechanical engineering, civil engineering, and the other branches, mining engineering, and so on.

20,688. And you would differentiate the science training given to engineers at a very early period of their University course?—I think I would distinctly differentiate it for this reason, that the point of view of an engineering or an applied science student in general is different from that of a pure science student. You do not wish, in applied science, so much to study the science itself with a view to its development, as to study the science with a view to its application to the needs of your particular profession. Consequently the stand point, if I may say so, of the applied science student (I do not like the term "applied science") is distinct from that of the pure science student, and cannot fittingly be carried on in the same course. Whether it is to be taught by different men or not is a question of opinion. At present, where applied science is recognised at all, the pure scientific parts of it are taught, generally speaking, by the same men in this country. Abroad, of course, in Germany, it is not so. For instance, mathematics is divided up into a number of different separate courses, according to the particular application of mathematics which is required.

20,689. What method do you follow at King's College?—At King's College, in chemistry, for example, you have heard what Professor Thomson says. The engineering course in Chemistry is entirely differentiated from the medical course, and the same may be said, to a large extent, with regard to physics, mechanics, for instance, being added to physics for the applied science student, though not for the chemical.

20,690. You differentiate the lectures. Do you also differentiate the teachers?—We do not differentiate the teachers. They are the same teachers for the most part.

20,691. And do you think there is an advantage in having the same teachers?—I distinctly feel that the advantages would be, especially in mathematics, in having separate teachers.

20,692. As they have in Germany?—As they have in Germany—not quite to the same extent that they have in Germany.

20,693. Not quite so much, but still more than we have?—Yes.

20,694. That is your view?—Yes; that is my view.

20,695. And in any case there ought to be a separate Faculty, or a separate branch of the same Faculty?—A separate branch of the same Faculty.

20,696. That is a detail; but you would have a separate unit?—Yes, a separate unit.

20,697. A separate Board of Studies?—The course for the applied science student should be arranged by the applied science teachers. Of course, I may say that the distinction between the pure and applied science portions of an engineer's training is exactly the same as at present obtains between the applied and the pure scientific parts of medicine.

20,698. I see you allude to the view taken by the Scotch Universities. Are you acquainted with them?—I have stated them as they appear in the University calendars.

20,699. They accept the division?—They accept the division between pure and applied scientific subjects for the B.Sc. degrees. They have not separate Faculties.

20,700. Do they separate courses?—They separate courses.

20,701. And they separate the examinations?—Yes. I believe that complete provision has not been made for the applied science part of it at present in the new ordinance, as far as I have seen. The provision is made, but not the details exactly worked out.

20,702. They have left the details to be worked out by the University authorities?—Yes.

20,703. And you approve of the details being left to the University authorities, because they depend entirely on the numbers of the staff and the question of funds?—Yes.

20,704. The whole question of differentiation of studies is a question of funds?—Very largely so.

20,705. You have compared the distinction between pure science and engineering to the distinction between pure science and medicine, where the same thing occurs?—Yes.

20,706. Then you allude to the Bachelor of Science of Edinburgh or Glasgow, where, also, they do not give a special engineering degree. I think at Dublin they do give a special engineering degree?—Yes, and it is distinctly objected to in the profession, and that is an opinion I should agree with. It is like giving a medical degree without the clinical training, which is, of course, absurd.

20,707. You are not in favour of having workshops?—No.

20,708. The workshop teaching, you think, ought to be outside the University?—The workshop teaching is purely preliminary teaching. I should like to amplify that point later on.

20,709. On what qualification would you give the degree of Doctor of Science in this applied science department?—The question whether D.Sc. in engineering should be given or not is a question of opinion also, I think. The difficulty, of course, is a practical one. For the Doctor of Science degree you must have evidence of practical training in your particular profession, and at the same time I think one ought to demand original research. Of course the standard of the original research portion could be clearly ascertained. As to practical training, of course

a practical examination is an impossibility in engineering. To really determine whether a man has got the training or not is a question of time and not examination.

20,710. Why do you say that practical training is required before you give a degree, if there is such a degree, as Doctor of Science?—I should feel that if one gave the distinction of D.Sc. in engineering it ought to carry with it a more complete proof of his training as an engineer than the B.Sc.

20,711. Then, I suppose, that what you intend to convey is that original work in engineering without some practical training would not be of much value?—It would show academical training, not professional training.

20,712. The supervision of the practical training you would leave to a professional body?—Institutions of Civil, Electrical, and Mechanical Engineers and so on.

20,713. You would leave it to such institutions as the Institute of Civil Engineers to determine the conditions under which it should be carried out, and to give the certificates, if certificates were required, that a man is fit to proceed to the degree of Doctor of Science?—Yes.

20,714. Some arrangement would have to be made between the University and those professional bodies?—Yes.

20,715. A *modus vivendi* would solve the difficulty?—Yes. That, of course, would have to be worked out.

20,716. Then with regard to the certificates of proficiency in degree subjects?—Those are given in Glasgow at the present time, and I think it is a distinctly advisable course. A certificate of proficiency is given in degree subjects which sets forth the standing of the student in the branches which he has studied. That, of course, is extremely valuable to those who have not the time, money, and inclination to go through a complete degree course.

20,717. Might I ask which class of students would be likely to wish for those certificates of proficiency?—Many students might wish to study some particular subject like mechanical engineering or civil engineering or a course of electrical engineering, and so on for some particular post, without having gone through the complete course of scientific study for the degree which they were going in for.

20,718. Could you mention what kind of post you have in view?—It is difficult to give instances about that, but say manager's of works, marine engineeering posts, &c.

20,719. And those certificates of proficiency would have a marketable value?—Yes, they would show what a man could do. They would not show more than he could do.

20,720. They would be evidence of really good work in the subjects for which they were given?—Yes.

20,721. You might give them for one subject even?—Yes. The certificates would be endorsed with the subject the student had gone through.

20,722. You agree with the printed paper handed in by Professor Adams?—Yes.

20,723. And you do not want to make any additions?—No, I do not.

20,724. You lay stress on the necessity of not overcrowding the laboratories?—I do. I lay great stress upon that. I have found in my own experience that one cannot deal efficiently with more than a certain number of students in a laboratory. For one thing there is the question of funds again. A laboratory, if more than a certain number of students attended it, would have to have duplication of expensive machinery which in my opinion would be better placed in the hands of two or three professors than being crowded together under one. One professor even with a sufficient number of assistants cannot give that individual attention which is required in an engineering laboratory in order to give efficient training to the students, and in my opinion it is absolutely essential to have more than one professor (I do not mean a great number) in a large city like London to really give the efficient teaching that is wanted in such laboratories.

D. S. Capper, Esq., M.A. (Edin.), M.I.C.E., M.I.M.E.

27 Jan. 1893.

20,725. Your contention is that we have not more engineering laboratories and not more professors than we need?—Not more.

20,726. And in the teaching University it would be a question of distributing the work properly?—Yes, that is what was in my mind.

20,727. The appliances at this moment are not redundant?—They are not. The laboratories of University rank which at present exist, the City and Guilds Institute, University College, King's College, and perhaps on a different footing, rather, the Finsbury Technical College, are all full at the present moment. In my own, for example, I have quite enough students, and there is at present a question of raising the standard for entries into the laboratory in order to reduce the numbers for efficient training.

20,728. Have you laboratories for elementary students and laboratories for advanced students like your colleague Professor Thomson?—No. I have one laboratory, but added to that I have workshops. The workshops are used purely to give the preliminary training which a student needs before he can use his fingers for experimenting. It is more with a view to that than anything else that the workshops are used in King's College at present. If that could be done efficiently before the student came to the college I should prefer it. It is distinctly not University training.

20,729. The University would not deal with that kind of work in any way?—No. One would need of course a certain number of machine tools in order to carry out experimental research work and so on.

20,730. The research work obviously requires much sub-division?—It requires much sub-division and in a wide subject like engineering perhaps more than in many others. There are distinct lines which different professors will take in research work, and naturally draw together round them the students who wish to go in for that particular line of study, and it will be better done in my opinion, by so doing than by centralising it all under one professor's hands.

20,731. You distinctly repudiate centralising both for the elementary work and the research work?—Yes.

20,732. For the elementary work, simply because it is impossible, because the classes are too numerous; and for research work because the field is too large?—Yes. I should not have used the word "repudiate." I ought to have said it was distinctly my opinion that it was advisable.

20,733. Have you anything to add?—What I mean with regard to workshops is that even in the workshops one has at the college one must distinctly repudiate the idea of trying to teach the practical work which a student can only get in a factory, but the workshops, must only be used in the preliminary work for giving a student facility with the use of tools and acquaintance with methods of practice. They must not be used at all in a college or school as held to take the place of an actual professional training outside.

20,734. You use the workshop as a kind of gymnastics for the fingers?—Yes, for the fingers, and for the brain at the same time.

20,735. (*Mr. Anstie.*) It comes practically to what is called the use of the tools, does it not?—Yes.

20,736. And that is a thing which you would be glad that all your pupils should be familiar with before they come to you?—Distinctly.

20,737. Do you think you are doing what you ought not to be doing in providing for that?—Yes. You ought to have, as I said, small workshops where students could make apparatus for themselves, and adapt it, and adjust it, and so on; and you would probably always have a certain number of students who had not had the

D. S Capper, Esq., M.A. (Edin.), M.I.C.E., M.I.M.E.

27 Jan. 1893.

training even at school (outside students in a general course) who would naturally use your workshops.

20,738. Following your division of laboratory work between research, and elementary, I am not quite sure whether I gather your meaning. In the case of the elementary work you say you must not have your workshop crowded?—"Elementary" perhaps is a wrong term to use with regard to a mechanical engineering laboratory.

20,739. I will say educational as distinguished from research?—Yes.

20,740. How far would you carry that principle? Would you think it desirable that each laboratory should be only supervised by one professor, or would it be a convenient course to have a laboratory supervised by a professor assisted by demonstrators?—Distinctly you would need that always. If you had more than two students you would need demonstrators.

20,741. If you have your supplementary machinery of demonstrators speaking generally, might not that be applied on rather a large scale?—I do not think it is practicable.

20,742. Would you give me anything like the number you would be prepared to state?—It would not be advisable, as far as my experience goes to do deal with at any rate, more than 30 students.

20,743. In one laboratory?—Yes.

20,744. Even with an adequate supply of demonstrators?—Yes, even with an adequate supply of demonstrators. Of course, the machinery is extremely costly, which adds to the emphasis of it.

20,745. That is, of course, one of the things one has to take into account in these matters?—Yes; it is not like a chemical laboratory where you can duplicate the apparatus.

20,746. The degree of cost reaches its maximum in your branch, does it not?—Yes, I think so.

20,747. How many students would that accommodate. You say 30. I suppose you mean 30 at a time?—Yes.

20,748. How many in the total class would that accommodate. How many hours a day. If I may put it so, how many shifts of students?—Two in a week.

20,749. Is not that rather a waste of power, two thirties in a week?—I do not think so; because a student really to study the subject in one year, which is the usual course now, would have to study it three days a week.

20,750. For how many hours, the whole day?—Three hours a day at least.

20,751. Could not you get two shifts into that day?—The professor should supervise, even with demonstrators; and his power of work besides lecturing is limited.

20,752. Then you do not think it could be economically managed to have a larger arrangement than that?—No, I think not.

20,753. You would not be prepared to take more than one shift a day?—No, I think not, because preparation is required and so on.

20,754. Now, to come to research. Research goes on in many different lines, and it is desirable to allow freedom of research?—Yes.

20,755. But especially in some of the higher and more delicate operations of research, is it not the case that expensive machinery is required?—It is.

20,756. Would it not be desirable that there should be some central institution where apparatus of that kind could be made available for men of science and professors, and where they might, in fact, be undisturbed by the current educational operations of their own laboratories. Considering this very delicate and expensive apparatus, might it not be desirable that there should be central institutions for pursuing lines of research undisturbed by the ordinary work of the laboratories?—Even this expensive apparatus is required in all the different directions, and it would be better to sub-divide the use of it under different professors, and to let them get their expensive apparatus in their own line.

20,757. But that is imposing the burden upon each particular institution. What I am suggesting is that there should be something provided, the provision of which should not be a burden on the institution, but the use of which should be for the advantage of the different institutions?—But it seems to me that the total burden of the apparatus has to be borne in different directions, and it would be better to sub-divide its use among several men.

20,758. It might be borne by an outside fund?—One would hope that it would in individual cases.

20,759. Would you see any objection to a provision by a fund which would not burden institutions, in a central institution of that kind. Would not it be an advantage to science?—It might.

20,760. You do not go further than that?—No.

20,761. With respect to the Doctor of Science degree that you refer to, I should like to ask your opinion whether you really think it would be desirable to give a Doctorate of Science for anything but the performance of that which would strictly be research work?—I think if you were given a Doctorate of Science in engineering some cognizance——

20,762. You say in engineering. Would it be desirable to give a degree of Doctor of Science in engineering?—Do you mean Doctor of Science as distinguished from Bachelor?

20,763. Yes?—That is a question. I doubt very much whether more than three or four students a year would think it worth while to attempt to go on for the degree of Doctor of Science.

20,764. I know great difficulty is experienced in connexion with D.Sc. in the University in London, and practically now the degree is only given for high work of research—original work?—I do not think the Doctor of Science degree really practically comes into engineering, because, except for men who are simply going in for the academical portions of engineering, if one may so express it, it would, probably, not be used.

20,765. You would not perhaps be content to limit it to original work?—Well, I might.

20,766. And in that sense it might be useful as a recognition of valuable work done?—Yes. I had rather not go more closely into that, because I have not thought so deeply upon it. (*Professor Thomson.*) When I spoke of that degree, I had not contemplated the Doctorate. I spoke of it as a Bachelorship.

20,767. (*Mr. Anstie.*) I quite understand. (*To Professor Capper.*) You desire only a Bachelor's degree?—Distinctly.

20,768. I was only upon the point of how far it was desirable to go in these examinations?—I prefer not to go more deeply into that. I do not think my opinion is worth much if I go deeper than I have gone.

20,769. You say that the course should be arranged by a separate board of teachers. Might it not be desirable that the boards of teachers in the applied sciences should not be separated too far from those who undertook the care of pure science?—I do not like the term "applied science." I should prefer to use the term "natural science."

20,770–1. Natural science does not quite give the distinction which I was trying to point out. Might it not be desirable, say for instance, limiting it to that, that those who are professors of pure mathematics should be in constant contact with those who are professors of Applied Mathematics, and *vice versâ*?—Those who teach in the preliminary portions which would be probably identical with the pure science, should certainly have a say on the board of the Applied Science. But pure science includes a great many more than would be in such contact.

20,772. But still you think it would be desirable to keep that commerce?—Certainly there should be commerce I think.

20,773. You say they would be identical. Would that be so. Several of your professors who have given evidence here have stated that even in mathe-

matics, starting at any rate from the end of the school course, the study has to be differentiated; would you agree with that?—I have found very great practical difficulty, if I might say so, in imbuing the pure mathematician's mind with the needs of an engineer. A pure mathematician (I am perhaps dealing loosely with terms) looks at mathematical problems in quite a different way from the way in which they are looked at by a man who is going to apply them practically, and probably from the very outset of a University course, if the preliminary work was done by schools, as it ought to be, the differentiation would take place.

20,774. So you would agree that differentiation should take place at once?—Yes, if the preliminary work were done at school.

D. S. Capper, Esq., M.A., (Edin.), M.I.C.E., M.I.M.E.

27 Jan. 1893.

20,775. But allowing for that differentiation might it not be desirable in the interests of both sides, that the professort should be in the habit, so far as possible, of acting and consulting together?—Yes, so long as the course was arranged by the applied men.

20,776. But not without assistance or counsel?—That counsel would always be given I think, in pure scientific subjects by the pure science board, if the boards were divided.

20,777. That is your view?—Yes, that is my view.

The witness withdrew.

Adjourned to Thursday, 2nd February 1893.

Fifty-first Day.

Thursday, February 2nd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Q.C., B.A.
RALPH C. PALMER, Esq., B.A.
Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

E. H. BUSK, Esq., M.A., LL.B., further examined.

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

20,778. (*Chairman.*) You appear before us with a communication from the Convocation of the University of London. I am sorry I have not had an opportunity of looking over it, so I cannot ask you many questions about it, but perhaps you will make any statement in explanation of it or supplementary to it which you think will be of advantage to us?—If your Lordship pleases the reason why the scheme was not submitted before to the Commission was that the printers failed me, and even now the report of the Annual Committee which was adopted by Convocation, and the scheme in the form in which it was to have been laid before the Commission, has not arrived. I have, therefore, to ask the indulgence of the Commission and to point out that the scheme itself is printed, beginning at page 36, of the minutes of the last meeting of Convocation on the 13th of January. The report of the annual committee, which was approved by Convocation itself, appears in a separate paper, and the important part of it begins at the bottom of page 2 of that report. The other paragraphs are only introductory. I should like to have the opportunity of explaining to the Commission that, although so long a time has elapsed since the Commission was good enough to hear the evidence which we had to give upon other schemes which had been proposed, yet, practically, Convocation has not lost any time, because it takes a long time to pass through the sub-committee, and then through the main committee, and afterwards to obtain the sanction of a large body like Convocation itself. The long vacation also intervened. I also wish to have the opportunity of calling the attention of the Commission to the terms in which Convocation approved of this scheme and report. The resolution approving of it is to be found at the bottom of page 32 of the minutes. "That the *Report* and *Scheme* as now approved be "adopted by Convocation as a basis of conference "with the Senate and of negotiation with the various "institutions affected thereby, and be laid before the "Royal Commission, by the Chairman, as the outline "of a *Scheme* for the reconstitution of the University "approved by Convocation as such basis." The scheme may appear somewhat curt and crude, because there has not been an opportunity since Convocation met on the 17th of January for a conference to take place with the Senate, and still less any opportunity for negotiation with the teaching institutions affected by the scheme. I wish, therefore, to point out that it is provisional, and that Convocation itself expected that modifications might be introduced after such conference and negotiations had taken place.

20,779. Would you tell us what the numbers were that attended Convocation and what the division was, if there was a division?—There were 286 members actually present at Convocation at the meeting in January. Upon the scheme itself there was no division. The several votes were taken, but the only actual division which took place was upon the introduction of the Faculty of Divinity, upon which there was a great deal of very interesting discussion, and the division that took place was, excluding tellers, 101 to 35, that is 140 took part in the vote. Some members of Convocation who were present did not vote; it is not necessary by the standing orders of the House that they should vote.

20,780. The total number of Convocation is 3,000, is it not?—3,700.

20,781. Therefore is there any guarantee whatever that what was done by that meeting might not be reversed by another meeting?—In addition to the vote, although of course I do not wish to lay too much stress upon it, letters were received from 607 members of Convocation approving of the report.

20,782. In the vote that took place rejecting the scheme that was proposed some time ago by the Senate of the University of London, there were about 700?—About 740 voted.

20,783. You do not know at all, I suppose, whether

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

the 286 who appeared the other day formed any part of those 740 who appeared before?—I have not compared the division lists.

20,784. The point is that you cannot guarantee that Convocation will not reverse this vote, only you have reason to hope that they would not?—I think I can safely guarantee that they would not reverse it, and for this reason, it is much more difficult to get a vote in favour of a complicated report and scheme than it is to get a vote against it. I think the response that we got from those who were absent, over 600, was very much more than could have been expected beforehand. I think the approval of the scheme was marked. And there is another reason also; in all these bodies—in companies in the City and elsewhere—we find that those who have objections to urge attend; the point of difficulty is to get the attendance of those who support the executive. The board have great difficulty in getting people to come and support their policy, because those who are satisfied do not trouble to come. I think, therefore, that the absence of people does not mean that those who were absent objected. If they had objected I think they would have expressed their objection.

20,785. Do the working members of Convocation, those who generally attend and take part, cling much to the power of veto vested in Convocation, or do they individually think that Convocation is a body which ought not to be entrusted with such very great power?—I think that they do cling to a veto upon an alteration in the Charter, but that they do not seek any interference whatever in the executive functions of the University. They never sought, and they do not claim, to share in the executive functions of the University as do the Convocations of Oxford and Cambridge. There, as your Lordship is aware, the Convocations actually appoint certain professors and vote certain sums of money.

20,786. The resident members of the University?—I think it is only confined to the resident members of the University in the case of the appointment of the governing bodies. The Hebdomadal Council of Oxford is appointed by the resident graduates, and the resident graduates, I beg to remark, appoint every member of the Hebdomadal Council. There are no Crown nominees at all. So it is with the Council of the Senate at Cambridge. That is limited to the resident members of Convocation and the Senate respectively, but on other subjects the graduates vote by proxies.

20,787. In the University of London there is no difference between the resident members and the other members?—Not at all, except to this extent, that the Chairman of Convocation is appointed by the members present, and not by the whole body of Convocation.

20,788. (*Mr. Rendall.*) You mentioned the response of 600. In what form was support or opposition invited?—The Committee of Convocation sent out circulars with the papers.

20,789. Containing the whole scheme?—Containing the whole report and the whole scheme, and requesting members to state that they had read both those documents, and that both those documents met with their general approval.

20,790. (*Professor Sidgwick.*) You did not invite negative answers?—No.

20,791. So it was 600 out of about 4,000?—And those who were present at the meeting, 286.

20,792. (*Mr. Anstie.*) Does this statement about the circular appear in the minutes anywhere?—No, it does not. That is in the evidence I am giving. It rendered it, I thought, advisable that I should attend the Commission, besides simply sending the papers.

20,793. Have you a copy of the document which was sent out?—No.

(*Mr. Anstie.*) It is necessary that we should have that, if any reliance is to be placed on the replies of the 607.

20,794. (*Sir George Humphry.*) The letters are not taken as votes, I suppose?—No; there is no power to vote by voting paper.

20,795. (*Professor Sidgwick.*) Do you remember the numbers on the previous occasion?—I believe there were also answers received. The objections to the Senatorial scheme were about 1,100. Those were answers to a circular which was not official, but which was sent out by certain private members of Convocation; and on the occasion of the memorial to the Marquess of Salisbury against the draft Gresham Charter there were a few over 1,200 signatures.

20,796. (*Chairman.*) I suppose we had better follow the outline of the scheme?—I will take any course your Lordship thinks fit. I think it might be convenient if I read the paragraphs in the report and the scheme, as the Commissioners have not seen it before.

20,797. You may take it for granted that none of us know anything about it?—There is one other remark that I ought to make before entering into the scheme; that is, that it is a mere outline. It was thought advisable by so large a body that they should not enter into details unless it was required; that the details should be left to a smaller body, and one better able to draft a document than Convocation itself. There are two exceptions to that remark; one is the constitution of the Senate, and the other is a list of Faculties in which teaching and examinations should be given and held. The reasons for those two exceptions to the very sketchy outline form of this scheme were these: it was felt that there should be no restriction put upon the conduct of a future University by an outside body; that the character of its teaching and the standard of its examinations must be left to the executive, and consequently that the appointment and constitution of the executive was of the utmost importance; that if an executive were appointed unable to cope with this great question, or with views different from those which might be held by the public at large, there could be no guarantee that the University would be kept up from time to time to the proper standard, both as regards teaching and examination. On the second head it was thought desirable to put in the Faculties because there were two innovations, namely, the Faculty of Divinity, which has never formed part of the University of London at all, and the Faculty of Technology. Those who were in favour of this scheme thought it was very important to get the views of Convocation as to those additional Faculties.

20,798. Technology is the same as Applied Science, is it not?—Yes, Applied Science. It was understood by the Committees of Convocation and by Convocation generally, that it would be something like the technical instruction which is mentioned in the Acts of Parliament relating to the County Council.

20,799. Chiefly applicable to engineering?—Engineering and chemical laboratories, and applications relating to manufacturing, dyeing and the like, manuring, and so on.

20,800. All intended for men going into practical business?—Yes. (*Prints of the Report were handed to the witness, who handed copies to the Commissioners.*) These prints will show what is the desire of Convocation. They begin with the outline scheme, and the Report is appended. The 10th paragraph of the Report is directed to Clause 1 of the outline scheme. "The result of all the consideration which has during the last seven years "been given to the subject of University education in "the Metropolis, has been that in the opinion both of "the teachers and of the public who desire to be "taught, there should be a University in London "which should itself undertake the task of University "education, and should not confine itself, as the "University of London has hitherto done, to the "somewhat indirect although important influence "upon teaching exercised by its Syllabuses and "Examinations, and further, that if possible there "should be only one University in London. As no "one alleges that the present University has failed to

" do well the work of examination, to which by the " tacit understanding it entered into with University " College, London, in 1836, its functions have hitherto " been limited, or suggests that the present University " should cease to exist; it necessarily follows, if there " is to be a teaching University in London, and " yet there are not to be two Universities, that the " constitution of the present London University must " be altered in such a way that it may undertake the " function of teaching in addition to its existing " functions. Having regard to the various reso- " lutions of Convocation,"—perhaps I ought not to read that, because it is the reference of the Committee to previous resolutions of Convocation, and as Convocation has adopted the report we can pass to the last sentence, which shows that Convocation does approve of such an extension of the functions of the University, as is indicated by Clause 1 of the scheme appended to this report. Clause 1 is to this effect: " The purposes of the incorporation of the University " to be so defined as to include, in addition to " the existing purposes, the organisation of regular " and liberal education throughout the British " Empire, and especially in the Metropolis and " its neighbourhood, and the advancement of know- " ledge and encouragement of original research." Upon that there is one remark to be made. It provides for teaching, for research, and for advancement or knowledge, as well as for examination. There was only one difference of opinion in Convocation upon that clause, and so far as I was able to test the feeling of the House, the advocates of the two sides were pretty well equal in number. It was as to whether the organisation of regular and liberal education throughout the British Empire should stand, or whether the teaching function should be limited to London alone. Ultimately it was decided by a show of hands and without division that it was better to leave the larger phrase in, partly because that larger phrase was in the scheme which the Senate had put forward, the phrase there being " the " promotion of regular and liberal education through- " out Her Majesty's dominions"; and partly because it was felt that if powers were to be taken to teach, it was well to take those powers as wide as possible even though experience might show that it was inexpedient to exercise the powers hereafter; that it might be desirable to do something in the way of direct teaching outside the Metropolis and that it would be as well to take the power in case it appeared to be advisable. One of the reasons why it appeared to be advisable was this: it was thought that the multiplication of Universities throughout the country, in Wales, Birmingham, Hull, Nottingham, and other places, where fresh Universities might be desired, was in itself inexpedient if it could be avoided, and that if it were in the power of the new University to appoint professors, say at Mason's College, Birmingham, and give them the status accompanied with the emoluments of University professors, some part of the grievance which those provincial colleges might feel would be removed.

20,801. Was there a large minority which took the opposite view to confine it to London?—There was. It was thought by a large minority that it was better not even to take the power to do that, but to simply restrict the educational and teaching part of the University to the Metropolis without any power to extend it.

20,802. (*Professor Sidgwick.*) Are the numbers given?—There was no division upon anything except the question of the Divinity Faculty.

20,803. Not on the question of whether the organisation of regular and liberal education throughout the British Empire and the power of appointing a teaching staff should be throughout the kingdom equally?—No, no formal division.

20,804. So that we may take it that that is the decided view of Convocation?—Yes, that was the decided view of Convocation; but I think it right to say that there was a minority, and that I have no doubt that Convocation would bow to an expression of opinion either from the Commission or any other body, that it should be so limited; they would not consider it to be crucial and essential.

20,805. You think they would consent to confine the regular and liberal education to London?—Yes, I think so.

20,806. (*Chairman.*) At any rate you say that they do not make this a vital question?—I think the Commission may safely take it that they do not.

20,807. The reason that a division was avoided was, that it did not bind them to do it, only it was thought as well to take the power?—I believe that did weigh with the House very much. Then with regard to the second point, the question arose about the constitution of the University, and I think it might be as well to refer the Commission to Clause 11 of the Report, which is as follows:—" The next question " which engaged the attention of your Committee " was, whether the University should itself undertake " the teaching, or whether it should be composed of " constituent and affiliated colleges and schools, to " which as corporations the teaching should be dele- " gated by the University. In other words the problem " was, whether the University should be one framed " like those of Germany and Scotland, or whether " it should be a federal University like the Victoria " University in the North of England, and to a certain " extent like the Universities of Oxford and Cam- " bridge. After careful consideration your Committee " arrived at the conclusion that a federal University, " even if desirable in itself, was not applicable to the " Metropolis, owing to the fact that there are only " two Colleges in London (University and King's) " which undertake University education in all the " Faculties, and that there are a great number of " institutions which only provide education in some " or even one of the Faculties of knowledge. Your " Committee was confirmed in their opinion against " giving a federal character to the University by the " opinions expressed by the Royal Commissions on " the Universities of Oxford and Cambridge in favour " of a dominant University professoriate, by the fact " that the Government Schools of Science at South " Kensington could not (owing to their being a " Government Department) join as a whole in any " scheme, and by the opinion expressed by the late " Royal Commission that the cause of education in " the Metropolis might gain a great impetus if the " various teaching institutions were co-ordinated " under a University as their natural head. Your " Committee are of opinion that the difficulties and " disadvantages which must arise if an attempt were " made to form a federal University in the Metropolis " owing to the wide variations in importance, and in " aims between the different teaching institutions in " the Metropolis, are obviated by their recommenda- " tion that the University should recognise not " institutions as a whole, but particular teachers or " courses of instruction either in the teaching insti- " tutions or outside them; and it is on this account " that in enumerating the members of the proposed " University in clause 2, they have added to the " fellows and graduates the professors, teachers, " and demonstrators of the University during their " terms of office." In confirmation of the opinion which Convocation has now adopted, I may say that another body with which as a whole Convocation by no means agrees does agree with Convocation on this point, namely the association for promoting a professional University for London. As I daresay, your Lordship is aware, in the paper which they put out they were most strongly against a federal University, and said that if a federal University were formed, in their opinion, the existing University of London would have to take up teaching, and it would result in our having two teaching Universities in London.

20,808. You say that is a body with whom you do not agree entirely?—I should say that we agree

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

upon very little else, but we do agree upon that point, apparently.

20,809. You disagree on most points?—The points of disagreement are, first, that Convocation is not to be represented at all on the Senate except by the Chairman, in support of which no reason was given that I ever heard; and the second point is that the Association wishes to have a great variety of examinations for the degrees; that the students at one college should be examined in one way, and on one standard, and those at another college in another way and on another standard. The Commission will observe that in accordance with the conclusions at which Convocation arrive, there is no mention made in clause 2 of the outline scheme of any affiliated colleges; but the University is to consist of first, members who are (1.) Fellows, that is to say, members of the executive as at present; (2.) Graduates; (3.) Professors, Examiners, Teachers and Demonstrators of the University during their respective terms of office; and, secondly, undergraduates, who would not be members of the University in the full sense of the term, not members of the corporation. I should wish, perhaps, to say, in addition to this, as so many schemes have proceeded upon a federal basis of colleges, that upon making inquiries the difficulty has appeared to me very great. For instance, I would take one of the institutions that was mentioned in the report of the late Royal Commission in clause 12 of the report, the Birkbeck Institution. I should think no one could say that the Birkbeck Institution, as a whole, was to be placed on the same footing as University College or King's College in a federal University. At the same time there are courses of instruction there which are of the highest University rank. During the year 1891 there were three candidates sent up for our M.A. degree from the Birkbeck, and they all passed. I think the teaching must have been of a very high class which would enable all the candidates presented by that institution to pass. Since then I have seen one of the professors of the Royal College of Science at South Kensington, who has conducted one course of lectures at the Birkbeck, and has on many other occasions examined, and he reports that in his subject, which is physics, the examination was of quite a University standard, and the attainment of the pupils was something he had not at all expected before he became connected with the institution. That is one of the reasons, in fact, which leads Convocation to think that they could influence and organise education in the Metropolis, if, in an institution like that they could pick out a particular teacher, and say:—"Your course of instruction is up to Uni- "versity standard; we will make you a University "professor or teacher; give you that status, give "you that recognition, and, if funds will allow, the "emoluments which attach to that office."

20,810. And would they in consequence regulate the course of lectures to be given by him, or would he be left a free hand?—I think if he were appointed a University professor there would not be any desire to interfere with his mode of tuition. It would be because there was confidence in his tuition that he was appointed.

20,811. (*Sir George Humphry.*) Then he would be on what is called the constitution?—Yes, he would be a member of the University.

20,812. (*Chairman.*) Now will you enter into the question of medical colleges, as to whether they are to preserve their autonomy or whether they are to be entirely absorbed. The advocates of the professorial scheme drew a marked distinction, as you know, between them and the other colleges?—Yes.

20,813. The other colleges were to be gradually absorbed, but the medical colleges were always to be left with a certain amount of self-government?—I confess that although I have had the benefit of reading a great deal on this subject, and the still greater benefit of hearing the oral explanations of Professor Huxley and Sir Henry Roscoe, I have not yet been able to understand what the word "absorbed" means. If upon their scheme it is thought that the Councils of University College and King's College will give up their endowments, their freeholds, and their buildings to the new University voluntarily (and there has never been any talk about compulsion), I think it is a vain hope. Those colleges which possess no funds will be ready to be absorbed, I think, but in the case of great colleges the buildings must be worth 300,000*l.* or 400,000*l.*, or even more with the land, and I cannot think that it is within the range of practical politics that they should consent to absorption, or that any Parliament would compel absorption in the sense of complete merger in the University.

20,814. Your scheme would not compel them to give up the endowments, or buildings, or anything?—No, not at all. Our scheme would enable us to deal with the medical schools in the same way as with the other colleges and other institutions in England. If we found a teacher in one or more of the medical schools whose teaching was of a University rank, and of a scientific or academical character, he could be appointed a University professor, teacher, or demonstrator according to his status. The feeling of Convocation is that there need be no limit to the number of these, that, as in many of the Italian and German Universities that have a great number of professors in the same subject, so in this enormous city it would be necessary to have a great many University teachers in the same subject, and there would be great advantage in competition between the teachers which would keep the teaching up to the very highest standard.

20,815. So the great bulk of professors would teach in autonomous institutions altogether separate from the University. It would be a new plan in that way?—Yes, it would be a new plan in that way.

20,816. (*Sir George Humphry.*) The teachers whom you recognise in the several medical schools would be *ipso facto* members of the University of London?—That would be so.

20,817. They would have no further power but simply that of members of the University?—They would be members of the University.

20,818. It would be an honourable appointment as members of the University?—They would have the power of being on the Faculties and electing and being elected on the Boards of Studies.

20,819. They would be on the Boards of Studies if elected?—Yes.

20,820. They would not necessarily be on?—No, they would have the power of voting, and be capable of being appointed.

20,821. They would be in the same position as the other members of the University?—Yes, during their term of office. They would be also eligible to be on the executive of the University. Then the third head is with reference to the constitution of the Senate. The paragraph of the report in connexion with that is No. 12:—"As it it impossible in any "charter to fix the standards of examination, or to "lay down in detail the steps which the University "ought to take, with a view to organising regular "and liberal education, advancing knowledge, and "encouraging original research, great importance "attaches to the composition of the Senate. The "late Royal Commission recommended that ten mem- "bers should be nominated by the Crown, ten by "Convocation, twelve by the four Faculties, and that "there should be six additional members, being the "President of University College, and the Principal "of King's College, and the nominees of the Royal "Medical Colleges, the Council of the Legal Educa- "tion, and the Incorporated Law Society, making in "all 38 members. Your Committee suggest that "there should be eight Crown nominees and twelve "members elected by Convocation, that the number "of members to be elected by the Faculties should be "ten, that there should be six official members, as "recommended by the late Royal Commission, and "that in addition to them there should be four mem- "bers of the Senate, representing the municipal "authorities of London. If this composition of the

"Senate be adopted, the teachers will practically "have a representation of 16 members out of the 40, "made up of the ten members to be elected by the "Faculties, and the six official members; and in "addition to this (seeing that Convocation consists "largely of teachers) they will have a voice, and a "not unimportant one, in the election of the twelve "representatives of Convocation. Besides this repre- "sentation on the executive, the teachers will have a "large consultative powers by means of the Boards "of Studies. Your Committee recommend the in- "clusion in the Senate of four representatives of the "municipal authorities of London, partly because the "new University will require a very large income, "and without such representation those municipal "authorities would not be able to contribute to the "expenses of the University out of the large funds at "their disposal, and partly because it is thought "desirable that the University should not only con- "nect itself with University education, but should "seek to exercise an influence over the secondary and "technical education of the metropolis. It is for "these reasons that your Committee recommend in "clause 11 of the outline scheme that there should "be a Faculty of Technology, although they think "that the examinations in that Faculty should result "in certificates or diplomas, and not in degrees." With reference to that last clause I have to say that that limitation was struck out by Convocation. The Committee thought that it was better to state that degrees should not be given in technology. Convocation, again, with its view of taking the widest possible power, without saying that they should give them, thought it was well to take power to give them, and that practically is the only alteration that Convocation made in the scheme.

20,822. (*Professor Sidgwick.*) Might I ask you to explain the statement with regard to the six official members who would represent teachers?—The representatives of the Royal College of Surgeons, the Royal College of Physicians, the Council of Legal Education, and the Incorporated Law Society, the President of University College, and the Principal of King's College.

20,823. Those would represent teachers?—Yes. The Council of Legal Education does nothing but teach and examine, and the Council of the Incorporated Law Society on that side of its functions would be a teaching body. Of course Convocation here is under this disadvantage; that the University started with no graduates, and consequently when it started there was nothing for it but for the Crown to appoint everyone, because there was no Convocation, and the present representation of 14 was conferred on Convocation when there were only 400 members of Convocation. Now there nearly 4,000.

20,824. (*Mr. Anstie.*) Which would be the better body to nominate—400 or 4,000?—I am not old enough to remember when there were only 400, but I should think you are more likely to get a good election from 4,000 educated men than from 400. They are all educated men.

20,825. (*Mr. Rendall.*) When you say in the parenthesis: "seeing that Convocation consists largely of teachers" you do not mean that the teachers of the University would be *ex officio* members?—No. Many members of Convocation are engaged in teaching.

20,826. But not connected with the University?—No, not connected with the University as teachers, but only as graduates, unless they happened to be appointed by the University to teach. The teaching profession is largely represented by Convocation especially now with the women graduates, because our degrees are found to be so valuable for them in teaching. Our B.A. or B.Sc. is the capital upon which the woman teacher starts.

20,827. Has there been any proposal for conferring membership of Convocation upon the professors or teachers of the University?—Only indirectly. There was a proposal and an amendment moved with regard to the granting of honorary and *ad eundem* degrees. If this had been carried anybody on getting such a degree conferred would have come on Convocation on paying 5*s.* the year, or 1*l.* for life. That proposal has never met with favour from Convocation, and I hope to be able to convince the Commission that the granting of *ad eundem* degrees would be impossible.

20,828. (*Sir George Humphry.*) Would the admission of teachers to Convocation as well as to the constitution require an alteration in the Charter? They are members of the University, but they are not members of Convocation, and they have not any power?—Except the consultative power of being on the Faculties, and being represented by the Boards of Studies, and having power to elect to the Senate. Convocation has no power at all except to prevent the Charter from being changed. Otherwise than that it has no power; it is merely advisory.

20,829. All who are recognised as teachers are placed as members of the University?—Yes.

20,830. But to place them upon Convocation must require an alteration of charter?—Yes, because the Charter fixes who are to be members of Convocation; and then a further question arises whether they are to have a vote for the Parliamentary representative. The Register of Convocation is the Parliamentary list so far as it consists of adult males.

20,831. (*Mr. Anstie.*) I do not quite see why you say it requires an alteration in the Charter to put them on Convocation because by clause 40 of the Charter the Senate can "confer any of the said degrees "as *ad eundem* degrees; but no degrees so conferred "shall, without the consent of Convocation in each "case, entitle the holder thereof to be or become a "member of Convocation." So that the Senate has the power to confer *ad eundem* degrees?—I had overlooked that clause in the Charter.

20,832. To say that the Senate has not power to grant *ad eundem* degrees is wrong?—Yes. It is the nonorary degrees that cannot be conferred. The difficulty arises from the fact that there is no *idem*. If a man came up from Oxford or Cambridge, having taken an M.A. degree there, he might have taken a mere pass B.A., and proceeded M.A., and if we took the power to grant apparently *ad eundem* degrees, he would be entitled to get the M.A. degree in London, which could not be conferred upon a London B.A. without a further high examination; so that the graduates of our University would not be on so good a footing as the graduates of the other Universities. That is the difficulty about the *ad eundem* degree.

20,833. (*Sir George Humphry.*) Could these recognised teachers be admitted to an *ad eundem* degree and so to Convocation?—We do not propose to do that. I should prefer that if they should be admitted to Convocation, it should be done by opening Convocation to the University teachers.

20,834. For the Victoria University Charter, that would necessitate a new Charter?—Yes, but in any case there must be an alteration in the Charter if we are to undertake tuition.

20,835. (*Mr. Rendall.*) The phrase used is "similar and equal degrees." The University can determine what is a similar and equal degree, whether, for instance, the M.A. of Cambridge is a similar degree to one that requires a higher honours standard. Can you tell us whether the University can consider whether the holder of another degree holds, in fact, the equivalent of the degree sought?—Yes, it rests entirely with the Senate.

20,836. That would be met by the terms of the present Charter. It is a mere question of interpretation who is qualified for the *ad eundem*?—Yes.

20,837. The M.A. of London corresponds really to the honour degree, while the B.A. corresponds to the pass degree?—Yes. I do not deny that at the other Universities you could find graduates who could pass quite as high an examination, and who would be quite entitled to any honours that might be conferred by the "M.A." in London, but not the great bulk of the "B.A.'s."

20,838. (*Chairman.*) The Faculties are not all re-

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

presented equally?—The reason for that is this. It was felt that medicine would be represented to a great extent by the Royal Colleges of Physicians and Surgeons, or, if those representatives of the medical profession were thought to be unsatisfactory, by some representatives of an official character to be put in their place, and consequently it would be giving them too large a representation on the Senate if they had the same numbers of elected members elected by Convocation.

20,839. Then Law would only have one, for the same reason?—Yes.

20,840. And Arts and Music both together. Music has not the same weight?—It is a very small Faculty.

20,841. And they are allowed to vote equally with the Arts Faculty?—Yes.

20,842. (*Sir George Humphry.*) So that it need not necessarily be the President of one body and the Principal of another, but some one elected by the bodies. I see it is put "President of the University College and Principal of King's College," and so on?—The reason why those officials were put in was this. It was perhaps carrying the logic a little too far, but it was felt that it was better to have these official members as being great public men occupying positions which showed their greatness, their influence, and their talent, than to recognise the colleges as colleges, even to the extent of giving them power to elect to the Senate. It was felt that we were going over the logical border line between a University such as we wish, and a federal University.

20,843. (*Sir George Humphry.*) They often hold their office for a year or two and then pass away, and each person has very little knowledge of the University affairs, and they do not take very much interest?

(*Lord Reay.*) Perhaps I had better say that the statement that the President of University College only holds his office for a limited time is inaccurate.

20,844. (*Sir George Humphry.*) I do not say University College particularly; but the officials hold their offices for limited times commonly?—Upon that point I have felt some heart-searchings myself, and I communicated with a body which is the most transient of all. The Council of Legal Education has a Chairman for several years, but the President of the Incorporated Law Society changes every year, and the Council of that Society prefer to be represented by the fugitive President rather than to be represented by an unofficial member. They think he would have more weight upon the Senate if he represented the Council officially, and had at his back the resolutions passed by his Council, than any representative of an unofficial character whom they might elect.

20,845. It might be the President or somebody whom they elected?—But for that rather fine distinction, that we should be recognising them as corporations. I think myself that, although there is, for the reason I have mentioned (which is only a slight reason), a preference in the mind of Convocation for this plan, they would not object to "representative." In fact it has been very much discussed, and the reason I have given is the one that just turns the scale.

20,846. (*Chairman.*) There is a wonderful difference in the amount of representation you give to Medicine as compared with what there is in the Gresham Charter, where they give one for each college?—There it is overwhelming.

20,847. This is rather going to the other extreme, is it not, considering what an enormous part Medicine will play, and how many colleges in Medicine there are? However, this was deliberately adopted by Convocation after full discussion?—Yes, after full discussion at every stage. The thing was most thoroughly threshed out, but, as I would ask leave to repeat to the Commission, as part of a provisional scheme as a basis for conference and negotiation. Before conference and before negotiation this was the view of Convocation.

20,848. Then that exhausts the question of the Senate?—Except that there is Clause 4, which is a novelty:—"Members of the Senate other than those "appointed under Section IV., to serve for a term of "six years only, but to be re-eligible, with provision "for the retirement of some members every three "years." The term and period of service was proposed by the Senate itself in its scheme, and, as one of the Members of the Senate mentioned to me, after the last meeting, as he understood the present constitution of the University, he might commit a felony, and still remain a member of the Senate. There was no power to get anybody off the Senate who was a lunatic, or who habitually resided abroad. He was on for life. In this case, election would take place.

20,849. And good men would be re-elected?—Yes.

20,850. (*Mr. Anstie.*) Which is the provision which compels a felon to retire from the Senate during the period of his five years' service?—He would be on for five years. We cannot help that, but the less we have of it the better.

20,851. (*Chairman.*) The existing rights and privileges of Convocation being the veto of anything which changes the constitution of the University, what other powers are there?—The power of advising and conferring with the Executive, and the power of voting for election of Member of Parliament. And besides that, it is recommended that Convocation should retain its present powers, rights, and privileges, and also should appoint at least two members on each Board of Studies.

20,852. What sort of number would each Board of Studies consist of?—Convocation has abstained from mentioning a number at all, because it would vary with the Faculty. On the report of the last Royal Commission, the then Commissioners looked forward to there being considerable variation in numbers; but however large the Board of Studies, Convocation thought it ought not to have more than two members. But Convocation thought there ought to be two members even on the smallest board, so that it should be certain to be represented, and not depend upon the health or engagements of a single man. Then in the next paragraph (Clause 14) there is a little obscurity, which I will endeavour to remove. "Clauses 7, 8, 9, and 10, show how it is proposed "that the University should co-ordinate under it all "teaching which it may consider to be of University "rank, in whatever institutions such teaching is "given, and also indicates that in the opinion of your "Committee, the National Museums and Libraries "can be rendered available for the Members and "Undergraduates of the University." Upon this the most important phrase is now Clause 7 of the Scheme, that "There shall be a University Professoriate and a staff of Teachers, and Demonstrators." Then it says, "All appointments shall be vested in the Senate, and shall be held during their pleasure." Upon that there was a little difference of opinion. Some people thought that the professors, teachers, and demonstrators ought only to be appointed for a term of years, being re-eligible; that it was undesirable to have an appointment in that form, which practically means an appointment for life. I am afraid there is a little obscurity in Clause 8:—"The "Senate shall have power to appoint Members of "the Teaching Staffs of the Colleges or other higher "educational Institutions as University Professors, "Teachers, and Demonstrators, with endowments "from the funds of the University, on condition that "the appointment to such Chairs whenever a vacancy "occurs, should pass to the University." That was intended by Convocation to be a temporary arrangement, and it was intended to point out to the Commission that the University, although it did not federate the Colleges or absorb them, would be able to avail itself of the existing teaching talent in the Metropolis, wherever it was to be found, not that the University should be limited to those teaching staffs.

20,853. (*Sir George Humphry.*) Then what would mean that the teachers, we will say in the Medical

Schools, who were appointed members of the University, would be so appointed on condition that the appointment to such Chairs, whenever a vacancy occurs, should pass to the University?—Yes. That is also a little obscure. It was intended to mean that if the successor was also to be a University professor, if it was to continue to be a University Chair, then the Senate would have the appointment.

20,854. That would be a great difficulty of course?—That would be a great difficulty. But then a successor might be appointed whom the University did not recognise in that way, and then the appointment would vest in the teaching institution.

20,855. Supposing, we will say, a teacher in any subject in a Medical School is recognised by the University, and appointed a member of the University; then, when he vacates, his successor would be appointed by the Medical School, not by the University?—Then it would be open to the University to say that they did not recognise that successor in the same way, but if it is to remain a University Chair, then the appointment would remain with the Senate.

20,856. But he might be appointed by the School, and then, in the same way as his predecessor, recognised by the University?—Yes, but it would be open to the University to recognise him or not.

20,857. That is not quite clear?—No, I feel sure that that line does not express what Convocation meant.

20,858. (*Lord Reay.*) Convocation meant to recognise a college professor who was paid out of the College funds and whose teaching was of University rank?—The endowment from the funds of the University, seeing there are at present no funds, would, and must for several years, be very slight. It would be only a slight additional emolument.

20,859. Do you think that Convocation intended that form of recognition of a College teacher of University rank?—Yes, giving him the status of University professor or teacher, and, if possible, adding to his emolument.

20,860. He would be partly under the control of the University, and partly under the control of his own college authorities?—I suppose he would be partly under the control of the University, but the control of the University would be almost nominal. The University would not interfere with his teaching at all.

20,861. Whatever the control was, the University could exercise it?—Yes.

20,862. (*Chairman.*) And whenever a particular professor either died or retired, it would be open to the college to appoint whom they liked, but if they chose to appoint somebody who was not recognised by the University, he would lose the University endowment, that is all?—That is all, but what is meant by that line is that if the teacher is to keep the University status and endowment, the University must appoint.

20,863. (*Mr. Anstie.*) Then ought we not to strike out the last line and a half:—"On condition that the "appointment to such Chairs, whenever a vacancy "occurs, should pass to the University?"—I should have thought that instead of striking it out, it would be better to add a few words, "to such Chairs if they "are to remain University Chairs."

(*Mr. Rendall.*) Surely that is provided for in the beginning of the clause? I think those words are entirely misleading, according to your explanation.

20,864. (*Chairman.*) I suppose it would practically amount to this, that the college would appoint after discussion with the University?—I should think it would.

20,865. The college would not like to have anybody forced upon them, without having a voice?—No, and the College would not wish to lose a University Chair. The fact of a teacher in the college being a professor of the University must add additional lustre to the class and bring additional pupils.

20,866. (*Mr. Rendall.*) Did that proviso receive any discussion in Convocation, or was the meaning of the clause overlooked?—The meaning of the clause was stated by the mover, in the way in which I have stated it to the Commission, and upon that there was no discussion that I can recollect. The meaning was clearly understood by the House to be as I have stated it.

20,867. (*Lord Reay.*) And the clause does not provide for a case that might very easily occur, that a college endowment would be supplemented by a University endowment?—We thought that would be so.

20,868. Do you contemplate that case?—Yes. Quite.

20,869. (*Mr. Palmer.*) I should have said it meant plainly that all appointments should be vested in the Senate, and upheld during their pleasure, providing that the Senate shall take power to appoint members of the colleges, and so forth, with endowments from the funds of the University. That gives them power if they please to appoint members of the colleges, and to pay them in addition out of the endowments of the University?—Yes.

20,870. It is simply a proviso limiting the first general statement, that all appointments shall be held during their pleasure?—It was put in because we wished to negative the idea that we should have to start a separate and new teaching staff, in addition to all the teaching staffs that there are in the Metropolis.

20,871. But it gives them power, if they think fit, to give them part of the endowment of the University?—Yes.

20,872. (*Sir George Humphry.*) In the first line of clause 7 it says:—"There shall be a University "Professoriate, and a staff of Teachers, and Demon-"strators." I understood that all who were recognised by the University as teachers in the several colleges would be University teachers?—Yes.

20,873. Very well. We grant that all who are appointed to the colleges, and recognised by the University, are University teachers. Then it says that all appointments are to be vested in the Senate?—That meant appointments of the persons mentioned in clause 7, a University Professoriate and a staff of Teachers and Demonstrators.

20,874. But the University teachers are not to be appointed by the Senate, because any person who is appointed by a college and recognised by the University is *ipso facto* a University professor, and he has not been appointed by the University?—Is not a recognition, an appointment?

20,875. No, certainly not?—It is meant to be.

20,876. (*Mr. Anstie.*) He holds an office by virtue of a collegiate appointment. Then it is suggested that the University may give him a further appointment, and having given him a further appointment, they may supplement his emolument by the endowment of the University?—His appointment as a college tutor is by the college, but his appointment as University professor would be by the University.

20,877. (*Sir George Humphry.*) That would be by recognition?—No, it is a new appointment. I think he would have both.

20,878. (*Professor Sidgwick.*) If the Senate exercise the power of appointment, does it mean with endowment, or without?—It means with or without—power to do both, or only one.

20,879. (*Sir George Humphry.*) It is a point that wants to be made quite clear?—Yes. I am afraid that it is very much like the language of a draft Act of Parliament.

20,880. (*Chairman.*) However, you give us the intention, and it is clearly understood that the future appointment to these Chairs will be a joint thing between the college and the University?—Yes, it will be a joint thing.

20,881. (*Sir George Humphry.*) That, again, is a little difficult, because in these several schools the appointments are made entirely by the schools, and then it will be for the University to recognise such appointments?—Yes.

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

20,882. (*Chairman.*) I should have thought this last clause was unnecessary?—I think it is so. I think it would be clearer to leave it out.

20,883. (*Sir George Humphry.*) It does want to be made clear that a person appointed by a school and recognised by a University, would be a University teacher?—I agree with what one of the Commissioners said, that it is almost a matter of words. I do not think the course would be that the University should appoint that man to be a University teacher.

20,884. (*Professor Sidgwick.*) I think I should prefer the word "appointment." It keeps the position more clear. It is desired to keep the title of "College" and "University" teacher distinct, although they may be held by the same man?—Yes.

20,885. (*Mr. Anstie.*) I understand it to be consistent with the view on which this whole scheme is based, that you should not recognise the institution at all, and therefore the appointment of him as a college teacher does not mean that he is recognised by the University, but finding him there, and deeming him fit, the University appoints him?—That is why we prefer the word "appointment" to the word "recognition."

20,886. (*Chairman.*) Of course, it is understood that the University may appoint other professors if they like, who have nothing to do with any college?—Yes.

20,887. Do you think that practically there would be many, or that the majority of them would be teachers in colleges?—I should hope, and I think Convocation hopes, that the University will appoint other professors. The feeling on the part of a great number of members of Convocation, is that the professors should pretty well limit themselves to research, and to post-graduate courses, while the teaching of undergraduates would be more in the hands of the teachers and demonstrators who might be appointed by the University, and if there are post-graduate professors appointed, they will be outside the present teaching staff of London to a great extent.

20,888. The higher education would be given by the University professors, and the ordinary teaching of undergraduates would be given by the colleges?—Yes.

20,889. (*Mr. Anstie.*) Clause 12 of the scheme uses a word which I do not think you like:—"Each "Faculty shall consist of all the persons for the time "being answering the following descriptions:—All "University professors in the subjects comprised in "their Faculty. Such other teachers and demonstrators of subjects comprised in the Faculty as "may be recognised by the University." You do not like the word "recognised," do you?—I prefer the word "appointed," certainly.

20,890. (*Sir George Humphry.*) I notice that in clause 14 of the Report it says that in the opinion of your Committee the National Museums and Libraries can be rendered available for the members and undergraduates of the University. Have you any idea of their being represented on the Senate?—Yes. That is provided for by the condition as to Crown nominees, sub-section 1 of clause 3. I think sufficient stress has hardly been laid upon the very great advantage which the students in London would get if this could be obtained. If courses of lectures could be given upon Biology at the South Kensington Natural History Museum, upon Archæology or other subjects at the British Museum in Bloomsbury, and still more if the recognised undergraduates and members of the new University could have permission under proper restrictions to open the cases and to look at the objects they would really be made educational, whereas walking through a museum and looking at the objects as they are in the cases alone is a very poor educational work. At the Museum at Oxford recognised students come in; they open the cases and look at the objects from all points of view, and, as far as I know, that system which has been going on for a great number of years has not led to any accidents at all. Of course there would be curators.

20,891. (*Chairman.*) Do you know whether the authorities of the British Museum and the other places are favourable to this idea?—No, I have not been able to obtain any information on that point. I have not asked them. But it is not going very much further than the Reading Room of the British Museum where I have been entrusted with the first edition of "Hamlet."

20,892. (*Sir George Humphry.*) It could be arranged, but, of course, looking at specimens means touching them, and that is often very serious?—Yes, no doubt. Convocation purposely left it rather vague, but they have a very strong feeling that better use might be made of these collections for the purpose of learning and research than is made of them at present.

20,893. (*Professor Sidgwick.*) With reference to clause 9 of the scheme, what are the purposes for which the University should be centralised?—It must have its executive, its staff, and its examinations.

20,894. But why do you say "its own lectures, laboratories, and libraries"? Are the laboratories for examination?—Yes, but we could not multiply a large library.

20,895. (*Sir George Humphry.*) You have laboratories for practical examinations?—Yes, we have laboratories for practical examinations, and also a library.

20,896. Have you room for any great increase?—No; the laboratory is at South Kensington, and not in Burlington Gardens. The point is also worth notice that Convocation thought it would be necessary that the instruction should be given at various centres, owing to the size of the Metropolis. Instruction would have to be given in the East End, and certainly to the south of the river, and perhaps elsewhere.

20,897. You do not contemplate using the laboratories of University College and King's College by any arrangement?—I am afraid we cannot go further. If University College would be willing to co-operate afterwards it would be a matter of arrangement. So far as their teachers are recognised by the University we should be able to use the appliances of those well-furnished institutions.

20,898. Was there much discussion by Convocation about the number of Faculties?—We had a great discussion about the two Faculties of Divinity and Technology. Upon the Divinity Faculty there was a formal division and a division list printed.

20,899. Was the Divinity supposed to be undenominational?—Absolutely undenominational, as will appear from clause 20 of the scheme:—"The "examinations in Divinity to be confined to the testing of knowledge, and to be in no way concerned "with the religious opinions of the students." Upon the subject of these two important Faculties I should like to ask your leave to read the clause in the report. It is paragraph 15, on page 10:—"Clauses 11, 12, "and 13 deal with the Faculties which are to be "electoral bodies, appointing members of the Senate "and, from their own bodies, members of Boards of "Studies. The constitution, powers, and duties of "such Boards are set out in clauses 14, 15, and 16. "The Faculties of Arts, Laws, Medicine, Science, "and Music are already recognised in the University, and the reasons for recommending the establishment of a Faculty for Technology have "already been given." That was in a previous clause, and with reference to that I may say that this scheme has become known and Convocation has been invited, at present only informally, to send a deputation to the Committee of the County Council on the subject. I have an extract from the report of that Committee, and I am sorry to say that the report is still practically confidential, because it was not considered by the Council last Tuesday.

20,900. (*Mr. Palmer.*) Has the County Council anything to do with Technology as far as it has gone at present?—Yes, and the Committee of the Council appear willing to grant 10,000*l.* a year to the new University of London.

20,901. (*Chairman.*) You say they are willing to give a degree?—They are willing to take power to give a degree. I do not think they are willing to confer it at present, but to take power.

20,902. (*Mr. Anstie.*) Do you say the Council have considered it?—No, not the Council—the Committee of the Council. We have received an intimation that the Committee would receive a deputation from Convocation.

20,903. (*Mr. Palmer.*) There is a phrase in clause 12 of the Report. With regard to the University exercising an influence over the secondary and technical education of the Metropolis?—Of course that is in connexion with the paragraph before, which says:—"Your Committee recommend the inclusion in the "Senate of four representatives of the municipal "authorities of London, partly because the new "University will require a very large income, and "without such representation those municipal "authorities would not be able to contribute to "the expenses of the University out of the large "funds at their disposal." Then it goes on to say that the second reason is because of influencing technical education.

20,904. Could you influence it in a different way from the way in which it is influenced at King's College? Dealing with the City and Guilds Institute, for instance, you do not propose in any way to take them over?—No.

20,905. But you propose to give either a degree or diploma for various subjects in technology?—Yes, and to appoint University professors or teachers. That was thought desirable.

20,906. The adequate endowment of which you speak, and the large funds to which you refer, are quite apart from the existing institutions such as the City and Guilds, and what you hope to get from the Corporation for the University chest?—Yes. The feeling was that up to the present time the University had not recognised any education under University rank except in the very indirect way of its matriculation which does influence the secondary teaching of the country; and to a small extent by inspecting and reporting upon schools; and it would be desirable, especially as the tendency of modern thought is that the path should be made easy right up to the University, for all pupils able to follow it, that we should connect ourselves with secondary education so as to make the path simpler and easier.

20,907. You put aside what the promoters of the Gresham Charter look to, that is, recognising the higher education in the City in connexion with the Gresham foundation. You do not take any cognisance of the Lord Mayor in connexion with higher education other than his concern with technology. You see the name "Gresham" has had something to do with that, but that is passed by entirely in the Convocation scheme, is it not?—The name is.

20,908. Of course the name is, but you do not in any way provide for recognising in the City anything to do with higher education. You mean adequate endowment for the University chest in relation to technology not in the least for the higher education as was considered by the promoters of the Gresham scheme?—That was not my view. My view was that the new University might appoint teachers belonging to the Gresham College as University teachers and with reference to the various centres at which instruction was to be given certainly the City was the first which I thought of.

20,909. You have given two exhaustive reasons why you ask for this endowment from municipal authorities. Neither of those has any relation to higher education in the City. Is that intentionally left out? You give two reasons: one, that you look to the City for endowments, and also you want to be in touch with technical education?—It would make a very great difference how this proposal is regarded, whether the promotion of higher education in the City is passed by in your scheme or not. These endowments are to be applied exhaustively, but their application has reference to higher education in the City. It is the omission of higher education from the reasons, which led me to ask the question?—It certainly was not intended to exclude the City from the organised higher education of the new University.

20,910. (*Chairman.*) Then we will proceed to the Divinity degree?—It is clause 15 of the Report, on page 10:—"With reference to the Faculty of Divinity "your Committee wish to point out that if that "Faculty be established they recommend that the "examinations should be conducted in strict con- "formity with the restriction specified in clause 20 "of the scheme. Your Committee are well aware "that this is a novel departure on the part of the "London University, but they believe that the exa- "minations in Divinity can be conducted strictly in "conformity with clause 20, just as the examinations "in Philosophy have always been conducted without "any regard to the particular school of Philosophy "which the candidate has accepted. As this can be "done, your Committee think that the Faculty of "Divinity ought to be added; because without it "the University would not have the control over all "the higher teaching in the Metropolis; and also "because they feel that Nonconformists ought not "any longer to be compelled to go abroad for a "degree in Divinity, as they are at present."

20,911. And they really have satisfied themselves that an undenominational degree can be given. Is there any place in which an undenominational degree is given?—I believe that it is quite undenominational in the foreign Universites. Any of our Nonconformist ministers can get their degreee there upon simply a knowledge of historical Divinity.

20,912. Would they not leave out the Roman Catholics?—Not anybody.

20,913. Or, to take an extreme case, a Mohammedan?—I may say that upon the Committee one of the strongest supporters throughout of the additional Faculty of Divinity was a Roman Catholic.

20,914. You say there was a division on the subject?—Yes. Including the tellers 103 voted for it and 37 voted against it, of those who were present; and no objection from those who wrote approving of the scheme.

20,915. (*Mr. Palmer.*) Was it intended to limit it to Christianity?—No. It was thought that there should be an examination upon comparative religion, the subject which Professor Max Müller deals with.

20,916. Such as a discussion as to whether the Psalms were written by David, and so on, if you come to a criticism of sacred writings?—A knowledge of sacred writings.

20,917. (*Mr. Anstie.*) You do not exclude the subject of scholarship and history, do you?—No, history would form a very great part of it indeed. The six colleges which are mentioned in the report of the Committee are colleges which have formed themselves into a kind of corporation at present called the Senatus Academicus, of which I have the calendar here. The list is taken from the Senatus Academicus Report and Calendar, 1892, but since this report was circulated amongst the members of Convocation, letters have been received which show that there are a very much larger number of colleges; that, in fact, the Senatus Academicus is limited very much; and that instead of hundreds there are thousands of students who are quite willing to take the Matriculation of the University of London, but who cannot take a Bachelor of Science degree or a Bachelor of Arts degree before they specialise, and who therefore must go without a degree in this country, not being members of the Church of England, and who must go abroad to get a Divinity degree. They have not time to get a degree before they specialise.

20,918. (*Lord Reay.*) Does the existing University of London give a Divinity degree?—No.

20,919. Under this scheme you claim the power of appointing Divinity Professors?—Yes.

20,920. (*Mr. Palmer.*) Could not such persons take a degree in Arts?—They say that they have not

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

the time, that they must begin to specialise, to take up the subjects connected with the profession which they are going to embrace.

20,921. (*Mr. Anstie.*) Is it your idea that a man should take a degree in Divinity, who is not competent to qualify in Arts?—He would pass the matriculation.

20,922. That is an examination which he takes at the age of 16 years?—He would be no more compelled to take a degree in Arts, than he would if he were taking the degree of Bachelor of Laws, or Bachelor of Medicine.

20,923. (*Chairman.*) It would throw a little light upon it, if you could hand in a syllabus, or tell us what sort of books they would have to take up. Would that be going too much into detail? It would show how far it could be done in an undenominational way, which is my difficulty at present?—It is very difficult indeed for a person who is a layman to prepare a syllabus or indicate what the books would be. (*The witness handed in a paper showing some suggested General Conditions for Divinity Degrees. See Appendix, No.* 44.)

20,924. (*Mr. Rendall.*) Surely, broadly speaking, the intention would be that it should be a course somewhat similar to Cambridge or Oxford, the course there in Divinity being made a part of the Arts course. Should you think of a course parallel to that?—I am not sufficiently acquainted with those courses to say.

(*Mr. Anstie.*) Of course that would meet my objection entirely.

20,925. (*Mr. Palmer.*) There would be no objection to its being taken as part of the Arts course, but the difficulty with regard to which I did not understand Mr. Busk, was in the necessity of specialisation?—It would be granting the same degree of B.A., though in a totally different set of subjects from the B.A. At present, the B.A. is granted upon one set of examinations, though there is a little choice in the selection of some subjects.

20,926. (*Chairman.*) I suppose there would be largely alternative papers on different books. There would be a large variety of books that the different students might take up at their own choice?—Yes. I think, if the Commission would allow me, I could, within the next few days, send to the secretary a syllabus or a list of such books. I will see the heads of the Nonconformist Colleges. Without their knowledge I had rather not mention the books.

(*Lord Reay.*) If the Chairman would allow me to point out that the question is fully answered in the proceedings of the Commission on reform of the Scotch Universities in the evidence on the question of the abolition of tests in the Faculty of Divinity.

20,927. (*Mr. Anstie.*) The alternative method in Oxford is one by which they allow in the Arts course men to go out in various schools?—It has been referred to, not in Convocation, but in the Committee a good deal, and it was thought undesirable to give the same title and the same degree for examinations which were wholly different. It would be much better to give a different degree, so as to indicate in what subjects it has been given. But if I may be permitted I will ascertain from the heads of the colleges in detail what the idea is, and send it to the Secretary.

20,928. (*Chairman.*) Is there now a Faculty of Music?—Yes.

20,929. Then it would be merely continuing that?—Yes.

20,930. Do you think Music ought to be treated differently from painting or any other of the Arts?—It generally is, I think. In your opinion is Music more worthy of encouragement?—I do not know whether it is more worthy of encouragement, but it is based upon definite mathematical and scientific principles of acoustics and combinations of sound, which make it a more possible subject to examine in, I should say, than drawing, painting, or sculpture.

20,931. And it would be only retaining what you have at present?—Yes.

20,932. (*Mr. Rendall.*) In the representation of Faculties would not there be some fear of Music not being represented at all?—There would be some fear, but unless the representation of Convocation was very largely increased they could not even give Music one representative. It is so very small a Faculty.

20,933. Is that a more or less polite way of saying that Music would have no representative?—It might be arranged by a kind of tacit understanding that there should be an alternation.

20,934. It seems a little paradoxical that a Faculty should not have even one representative?—It is a little paradoxical, but the Faculty is very small. I think there might be a tacit understanding between Arts and Music that at certain intervals Music might nominate its own representative.

20,935. A member every fourth year or something of that kind?—Yes.

20,936. (*Mr. Anstie.*) Then you give this representation merely to numbers and not to educational importance?—Is there any difference in educational importance which would have to be emphasised?

20,937. I should have thought there was a difference whether you regard the Senate as being a mere representative of numbers or an educational body which has to take into consideration the educational needs of the University, and which requires advice on all the needs?—That is why we desire all the Faculties to be represented.

20,938. But is it not dominated by the more important consideration of mere numerical representation?—I do not see that.

20,939. Music was not to come in because in number the graduates are not equal?—On the contrary, I said we preferred that it should, but it should come in such a way that it should not be over-represented. That is why we have included Music in this way. It was simply in order that it should not be excluded.

20,940. (*Chairman.*) I was going to ask you with regard to Technology which is the same as Applied Science I take it. Several of the witnesses before us have thought that that ought to be included in the other Sciences; that there ought to be two sides, one ordinary Science and the other Applied Science. That question was well considered by Convocation and they preferred on the whole that what they call Technology should be entirely distinct?—I think they preferred to leave it distinct. Although taking power to grant degrees (which was not originally contemplated) they preferred to keep up a distinct Faculty to mark its practical rather than its scientific character.

20,941. Then we will go on to the next head?—Clause 12 on page 4:—"Each Faculty shall consist of "all the persons for the time being answering the "following descriptions,—(i.) All University Pro-"fessors in the subjects comprised in their Faculty; "(ii.) Such other Teachers and Demonstrators of "subjects comprised in the Faculty as may be re-"cognised by the University." That should "be appointed" as Mr. Anstie points out.

20,942. You draw a marked distinction between clause 1 and clause 2?—I think Convocation would wish the professors to take a distinctly higher stand, in the same way as it says,—"There shall be a Univer-"sity Professoriate and a Staff of Teachers and "Demonstrators" so as to put the professors into what Convocation thought should be their proper higher position.

20,943. You wish to keep them in a separate class from the College teachers?—No, because the University professors may be attached to a College too.

20,944. "Such other teachers and demonstrators of "subjects comprised in the Faculty as may be "recognised by the University." To recognise them in the University does not give them the status of University professors?—That should be "appointed," I think. They would be University teachers and University demonstrators.

20,945. (*Sir George Humphry.*) It still would not be quite clear. This means "should be appointed by

" the University as members of the Faculty," or does it mean "should be appointed as teachers." It says, "Such other teachers and demonstrators as may be "appointed." That would mean such other teachers and demonstrators as may be appointed on the Faculty? —That is not the idea. The idea was that the new University would appoint professors; would also appoint teachers and demonstrators; that those University professors, University teachers, and University demonstrators, should also be members of the Faculty in which they teach, and that they may, all of them, professors, teachers, or demonstrators, be or not be teachers in a college.

20,946. And that all teachers in the several colleges who are appointed or recognised by the University will be on the Faculty?—Yes.

20,947. (*Mr. Rendall.*) I thought the distinction that Sir George Humphry has called attention to was contemplated, that there was to be a further recognition to constitute membership of the Faculty, and, as far as meaning goes, it would mean all University professors, teachers or demonstrators in the subjects comprised in the Faculty?—All University teachers.

20,948. It is rather a pity to introduce what seems to constitute a difference?—I think it might be made clearer.

20,949. (*Sir George Humphry.*) The whole point wants to be a little clearer?—The second clause would run: "all University teachers and demon- "strators of subjects comprised in the Faculty."

20,950. (*Mr. Anstie.*) What you mean is "all Uni- "versity professors teachers, and demonstrators in the "subject comprised in their Faculty," and the only reason why you have not drawn it in that form is to pay them a compliment?—That is not so. There was another which was suggested in the discussion in the Committee, and that was that the professors might, if they were simply put in the same category with the teachers and the demonstrators, not have their legitimate influence on the Faculty.

20,951. It is not giving them any power?—No, not in this sketch, but it was thought that if they were put into a separate category, when the details came to be worked out, the powers of the professors might be safeguarded, there being possibly a far larger number of teachers and demonstrators who might outnumber the professors if they were on a level.

20,952. Do you mean that they should have different voting powers?—It is possible that the Faculties might return no professors at all, but only teachers and demonstrators, and the professors be left out altogether.

20,953. What is to prevent that now?—There is no provision in this outline scheme, but it was indicated by our carefully keeping the professors in a separate class, so that when the details came to be worked out they might be separately treated, and some provision might be made. Then we come to the Boards of Studies, which are still more important than the Faculties, because it is through the Boards of Studies that the teachers will exercise that influence which they so strongly desire, and, if I may say so, legitimately desire, over the curricula. The Boards of Studies would consist of members appointed by the Faculties, but as was explained at an earlier stage, the number of members was purposely left vague.

20,954. (*Chairman.*) What was the number?—I think the late Royal Commission said from 4 to 16.

20,955. And even if there were only four Convocation would appoint two of them?—Two in addition. I do not know that the numbers were at all carefully considered by the late Commission. I think they merely mentioned different figures with a view of showing that the Board of Studies would not be of the same size in all the Faculties.

20,956. The scheme says the powers and duties of the Boards are consultative only?—That was in accordance with the view of the last Commission. I think that has been always the view in all the schemes which have been prepared. Then it goes on:—"To "consider and report upon any matter referred to it "by the Senate;" then, secondly, "to represent to "the Senate its opinion upon any matter connected "with the degrees, and examinations, and teaching "of the subject of its Faculty." That we put in afterwards, because it would give the Boards of Studies the power of initiating. Then, thirdly, "To "deliberate, if so requested, in conjunction with the "Senate or any Committee thereof"; and, fourthly, "to meet and act concurrently with any other Boards "or Board of Studies on particular subjects." Then, clause 16: "The Boards of Studies shall also advise "as to regulations in connexion with museums, labo- "ratories, &c."

20,957. (*Professor Sidgwick.*) Was the question at all considered as to whether the Boards of Studies might also have executive powers?—Yes, it was considered.

20,958. And it was rejected?—Yes; it was rejected in accordance with the Report of the Second Committee of Convocation and the Report of the last Royal Commission.

20,959. On what ground?—It was considered it would be very difficult to have a dual executive; that everything must be left to the Senate.

20,960. But the Senate might have power to devolve executive functions on the Boards of Studies as is the case in Oxford and Cambridge?—That would come in under its powers.

20,961. Was the question considered whether the Senate should have power to delegate any executive functions to the Boards of Studies. Considering the experience in Cambridge, I should say it was extremely inconvenient that it should not have the power. There are so many minor points which it would be convenient to leave to the Boards of Studies?—I do not think it was considered from the point of view of delegation. It was considered simply that the Boards of Studies might have executive powers conferred upon them by the Charter. That was thought undesirable and that it was likely to clash with the executive of the Senate. The question whether powers given to the Senate might be delegated to the Boards of Studies was not considered.

20,962. (*Mr. Anstie.*) And you do not raise any objection to that on the face of this scheme. You treat it as an omitted matter, not as one which was discussed and rejected?—It was an omitted matter not discussed and rejected, and therefore I cannot express the opinion of Convocation on the matter.

20,963. (*Mr. Rendall.*) The Faculties only exist to appoint representatives?—Yes.

20,964. Why should they not act as a whole? Why should not they exist as complete Faculties on all occasions?—That would be possible if we do away with the power of teaching outside the Metropolis, but if we have professors, teachers, and demonstrators appointed under clause 1 outside the Metropolis, we should have the same difficulties about getting the Faculties together that we have about getting Convocation together.

20,965. But if limited to the Metropolis the Faculties might assume the powers here given to the Boards of Studies?—Yes; perhaps with this one qualification which I hinted at a short time ago, as to whether the professors might not be outvoted by the other teachers.

20,966. But there is no safeguard against that in this scheme?—No; there is not.

20,967. Then there is no provision at all providing that the Boards of Studies should meet together for consideration of the subjects?—It empowers them to meet and act concurrently. It is a mere power.

20,968. Is that to be given to each board?—Yes; with the consent of the other boards.

20,969. But it is expected that it would rest with the consent of the boards concerned. Why it seems to me very important is that the scheme contemplates a separate Faculty of Technology, and that would mean that every subject of technology would be considered by a single Board of Studies and would be reported direct to the Senate, and would not neces-

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

sarily or even at all be considered by the Faculty of Science. The original scheme as a whole thought of giving technology only a diploma. That distinction has been struck out and you give a degree, and notwithstanding you leave the constitution that the Board of Study of technology will not necessarily consult or act with the Board of Study of Science, but will consult with the Senate. Was that foreseen?—I think it was not foreseen. The form in which it was submitted to Convocation was this in paragraph 11: "There shall be seven Faculties, Arts, Law, Medi- "cine, Science, Divinity, Music," all of which were bracketed together, and after the brackets were these words:—"Examinations wherein shall result in degrees." Then came technology, outside the bracket, and the words "Examinations wherein shall "result in certificates or diplomas." The vote of Convocation was as to whether the words following the names of the Faculties were to be omitted. I do not think any member of the House thought that as a consequence of that it might have been advisable to bring up technology into the Faculty of Science. It did not occur to me, nor, as far as I know, to any member of the House.

20,970. The scheme tends to make very slight provision, with so slender a representation of Faculties on the Senate, for one Faculty in the University having a voice in the recommendations of the other Faculties, and that is accentuated the more you multiply the number of your Faculties. You put several Faculties, and several of them with only one representative, which would be the whole connexion with the final body that one Faculty would have on the opinions of the others?—Of course, as the matter was not discussed in Convocation I cannot be expected to express the views of Convocation on that point; but, personally, I should have no objection to technology being made applied science.

20,971. (*Mr. Anstie.*) May I ask whether you would have any objection or whether you would think any objection would be felt in Convocation to the provision contained in the Senate's scheme:—"Boards of Studies shall, if so from time to time "requested by the Senate, and may, if they shall "from time to time think it desirable, meet and act "concurrently on particular subjects"?—That is the same as this clause of the outline scheme, but with the addition that if the Senate requires it the Boards of Studies shall meet and act concurrently.

20,972. They shall if required by the Senate, and may, if they think fit?—In this scheme we have only got, "may if they think fit." I see no objection to it personally. Of course, I must again state that that is only the expression of my personal opinion.

20,973. (*Chairman.*) Then we come to the question of degrees and examinations?—Yes; and there is a passage there in paragraph 16 which, again, is a statement of Convocation as to its opinion:—"No "adverse criticism has been made upon the standards "of examinations for degrees in any of the Faculties, "except Medicine, and in that Faculty the grievance "seems to be, not that the degrees of our University "are too difficult for academic distinction, but that "other Universities, by conferring the degree of M.D. "on a less difficult educational test than the examina- "tions of this University, tempt students away from "the London Medical Schools, with their unrivalled "facilities for clinical instruction. The true remedy "would appear to be that those Universities should "cease to confer the M.D. degree on such easy terms, "or that if such degrees must be granted they should "be conferred without the necessity of residence. "Your Committee recommend that such increased "facilities for obtaining the London medical degrees "should be afforded as are mentioned in clause 19 of "the scheme." The facilities are with reference to the times at which the examination is to be passed. It was felt that as the Conjoint Board of the Royal Colleges requires that a certain time shall be passed in the medical training of the students the University would have that as a safeguard, and might allow the students to take the examinations for their degrees at any period during that time which may be convenient to them, while in the other Faculties, of course, it would not do not to limit the periods, because otherwise the examinations might be rushed through in the course of a few months, and there would be no guarantee of a continuous training over three or four years.

20,974. I think a great deal of the criticism about the London degree refers not so much to the difficulty of the examination as to the time in which it is done, requiring too many subjects to be taken up at the same moment?—Yes; and Convocation thought that if something like clause 19 of the scheme were adopted that difficulty might be met; give increased facilities without lowering the standard of the degree was their idea; and thus make it more accessible.

20,975. (*Sir George Humphry.*) Was the question of the University combining with other bodies in examination to grant degrees, considered by Convocation at all?—It was considered, but the difficulty was that unless the University had effective control over the examinations it would be doing what, at any rate, the University at present does not do, namely, accepting the examinations of other bodies as equivalent to some portion of its own.

20,976. That there should be a board composed of equal numbers of those representing the Conjoint Board and the University to regulate and control examinations; that the examiners should consist both of examiners of the University of London and of the Royal Colleges of Physicians and Surgeons?—That does not meet with the approval of Convocation. The point came up at the time of the scheme of the Senate.

20,977. The urgent desire of the medical profession is that the degree should be put upon a somewhat similar footing with those of the University of Edinburgh?—Is that really the desire of the profession?

20,978. That is stated so very strongly, one hears it almost everywhere?—I have heard such an estimate of, at any rate, the lowest standard of the University of Edinburgh that I should have thought myself all the medical men in London would have considered it too low.

20,979. If there could be a combination and a certain standard between the bodies who admit to the license, and the degree of the University of London in addition, that would be great gain to the profession it is thought, and would in a great measure reconcile the medical profession and the medical schools to the plan?—The degree of the University of London at present is a license, is it not, without the necessity for taking any license at the colleges at all.

20,980. Quite so. The idea is that the combined examination should give admission to the colleges, and at the same time the degree of the University—that there might be some kind of arrangement between them. If there could be any combination of that sort, from all the evidence we have heard it would greatly tend to reconcile the medical profession and the medical schools to the plan?—The importance being not that there would be license to practise, which, of course, the graduates have now, but that it would give them the membership of the colleges which, of course, the medical men desire.

20,981. Yes, and the degree. It seems to be the desire that one examination should give the whole?—It would be intended, I suppose, that there should be some additional examination for the degree.

20,982. The idea rather was that the scientific examination should take place earlier perhaps in the University of London, but that the final examination in medicine, surgery, and midwifery should be one conjoint between the Universities and the colleges?—I have not been able to read so carefully as I ought to have done the evidence taken before this Commission, which the Commissioners were good enough to send me, but I have gathered from the cross-examination to which they were subjected, that the witnesses did not really complain that the medical degrees of the University of London were too dif-

ficult. I derived the impression, on the whole, that they did not question the degree as an academical distinction.

20,983. I was not saying anything about the degree; there are so many opinions about it?—Convocation considers it to a great extent from the point of view of the difficulty of the standard. We have a large number of Bachelors and Doctors of Medicine on Convocation, who would view with distaste the creation of a lower standard.

20,984. This is a point which is wider. The question is really not simply whether the University would combine with the Royal Colleges of Physicians and Surgeons in an examination, but whether they would be disposed to combine also with other colleges, and also other teaching institutions for certain examinations. That question does not seem to have been considered at all?—I beg your pardon. It was considered. It was put into the draft report and it was struck out, and moved to be put again. The only avenue to a degree which was considered by Convocation in its Committees, besides the ordinary avenue of passing all the examinations of the University was this: that those who attended approved courses of instruction at an approved institution should be allowed to pass a separate examination, to be conducted by examiners approved by the University. Even the minority who supported this alternative felt, with the late Royal Commission, that the final examination ought to be in the hands of the University of London altogether, apart from the colleges. It was one of the objections that Convocation felt to the scheme of the Senate that it gave up the final examination. This alternative avenue was excluded from the scheme now before us on two grounds. First, that even if granted it would not be satisfactory to the colleges which had bargained for control over the the final, and would not he put off with the intermediate. Besides this we felt the extreme importance of the intermediate examination. It is an examination on the typical subjects of that Faculty in which the candidate is going to graduate. It is broader than the final, and is a half way stage between the general subjects of the matriculation examination and the limited range of final examination. To give up the intermediate Convocation felt would be to interfere with the scheme of education, not only with the scheme of examination, but with the scheme of education itself; Convocation also felt that the intermediate examinations for a bachelor's degree are only elementary, and that undergraduates students ought to be taught what is certainly known, and according to the best known method; and if that is done so far as elementary work is concerned the teachers will not really require the free hand which they seek to have. It would be better that they should not teach to such young and elementary students doubtful facts and theories.

20,985. By "the teachers," what teachers do you mean?—Those who promoted the Gresham Charter; those who complain that they feel fettered in their syllabus and that they cannot teach freely. We felt that in this elementary instruction there was really no scope for the free teaching; that it must be a communication to the students of well-known and undoubted facts and theories, and that it must be a communication of the best methods of learning those well-known and undoubted facts and theories, and if the teachers got indirectly through the Faculties and Boards of Studies, and directly by representatives on the Senate, influence on the examinations of the University, and influence over appointments in University teaching of all kinds, that would be quite sufficient.

20,986. You mean that there should be no specialisation of teaching, and no specialisation of examination in elementary work. That is common ground which any examiners might examine on, whether they had been teachers or not?—Yes.

20,987. So that the University does not contemplate any plan of combination with bodies for examination?—No, it has not done so.

20,988. Not any plan at all?—Not any plan at all.

20,989. So as to give the teachers an influence in examination as well as in teaching?—None, beyond the influence which they would have, of course, in being on the Senate which appoints the examiners, and in advising the Senate through the Boards of Study and the Faculties. But in these ways they would have a direct and important influence and power there.

20,990. That would also influence the several bodies if they had some share in examination as well as in teaching?—Yes. It could not go beyond the intermediate. That would not be accepted.

20,991. And you think that any such plan as the combination of teaching and examining with the Royal Colleges which was proposed by the Senate would not be likely under any conditions whatever to meet with the approbation of Convocation?—No, I think not.

(*Chairman.*) I suppose under this scheme, if it was passed, the Senate and the Boards of Study together could enter into arrangements with the Royal Colleges, could they not, if they chose?

(*Mr. Anstie.*) It does not need any scheme, or any alteration of the Charter, or any added powers beyond that which the Senate at this moment possesses to enter into arrangements with the Royal Colleges. In point of fact, although it is in suspended animation at the present moment, there are negotiations going on between the Senate and the Royal Colleges with that view. It is expressly provided by Act of Parliament that they can do it, and they do not want the assent of Convocation or anybody else to do it.

(*Sir George Humphry.*) You mean that an arrangement with the Royal Colleges, like the scheme of the Senate proposed, might take place.

(*Mr. Anstie.*) Yes, it might, and it is before the Royal Colleges. It is under the Act of Parliament, and they have express power to do it.

20,992. (*Sir George Humphry.*) That really is a very important point?—Very.

(*Chairman.*) I suppose the scheme of the Senate would have made it compulsory?

(*Mr. Anstie.*) No, it did not make it compulsory. It gave it a definite expression, but after the rejection of the scheme a further communication was addressed. What the scheme did, really, was to give a definite expression, and a mode of arrangement by agreement with the two Royal Colleges, which they had power to conclude under the statute.

(*Chairman.*) I thought it was compulsory, but I see it is not. Then it only gave them what they had already.

(*Mr. Anstie.*) It did not give them the power they had already, but it gave the form which had, in fact, to be settled with the Royal Colleges. They were a little careful in that with regard to their interest and rights, and the form had to be settled with the Royal Colleges. That is the result of the agreement come to as to the mode of working out the power which they already had.

20,993. (*Sir George Humphry.*) There is no doubt that some plan of that sort, some understanding and some combination between them, would do a great deal to reconcile the medical profession, and the medical schools. The medical profession and the medical schools have been very loud in this matter, and their desire to place a degree within the range of the medical schools of London has been a great motive power in bringing about this desire for a new University, or an alteration of the London University?—But would that have the effect of preventing students from leaving the London schools to go to the cheaper Edinburgh examination.

20,994. That is the general impression. The idea is that the London students should have easier access to a degree. We do not say to a lower degree, but an easier access to a degree?—More than is provided?

20,995. Yes. Perhaps that is the most important point in connexion with this scheme of Convocation.

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

(*Mr. Anstie.*) This 19th clause is only directed to what is called the practitioners' degree, is it not, giving degrees to people who have done practical work. We have had a good deal of evidence about it.

20,996. (*Sir George Humphry.*) This regulation merely provides the period at which examination is to be passed?—It provides that any candidate may take his examinations at any time during his fixed medical curriculum.

20,997. (*Chairman.*) Of course the Senate has power to modify the degrees at any time if they find they are getting too hard?—Yes, that is why the constitution of the Senate is so important.

20,998. (*Mr. Rendall.*) With regard to section 19, do the present restrictions rest solely upon the regulations of the Senate?—I think only upon the regulations of the Senate.

20,999. Then what does it mean when you say the restrictive regulations are to be abolished? Does Convocation deliberately wish to put it out of the power of the University to make any restrictive regulations about intervals of time or intermediate examination?—In the Medical Faculty they feel that the length of time provided by the medical curriculum is a sufficient safeguard.

21,000. They might feel that, but it is a formidable thing to insert in a charter a point like this with regard to the deprivation of power. If you put it out of the power of the University to determine its own curriculum you do an extremely serious thing?—Convocation has no power over the regulations, and Convocation can only express its view that the regulations as to time should be waived.

21,001. Convocation is not here expressing an opinion to that effect, but it is proposing to insert them in a charter, and that a power of restricting the curriculum in that respect shall be taken away for all time, which is a very different thing. I do not know whether it meant to go as far as that, but you say that is the intention of the clause?—Yes, that is the intention.

20,002. Then in paragraph 16 of the report about conferring degrees it proposes that the degree should be conferred without the necessity of residence. What sort of procedure was contemplated?—No procedure was contemplated at all. Convocation thought that the true remedies were those mentioned in that paragraph, but that there was no power to enforce either of them, either that the other Universities should raise the standard of the M.D. degree or that they should grant them without residence.

21,003. What would be the effect supposing there were degrees given without residence? Would it not tend to lower the level of the degree examinations and rather withhold students from entering for the University degree than to encourage them?—What was felt was that the great objection to the present system was that it took away the London students from their good instruction in London to Edinburgh for two years or to Durham for one year, giving them the less good instruction there; and if the Edinburgh and Durham Universities could be made to grant degrees to anybody who simply went up to be examined there would be an advantage in keeping in London till the last minute, and then taking the mail train to Durham and passing the examination. The students would not be taken away from the London medical schools.

21,004. It strikes me it is a very two-edged remedy to say "let us have a lower degree open, so that we may have the men stay in London," because if it makes the standard of education lower you are not likely to have a better education, though the student may remain in London. Was that thought of at all?—It was thought that the teaching would be kept up in London by the London degree. Of course attendance at a hospital is required. That cannot be cut out, and there must be residence.

21,005. (*Sir George Humphry.*) The standard of examination can never be a thing regulated. That depends upon the examiners for the time being?—Yes.

21,006. (*Professor Sidgwick.*) Those who drew up this document had not the slightest idea that either course would be adopted?—We felt it would be quite hopeless.

24,007. (*Sir George Humphry.*) The real point is that you cannot regulate standards of examination?—No.

24,008, The standard fluctuates and has fluctuated at the University of London?—Yes.

24,009. The feeling of the profession I think is not that there should be a degree of lower standard but that greater facilities should be afforded for obtaining a degree; and suppose there was that sort of combination with the College of Physicians and the College of Surgeons, so far as the evidence before us has gone, it would seem as if that would very much meet the requirements?—Would the determination of the standard or the joint standard from time to time be left with the University.

24,010. That depends upon the examiners; and if there be examiners from the London University combined with the examiners from the Colleges of Physicians and Surgeons they would enforce it or direct it as far as possible, because you cannot regulate standards of examination?—No.

24,011. (*Mr. Anstie.*) That is regulated by the 47th clause of the Senate's Scheme. All the responsibility of the degree rests with the University?—Yes.

(*Sir George Humphry.*) I think the medical difficulty would be met very much if some plan of that sort such as was proposed by the Senate of the University of London was adopted. That has generally been felt by those have been examined here with regard to medical degrees.

21,012. (*Professor Sidgwick.*) Might I ask a question, not with a view to controversy, but only to elucidate the scheme? There is a point that I think was overlooked in clause 6, or at least one to which I did not hear an answer given. That is how the Faculties are to be appointed at the election of the Senate. The Senate will, I suppose, appoint University teachers and examiners under clauses 1 and 2, but then the Senate according to chapter 3 ought to have 10 Fellows representing the Faculties?—Yes.

21,013. Therefore it would seem that some transition was desired?—I think there is no doubt that there would have to be several transitional clauses introduced all the way through the scheme; but as this is temporary it was thought better not to invite pronouncement from Convocation.

21,014. Of course it might be done by allowing some designation by the colleges in the Gresham scheme?—Yes.

21,015. I do not know whether that would be rejected as a means of starting the thing, an original designation of Faculties for the purpose of election?—How far would that bind the University afterwards to appoint certain people to be professors and teachers. They would have to remain the Faculties. I think it would be almost better to have a special constituent body appointed for the purpose of starting the new University.

21,016. Was it talked over on the Committee?—It was.

21,017. (*Mr. Anstie.*) In addition to the restriction which Mr. Rendall has pointed out I should like to ask you your construction of the 17th clause, which is germane to the point we are inquiring about. It says that the examinations are to remain open to all candidates who have complied with the regulations, irrespective of the place or manner of their education; which implies that the regulations are not to deal with that point. Was it intended that they should be abolished?—That is fixed by Act of Parliament, we believe. It was thought that they should not be abolished.

21,018. (*Chairman.*) Have you anything more to say with regard to clause 22:—"The University not "to have power to grant honorary or *ad eundem* de- "grees, or to allow of procedure to a higher degree "without examination"?—Upon that Convocation

has been always very strong. In 1886 a special committee of Convocation brought up a scheme and put a clause into it that honorary degrees should be capable of being conferred. Convocation adopted the whole scheme with the exception of that clause which it struck out.

21,019. They did not divide about it at all?—Not at all.

21,020. Then clause 23 is—"The University to have power to hold real property, and to accept endowments, grants, gifts, devises, and legacies, notwithstanding the Statutes of Mortmain"?—That would be necessary.

21,021. Then to go back a moment to the Faculties. With regard to the Faculty of Law which I did not ask you a question about, it has been represented to us that it would be a great advantage if we could get the co-operation of the Inns of Court and that the Inns of Court will be more likely to co-operate with us if they were allowed to nominate a certain number of members of the Faculty in addition to the teachers of whom the Faculty would otherwise consist. Was that considered at all?—No, I do not think it was considered. It was thought that the teachers appointed by the Inns of Court would probably be recognised by the University.

21,022. And that would be the Inns of Court in connexion with the University itself?—Yes.

21,023. But supposing it were thought desirable to give the Inns of Court a stronger voice in that one Faculty, would it be objected to by Convocation?—Personally, I think not. So far as I can judge I think Convocation would not object.

21,024. Of course nothing in this would interfere with the degree which at present is given by the University of London to all comers from the whole of the United Kingdom?—No.

21,025. That would remain the same?—Yes, that would remain the same.

21,026. But they would take the same degree exactly as was determined on by Senate, and pass the same examinations that were decided on by the Senate after consultation with the Boards of Studies?—Yes.

21,027. And the same degree would be taken by those who had gone through a regular University teaching under the auspices of the London University and those who came from outside?—That is thought to be so. That is the effect of it.

21,028. And if the teaching led up to the examinations and those who had been taught had therefore an extra chance of doing well in the examination though that would be a little against the outsiders, they must run that risk?—Yes.

21,029. And they would not be under any protection whatever. They must take their chance?—Convocation feel that the advantage of attending the instruction will be so great, and it would not be well for the University, or perhaps very dignified for the University to try to drive students into particular colleges, or attendance at particular courses of instruction, or to bribe them by giving them special facilities. They would be more able to pass the ordinary examination.

21,030. And that would be the inducement for them to come?—Yes, and the teachers having this important consultative and even executive voice.

21,031. (*Lord Reay.*) The main power in the University for all purposes of examination, appointment of University professors, rests with the Senate, as constituted in clause 3?—Yes.

21,032. The question as to whether the Senate should make arrangements with outside bodies, is one you leave the Senate to deal with. The object of this scheme is only to constitute a body for the commencement of operations, and then to leave the further development of the University to that body?—That really is the view, and that I may say was expressly mentioned; and the feeling on the part of Convocation, or rather its Committees, most strongly was that this must grow gradually; that if it was to be a University which was to permanently last, it should not be a paper University. You must leave it to the Executive to develop the teaching as well as the examination, from time to time as opportunities and as funds allow. The University might absorb all the teaching in London in course of time.

21,033. And any arrangements with existing colleges, or with the Inns of Court, or with the Royal Colleges of Physicians and Surgeons, should be left to that body after the University had once been constituted?—That is so.

21,034. The main object of this scheme of Convocation is to start a University Executive, sufficiently strong, and at the same time not too unwieldy (because I see the numbers have been carefully limited), to be able to conduct all those various operations, which must be subsequent and not antecedent to the creation of the University. That is the view of Convocation?—Yes.

21,035. You do not attempt in any way to interfere with such teaching as the colleges at present give in the way of research, you do not want to absorb that into the University. The University would recognise such teaching?—Yes, and might select any professor of the whole staff as it liked, as an individual professor.

21,036. Leaving the college its entire autonomy and independence?—Yes, entirely.

21,037. (*Professor Sidgwick.*) I think that when the scheme of the Senate was mentioned, you referred to the older Universities of Oxford and Cambridge, and to the fact that the Council of each of the older Universities is elected by the resident Masters of Arts. You referred to that as an analogy, justifying the representation here given to Convocation?—Yes, I did.

21,038. Are you aware that the resident graduates are, in the main, the persons engaged, either in teaching, or in the administration of the colleges?—Yes, they are.

21,039. So that practically, the system so far as it gives the control to the resident graduates, gives the control in the main to teachers?—Yes, I suppose it does so. Of course, they appoint the whole body with certain restrictions while our Convocation asks to appoint less than a third.

21,040. Therefore, there is nothing really in Oxford and Cambridge as they practically work, in the least corresponding to the large share in administration given by this scheme to the whole body of graduates?—A very large number of the graduates are themselves teachers. The members of Convocation are not, of course, simply graduates. They have passed on to other things.

21,041. I mean by teachers persons actually engaged in giving academical instruction?—But surely the resident graduates who vote in Oxford and Cambridge are not all teachers in the Unversity. They are teachers at colleges, or private tutors, as the teachers on our Convocation are.

21,042. Because in Oxford and Cambridge, as you say in your report, the system is a partially federal one, and therefore the colleges must be regarded as really forming part of the University, as in fact they do?—So far as it is federal.

21,043. The actual working of the system is that the control which is given in Oxford and Cambridge to the Council is practically, though not formally, a control given to the persons who are either themselves engaged in teaching, or are connected with the bodies who are so engaged in an administrative way?—Yes.

21,044. With regard to the federal character of the University, which, according to clause 11 of the report, it is desired to avoid—as I understand, the only way in which a practical federal character is avoided, in the body of teachers that this scheme proposes to institute, is by giving a certain number of titles, and perhaps money; it might not be money at all, as I understood that there need be no funds raised; and if the funds are raised, as I understood

E. H. Busk, Esq., M.A., LL.B.

2 Feb. 1893.

you, in the design of those who framed the scheme, the funds are rather to go to the encouragement of research and post-graduate work, which it is designed to organise separately. It is designed to take away the post-graduate work from the academical institutions in London, University College, for instance?—Oh, no.

21,045. When I say "take it away," I mean in the practical sense of appointing a professor elsewhere with an endowment to engage in a research for going through the ordinary degrees?—No, I do not think we proposed even to interfere with it to that extent.

21,046. But is it not the design of the scheme?—The design of the scheme is not to recognise any college or any teaching body as a corporation, but to look at the teachers who happen to be teaching in that college, and either recognise them or not according to the qualification of those teachers.

21,047. I am now thinking not of what you gave as an interpretation of these clauses, but rather, if I understood you rightly, the intention of those who framed the scheme, and in your view the intention of Convocation, I thought was to appoint a University professoriate who would be in the main outside the colleges, and who would conduct the post-graduate work and research, the college teachers who have been engaged in preparing for the degree. I thought that was your view of the scheme?—I did not intend to convey that impression at all. I was thinking, in fact, of the course of post-graduate lectures which has just terminated at University College by Professor Marshall Ward, which had very great success. We should not interfere with anything of that kind. We should leave that to the college. All that we should do would be to add further instruction not to interfere with what the Colleges at present give.

21,048. Then I was wrong in understanding you to say that the idea of a University Professor in the mind of those who formed the scheme was—I do not mean absolutely and always, but on the whole—that he is not a college teacher?—I did not intend to convey that impression. I meant that he should not spend his time on undergraduate work, but I did not mean that he should not be a teacher at a college.

21,049. Was that question of the separating the teaching of undergraduates from the work of a professor considered?—Yes, and I think the general impression and hope was that the professors would not fritter away their time on the lower work.

21,050. You are probably aware that it is a subject on which there is a considerable difference of opinion?—Yes.

21,051. In Germany where, it is generally admitted that research is effectively carried on, the leading professors have the function of delivering lectures to undergraduates?—Yes, I know that is so, but I should have thought that the demand on their strength would be very great.

21,052. The demand upon the time of the teacher is not so much in the preparation of lectures as in the other work that has to be done with undergraduates. In preparing for a degree that part of the work, no doubt, is not done in Germany?—The most laborious part in teaching that I ever did in law, was the correction of exercises.

21,053. Rudely following the same lines that Professor Sidgwick has taken up, does the scheme contemplate that the University should have no control over the courses of instruction, in regard either of length, subject, matter, or sequence?—Not I think, apart from the appointment of professors, or other people who are teaching.

21,054. At the foot of page 8, in paragraph 11, of the report it does throw in, but in rather of an exceptional way, the particular teachers or courses of instruction; and of course, if the University has control over the courses of instruction, it gives it a very large amount of jurisdiction indirectly over the teachers?—I do not think that was intended. I think that the passage, to which you have been good enough to call my attention, merely meant that they should express their approval of an existing course of instruction, and not require an existing course to be modified in order to suit their views.

21,055. There is no definition at all as to the powers of the Senate, I observe?—No.

21,056. Do you think that Convocation holds that an exercise of a power of that kind is within the rights of the Senate?—If you mean with regard to the rocognition of a course of instruction, yes.

21,057. That the Senate would say, "we accept "your declaration to accept such and such a course "of instruction, as qualifying for a degree," in the same way that the Senate does require such-and-such course of instruction, and such-and-such attendance in all medical schools?—I think the Senate ought to have that power.

21,058. Does Convocation think so?—I should say so.

21,059. So you think you would speak for Convocation?—Yes.

21,060. You observe that a very great deal will turn upon it?—Yes.

21,061. And you think that that is the desire of Convocation?—Provided that the examinations are retained.

21,062. The scheme makes the appointment of professors, lecturers, and teachers entirely personal?—Yes.

21,063. By what mechanism do those appointments terminate. I mean, can any professor, teacher, or lecturer continue to be for his life, or as long as he remains in connexion with any institution, or under what terms a professor, teacher, or lecturer?—The appointment is to be during pleasure, which practically means appointment during life. Those who prepared the scheme felt that there might be a difficulty in getting the very highest class of professors to accept an appointment which was not for life; and I believe it was on that account that the clause was inserted. There was a minority which was in favour of the appointment being for a period of years, renewable.

21,064. Is that to hold good whether he remains in connexion with a particular institution in which he is apppointed professor or not?—Yes, that would be so.

21,065. A gentleman might be appointed professor in a college, and sever his connexion with the institution, and still remain with the title of professor. Was that contemplated as a good arrangement?—I think it was contemplated, but by clause 8 all the University appointments are only to be held during the pleasure of the Senate.

21,066. And there might be teachers in the private profession having once obtained the University recognition, continuing to hold it?—Yes, that is probably what made the minority feel that they would rather have it for a term of years, renewable.

21,067. Of course a term of years might not obviate that objection; it might enhance it. One would have thought that the appointment might be made conditional upon connexion with certain institutions or delivery of courses of instruction in particular institutions. Convocation, perhaps, hardly entered into those reasons?—No. It did not like to hamper the Senate. It thinks the Senate ought to have a free hand, and did not like to enter into a question of that kind.

21,068. It would be prepared to give jurisdiction of that kind to the Senate?—Yes; I do not think there would be any objection on that.

21,069. (*Professor Sidgwick.*) By clause 17 the examinations of the University are to remain open to all candidates irrespective of the manner of their education. It prevents the Senate absolutely from imposing restrictions in that regard?—The wording may not be very apt, but what was intended by Convocation was simply that the private students should not be excluded, and that the examination of the University should be left as open to every candidate wherever he lived as they are at present. That is really what was intended.

21,070. (*Mr. Rendall.*) I read that clause to mean that there should be the examinations of an Imperial character rather than that every examination of the University should be open as an Imperial one. If you could tell us which was meant it would be advantageous?—As one of the Commissioners has said, it cannot be read into the medical part, because there a course of instruction is required.

21,071. (*Professor Sidgwick.*) Did Convocation mean to refuse to the Senate as regards every other department the power which has been exercised with regard to medicine?—No; provided that the examinations are subsequently passed. Not to accept the courses of instruction in lieu of examinations, but in addition to the examinations. I think there can be no doubt whatever about the course of instruction proposed, although Convocation did feel, as I said before, that the advantages of attending courses of instruction would be so great that there would be no necessity to compel such attendance in the other Faculties.

21,072. (*Mr. Anstie.*) It is very important to get rid of any controverted matter. I want to see how far we can disengage the essentials from the non-essentials. May I take it as the result of your late answers to Mr. Rendall and Professor Sidgwick that section 17 may be read thus:—"The University is "still to hold open examinations, but it is at liberty "to recognise courses of instruction sanctioned by "itself"?—I could not accept the clause, and I am sure Convocation would not accept the clause in that form.

21,073. Then what precisely is it? I really cannot understand it. It says the Imperial character of the University is to be retained. The examination is therefore to remain open to all who like to come? But you will not let me read it in this way:—"Although "in certain cases they may not have complied with "the ordinary condition of examination." That, you say, you do not admit as a proper reading?—No; the regulations must be complied with, and among those are the regulations for the existing degrees.

21,074. Do you mean the existing regulations, or regulations to be hereafter made?—The regulations for the time being existing.

21,075. Is this clause 17 intended as a temporary or permanent clause?—A permanent clause.

21,076. Then if it is a permanent clause it really says nothing, because "regulations" to be hereafter made may mean anything?—Except what the clause says they are not to mean.

21,077. What is it the clause says they are not to mean?—It says there is not to be any exclusion of candidates.

21,078. It does not say exclusion, it says "irrespective of." It does not merely go to prevent the exclusion of candidates, but it goes to exclude any division of candidates or any consideration whatever of the place or manner of their education, and in that respect it is directly contrary to the rules now existing with respect to the medical degrees, and which, as I understood you to answer Professor Sidgwick, you would not object to see extended, if the Senate thought fit, to other departments?—I should not object to it personally very much. Convocation, I think, would not object to it, provided the examinations are retained.

21,079. That is really inconsistent with the language of the clause because it says "irrespective of," which means without having any regard to?—Yes.

21,080. That is inconsistent with any regulations requiring attendance at any particular school or course of instruction?—I have already explained that Convocation may have been under a misapprehension, but it was under the impression that the regulations for the Medical Faculty were required by Act of Parliament, which of course no charter would supersede. The law of the land must be obeyed. We were under that Act of Parliament.

21,081. That would be only under the Medical Act, and that would be only as far as the license is concerned; it would not affect the degree; so far as the degree is concerned the regulations always have been laid down by the Senate itself, and a list is drawn out and subjected to their own revision from time to time?—The selection of the hospitals rests with the Senate. The attendance at the hospitals rests with the law. If that is not so, we have been under a misapprehension.

21,082. It is rather important, because if read in one sense (this is entirely fundamental) it subverts the existing regulations of the Senate. If read in another sense it seems to mean nothing at all?—It meant in the view of those who compiled it that there should be no restriction whatever, that the private student should be under no disadvantage because he had studied privately. He should be under no disadvantage because he had not attended a course of instruction.

21,083. Then one cannot read this with reference to the true state of facts, which is, that the Senate have power to make regulations. One can hardly know how to deal with the 17th clause at all. However, I will pass on. Then I come to the next one, which also gives power intending to impose a fetter, which I do not quite understand. The 18th clause says, "The standard of attainment for matricu- "lation and the various examinations in all the "Faculties to be maintained at as high a level as at "present." Reading that I have not gathered it as expressing quite what you say; am I right in thinking that you are of opinion that the Senate should be compelled to retain the apparatus of intermediate examination which it now possesses for all purposes?—No.

21,084. Then you would allow that the Senate should have control as it has now over the regulations for the degree?—Yes, absolute control, only fettered by the growth and history of the University which would prevent any convulsion from happening.

21,085. But it has such control?—Yes.

21,086. And it might to-morrow say that it would not require intermediate examination from those who brought certain other certificates as is done at other Universities where equivalents are at certain stages of the University career accepted?—It might; but only in the sense that Parliament has absolute power. Really and practically the Senate has no such power.

21,087. Why do you say he has no such power?—Because the executive of every public body is bound by the prinsciples which have grown up since the creation of that body. It is morally bound.

21,088. Do you mean to say that the Senate would be shocking public opinion if to-morrow it were to make a regulation that it would accept instead of matriculation or intermediate examination a certificate from a competent and well-qualified University authority?—I think it would find itself in a great difficulty in doing it, because it used to accept those certificates and deliberately gave them up.

21,089. It never had such certificates at all? The only certificate it had were certificates of attendance?—I beg your pardon, certificates were accepted in lieu of some of the examination for the degreess and that system was abandoned.

21,090. You think it would shock public opinion so much that the Senate would never venture to do it?—I think the Senate would not venture to do it.

21,091. Then may we take it that one of the bases of this scheme is that the Senate would not have power to accept in lieu of matriculation or any other examination the certificate of any other body whatever?—It is the feeling of Convocation that the examinations of the University of London should continue as they are now, independent.

21,092. Is that to be taken as essential?—That is the view of Convocation.

21,093. And are the restrictions in the 19th section to be taken as essential?—That is the removal of a restriction.

21,094. But it makes a restriction as Mr. Rendall has pointed out. It affects to remove a restriction, but that restriction is made by the Senate and you are now

E. H. Bush, Esq., M.A., LL.B.

2 Feb. 1893.

going to restrict the Senate from making any such?—It certainly is the wish of the medical graduates that the restrictive regulations referred to in paragraph 19 should be abolished.

21,095. Is that essential?—I think the medical graduates feel very strongly about it.

21,096. And is it essential that the University ought not to have power to grant honorary or *ad eundem* degrees?—Yes, for the reasons that I have given—that a man might take a pass degree at Oxford or Cambridge and then become M.A. on payment of a sum of money and might get an *ad eundem* degree of M.A. in London without the honours examination that a London B.A. would have to pass in order to get that degree.

21,097. You assume that this is a power in the graduates of other Universities to come in and be admitted *ad eundem*; but there is no such power at all. But an *ad eundem* degree may be given to those whom the University recognises as fit to have; not to anybody. The case is not that which you put that any person may come on a very much lower degree and take it?—Any person might get it on that.

21,098. Then you say you do not trust the Senate?—I do not see that it is at all necessary to give an advantage to a person outside the University over the members of the University.

21,099. Therefore, you think it is necessary to take it away?—I do not think it ought to have been granted. It has never been acted upon in a single instance.

21,100. I do not quite understand in what sense the answer to Lord Reay is to be understood. From the answers you have now given to me I rather gather that your view is that a number of these things are essential which can by no construction be brought within that description?—Some are essential; some are open to discussion, conference, and negotiation.

21,101. Which of those that I have referred to are open to discussion, conference, and negotiation?—I thought we had come to the conclusion that those were essential.

21,102. Then they are not open to discussion?—I think that was the result of my answers.

21,103. Then I am not wrong in thinking that that is a matter to which discussion could make no difference?—No, these clauses under heading 8 were selected as being those embodying the principles of the University as far as Convocation understood them.

21,104. Then if I may say so they are the most basal clauses of the scheme?—They are.

21,105. (*Professor Sidgwick.*) Does clause 18 mean not merely that the standard is to be maintained but that the various examinations are to be maintained as at present?—No, it does not mean that; it means that the level of the examinations should be maintained.

21,106. Then, if an examination was to be removed, would not that in itself be held to be lowering the standard?—Something else would have to be substituted for it if this principle were to be observed. There was a good deal of discussion about that, but Convocation felt that it would be very unwise indeed to state that the present system was perfect, and in the second place to state that in the course of time even if it were a good one now it could not be improved.

21,107. Then it is not intended to propose any particular method of ascertaining the standard?—No, the height of the level is really the important part.

21,108. (*Mr. Anstie.*) I read it in the way that Professor Sidgwick has read it, but your answers have rather put me off that, because I understand you now to say that the University must not only retain and insist upon a high level, but insist upon the avenue being precisely identical through the whole course?—Identical with what it is now, do you mean?

21,109. No, identical for every candidate throughout the whole of the course?—Yes.

21,110. (*Mr. Rendall.*) I suppose after the verbal criticism that has been passed one may fairly say that we are to take these clauses as rather expressing general pridciples than being drawn in any legal statutory form?—Yes.

21,111. They contain opinions which Convocation wish to carry out?—Yes; they do to a great extent embody, although perhaps not in the most apt language, the principles which I endeavoured to convey to the minds of the Commission a few months ago.

21,112. (*Lord Reay.*) When you say "identical" you do not mean that the examinations for all B.A.'s are to be the same. You merely mean that they should be of the same standard?—What I understood Mr. Anstie to say was that there should be the same curriculum for all the B.A.'s. If that curriculum allows optional courses every B.A. would have the same choice.

21,113. You mean with regard to optional courses?—Yes.

21,114. (*Professor Sidgwick.*) But apart from the medical question, no advantages are to be given in respect to the examinations to persons who have gone through any particular course of instruction, and no arrangement should be made to adapt the examination to any particular course of instruction. I mean that there are in the mind of Convocation essential points, and it is not likely to give way?—I assent to that, except that I do not think we shall go quite so far as to say that no certificates of attendance are to be required.

21,115. If they are to be allowed so much advantage must be given, otherwise what is the use of presenting them?—In the opinion of Convocation no one ought to get more advantage than the advantage he has derived from being well instructed.

21,116. If he can pass a particular examination at the particular time that is all that he should be required to do. That is, in all the departments except Medicine?—Yes.

21,117. And I understood you to say that, as far as regards that, Convocation did not contemplate interfering?—No; and in addition to that the examination would be at a fixed interval, so that it would not be possible for a man to go into Matriculation in January for his first B.A. in May and his second B.A. in the following October. There would be a length of time in which his studies must continue. As the object of the restrictions is to ensure the undergraduate having gone through a certain course of study for a certain length of time, that object can only be obtained in Arts, Law, and Science, by the restrictions of the University; but in Medicine it is obtained by the length of the course of instruction which is otherwise fixed; and that being so, you do not shorten the period of education at all by allowing him to take all his examinations for the degree either at the beginning or the end of his course.

21,118. Still you leave the length of the course entirely in the hands of the General Medical Council. I mean that you intend in the charter to impose an absolute restriction on the University in this one subject which you propose to leave entirely in the hands of an outside body, and yet Convocation seems so very strong with regard to allowing no outside interference in examination?—Yes, in examination. If there were any practical risk of the course being shortened I should think it very dangerous, but the course has been extended quite recently from four years to five.

21,119. (*Sir George Humphry.*) You do not propose that those exact points should be inserted in the Charter, you would rather leave to the University a somewhat free hand than the insertion of these points in a Charter would give?—What points?

21,120. The very points that have just now been discussed. You would not tie the University in all these particulars would you?—That section 19 was put in expressly, not so much with a view to the

Charter, as with a view to get some expression by Convocation of how far it would be inclined to meet the wishes of the medical undergraduates, and I do not think that need necessarily be inserted in the Charter.

21,121. There should be a good assurance that the level of the examinations is maintained. Do you think that Convocation would be willing to assent to the combination of other bodiess in the examination supposing they were assured that the level of the examination should be retained? — They do feel very strongly about the independence of the examination. There is a passage in section 4 of the senatorial scheme to which attention was called. It is on page 46. The Royal Colleges are accorded power akin to those of the University College and King's College, although they are not educational bodies of University rank.

21,122. Not educational bodies at all, but merely as a matter of examination?—Then Convocation, or at least a large number of members of Convocation, added this last objection:—"Such arrangements must "either lead to an approximation of the University "degrees to the licenses of the corporations, or fail "to in any way satisfy the 'medical grievance.'" At that time Convocation was under the impression, which you have relieved me from to-day, that the medical grievance would not be relieved without the lowering of the level of examinations.

E. H. Busk, Esq., M.A., LL.B.

2 Feb 1893.

21,123. I see they do not desire to lower the level of the examinations, but the point is, granting that there should not be a lowering of level would Convocation agree to the final examination or some part of the examination being conducted in combination with other bodies?—If that were granted, I think it would agree, because the objection that Convocation felt before was that it would necessarily tend to lower the level.

21,124. That the University would take care it would not do?—If Convocation did not fear that it would lower the level, I think it would not dissent.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Fifty-second Day.

Friday, February 3rd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.

JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., M.A.
Principal G. H. RENDALL, Esq., M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

WILLIAM JAS. RUSSELL, Esq., Ph.D., F.R.S., further examined.

W. J. Russell, Esq., Ph.D., F.R.S.

3 Feb. 1893.

21,125. (*Chairman.*) You are connected with St. Bartholomew's Hospital as a teacher, and you teach Chemistry?—I do.

21,126. Will you give us some account of your classes; the number who attend them, and the number of lectures which you give in the course of the year?—We have the chemical teaching for the ordinary medical student, which is the minimum amount, and then we have also teaching for the higher Chemistry, that is the Chemistry for men who are going to present themselves at the University of London.

21,127. Every student has to go through a course of Chemistry at your hospital, has he not?—Not necessarily. He may be signed up for his Chemistry before he enters the hospital, and then we have no hold over him whatever with regard to his Chemistry. According to the regulations of the Conjoint Board medical students have to pass a certain examination in Chemistry, but they can do that before they enter a medical school.

21,128. Those who attend your lectures are at the same time learning the practical part of their profession in the hospital, are they?—Essentially they have not begun that. The majority of them take their Chemistry in the summer session, beginning in May, and they enter on their study of Anatomy and Physiology in the coming October.

21,129. With regard to those who pass in Chemistry in August, how long have they attended your lectures?—They have attended my lectures during the whole of the summer session.

21,130. How often?—Every day.

21,131. Every day for how long?—For about three months. The time is too short. They are supposed to, and do, devote the whole of their summer session to the study of Chemistry.

21,132. About 50 to 60 lectures?—Yes, altogether; Chemistry and Chemical Physics.

21,133. And you have good appliances at St. Bartholomew's; good laboratories?—Very good laboratories, and all the specimens and apparatus that are required.

21,134. Do you give a thoroughly successful practical instruction in Chemistry and other scientific matters?—Yes, we do. I lecture every morning from 10 to 11, and then after the lecture they go at once into the laboratory with me, and do their practical work. That lasts them until 1 o'clock.

21,135. And that system of scientific instruction at St. Bartholomew's is one which answers well, and which you would be sorry to see interfered with?—That arrangement at St. Bartholomew's answers well on the whole. The only objection I have to it at all is, that the time is too short, in this way: It is too short for them to assimilate the knowledge. They have plenty of time to learn the amount of Chemistry which is required, but many of them come up without any knowledge of Chemistry at all, and the time then is too short. That I endeavour to meet

W. J. Russell, Esq., Ph.D., F.R.S.

3 Feb. 1893.

in this way; if a man enters, as a great many do, in October, I have every man up before me, and I require to know from him whether he has any chemical knowledge or not. If he has, well and good, he may go to his Anatomy and Physiology. If he has no chemical knowledge I insist upon his regularly attending a preliminary class, which lasts from October till Christmas. By May, even if he has forgotten everything he heard in this preliminary class, it has been a very great advantage to him because he is in a state of development, so that he can follow my lectures beginning in May; and the same sort of thing happens again with those who enter in May. I have them all up, and those who know no chemistry then have not only to attend my lectures but they have to attend a class by my demonstrator, who coaches them up after the lecture, so that they can keep up with the lectures. If they once get behind they are done. In that way I meet, I think pretty successfully, the objection which has been raised that the summer session is not long enough. On the other hand, I ought to say that having admitted that objection, this arrangement of attending Chemistry in the summer has immense advantages, in this way, that you have a perfectly willing class. The arrangement which, I believe, was an utter mistake, that the students should at the end of the first session pass an examination in their Anatomy and Physiology and not in Chemistry has been the point which all this has turned upon. You cannot reasonably expect that the students will devote themselves to Chemistry during the winter months, when they have immediately before them the examination in Anatomy and the examination in Physiology, both of which are very extensive ones, and they know they are not going to be examined in chemistry till the following July. If forced to attend chemistry lectures during the winter they come and sit in the rooms, and, I believe, learn little or nothing, but if the Chemistry teaching is, as in my case, in the summer, the men feel that they must devote themselves to the subject, and they do so most thoroughly. I get an enthusiastic class, and they work uncommonly well during that time. The amount of energy that they throw into it is exceedingly marked and satisfactory.

21,136. These are the three branches of science—Anatomy, Physiology, and Chemistry; are there any others?—These are the three great ones that the first year men have to study.

21,137. When is the knowledge required by your lectures tested? Does it lead to an examination of any sort?—Yes. I test it as they go on, with written and practical examinations; and then they have to pass their Chemistry under the examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons.

21,138. They have to pass separately each of these things?—Yes.

21,139. That is what it leads up to?—Yes, that is what it leads up to, and they cannot possibly go on with their anatomy and other subjects until they have passed their Chemistry.

21,140. You told me that on the whole you are satisfied with the way in which science is taught at St. Bartholomew's Hospital, with the exception that you wish a little more time to be given to Chemistry. In what way do you think the teaching at St. Bartholomew's Hospital could be satisfactorily connected with the University, or do you think it could be connected satisfactorily with the University?—I have very strongly the feeling that the chemical laboratory should remain an integral part and become more an intimate of the medical schools.

21,141. You would not wish it to be interfered with by an outside authority?—No.

21,142. And with regard to yourself or anybody in your position, do you think an outside authority should have any power of interfering with you?—I think my answer should be, "No." Without having a more clear idea of what you mean by a University, I do not see how I can answer the question; but my general feeling is that the laboratory should be part and parcel of the medical school. I wish that the relationship between the laboratory and the medical school should be more intimate.

21,143. Is it not closely connected now?—Not sufficiently closely connected with the physiology and the other studies which are going on in the medical school. It is looked upon rather, and always has been, as a little outside—a little excrescence to the school. It has never been part and parcel of it, so much as other subjects are. I am certain that the tendency, as chemical knowledge increases, is to necessitate a more intimate connexion between the medical schools and the chemical laboratory. Hence, if the University, be it of what kind it may, destroy that sort of thing, I should object to it.

21,144. Then you cling very closely to preserving the autonomy of the college?—Yes, with regard to the chemical teaching and laboratory.

21,145. Would it put you or anybody in your place in a more satisfactory position if you were appointed professor at a University going on with your own work and confining yourself to that?—Anything that added dignity to the lecturer would be of advantage, of course.

21,146. And it would be giving you a position in the new University. You would form part of the Faculty and possibly be eligible to be on the Board of Study?—Anything of that sort would be an advantage, so that you did not disconnect me from hearty co-operation with the medical school.

21,147. And you would feel no difficulty from being under two masters or under a divided authority, in being a member of the University at the same time that you were in the other position?—I do not know. That would depend upon what the divided authority was. I cannot answer that at all.

21,148. You would not wish to be under a divided authority?—No. I wish to see the chemistry developed in the medical schools, and I wish to see that the lecturer there should have a proper maintenance—emolument.

21,149. At present the endowment is small, is it?—It is paid by fees entirely. I may say at once that I am not speaking in any way personally. My career is more nearly coming to an end than beginning. I should want to see the professor having a proper emolument so that he can live by it, and I would insist upon his not being allowed to take a lot of private practical work—analyses. He ought not to be allowed to convert his laboratory into a shop for analysing dirt or anything that might be sent in. I do not say that he is not to be allowed to take any consulting practice. I think he ought to be allowed to take some, for it may be of interest and importance and involve scientific principles, and it brings in a certain amount of emolument. It is difficult, and almost impossible to draw a hard and fast line, but the line of demarcation is perfectly clear. I am clear in my own mind what I would allow and what I would not. He is not to become a borough analyst and be continually analysing butter and milk. Of course, if you do not pay him sufficient he must do it. He ought to have sufficient remuneration from the school to be able to live. Giving him that and I would say, "You are "not to become a borough analyst and devote your- "self to analytical work; you may do a certain "amount of consulting work, but you are to devote "yourself and to encourage in others to do scientific "work." Again, one other thing. This lecturer should also not be overburdened with lectures. I mean that he should not be made to lecture morning, noon, and night. He should feel that he had other duties which are almost higher than that of standing behind a table and lecturing, I mean simply that of instructing his students in the laboratory. Formerly, I remember very well, for many years after I was at St. Bartholomew's, there were certain fixed times when students were obliged to come. After those hours nobody cared to come and do any work, and I was left entirely to myself. Now students are always

there, educated men, interesting men, men who are thankful to you if you go and talk to them, not out of the ordinary text book, and thus you may gain some sympathy with and influence over them. A most important duty of a lecturer, I think, is performed in this way. Hence I say that the lecturer should not be always lecturing, but that he should be in his laboratory at work there, and be able to influence and teach these higher students in this way. It is a most interesting thing now. You have a class of men there who are totally different from what they were formerly, men whom it is worth your while, and of very great interest to communicate with. In the same way the demonstrators should be paid on the same scale as the demonstrators of Anatomy or Physiology are paid, and the lecturer should have efficient help by means of demonstrators.

21,150. Do you think you have not sufficient help now in the way of demonstrators?—I did not say that; I was merely laying down general principles.

21,151. Will you tell us how you occupy the rest of the year?—Besides this class,—and what I said applies merely to the minimum amount,—there are a large number of students going to the University of London and other places, who take a higher chemistry, which goes on all the year round.

21,152. Which leads up to the intermediate in Medicine?—Yes.

21,153. There are regular courses of lectures?—Yes, there are regular courses of lectures, and practical work two or three times a week; and of late years the University of London have been insisting upon a very large amount of practical work. We are obliged now to devote a very considerable amount of time to these practical classes. They consider them absolutely necessary, and I quite think it is so. Now the students, besides attending the lectures, come to the laboratory, and, beside the analytical work, the testing, which formerly included the whole of the practical chemistry, they have now to make a good many preparations, and make many of them quantitatively, which is an exercise of an excellent kind. So that chemistry is advancing, and chemical teaching has advanced.

21,154. Do you prepare many students for the degree of the University of London?—Yes, a good many.

21,155. Is it true that a good many of the students from your medical hospital, as well as others, go to take their degree in other places than London, that they go off to the north?—Some do. I really do not know anything about the absolute number. You had our warden up before you, and I think it is a question rather for him to answer.

21,156. You do not speak from practical knowledge on that point?—No; I do not speak from practical knowledge. The warden keeps the books; it is not my business.

21,157. We have, of course, chiefly to consider all this in relation to the new University. I gather that you wish that your position should not be interfered with by an outside authority: on the contrary, you wish to be joined more closely to the school than now, but you would have no objection to be appointed a professor of the University, as long as there was no danger of your being under two authorities, and of your practical work being interfered with?—That is my general feeling. The important thing that I feel really is this: keeping the chemical laboratory in direct and intimate touch with the medical school. There is one other reason which appears to me a very strong one for doing that, it is that with the progress of Science, as surgeons and physicians become more acquainted with Chemistry, the number of chemical questions which will suggest themselves to them, will very rapidly increase. I do not say that the chemist will be able to solve them all, but still that is the direction in which things must go. Whatever you do they must go in that direction, and it is of the highest importance that all these schools should have some laboratory to which these questions could be referred, and as far a possible, answered. Of course there would come up questions of arrangement about them, but that is the general principle which I should advocate.

21,158. You think on principle that a man in your position ought to have sufficient payment, and also, I suppose, sufficient leisure, to enable him to make his researches and add to the general knowledge?—Yes, and of course there would have to be restrictions with regard to the questions that are to be sent from a hospital to a laboratory. It is very easy to ask questions, but it is uncommonly difficult to solve them, and the lecturer's time should not be entirely taken up by trying to solve any question which may be put to him.

21,159. Your knowledge extends to a certain degree to what goes on in other medical colleges?—Yes, to some extent.

21,160. With regard to the smaller ones, how ought that scientific education to be conducted?—Do you think they could be grouped together or attached to the larger ones, or how would you put the teaching of Chemistry as well as the other branches of Science on a good footing?—I think in this way. The larger ones have of course their individual laboratories, and, with regard to the smaller ones, you must not, even with them, excommunicate the laboratory. They would be obliged to have a laboratory, but I think with regard to the higher teaching they might very well come together and have two or three different schools for that higher teaching. But I should be distinctly against their having a medical school, and no laboratory attached to it. There ought to be a chemical professor for each, and there ought to be a laboratory, and that laboratory must be an integral part of the school. It is bound to come; it must be so. If you have a medical school part and parcel of that school is to be a laboratory.

21,161. And that is not always the case now is it?—Even in your case it is rather detached?—In spirit, but not in truth.

21,162. You have told us that a student is not obliged to attend your lectures?—He is obliged to pass the examinations under the Conjoint Board; he is not obliged to attend my lectures. Some years ago they passed a rule that he might get his chemistry anywhere at any of the crammers; anybody might sign for it. That rule has been of late rescinded and only certain institutions are allowed to sign.

21,163. But as regards your lectures?—Now there is no obligation to attend my lectures.

21,164. Would you like to see it obligatory?—No. I do not think you could go back to that amount of protection. I suggested what is now carried out, and I think it is quite sufficient that only the signatures of certain schools where the Conjoint Board have evidence that there are the means of teaching chemistry theoretically and practically should be taken. It was a very great mistake in my opinion that they ever threw it entirely open and allowed anybody to sign up and say, "These students have attended." The whole thing was a farce.

21,165. Would you have it inter-collegiate in that way?—I would have it that the power of signing should be given only to those places where Chemistry can be satisfactorily taught.

21,166. Attached to a college?—I do not care where it is. As long as they can show that they have the means of properly teaching Chemistry I would take their signature.

21,167. Do you admit outsiders to your lectures?—Yes, but they very seldom come.

21,168. Why is that?—The tendency is to go to the men who are called crammers.

21,169. Do they charge less?—Yes, and do it in a shorter time.

21,170. And give them more catch questions and answers?—Yes; I do not know how it is now, but formerly some used to teach them all their Chemistry without showing them a single experiment or a single specimen.

W. J. Russell, Esq., Ph.D., F.R.S.

8 Feb. 1893.

21,171. I suppose it is a general principle that if the teaching and the examination went together, and if you had a voice in preparing the examination which would follow your teaching, that would induce them to come to you more, and prevent their going so much to crammers?—Yes.

21,172. You do not see how that could be carried out in a particular case?—I have on several occasions been one of the examiners at the Conjoint Board.

21,173. Appointed by the Royal Colleges?—Yes, by the Conjoint Board.

21,174. And you have examined your own pupils amongst others?—Yes; that is to say, the papers are set in conference with the other examiners, and then in the case of the practical examination which is held there, I never examine my own students. There are four examiners, and no one never examines his own students.

21,175. But still you have the means of seeing that the papers harmonise with the teaching, and that the teaching has led up to the examination?—Yes, and the examiners are always teachers at the medical schools.

21,176. So that, as a rule, the teaching and the examination do harmonise with each other?—Yes, now they harmonise with each other.

21,177. You say "now." It was not so much the case formerly?—No; formerly they always had members of the college to examine under the old system of the College of Physicians. I think I was the first person who was ever appointed there who was not a Fellow of the Royal College of Physicians. It was very peculiar at that time. The first notice that I had was that I was required to go there and carry out an examination. When I got there I found the laboratory was an old kitchen, which I induced them to whitewash. Chemistry had not then the value and importance which it has at the present time.

21,178. As it increases in value and importance and the teaching improves, has that the effect of stopping the pupils from going to coaches?—Yes; I think the whole thing is now working well.

21,179. They attend lectures more?—Yes, the students are now feeling that when they go to coaches the result is not so satisfactory. I should like to make one other remark about the teaching. It has lately come to my knowlege that there is an impression amongst some that the number of students of Chemistry at the medical schools is likely to be diminished owing to the teaching of Chemistry at schools.

21,180. (*Sir George Humphry.*) Which schools are you speaking of now?—Proprietary schools in general, all over England. That a great number of those will be able to sign for the attendance at the Conjoint Board, and that the schools will be able to give sufficient chemical instruction to enable the boys to pass the chemical examination under the Conjoint Board. I am certain is a mistake. The amount of Chemistry, and the kind of Chemistry which these schools can teach is not sufficient for the medical student. That they should teach this most elementary Chemistry at schools is most valuable; but, the boys having learnt that, must then go through such a course as I have been indicating. They should come then to these medical schools, and there go through the elementary course which is held there, to fit them for passing. That again is elementary. That course of Chemistry should also have this special direction: it should be in the direction of their future studies. If they were going to be chemists instead I can imagine that the illustration of the principles of Chemistry would be somewhat different, and the instruction somewhat different. But I am very fully convinced of the fact, and I should like to emphasize it, that the school teaching of Chemistry is not sufficient for the medical students. As they come up from the schools, and the schools can certify that they have learnt a certain amount of Chemistry, they would be in a position to attempt this examination of the Conjoint Board, but the amount of Chemistry which they would get at the schools is not sufficient in amount, nor is it of the character that the student who is going to be a medical man ought to have.

21,181. Chemistry will always be an important part of every medical school?—Yes.

21,182. And it will become more and more important?—It will become more and more important every year.

21,183. What do you think the University could do in the way of helping the instruction in the higher part of Chemistry—in the way of research or anything of that sort? Could they appoint new professors?—I have not a sufficiently distinct knowledge in my own mind of what this new University is.

21,184. You do not wish to be interfered with in any way?—I can imagine that there would be a general grouping, which would be advantageous and give stimulus to that kind of teaching. But the point I want to insist upon is the intimate relationship between the medical school and the laboratory. Do not interfere with that; do not go and separate them; throw the responsibility on the medical schools; they will, I believe, be willing to develop in this direction. The *esprit de corps* I value very highly.

21,185. It exists to a very great extent at St. Bartholomew's, does it not?—I think at the medical schools generally, and certainly, I think, at St. Bartholomew's. That is my point, and that is what I wish to emphasize. I do not wish to enter into the question with regard to the University.

21,186. (*Professor Ramsay.*) Your great point in wishing the Chemistry to be still more closely allied than it is to the medical schools, is with a view to improving the chemistry of medical students?—Yes.

21,187. You wish our future medical men to have a more complete and more scientific knowledge of Chemistry than they now have?—I do, and also of the methods of Chemistry. I should like them to understand how a chemist investigates any subject.

21,188. That is to say, to have a more scientific knowledge of Chemistry, and not a mere book knowledge of Chemistry?—That is of no use.

21,189. Is it your experience in London (from what you have said I rather gather that it is) that the tendency in the purely medical part of the school is, that the professors who are engaged in the medical subjects are rather desirous to oust or to keep down the purely scientific subject? That is what I gather from your remarks?—That is rather my feeling.

21,190. And that they rather pooh-pooh the value of the preliminary scientific studies, and are emphasizing more and more every year the necessity for more clinical instruction, and with regard to the recent regulation of the Medical Council which requires five years' medical study instead of four; their desire is that the whole of the extra time should be devoted to the clinical part of the work and none to the preliminary scientific part?—Of Chemistry, certainly none.

21,191. You have no more time?—I have no more time than I had before.

21,192. And there is no intention that you should have any more time than you had before?—No.

21,193. Then I further gather from you that you have no outside students in your laboratory?—No.

21,194. Therefore, your Chemistry, if I may say so, is purely medical Chemistry?—Purely for medical students.

21,195. It is not a place in which people come to study Chemistry as a science with a view of coming out as chemists. They all have this one professional object in view?—They are all medical students.

21,196. Is it not possible that your object, which is to promote the science of Chemistry, might rather be promoted from the very opposite view from that which you take? If the connexion of Chemistry with Medicine is likely to depress Chemistry, to put it into a corner, because it must be overshadowed by the greater importance of the practical medical subjects—if you turn your thoughts to the interests of the scientific Chemistry of the country *per se*—would not the natural feeling be that the more the teaching of Chemistry is divorced from this profession the better

for the interests of Chemistry?—I think not; but I am sure of this: I am there for a specific purpose. All my students there are going to be medical men, and I think it is my duty to do the very best for them that I can from that point of view. I think that chemists have done a certain amount of mischief in this way; they have rather considered that these medical students were going to be chemists, and tried to teach them, I might almost say, too much.

21,197. Whose fault has that been?—The lecturer's at the medical schools. Now, my greatest difficulty is the difficulty of selection. Here are these men; all going to be medical men; the amount of time they have to give to Chemistry is very small, and my great object is to economise that time, and use it to the best advantage. I have to teach them the principles of Chemistry; but in teaching them those principles I illustrate them in a somewhat different way than I should if I had a class of Chemistry for general students.

21,198. Does not that all rather lead to this conclusion, that you in the teaching of Chemistry are crabbed and confined by the fact that you have all along to consider what is the particular purpose with a view to which those students are learning Chemistry, and, therefore, might not the argument be that if the Chemistry teaching of the University was separate from the medical schools, the teachers would be less confined, and would be able to consider, not the special object of the students, but the science of chemistry and the best and widest possible way of teaching it?—If you could lengthen their lives and give them more time I should agree with you.

21,199. But that is from the point of view of your having nothing but medical students to deal with. I quite understand your point of view, that as a teacher of Chemistry to medical students you have to choose your subjects and to confine your teaching. The point is, would not the teaching of Chemistry be larger, more scientific, and more comprehensive if you were teaching it not only to medical students but to those who have come to learn Chemistry for its own sake?—I do not think it would be so advantageous to the medical student.

21,200. Why not?—Because I should have to teach the medical students certain points which I can now omit.

21,201. I do not understand that?—I mean in this way. You cannot teach a beginner medical chemistry or calico printing chemistry, or anything of that sort. Your duty with these men is to teach them the general principles of Chemistry, and then afterwards it is for them to diverge in this direction or that. I as fully realise as you do, perhaps more so, the importance of teaching them the general principles, and with these medical students I endeavour to do so; and I think that with this teaching of the principles I can to a certain extent combine knowledge which is of interest and importance to them, especially as relating to medical subjects and substances. For instance, I should use as an illustration magnesium or mercury rather than cobalt or nickel. With these men I do not think there would be any real gain, if I teach chemistry properly, by such an extended system as you are suggesting.

21,202. You say there is no such thing as medical chemistry?—In the abstract.

21,203. I suppose we should all agree with you; but the medical professors and the schools think there is such a thing as medical chemistry?—I am not responsible for that.

21,204. And the students who come to you think there is such a thing as medical chemistry; and when you are dealing with bodies in which medical professors are concerned in laying down the course of instruction, I have constantly heard it said, "We do "not want this man to teach Chemistry, we want him "to teach medical chemistry," and as University professors their tendency is to depress the teaching of Chemistry for the general students down to the particular kind of Chemistry which they think is sufficient for the medical student. Now I am asking you the question not with a view to medical schools but with a view to the future London University, and the question before us was this: If we are to have a thoroughly equipped and well-taught scientific Faculty, it is the right policy to start with the medical schools which exist in the hospitals, and which are tied and bound down with the necessity of teaching for the medical student? Will our teaching of scientific chemistry be established if it is based mainly or entirely upon laboratories, and conducted by teachers who are under the conditions which you have described? Or would it be wiser for the University to say, "We will not recognise chemical "laboratories or chemistry teachers who are con-"nected with schools at all. We are going to teach "not medical chemistry, nor dying chemistry, nor "brewing chemistry, nor any other, but we are going "to teach Chemistry as a science, and upon scientific "principles." I ask you: Do not the considerations which you have mentioned as hampering you in the teaching of Chemistry—those conditions which make you desire to be, as you have described it, more closely connected with the Medical Faculty,—rather influence you in saying, "We will not recognise chemical la-"boratories, and chemical teachers connected with "schools, but we will have laboratories and teachers "who will teach the science as a whole"?—You put me in a very great difficulty, but bear in mind I have not been advocating teaching solely "medical chemistry."

21,205. I know it is difficult, because in Glasgow we have had what we have called a technical chemistry Chair. It has always resulted thus: the students come and think they can learn technical Chemistry without knowing Chemistry. I am assuming the present thing exactly applies to the medical studen s he wants to come to learn medical chemistry and not Chemistry. Your point is that you want him to learn Chemistry, and not medical chemistry. Will not that rather lead this Commission to the view which I have suggested?—There is no doubt that what you have indicated is a larger and higher kind of thing, but I doubt its being so practicable and capable of being carried out for the case of medical students as what I am advocating. You will see what it comes back to as the controlling thing after all, is the question of time. You are indicating a higher instruction undoubtedly, but it will require a very great deal more time. Whether practically it can be carried out I doubt. I think that I am suggesting the best thing for the medical student that is practicable.

21,206. I quite grant that, but is it not the case that you will have out of your teaching branches of Chemistry which you would teach if you were a University professor of the same subject?—If my students had more time to give to Chemistry.

21,207. I do not know if you are familiar with the state of things at Oxford and Cambridge, but is it the case that in the laboratories at Oxford and Cambridge they have the same sense of being overpowered by the necessities of the medical schools?—But they have not the same circumstances. My body of students, or four-fifths of my body of students, are going to be ordinary medical men, having entered for the four or five years' course, and in the shortest space of time they are under the necessity of getting through. If you ask me, on general principles, whether what you have indicated is not a far higher thing, I answer "certainly."

21,208. The very fact that you have to teach the medical students is a reason why your teaching cannot be of the same scientific height?—It cannot be of the same scientific height. It is teaching Chemistry to medical students.

21,209. Does the pay depend upon the fees of the students?—Entirely. The whole of our emoluments arise from the fees of the students.

W. J. Russell, Esq., Ph.D., F.R.S.

3 Feb. 1893.

21,210. And do the chemical professors or teachers take the whole of the fees?—No. It is not arranged in that way.

21,211. There is a fixed salary, at any rate, as well as fees?—My emolument has been always dependent on the total fees received by the school.

21,212. And it is an arrangement made by the school as a whole?—Yes.

21,213. Have you any voice in that arrangement yourself?—I should have probably. The arrangement was made before I was elected.

21,214. Did I gather that one of your points was that you considered that the professors of that subject were insufficiently paid?—Yes; that, as a rule, I believe they are not paid at the same rate as the lecturers on, say, Medicine and Surgery are paid.

21,215. You say it would be impossible for a boy at school to be prepared sufficiently to pass the amount required by the Royal Colleges of Physicians and Surgeons?—Yes. I was speaking generally.

21,216. Take an ordinary student who knows hardly anything at all about Chemistry. He comes up to you in October, and will take a preparatory course of three months?—Yes.

21,217. Then a subsequent proper course of three months?—Yes.

21,218. Do you mean that our big public schools, with all their equipments, and all their many dealings with clever, well-educated lads, would be unable up to the time a boy is at school, up to 19, to teach as much Chemistry as you can teach a perfectly ignorant young man in a period of six months?—No; I do not say anything of the sort. My statement is that the average student, at the average school, will not learn sufficient Chemistry to pass under the Conjoint Board.

21,219. But that is because the arrangements for teaching science in most of our schools are absolutely insufficient?—Yes, and the time that they have got is insufficient. Some years ago the British Association appointed a committee, of which I was chairman, to investigate the teaching of Chemistry in schools. We sent out a paper to hundreds of schools, and we got reports as to what they were doing, from the schools where Chemistry was taught. They are so pressed for time. I feel convinced that the boys, at the time the majority of them leave school, are not in a position to have learnt sufficient chemistry to pass the examination under the Conjoint Board. You take the case of one of the best schools, where there are young men up to the age of 19; certainly they would, but not the by leaving school at 16.

21,220. There is no reason why the thing could not be done; it certainly is not done. But if the public schools take it into their heads that science is as much to be developed as classics and if they were to take it up, as they do some subjects for the Army examinations, there is no reason why a student should not get an education in a public school on a science basis?—If they stay until 18 or 19.

21,221. As most boys do?—By all means.

21,222. I rather misunderstood some information which I obtained at St. Bartholomew's. I think you have explained what you wished to. The question was as to the extent and amount of teaching of science of a higher kind, which goes on at St. Bartholomew's. One thing is clear: you give it only to the medical students. Can you tell me the number of students you have who are doing work of a kind quite beyond the requirements of a Conjoint Board examination?—That is the M.B. and preliminary scientific class—say 50—I have not looked up the numbers—50 or 55, or something like that.

21,223. All of them, of course, St. Bartholomew's students of Medicine; they are going on for the M.B.?—They are either at the preliminary scientific or the intermediate. Of course, the men for the preliminary scientific have not absolutely entered for the medical career; they might go elsewhere.

21,224. Is there any work of an original or research kind carried on beyond that?—Yes; whenever we can get a man to do it. Let me say that I am always trying to get some of the men to do original work. I have at the present moment got one or two men, but I seldom succeed. Once or twice it has been done. It always ends in this way; a man comes to me and I ask him if he would like to do some original work. He says he would exceedingly. I say, "Come, you shall "do it yourself, or we will do it conjointly; I will "find you all the materials; it shall be no expense to "you." He says he would like it very much. He comes once or twice, then, after an interval of a week he comes, and then he never appears again. Then, when I see him, I say, "Why did not you come,"? and then he says, "I have this and that examination "before me, and I cannot."

21,225. Can you give us the time which is required for the M.B. of the University of London over that which is required for the Conjoint Board?—We have lecturers twice a week all the year round, besides practical work.

21,226. And the whole year is needed for that purpose?—We begin in October and go on for the examination.

21,227. (*Professor Sidgwick.*) Each man is spending four hours a week for the year?—Yes, two hours for the lecturing and two hours at least for the practical.

21,228. (*Professor Ramsay.*) You spoke of the evils of chemists occupying themselves and their resources for analysing. Can you suggest any practical means for stopping that. You said you could, in your own mind, draw a distinction between the amount of work a man at a school might do, and might not do. It is the case, is it not, that there are chemists whose whole energies are taken up in doing private practical work of that kind?—I believe so.

21,229. You said you could draw a distinction between the amount a man should take and the amount he should not take?—And I also said I saw a very great difficulty of drawing any hard and fast line between the two.

21,230. Can you suggest any mode of discouraging any such possibility?—Only the tone of feeling at the school. I do not think you can absolutely lay anything down with regard to that, but I think at the time of the appointment he should be distinctly told what his duties are.

21,231. So it is a difficulty that would have to be met under all circumstances?—Yes.

21,232. Would any work of that kind come to the medical laboratories and the school?—Yes.

(*Professor Ramsay.*) Your Lordship asked with regard to the number of students who went from London to the Universities in the north during the course. You will remember that the Commission asked for a return, and the secretary had in his hands an exact return upon that subject as far as the Scotch Universities are concerned, and whenever it is read I should like to call the attention of the Commission to that point. It has been asked of a great many witnesses. (See *Appendix*, No. 58, Paper No. 1.)

(*Chairman.*) We will have it read.

21,233. (*Professor Ramsay.*) Have you anything to say upon the point with regard to the higher teaching. The question which I asked was with regard to the teaching of Chemistry solely with a view to preparing the students for the conjoint examination. You have now explained that you have in addition a whole year's work with a view to the M.B. degree, with the exception of that there is nothing like post-graduate work or research work, is there?—We have done a little, but very little in that direction.

21,234. (*Sir George Humphry.*) With regard to the teaching in Chemistry which would be best for a medical student, forget for a time the Conjoint Board, forget for a time the University of London, and taking into account the period which can be given to medical study altogether, what is the best teaching for a medical student. As far as I have understood you it would be a thorough knowledge of the principles of chemistry, not of medical chemistry, but Chemistry generally, wherein you say there is no such thing as medical chemistry, a thorough knowledge of the principles of

Chemistry; but that the application of those principles are rather to be in the direction of Medicine. Is that what I have understood?—That is my meaning.

21,235. The illustration of the principles should be drawn rather from those subjects which would be of use to him in his after life, than from those subjects which will not be of use to him?—Certainly.

21,236. May we say that the drawing his attention to those subjects which will not be of use to him will be, on the whole, rather disadvantageous?—It might be.

21,237. That it is far better to impress well upon him the subjects which are likely to be useful, than to divert him from those, and impress upon him the subjects which are not likely to be useful?—I think so, certainly.

21,238. But you feel it to be of fundamental importance, that the principles of Chemistry should be clearly laid before him?—Absolutely fundamental.

21,239. And do you think that the examinations, which are at present conducted at the Conjoint Board, assist you in carrying out those views which you have, with regard to the chemical instruction of medical students. Is the examination in accordance with those views?—Yes. I do not say it could not be improved.

21,240. Then for a University student and for a University graduate, do you think that the examination should be somewhat higher?—Yes.

21,241. In what way should it be higher. Should it require a higher knowledge of principles, or a greater knowledge of facts?—A higher knowledge of principles, and a more extended knowledge of facts.

21,242. And that would be desirable even for medical students?—Certainly.

21,243. It would give him a more scientific idea with regard to his profession, throughout the future walks of his life?—Yes. We are now teaching the least possible amount of Chemistry.

21,244. With regard to the teaching which is required for the ordinary medical student, do you require much apparatus? You have apparatus sufficient at St. Bartholomew's?—Yes.

21,245. Does it require any elaborate apparatus?—No, not very elaborate. What is wanted is a good supply of ordinary things, more than any elaborate apparatus.

21,246. But for higher teaching something more is required?—Yes. As a matter of fact, I have had within the last year or two, to add enormously to the stock of apparatus for the practical work that the University men require.

21,247. In the smaller medical schools (perhaps you will not like to say much about them), do you think they have the apparatus requisite for the teaching of the ordinary medical student?—I think so.

21,248. It does not require a great amount of apparatus?—No.

21,249. And they probably have sufficient?—Yes.

21,250. If that be sufficient, is there any reason why the chemistry teaching in those schools should not be well conducted?—No. You are speaking of the ordinary course?

21,251. Yes?—I should say none.

21,252. They are sufficiently well equipped for that purpose?—I should think so. I have not an intimate knowledge of them. I was at St. Mary's before I went to St. Bartholomew's.

21,253. St. Mary's has improved, I think, a good deal?—I believe it has very much. It is 20 years since I was there.

21,254. Then taking your view, that it is very important that a medical school should be associated with a hospital, I understand you to take that view with reference to the advantage of the hospital, as well as the medical school?—Yes.

21,255. You would say that a hospital is not properly equipped unless it has a chemical school connected with it?—Of course, I was assuming that the medical school was attached to a hospital.

21,256. You said a hospital was not equipped unless it had a laboratory connected with it; that a hospital required a laboratory, and that it was advantageous to a hospital that it should have a laboratory associated with it?—Certainly advantageous; but I am bound to say that when I made that remark what I had in my mind was a hospital and medical school. I was thinking of the medical school attached to the hospital the whole thing together.

21,257. But it is advantageous to a hospital that there should be a chemical laboratory attached to it?—Yes.

21,258. Advantageous for clinical purposes?—Yes, for clinical purposes.

21,259. And I rather understood you to say that as time advances chemistry will be felt to be a much more important part of medicine?—Yes.

21,260. And a chemical laboratory will be still more important to the clinical work of a hospital?—Certainly.

21,261. Do you find that it is becoming so?—Not at a rapid rate.

21,262. Does the teaching which is given in Chemistry prepare a student well for his work in physiology?—I think there ought to be greater co-operation between the lectures on chemistry and the lectures on physiology than there exists at present in the medical schools.

21,263. You mean that Chemistry forms so very important a part of Physiology that the Physiology should look a little more to Chemistry?—Yes, and that they should work more together than I think they do at present in the medical schools. The impression is that the Physiology is one thing and the Chemistry is another. Instead of being separate and distinct things they ought, to a certain extent, on certain points be united.

21,264. There is such a thing as what they call physiological chemistry?—I believe there is.

21,265. But you feel that the teacher of Physiology and the teacher of Chemistry should be more *en rapport*?—Yes, and the instruction, of course *en rapport*. I think that is very important.

21,266. Do you find that your students make good progress as they work with you. Do they get on very well?—Very well.

21,267. Do you test them in any way?—Yes, by examinations.

21,268. In what way. What kind of examinations?—I have written examinations and practical examinations.

21,269. How often are the written examinations?—In the summer. You see we have only about three months. I have always two examinations. I should have a third, but they are examined so much that I take the conjoint one as the third examination. They are examined about every month.

21,270. Do you make any report of those examinations to the school?—To the students I do in this way: All the papers are looked through carefully by myself and by my demonstrators, and then every statement that is wrong is marked, and the page in Roscoe's Chemistry, which they use principally, is noted there, and everyone of those papers is given back individually to each student. So he sees at once where his mistake is, and he sees at once the page he has to refer to to correct his mistake.

21,271. You make no report of this to any Board, do you?—No, only to the student; and I impress upon him this: As we have taken the trouble to correct his paper, he has to take the trouble to look carefully through it.

21,272. Do you think that the reports of your examination to the Examining Boards would be a good thing, so that they should have your reports to assist them in their determination as to the qualification of the students?—I think so. In the higher chemistry now, I make the men write out an account of their chemistry. A man makes some substance, and he writes out an account in his book. I initial that, and if he likes, he takes that to the Examiner.

W. J. Russell, Esq., Ph.D., F.R.S.

3 Feb. 1893.

21,273. You think it would be an assistance to the examiners. I mean the examiners at the Conjoint Board and elsewhere, if they had such reports from you?—Yes.

21,274. Do you think it would be a stimulus to the students if they knew that such reports were going from you to the examiners?—Yes, I think a very good thing.

21,275. You think that on the whole, therefore, it would be an advantage in every direction, that some such communication should exist between the teachers and the examiners?—I think so. I think anything of that sort if properly arranged is of importance.

21,276. And would stimulate the students much?—I think it would. Where they make experiments, which are quantitative I have adopted the plan of writing up their results afterwards, if several have been making similar experiments.

21,277. Have you been an examiner at the University of London?—Yes.

21,278. What opinion did you form with regard to the excellence of that examination?—It is a good many years ago that I was examiner; and since then the curriculum has been much altered.

21,279. You can form an opinion of it from the students you are preparing for it?—Yes. I think the practical chemistry especially is capable of improvement, and in conjunction with some other lecturers I have been making suggestions to the Senate for alterations.

21,280. You think that on the whole it wants improvement?—Yes, on the whole.

21,281. Do you find that that is a difficult examination for your students to pass?—Yes.

21,282. In what respect? What constitutes the difficulty?—The extent.

21,283. You mean the range of knowledge required?—Yes.

21,284. And the range of substances which require to be analysed, and so on?—To be studied.

21,285. Do you think it would be an advantage if that range were diminished?—I do.

21,286. Do you think it would be an advantage and would prove beneficial to the examinations of the University of London if a larger number of teachers were concerned in directing the work of that University, if they had a larger number of teachers on their Board and Senate, and so on?—I think so.

21,287. That is one of the demands made, and you think that would be desirable?—Yes, I think so.

21,288. Now with regard to research work, I suppose you yourself in teaching medical students and working with them have not very much time for research work?—No, not very much.

21,289. Do you think that those who have the charge of elementary teaching would also be likely to be able to prosecute much research work generally in a University or elsewhere. Do you think the two things are thoroughly compatible?—Elementary teaching and research, you mean?

21,290. Elementary teaching on the one side and higher teaching on the other. Do you think that those two departments of teaching could be carried out really on a large scale, or would the person who is engaged in and anxious about research and higher teaching be likely to carry out well elementary teaching?—That is a very general question.

21,291. It is rather an important one, that is to say, a man who is prosecuting research earnestly, vigorously, effectively?—Do you mean, could he teach elementary chemistry?

21,292. Would he be a man likely to teach elementary chemistry to a class of students?—I do not think there is anything incompatible with the higher research and teaching elementary chemistry.

21,293. And that the person who is occupied in high research would be likely to take the trouble to teach elementary work well. That is the practical point?—Yes, and it is almost impossible to answer. It partly arises in this way: the ordinary elementary teacher has been a man who is teaching for his livelihood, and the thing has been ground down to its lowest state in that way; he has a certain amount of most elementary knowledge and he could not teach anything higher, and if he has become a teacher at all he has become an elementary teacher. I do think that elementary teaching is very difficult teaching, and I would like to see that elementary teaching in the hands of a higher class of men. Hence, I do not feel inclined to say that these men who are doing the higher research cannot or should not be also elementary teachers. Obviously a man engaged and interested in higher research would, probably, like not to teach at all.

21,294. And would they be likely to do it?—At the present moment, no; because you will have to educate a higher class of elementary teachers in order to do it. If you ask me at the present moment to go out into the highways and byeways to find men who are doing higher research and are good elementary teachers, there would be difficulty in doing so; the men who are doing research work would not be the best elementary teachers; but I do not see why they should not be good elementary teachers.

21,295. I suppose the examinations do, and would you say that they necessarily will direct to a certain extent teaching? You must have examinations?—Certainly.

21,296. And would you say that they will under all circumstances necessarily very much regulate the teaching?—I would. I do not see how you can help that. You do not say whether they are well arranged or not, but as long as you have students, and they are compelled by Act of Parliament to go through these examinations, of course, teachers have to teach to those examinations whatever your own private opinion about examination may be.

21,297. Therefore, it is of the utmost importance that the examinations should be of the highest and best kind?—Yes.

21,298. Would you say that education altogether very much depends on that?—Yes.

21,299. It must do so?—Yes, it must do so. You see the conjoint scheme examination entirely determines the amount of Chemistry which these medical students have to learn.

21,300. And the student will not get up very much more?—They will get up nothing more, and you have no business to ask them to get up more.

21,301. Therefore, it is of the utmost importance that those who are well acquainted with these various subjects shall be on the Boards which direct and regulate examinations?—Certainly.

21,302. You have spoken of the purely medical staff of a hospital not sufficiently recognizing and measuring the importance of chemical teaching; and that, I think, is felt by others in the medical schools, as well as by yourself?—Yes, I think so.

21,303. I have heard that expressed several times strongly, and that that interferes somewhat with the emoluments which you obtain?—Yes.

21,304. Do you not think that as chemistry becomes recognised and acknowledged more and more as an important branch of medicine, that will undergo some alteration?—It will fade away in time. It is less now, considerably in the last few years, than it was, but there still exists that tone of feeling, that Chemistry is rather an excrescence on Medicine, and they would have been relieved to have rid themselves of the whole chemical teaching.

21,305. That change must come on?—Yes; I have no anxiety on that subject now.

21,306. Is not the fact that they are now at the Conjoint Board requiring a larger amount of Chemistry at their examinations an indication that that feeling is fading away?—I think so.

21,307. I think we all feel with you very strongly that there should be some limit to the outside work, which a professor or teacher can take, if possible, if that limit could be made; but you do not see any way in which that is to be regulated, even in a new University. Do you think it would be an advantage

or not, that the University of London should establish a higher teaching of its own—a higher teaching of chemistry, physics, and all the branches of science with its own laboratories, in which scientific work and scientific teaching should be carried on, beyond that which is required for ordinary education?—Certainly, and research.

21,308. You would feel that to be a very important element in a future University?—It is a very important element.

21,309. And would you concede that such work as that should be supplemented by public grants?—Yes.

21,310. It would be a work of national importance?—Certainly.

21,311. And therefore, the nation might well be called upon to contribute towards it?—Certainly. Of course, that is entirely apart from anything I have been saying.

21,312. (*Professor Ramsay.*) You include, of course, organic chemistry in your ordinary course, do you not?—Yes.

21,313. Can you tell me at all what portion of the three months' course is taken up by organic chemistry?—About a third or a fourth of the three months.

21,314. That is to say, about three weeks?—About that.

21,315. And for the intermediate M.B. examination for the University of London there is, I suppose, a great deal?—That is organic.

21,316. There is no inorganic?—No.

21,317. And that amount is sufficient for the purpose, is it?—During the whole year, yes, including the practical work, of course.

21,318. (*Mr. Rendall.*) At the outset of your evidence you dwelt upon the enforcement of attendance, and I understood you to regret that the Conjoint Board regulations had accepted attendance of students from teachers or institutions of a very irresponsible kind?—Yes; they could to be signed up by, I should say, inefficient teachers for the chemistry they had learnt

21,319. You are quite aware now that that stage has passed away, and that in the revised regulations attendance is required from an institution recognised by the Board?—Yes. I believe I was the first to suggest that.

21,320. And that has been satisfactory?—I think it is a step in the right direction.

21,321. You are satisfied with the present practice?—I have no knowledge at all of what institutions they have authorised; but the principle is right.

21,322. London University enforces attendance upon all students for the degree, at recognised medical schools, does it not?—Yes.

21,323. Here too you are satisfied with the present arrangements?—Yes.

21,324. Do you feel it vital, or at any rate of high importance, that a new University should possess that power of enforcing attendance?—Such as is now held by the University of London for the medical degrees.

21,325. By the University and by the Conjoint Board?—Yes, I think so.

21,326. Do you think it would do to leave the students perfectly free, and not to give the University the power of enforcing attendance?—My impression is that there ought to be enforced attendance, as now.

21,227. Some hold that a University should simply insist upon an examination test, and say nothing about attendance. You do not think that proved satisfactory so far as it was adopted or approximated to, by the Conjoint Board?—No, not with regard to the chemistry. I have no knowledge beyond the working of the chemistry.

21,328. Another main point was with regard to your anxiety that the chemical laboratory should be an integral part of the medical school?—Yes.

21,329. Would you tell me who were the more interesting students, and the more scientific students, of whom you spoke?—Those who are studying for the B.Sc. and the Intermediate and M.B. degrees.

21,330. The London University students?—Yes.

21,331. Does the admission of those London University students weaken the intimacy between the chemical department and the medical schools?—No.

21,332. It rather strengthens it, perhaps? I mean the whole effect of having London University students in your classes is to promote an attachment between the medical school as a whole and the chemical part of it?—Yes, rather than the reverse.

21,333. Do you deprecate at all that your own school or yourself should have some voice in the determination of the study of chemistry required by the London University?—You mean, do I deprecate that in the abstract?

21,334. Yes?—No.

21,335. I suppose you do not think there is any particular virtue in the determination of curricula and standards by a completely external body, and that there is an advantage in your own school not having any voice in it?—No, there is no advantage in our being excluded.

21,336. Do you desire to see your medical school as a whole an integral part of the University?—I do not know what the University is.

21,337. It would depend largely upon what the University would be?—Yes.

21,338. (*Professor Sidgwick.*) Are you acquainted with the document I have here, called "A statement "of points upon which the London Medical Schools "are agreed," which was laid before the Commission some time ago?—No.

21,339. (*Mr. Rendall.*) In principle you do no prefer that a medical school should carry out the programmes and curricula imposed by an exterior authority in the decision of which it had no voice?—No.

21,340. Then it seems to me that you would be glad that your medical school should belong to a University, and should have participation in your decision of University curricula and examinations, provided the University is well constructed?—Yes, provided that; but I do not want to express any definite opinion on that point now, because I do not realise what this University is.

21,341. Your whole distrust, and really your misgiving, rests on that point, that the University might not be very well constructed?—That it might, and probably would, destroy this intimate relationship between the medical schools and the laboratory.

21,342. But it seems to me you admit that your present connexion with the London University, so far from destroying it, rather tends to make the attachment more intimate?—On that point which you mention with regard to the students; but supposing this new University said, "We are to appoint the "lecturer and not the school," anything in that direction would be fatal to it.

21,343. And you wish that in so far as that the autonomy should be reserved to the medidal schools as a whole, treating the chemical part of it as an integral part of the school?—Yes.

21,344. And of course, in a University so acting, you would not for a moment wish that medical professors and lecturers should be represented and chemical professors lecturers should not be represented?—No.

21,345. (*Professor Sidgwick.*) I wish to ask a few questions with regard to the importance to be attached to the connexion of the chemical department with the medical school in the district. As applied in London, that would lead to the establishment, or maintenance rather, of 11 chemical departments in connexion with 11 medical schools?—I think 11 or 12.

21,346. At the same time you admit that as things are, chemistry so attached tends to be left in a somewhat subordinate position. I understand that you do not wish to give evidence with regard to other schools, but still we might agree that in the abstract, in a single town, even like London, if you have 11 hospitals, each with its own school, it is probable that the chemical teaching at some of these schools would be inferior to that at other schools?—Yes.

W. J. Russell, Esq., Ph.D., F.R.S.

3 Feb. 1893.

21,347. May we not take it as admitted that the provisions for chemical teaching, and the teaching at some of these schools, are of an unsatisfactory kind?—I am not going to say that. I have not personal knowledge. What I said applied clearly and solely to the larger schools, and I qualified what I said, I think, in this way, that with regard to the smaller schools, I do not think they need be equipped to the same extent. With regard to the smaller schools I think it is important that they should have a laboratory. It is important that there should not be a medical school without a laboratory, but to what extent their teaching should go would vary with the means they have got, and as I said before, with regard to the higher teaching, the smaller schools might very well, two or three of them, join together. But I would not have a medical school without a laboratory attached to it.

21,348. With regard to this joining together, that has not taken place by any voluntary combination?—No.

21,349. Then might it not be an advantage if there were some means of putting pressure on these schools; some means such as the existence of a University that had a right to say—and, occasion offering, would say—that the teaching of such and such a school was not adequate. Do you not think that a little outside pressure of that kind might assist in stimulating a process which you yourself would wish to be developed?—I think so. I think anything which would stimulate active co-operation and produce less jealousy amongst the medical schools would be of very great value.

21,350. As I understand, you think that every hospital ought to have its laboratory; but, if I understand your ground, it is rather for the purposes of research that arise from time to time than from the necessity of teaching the students in their own hospitals. It is rather that you think that questions arise that each hospital ought to refer to its own laboratory?—Yes, but for teaching purposes as well as for research. As science progresses more and more these questions will be soluble, and the hospitals ought to have the means of attempting that solution.

21,351. But is it not more likely that those questions which require a searching investigation would be better dealt with in a laboratory more completely equipped, and with more costly apparatus, than it is likely that all these eleven schools could provide?—I was not picturing so much higher research in those as an answer to the practical questions.

21,352. Those practical questions you think might be usually answered with a comparatively small amount of apparatus?—Yes; it is brains that are wanted more than apparatus.

21,353. You think that even if the laboratory is only equipped for elementary teaching, still the chemical teacher will have sufficient apparatus, and we may hope that he will have brains sufficient for answering the question in his own hospital?—Yes. Of course, practical questions with regard to peculiarities of urine or something of that sort, is rather what I meant. It would be a step in the right direction. It is bound to come. As science goes on, this is a phase that is opening out, whether it is liked or not.

21,354. You think that kind of work could be well combined with the work of teaching, and that it ought to be?—Yes, and that it ought to be combined. That kind of work I should like to be done, to some extent, by the students themselves, under the direction of their lecturer. The students ought to bring these questions in, and the teacher ought to make the men themselves do it.

21,355. Taking into consideration what in reply to Professor Ramsay you emphasized so strongly—the severe limitation of time—would not the students feel that they were drawn a little out of their preparation, if they had to answer these inquiries?—I think not. Of course, it is very easy to take up too much of their time, but there are many practical questions which they can solve, and such work gives the men an interest in what they are doing, and shows the application of what they have been learning, which in itself is educationally of very considerable importance.

21,356. Does the crammer flourish in the department of medicine?—Yes. I am speaking now of chemistry.

21,357. But, as I understand, the crammers have not the power of signing the certificates of instruction required from students?—No, not now.

21,358. Then they only give supplementary teaching, I suppose, to students who have to go to some other institution?—Yes.

21,359. Why do students go to the crammer? Is it because they fail to learn at the lectures?—Yes; they fail to learn. In my own case, when I adopted the practical work immediately in connexion and after my lectures, my object was very much to keep down the use of the tables, which, as I daresay you know, lead to mere mechanical work. After my lectures now, I take the students upstairs into the laboratory, and instead of beginning with mete testing, they make experiments to illustrate the things I have been going through in the lectures. When I first began that, my students did not believe in me. They said, "This is not what we want to learn; this is not practical chemistry," and many of them went off for that simple reason to the crammers. When we come to sulphur, I work in the properties of sulphuric acid, and the tests for the acid, and so with other bodies; and I postpone till the last possible moment the use of those dreadful tables.

21,360. How far do you think that cramming in the bad sense—I mean teaching that tends to substitute memory for intelligence—is excluded now by the requirements of the Conjoint Board?—Are you speaking of the practical work?

21,361. Yes?—No.

21,362. You think it requires to be improved in that regard?—Yes.

21,363. Do you think it is fairly excluded by the requirements of the London University; that the London University has been able to devise a practical examination in chemistry which, speaking humanly, cannot be crammed for, so that the student has to understand his subject in order to get through the examination?—As far as my own knowledge goes I do not think there is much sheer cramming for the London University.

21,364. (*Lord Reay.*) You have laid great stress on the practical limitations which at the present moment exist; but I should like to ask you, if these limitations did not exist, how would you then organise the chemical teaching from the beginning? I understand that you approve of the secondary schools undertaking elementary chemistry?—For the medical students.

21,365. You desire to have it taught at secondary schools?—Yes.

21,366. You would prefer to obtain students who had been efficiently prepared at a secondary school?—Yes.

21,367. At the University do you wish to differentiate them from the ordinary science students? Supposing you had an absolutely free hand, would you combine your students preparing for a medical course with the ordinary students, or would you still wish to have the separate preparatory course for your medical students?—It can be but for one thing, the best possible teaching for a science student.

21,368. In principle you approve of what is done abroad; that the preliminary scientific education of medical students should be given in the Faculty of Science, and not in the Medical Faculty. That is your opinion as a scientific man?—Certainly.

21,369. Would you tell us whether the guarantees which the medical schools (I am speaking of all the medical schools, of course; I am not asking as to one) offer for the appointments of the professors are such as to give security that they always, and in every case, appoint the best scientific men they can obtain?—No.

21,370. You think those guarantees do not exist?—Practically they do not offer sufficient emolument.

21,371. Whatever the considerations are (we can leave that out of account) you can conceive a system of selection of the teaching staff of the medical schools which would lead to better results?—I thought you were speaking of the emoluments.

21,372. No, I am speaking generally. Is the selection made on such lines as to take only into consideration the efficiency of the man who is to be appointed?—I think the medical schools make very good selections of their teachers, speaking of late years.

21,373. You are satisfied?—I cannot recall any objection.

21,374. In a new University, of course, there will be a Faculty of Science and a Faculty of Medicine. Under such conditions, if you were given the choice, to which Faculty would you desire to belong?—Do you mean *quâ* lecturer on Chemistry at a medical school?

21,375. Yes. If you were given the choice to belong either to the Medical Faculty or to the Science Faculty, in which would you join?—In what relationship, do you mean?

21,376. The object of my question is to ascertain whether you think you would exercise more influence and obtain better conditions for the development of chemistry at St. Bartholomew's by casting in your lot with the medical professors, or whether you would be satisfied with the position which you would naturally occupy in the Science Faculty?—Personally I would far rather belong to the Science Faculty, but in relationship to the school it seems to me that would depend upon the position of the University. *W. J. Russell, Esq., Ph.D., F.R.S.* 3 Feb. 1893.

21,377. I ask you the question because you said that you attached great importance to the relation which existed between the physiology teacher and the chemistry teacher?—I do not know that belonging to that particular Faculty of Medicine would in any direct way help me in that direction. It might, or it might not.

21,378. The Faculty of Medicine would naturally exercise a very great influence over the St. Bartholomew's Medical School?—Yes.

21,379. And the majority of the professors of St. Bartholomew's would belong to the Medical Faculty, and only a minority to the Science Faculty; I ask you in which you would like to be enrolled to?—I would like to belong to both.

The witness withdrew.

The Hon. Sir Charles Edward Pollock examined. *The Hon. Sir C. E. Pollock.*

21,380. (*Chairman.*) You have been kind enough to come here to give us your views with regard to this question, and I think chiefly with reference to the Law Faculty?—I should say solely with regard to the Law Faculty, and also, I think I ought to say, that I have no academical experience myself. I see you have had a great deal of evidence as to the details of these matters, with regard to which I think I could not assist.

21,381. Have you read any of the evidence which has been given before us already?—I have, and in particular I read Mr. Crackanthorpe's evidence, and in the main I may say I agree with his views.

21,382. You agree that it would be desirable and very important in establishing any teaching University that is to be established, either a new one, or remodelling the existing London University, that there should be a really good Law degree that would be sought after, and that would carry a certain amount of weight, and would be useful to people to take?—I do, and more than that, I do not think that the same object could be fully attained by the Inns of Court without a Legal University. I should like perhaps to say what experience I have had myself in this matter. For myself I had no University teaching, but I began Law when I was only 17, beginning in chambers. I had three years with my father, who was Attorney General, I learnt some, but not much, law in his chambers. I had three years then with Mr. James Shaw Willes, who certainly was the greatest lawyer of his day. Then I was called to the Bar, when I was 23; in a short time I lectured at the Law Institution, and in that way saw something of the teaching of Law; and when the question of University education was raised by Lord Selborne I was a Bencher of the Inner Temple, and did my best for that scheme, which was very coldly received, I am sorry to say, at our Inn. Of course I watched with great interest the progress there has been since, and I have seen the important steps that have been taken since by the Council of Legal Education under the auspices of the four Inns. But I still think the same deficiency exists.

21,383. The chief reason that scheme failed was, I suppose, that it wished to put barristers and solicitors to the same examinations?—Yes, and to admit outsiders. At the Bench of the Inner Temple they used to be known as the "pheasant shooters," the country gentlemen.

21,384. I suppose we may take it for granted that the Inns of Court would cling to having the exclusive power of admitting to the profession of a barrister?—Certainly, and I think they ought.

21,385. That would not prevent them from co-operating with the University in enabling us to have a good Law Faculty and to give a good degree. Anything the University undertook in that way ought to be done, and could be done in connexion with, and with the assistance of the Inns of Court?—I think so. I think that the larger voice upon the question of legal education should be given by the Inns of Court, and in part by the Incorporated Law Society, and given in such a manner that when the Senate of the University was once seized with that power they should possess it independently of the Inns of Court, although they have been appointed by the Inns, and by that means allow them to provide a sufficient breadth of education to attain the object. But I also think myself that the Inns of Court should not only have the sole power to call to the Bar, but they would be wise to retain in some way the old rule, which I think is now abandoned, of requiring some certificate from gentlemen offering themselves to be called to the Bar of having read in a barrister's chambers, or I should say having learnt practice in a barrister's chambers.

21,386. As long as that University did not wish to interfere with any of their privileges they might assist the University by having representatives on the Senate, and by being represented on the Law Faculty, and therefore, indirectly in settling the examinations for a degree, and the other matters connected with legal instruction?—I should say certainly, and partly as a question of finance. All the Inns of Court are able to contribute liberally, and they, I think, are the better persons to know what they want what the requirements for the Bar are, and therefore in the outline what sort of teaching and examination should be required.

21,387. Do you think there is any chance of their assisting the University in a pecuniary point of view by endowing Professorships of Law connected with the University. Would they assist us in that way?—I have no doubt they would assist if they held the principle, but I should doubt at present whether they would move unless some very sound scheme were established and generally approved of.

21,388. But if they were represented on the Senate of the University, and if they formed a considerable part of the Law Faculty, you think they might be induced to come forward?—I think they might.

21,389. And even independently of the money considerations it would be a good thing for the University itself that they should be represented in that way. It would be a strengthening element that they should be

The Hon. Sir C. E. Pollock.

3 Feb. 1893.

represented on the Senate and in the Law Faculty?—I should say you would not only get a more perfect Senate by that means, but I doubt *quoad* the profession, whether you would get a successful University without it.

21,390. Those seem to be the two ways of getting the co-operation, by their teachers and perhaps some representatives besides being on the Law Faculty, and by others being represented on the Senate?—Yes.

21,391. And there might be arrangements entered into between the University and the Inns of Court with regard to the examinations so as to prevent duplicate examinations, or too great a number of examinations for men who were anxious to qualify, and at the same time anxious to take a degree?—Yes, there would be no difficulty, I think, about that.

21,392. Is there anything else with regard to the question which you would lay before us?—I should like to say this. It is a long time since I first began learning Law; it is 52 years ago; and the increase in the knowledge of Scientific Law has undoubtedly been very great among young men now as compared with the young men of those days. I attribute that in a considerable measure to the better sources of legal literature that exist now as compared with those that existed then. With the exception of some of the American books, Kent and Story, and one or two books, such as "Best on Evidence," there were very few books that could be called scientific books upon legal subjects. But I also attribute the improvement in both branches very largely to the teaching that has been given by Law lectures, and I think that the saving of time by men who come into Chambers by having read Law, and having learnt Law by lectures, would really very much shorten the period they would require in Chambers; and the only difficulty I have felt is in putting together the time that would be required to give a man a really good legal education. For my own part, I should not interfere with his curriculum at, say, Oxford or Cambridge. I have had sons of my own there, and I have known a large number of young men, I suppose some twenty or twenty-five, in whose education I have been interested. I have seen a great deal of young men and their teaching, and their learning, and I am quite sure that a young man should not, except it be a course of Roman Law possibly, begin to learn Law while he is at the University if he can get the curriculum elsewhere, or later. I think he should make a break, and say: "Now I have finished my general "liberal education, and I am going to be educated for "the Bar, or to be a solicitor." Then I equally think that whatever time he spends in London upon that education, there still remains, I should say at the least, two years that should be occupied by acquiring a knowledge of Law practically in Chambers. But I do not think that there is the difficulty that I see some of the witnesses have supposed there is about the time, for this reason: Allow him, say, three years at the University, and even two years for his law, a part of that might, I think, a little overlap; but when he gets to his chamber work, certainly some of that might overlap with his London University teaching. And there is this to be said; even if he is called to the Bar, he still may well spend two or three, or even more years in Chambers with those who have practised; because unless he is very much unlike other young men, he certainly would not get employment for that time. I should say five years will be a very safe period to allow.

21,393. Would the London University training fill the place that is now filled by the Oxford and Cambridge training?—I think it would.

21,394. That would come first, and then would come the reading, actual practical law and chamber work?—Yes.

21,395. The University work, which would be a general knowledge of the principles of Law, and perhaps of Civil Law, and other things, would come first. That is, of course, the only part we have to do with. Then after that would come the chamber work?—I have been led to that rather by this: it seems at first rather inconsistent, although I find that certainly there is a higher education in law among the younger men than there was, say, 40 years ago, I still find a deficiency among the younger men of the present day, which arises from a want of chamber practice. I partly account for that by the recent changes of law, and an idea that the law is not fixed in its principles, and partly by the abolition of pleadings, which although a good thing in itself has set men more abroad; and I find men very deficient in law which they ought to have learnt from barristers, or pleaders, in Chambers.

21,396. That cannot be given by any University?—No; and that must depend upon the individual enterprise of each man.

21,397. But the degree given by each University ought to be more of a general nature, and showing knowledge of the principles of law, of the different kinds of law and general training?—Yes.

21,398. And I suppose a degree of that kind might be useful not only to men who intend to follow the law as a profession, but to others also?—I think so, certainly, to men who are going into Parliament, or the public service, or who are going to be magistrates, or country gentlemen.

21,399. Or even perhaps commercial men, to a certain extent?—Yes.

21,400. And the kind of degree which the University ought to establish ought to be so general in its nature, that it would be useful to all these men?—Yes, especially when so many go to the colonies. I have some doubt about the Roman Law, not from any disrespect to Roman Law—I certainly should have a School of Roman Law, and let that be one of the certificates that is to be given—but I have a little doubt whether the study of Roman Law should be made compulsory for such a certificate as the benchers would require for call to the Bar.

21,401. It might be taken as an alternative subject, perhaps, with some others?—Well, I would hardly say that. I look upon Roman Law as peculiar. I think every person who is to be an accomplished lawyer should know Roman Law, but there is no sufficient time, and the subjects that are given are not sufficiently extensive to indicate a real knowledge of Roman Law, and my experience is that most of the young men who pass that do so by a cram. I had a very marked instance of that not long since of two young men coming from the University; one had taken a very high degree, and was a very able man, and had given considerable time to it, and he did not pass the Roman Law; the other man had been industrious, gave up about three weeks to it, and did not profess to do more than he could to pass it, and he passed.

21,402. Had he that particular turn of mind?—He picked up the subjects that he was likely to be examined upon, and did not read much of Justinian or the other books, but read for the examination.

21,403. Would you have a Case Law examination?—More or less; but I think the Roman Law is so grand a subject, that I think it ought to be treated somewhat more liberally than it is.

20,404. The result of cramming, and the tendency that the man who can cram should pass as successfully as a man who reads in a more solid way, must be guarded against by compelling attendance at a certain number of lectures, and by arranging that the teaching of the lecturer should lead straight up to the examination; there should be complete harmony between the two?—Yes, and the difficulty is done away with in a certain measure by one of the things that I contended for before my Inn, which was that the certificate for Roman Law of the Universities of Oxford, Cambridge, Dublin, and possibly some of the foreign Universities, should be accepted. The Inns of Court resisted that for a very long time, but they agreed to it, and they do accept the certificate of a University. Therefore there is not the need for doing what was mischievous, bringing up that subject, at the same time that the larger subjects were being prepared.

21,405. And the Teaching University of London would be on the same footing in that respect as Oxford and Cambridge?—Yes.

21,406. You do not see any chance of bringing the Inns of Court and the Teaching University of London into a still closer connection, and in return for the representation of the Inns of Court on the Senate and the Faculty, the Inns of Court putting the new University into a still greater position with regard to taking its teaching, as part of their own than they have with regard to the older Universities?—I think that might follow. If the system was successful up to a certain point, the Inns of Court would look upon it in a very different light, finding that they themselves had a voice, and finding that the better education was obtained, they might give way, a great advantage would be obtained by bringing these students more together. I think you will find that there is very little mixing together of students arising from the fact of their attending the same lectures in London, before the Council of Legal Education. But if there was a University on a broader basis, and the Degrees became of more importance, then that would arise which arises in Oxford and Cambridge, and certainly in the Chambers of Lawyers, that really working men help each other very much.

21,407. It would be a little difficult to establish that where there are non-resident students to the same degree as in a University where they reside in colleges, I suppose?—Yes, but already you find that a great many men know each other. I know in my own days, when we lived much more in the Temple than young men do now, a great advantage was obtained by men meeting together, and more especially meeting for moot courts and debating societies. I attach great importance to the moot courts. I think that the making of speeches, and the argument of cases before the supposed tribunal is not only advantageous, but I should say almost essential.

21,408. I think that is introduced to a certain degree by lecturers in law schools, is it not?—I believe it is, but I do not know that it has made much progress. I remember one that I belonged to myself where Mr. Justice Denman belonged, Sir Richard Garth, Sir George Honeyman, both the Karslakes—I could name twenty good men—Lord Thring was one, who met together, and did work with as much earnestness as if they held briefs for which they were paid.

21,409. And do you think that sort of thing should be conducted under the auspices of the University and under the superintendence of a professor?—Yes, I should think so. The debating societies of Oxford and Cambridge are extremely successful and useful, and there of course there is an absence of the professional element.

21,410. I believe in America, at Harvard, and other places they encourage discussions under the auspices of the college itself?—Yes, that is so; and in so doing it is only a return to the old moot courts in England. I think, perhaps, Englishmen are a little shy, and they do not like to feel that they are playing at something; but speaking for myself, those whose names I have mentioned, I am sure were as earnest as could be, Presidents were chosen, notes taken, and written judgments delivered; and we fought as hard to beat each other without the fee as we should now with the fee.

21,411. And that was entirely voluntary?—Yes, under no auspices, or controlling power whatever.

21,412. But you think it might be done under controlling power?—I think so, and then when connected with particular subjects and lectured upon at the time, I am sure it would serve a double duty. It would give an interest to the lectures, and give some sort of experience to the speakers.

21,413. Is there any other point on which you could give us any information or advice?—I do not think there is. I see you have had a great deal of evidence upon the details of the academic system, as I call it, which I should prefer to leave to those who have had experience, but I feel very strongly myself the necessity of some further step, and I believe that that will be successful, always provided that those who have the power to join in it will do so.

21,414. (*Professor Sidgwick.*) I think you said you were in favour of a student of law going through the ordinary University course first?—Yes.

21,415. And that in his University course Law should not come in to any great extent?—No.

21,416. You are aware that at Oxford and Cambridge now Law is one avenue to a degree in Arts?—Yes.

21,417. Your judgment is unfavourable to that?—I have often been asked by young men, Should not they go out in Law? I say, "If you mean to "play the high game you ought not to. You will "not have any more than enough time to get your "really good education without law, and you will "only get a small smattering of law as compared "with the law that you must learn hereafter if you "are called to the Bar."

21,418. May I ask whether your view is founded upon experience of the effect of the course as now arranged at Oxford and Cambridge?—Oxford I do not know much of, but I always understand that Oxford is a high degree; and as a question of learning no doubt it is a much more valuable course, but I should say of either *quoad* the profession, it would be far better if a man, say, at Cambridge, took a good mathematical degree, and at Oxford a good classical degree, and did his best and let the other alone, it would be better than going out in the Law Tripos.

21,419. You think that no part of the large study of law, abstract or historical, is adapted to form part of a general education?—I would not say that so much. For instance, if I was told of a young man, the son of a country gentleman, of only moderate ability, who was going home to take his place in his county, then I should say it would be a much more open question whether he should go out in Law, or he might go out in History, rather than go out in Mathematics or Classics, if he had not a powerful mind and a good application, because I think a little law for a country gentleman then would be better than a more finished education in either Classics or Mathematics. But in the legal education I should say that the man who is *ex-hypothesi* at some time or another to learn law before he can succeed in his profession had better employ his mind by laying down a broad general education certainly in things like Mathematics and Logic, rather than such Law as he can learn at such a school.

21,420. As regards the connexion of the Inns of Court with the University, do you think that the law which should be taught by the University should include all the law that can be learnt from lectures, or that the Inns of Court would still have to arrange any course of lectures of a more professional kind?—My own view is that if the Inns of Court would hand over the whole of the machinery affording some funds, and holding firmly to the claim of having a proper voice in the University, it would be better done if the whole of the teaching was under the University; that is to say, the whole of the teaching by lecture.

21,421. And you think that that should take about three years?—I think two years would be sufficient, remembering that after a man went into chambers he might still attend those lectures he liked. If a man spent three years at Oxford or Cambridge, and two years in London, he ought then to be able to take a degree which would satisfy his Inn with regard to his call to the Bar.

21,422. Then he would require two more years in Chambers?—Yes, then he should go on, certainly.

21,423. And you think there is no possibility, by anything like the system of moot courts, of reducing the amount of time that he is required to spend in chambers?—I think not.

21,424. I ask that, because it has been suggested, that the reason why study in chambers is not required as an absolute condition is an economical reason; that it is thought hard upon the poorer

The Hon. Sir C. E. Pollock.

3 Feb. 1893.

students to require so large an expenditure of money and time. Do you think that in the interests of the public two full years should be required of study in Chambers?—I think so. I think it is an illusion to suppose a man can learn what he requires in less time; it would be very like sending a man to take a medical degree who had never had bedside practice.

21,425. And you do not think they could learn their practice while they are rendering any services; they have to pay, and not to be paid?—They pay, but they really get according to their capacity and industry as much as they can do. Speaking for myself and some others in Mr. Willes' Chambers, I think they would tell you, as I could, that we used to be there as long as we liked.

21,426. Are you acquainted at all with the relation of legal education in the United States to the practice of the Law there?—Very little. Mr. Benjamin, the great American lawyer, was a pupil of mine, and I used to talk it over with him. I think the only difference there, or the real difference, was that that being a new country, it established a more perfect system of teaching, and that the judges themselves and the older members of the Bar, seemed to recognise the duty of teaching more than we do here. We have left things here in England, in this as in other matters, to take their own chance.

21,427. One difference, according to the information I have received, is that a student in the United States (I do not say that he has not got still much to learn from practice) can earn money instead of paying it immediately after he has gone through the University course. Are you aware that there is that difference between the two countries?—Yes, but in so many cases there the duties of counsel and solicitors are mingled.

21,428. And would you regard the result that I mentioned as being due to that?—I think in a great measure, but I cannot say that I have had any practical experience. I have never been in the States myself. I have only gathered what I do know from talking with others upon it.

21,429. (*Mr. Anstie.*) I understood your Lordship to say to Professor Sidgwick that you think whilst a man is at Oxford or Cambridge, and has the advantage of being at one of those places, he had better not go into professional work; but may I ask your Lordship to assume for a moment the state of things which exists there, and which is to some extent favoured by public opinion; then would you see any objection to the Inns of Court, assuming them to have a share in the direction of the curriculum and in the conduct of examinations at Oxford and Cambridge, accepting the degree as equivalent to the course to be pursued at the London School in lectures or classes?—I see no objection, provided they had a sufficient voice in the teaching.

21,430. That is a course which has been suggested to us by one or two professors from Oxford?—But I doubt myself practically whether you would get men to remain at either Oxford or Cambridge so as to learn a sufficient amount of Law to entitle the Inns of Court to accept the certificate.

21,431. Still, under those conditions you would not see any objection to the Inns of Court putting themselves in a similar position with respect to the London University and the other Universities?—No, and, as I said before, I think, for instance, with regard to Roman Law, it is a great advantage to accept the certificate of the Universities.

21,432. With regard to Roman Law, I rather gather your opinion to be that it should not be so much a compulsory as an honour subject?—Yes.

21,433. Then, broadly, would it be right to take this as an expression of your Lordship's view generally on the subject: that, as has been stated to us by one or two witnesses, the Inns of Court should retain in their hands the conditions of call, including those conditions of practical efficiency which you have referred to as depending upon chamber practice, but so far as concerns the rest of legal education it might be conducted by them in conjunction with the University?—Certainly.

21,434. Under the conditions which you have mentioned of their having an adequate voice in the control of the affairs of the University?—Yes.

21,435. You have mentioned some advantages which would result from its being treated as a University course rather than a merely professional course, and amongst those, I suppose, one might number the greater breadth given to the course of study?—Certainly.

21,436. I do not think that at present, for instance, there is any course of diplomatic law?—No. I do not know sufficient of the subject, but I should say that international law even is not taught with sufficient breadth and extent.

21,437. And your view, I suppose, would not be that the lectures delivered and the classes held under this system should be confined to professional subjects, but you would include in them the larger and wider topics which might be pursued by those who were not looking to practice at the Bar so much as to more literary pursuits, as, for instance, Sir Henry Maine?—I think by the joining of the different subjects together one would improve the other, and a better spirit would be kept up, which certainly hitherto has been wanting very much amongst those who attend the lectures.

21,438. Would you attach value to these higher branches of instruction as tending to raise the tone of the more practical subjects?—I should.

21,439. And you would, therefore, not wish to see any divorce between the two which would assign merely professional teaching to one body, and reserve the more theoretical teaching to another?—I should say that that is so, especially when you remember the different classes of persons, that is the barristers, the solicitors, and the country gentlemen, that is the men who come for an extended liberal education.

21,440. And you might add a fourth class, the public men?—Yes.

21,441. Would a system of that kind also tend to give a greater permanence and steadiness to the course pursued in the legal school?—I think it would It would take time, but I think in time the same sort of *esprit de corps* would rise up, that has arisen in all good Universities. Men would get to know each other, and meet together to discuss subjects and work at these debating societies, and in other ways acquire a breadth of knowledge which would be of immense assistance to them, when they came to apply it practically, and would be certainly of great public benefit.

21,442. And would, perhaps, tend to improve the feeling of the students at the classes to which your Lordship attaches so much importance?—Yes.

20,443. What you said implies that the lectures should be open to the public and not restricted to the students for the Bar; and, as your Lordship is aware, that was a recommendation contained in the report of 1846?—Yes, and I agree to that. That was part of Lord Selborne's scheme, to which the Inns of Court took exception.

21,444. The recommendation is now nearly 50 years old?—Yes. I was thinking of 22 years ago.

21,445. That was when Lord Selborne brought in a Bill which was not successful?—Yes. I was a member of the sub-committee of the Inner Temple, who met the sub-committees of the other Inns of Court in Lincoln's Inn. There was a good deal of sharp discussion over it, but we never ultimately agreed.

21,446. And, ultimately, the Bill was dropped?—Yes.

21,447. I think you said that success for a Law school could not be hoped for without the concurrence of the Inns of Court. You are, no doubt, acquainted with the history of the praiseworthy attempts which have been made to establish a Law school independently of the Inns of Court?—Yes.

21,448. Which had at first a flourishing success, but within the first decade they failed, practically, and have become of less and less importance ever since. Would that tend, or otherwise, to form the practicability of founding an efficient Law school without the assistance of those bodies which have attached to them so large a part of the clientele of the classes?—I do not think you would succeed until the Inns of Court, and certainly, as regards solicitors, the Incorporated Law Society also came in. But I think they would come in in time.

21,449. I suppose you would see no objection to uniting with a Faculty constituted as you have indicated, such important foundations as the Chair of Comparative Jurisprudence founded at University College and endowed?—No.

21,450. That would be a useful addition to the school?—I think so.

21,451. (*Mr. Palmer.*) I understand that your Lordship thinks that the Inns of Court and the Incorporated Law Society would come in in time. Can your Lordship advise the Commission as to how best they could be induced to come in in a shorter time?—I am afraid I cannot say. The practical improvement that would be obtained; the growth of public opinion, and the growth of opinion within the Inns of Court if it grows in the proportion in which it has grown since Lord Selborne's scheme, which is now 20 years ago at least, led me to think that the time would come.

21,452. There have been a great many other bodies upon whom public opinion operated but who did not voluntarily at least, so far as their governing bodies were concerned, come in until the Act of Parliament gave them the opportunity of coming in, or failing that a statutory Commission. Would your Lordship express an opinion as to the advisability of any such course?—I do not think I can with advantage. I think it must be left to this body, or to Parliament, when the time comes, to take such steps as they think best. If this proposed University was founded and adopted by Parliament, I think that in itself would have a very healthy effect towards getting the Inns of Court to come in.

21,453. But I understand it to be your Lordship's emphatic opinion that no school or Faculty of Law in a University for London, would be satisfactory to the profession that did not comprise the co-operation of both the Inns of Court and the Incorporated Law Society?—I think such a University might be useful but I think it would fall far short of what is required.

21,454. (*Sir George Humphry.*) It has been suggested my Lord, that forasmuch as the Inns of Court have had large funds, and forasmuch as they have recently made very great advances in legal teaching, possibly if a new University were founded they might be disposed to extend that legal teaching very considerably, and so meet in great measure or entirely the requirements of University teaching, provided they had a fair representation upon the University body; that, in short, the Inns of Court might become teachers, but the University be the examiners for the degree. Do you think it would be likely that the Inns of Court would so extend their teaching as to meet the requirements?—I do not think the severance of the teaching and the examination would either be desirable or that it would be a step towards the Inns of Court doing more.

21,455. It may have been that the Inns of Court would be teachers and also would exercise a considerable control over the examinations as part of the University, and so the difficulty of obtaining professorial teaching might be met by the Inns of Court?—My own impression is that already the Inns of Court have done a great deal. I do not think that during the last 15 years at any rate the public have the same ground of complaint against them that they had 30 years ago, but I still think that at present they have not the power, even if they would do it, to do as much as the University could.

21,456. In the way of teaching, you mean?—Yes, in the way of teaching. I think the combination of the education and the teaching and the bringing of different men together all have advantages, and I also think that the body of the teachers and the examiners being in some cases the same men would be a great advantage. You would lose if you had the two systems going on concurrently, the Inns of Court and the teaching University.

21,457. But whatever further advances the Inns of Court might make in regard to teaching there still would remain a residue for University teaching?—Yes, I think so.

21,458. Then, further, would it be at all probable that the Inns of Court would in any way contribute of their funds to supply that University teaching?—I do not think the question of parting with the money in that sense would be a difficult one. I think the question would be a question of feeling, I mean professional feeling and the good old feeling of liking to support their own body in the way they have gone.

21,459. At present I believe solicitors are not admitted to the teaching which the Inns of Court have instituted?—No, that is so.

21,460. Do you think it likely that they will be admitted or that it is desirable that they should be admitted?—I do not know that it is, so long as it is an Inns of Court affair. One of the advantages the Inns of Court would gain would be the admitting of others both professional and non-professional, but I am not prepared to say that without further consideration. I should advise the Council of Legal Education established by the Inns of Court to take solicitors. I think there are a good many points to be considered upon that.

21,461. But that would be a bar to the education by the Inns of Court forming part of the University education?—It would. If the Inns of Court would consent, being given the security of a large voice in the election and choice of teachers and lecturers, to hand over to a University the powers they have, and being assisted by money, the whole difficulty would be got over.

21,462. (*Mr. Anstie.*) Your Lordship's difficulty was only whilst it remained a barristers' and Inns of Court system?—Yes.

21,463. But if it remained part of the University those objections would fall to the ground?—Yes, clearly.

21,464. (*Professor Ramsay.*) There are two questions which arise out of Mr. Crackanthorpe's evidence which I wish to ask your Lordship, which have not quite been made clear, and which are not covered by your remarks to-day. You contemplate that one system of lectures might answer, both for those who prepare for the University degrees in law, and for those who want nothing more than the professional qualification. We have it in evidence that it is probable that there are a very large number of those who are preparing for the degree who would never think of taking a University degree. It would be only a small proportion of the best men, and the bulk of the men, for a considerable time at any rate, would continue only to do what was necessary. Is it your view that the education of those two kinds of students might be combined, that is to say, that the same course of lectures and the same class of lecturers would serve for both?—I think so, and I think it would be an advantage.

21,465. Mr. Crackanthorpe told us that there was no doubt a desire on the part of the profession to reduce to a minimum the amount of learning and examination with a view to the qualification, and he stated that one of the objections to the present system was that the courses of instruction were too narrow, and the whole scheme too scrappy, and the advantage of a University course would be treated at proper length to enable it to be treated scientifically. If that is the case, and if you have the same course of lectures for both, would you not be burdening the pass or qualification student with an amount of exa-

The Hon. Sir C. E. Pollock.

3 Feb. 1893.

mination which he would not think necessary, and which he would object to take?—There might be some difficulty. I remember what you allude to in Mr. Crackanthorpe's evidence, but it occurred to me that some of the subjects would be of such a nature, say, for instance, Conveyancing, as apart from Land Law, which involves a great deal of history and, to a certain extent, scientific interest. I suppose there would be in any case lectures on Conveyancing, which would be very practical but inferior as a question of learning to a more general lecture upon land law. But I do not see myself any objection to their going on concurrently. They would be doing so to a certain extent.

21,466. That is to say, you think that as a practical question there would be no difficulty in starting a system of education part of which would be sufficient for the mere pass student, whilst the whole of it would afford sufficient basis for the legal degree?—Yes.

21,467. One would not interfere with the other?—Take Mercantile Law. I think lectures upon Contracts, Marine Insurance, and concrete subjects of that sort would necessarily have to go on, and they would be more or less scientific according to what was thought desirable. If I had myself the arrangement of such lectures, and there were solicitors and would-be barristers coming in, I should take care that there were some lectures of a kind that were not so scientific that they burdened the men with a great deal of reading away from the lectures. On the other hand, I think the same subjects, or nearly the same subjects, might very easily be read with great advantage, so that a man might really be thrown upon a great amount of legal literature; and I think the same thing goes on at present according to the power of each man's mind and his industry. I find commonly a great number of Law students and young men have read very little indeed; they have just picked up a little knowledge at Pleaders' Chambers, and they go on to Sessions and get some knowledge of what we call the White Book,—the Rules of the Court. If they are clever men they may still rise high in the profession, but other men have a depth of knowledge of Law; they have read something of foreign Law and American Law, which gives them a real title to be lawyers.

21,468. But that would imply, would it not, a double set of courses. Mr. Crackanthorpe, for instance, mentioned that certain subjects were at present treated in a six weeks' course which really ought to be treated in a course lasting over the whole year, if done with a view to a degree. You could not make the pass student spend six weeks with a view to a course. It would be necessary to have two sets of instruction in certain subjects?—I think that could be done by revision.

21,469. At any rate it forms no objection in your mind to the whole body undertaking the legal education?—No, I think not. For instance, take Conveyancing: that is especially a subject which you cannot teach in a finished manner by lectures; you can throw out what line of thought the student is to pursue. Everybody who is going to be a lawyer must learn some Conveyancing, and in that sense a good conveyancer must give really good lectures, but they would not be scientific lectures. On the other hand, a man who wished to know something of Law historically, and why things came to be so, the refinements of some of our decisions and so forth, would have to aim much higher, and necessarily, there the lectures would be severed.

21,470. The other question I wished to ask you related to the constitution of the University. Mr. Crackanthorpe's idea was either to induce the Inns of Court to come in, or, as a condition of his agreeing to their coming in, he would require the Inns of Court to be practically independent of the University, and his suggestion was that the Inns of Court as they now are, with or without some intermixture from the Incorporated Law Society (one or the other of the two legal bodies) should themselves constitute the Legal Faculty, appoint the teachers and conduct the whole course of teaching and examining, subject to a mere nominal veto on the part of the Senate; and he expressly said that if that veto on the part of the governing body was anything more than purely nominal it would, in his opinion, destroy the efficacy of the Arts Faculty with the view to qualification for Law. I thought your Lordship seemed to take the broader view to-day, that you would expect the power of the governing body of the Senate to be as great over the legal Faculty as any other Faculty; that the lectures should be conducted in the name of the University, and that the Law Faculty, however constituted, should be as much under the government of the University as any of the other Faculties?—I should prefer that, always giving a sufficient power of nomination to the Inns of Court.

21,471. We heard a scheme the other day which they have in Trinity College, Dublin. They have a joint scheme there of lectures and examinations, but the system is that the legal bodies appoint one set of teachers and the University appoint another set of teachers—I suppose in the more scientific subjects—and the examinations are conducted in common between the two bodies. Much as in the scheme of the University of London, lately started, there might be a scheme for conducting the examinations of the Royal College and the University. Would a scheme of that kind obviate any of the difficulties which Mr. Crackanthorpe seemed to anticipate would be raised by the Inns of Court to any subjecting of themselves in any way to the power of the University?—I should regard that dual system with a good deal of distrust.

21,472. You would rather see the Inns of Court come in as a constituent part of the University having their proper and fair share of representation in the Senate?—Yes.

21,473. (*Mr. Anstie.*) Would you contemplate with an increase of breadth an increase in the number of professors?—Yes.

The witness withdrew.

Adjourned to Thursday, 9th February, 1893.

Fifty-third Day.

Thursday, February 9th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir WILLIAM SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B. *Secretary.*

LORD CHARLES BRUCE and Sir GEORGE GROVE, D.C.L., LL.D., examined.

Lord C. Bruce and Sir G. Grove, D.C.L., LL.D.

9 Feb. 1893.

21,474. (*Chairman to Sir George Grove.*) You have come from the Royal College of Music to give evidence before us?—I am the Director.

21,475. In the first place I will ask you to give us briefly an account of what work you are doing now, and, as far as you think it will be interesting to us, without going into very great detail, to give us the history of your college from the beginning?—The College of Music was founded by the Prince of Wales in 1882, and was opened by him in 1883, with 50 scholarships—50 scholars and 42 paying pupils, 92 pupils in all. We have had a steady increase every year, and our number now is 317. The scholarships, I think, form the distinguishing feature of the institution, for all these institutions properly carried on, must be more or less like one another in their mode of teaching and so on; but the scholarships are our distinguishing feature. We have now 50 open scholarships of the annual value of 40*l.* each, which entitle the holder to a complete course of musical education lasting not less than three years. If the scholar distinguishes himself, he may be recommended by the professors and myself to the Council, and the Council may allow him to have another year, and after that another year, and in some cases after that another. In addition to those 50 open scholarships, there are 11 close scholarships which have been founded by different localities, such as Liverpool, Shropshire, Portsmouth, Norfolk, Suffolk, Kent, Bristol, the Royal Amateur Orchestral Society in London, &c. These are tenable on the same conditions as the close scholarships, and entitle the holders to tuition and to maintenance. Some of the open scholarships are also open to maintenance. 1,000*l.* is annually voted for the maintenance of such of the open scholars as require it, but there is no competition for the maintenance: the circumstances are investigated by a committee of the Council, and that committee recommends who is to have the maintenance, and how much it is to be. Then there are various exhibitions granted by the Council, but the scholarships are our great feature, and we are able to have them on account of the funded property of the College, amounting to rather over 130,000*l.*, which was obtained from subscriptions throughout the United Kingdom, and in some cases from the Colonies, at the foundation of the College; then, under the express order of the Charter, it was funded, so that we cannot touch any of that money; we can only enjoy the interest on it.

21,476. You have buildings, I think?—45,000*l.* has been given us by Mr. Sampson Fox, of Leeds, for the purpose of a new building. It has been erected on a site leased to us by the Royal Commissioners of 1851 for 999 years at a nominal rent, but is not yet open. It will probably be open in the course of the present year. We are now in a building at Kensington Gore which was originally built by Sir Charles Freake, and given to the Prince of Wales for the National Training School, which was the first attempt at our College, and was made some time previous to the formation of our body. They proceeded on the plan of raising the scholarship money as it was wanted, year by year, and in many cases the donors, when applied to for renewal, said:—"We do "not propose to go on." We, at the wise suggestion of the Prince of Wales, funded our money, and are living on the interest.

21,477. You think you will be able to have good buildings for this 45,000*l.*, and it will include lecture rooms for all kinds and classes?—Yes, the building is an extremely good one, though it will not include the theatre which we mean ultimately to have.

21,478. You contemplate having at some time or other room for boarders and for lodging scholars?—I think not. We license certain houses and satisfy ourselves as to the goodness of those houses and the fitness of the people who keep them, and send the scholars there. Alexandra House should be mentioned. It was built for girls only, and was given to the Princess of Wales by Sir Francis Cook, who built it. It is for the lodging of 100 pupils, all from schools of art and science, on the Commissioners' estate; the house is on the estate of the Royal Commission, close adjoining our College, and we have 50 of the places in it. Of course it is of very great assistance to us and is a very good thing.

21,479. I think you have told us now the constitution of the Association and the history of it to a certain extent. Perhaps you will tell us what certificates and what examinations you have, and what they lead to in the way of either degrees or certificates?—The examinations are at the end of every term. We have an examination, not by outsiders but by our own professors and myself, and by that we determine the place of each pupil in the school. Each subject of teaching is divided into five grades, 1 being the lowest one, 2 being the next, and 5 being the top; and the pupils, as they are placed at the examinations, are moved upwards in the grades. Then, once every year at Easter, there is an examination by eminent outside musicians—such as Joachim, Charles Halle, &c., who do not belong to the college and who come at the request of the Prince of Wales. These gentlemen examine coincidently with our own professors, and they give the President a report for his satisfaction and for the satisfaction of the Corporation as to the general condition of the teaching of the institution.

21,480. You have power to give a degree?—Yes, but we have never exercised it yet. We have an examination for the Associateship of the Royal College of Music, which is conducted by professors of the college and by outside professors in London, who are asked to assist. That is gone through every year, and the result of that is that the persons who pass are

Lord C. Bruce and Sir G. Grove, D.C.L.,LL.D.

9 Feb. 1893.

Associates of the Royal College of Music, and are entitled to put A.R.C.M. after their names.

21,481. How many years are they supposed to go there before they do that?—It is something of the nature of the B.A. at Oxford and Cambridge, at the end of the college course; the end of the course; but outsiders are allowed to compete.

21,482. Who have not attended any lectures?—Yes, it is open to everybody.

21,483. I see that 48 per cent. of the candidates who come up pass?—Yes, about half.

21,484. So that it shows a pretty severe examination?—Yes; that is our intention.

21,485. So they become Associates generally at the end of the three years' course?—Yes. Then I ought to say with regard to the scholars that those who are very promising may be recommended by the Board of Professors to the Council to go abroad. In the Charter power is given to found Fellowships with the view of supporting deserving pupils for a time after they have left college, and enabling them to travel. Some day or other, I hope these Fellowships will be properly endowed and become a systematic part of the college education. At present we have sent abroad altogether five pupils.

21,486. Have they any separate examination?—No, they have not. The Board of Professors considers the case and recommends the Council to make a grant for the purpose of the pupil going abroad; not to be taught, because we consider that the college course has finished his technical education; but for the purpose of enlarging his mind, and that he may become aware of what is being done abroad at the different great towns, such as Berlin and Vienna; and this has been hitherto attended with very good results.

21,487. The governing body have a good deal of discussion as to whom they fix upon?—They have hitherto adopted the recommendation of the Board of Professors.

21,488. In order to become an Associate of the College of Music each man has only to pass one single examination?—Yes. (*Lord Charles Bruce.*) And women too; it is not limited to men.

21,489. (*To Sir George Grove.*) Before I ask you about your joint action with the Royal Academy of Music, as far as I gather from the papers they have sent in, you are doing very much the same work as they are, their institution is exactly similar to yours?—Identical in aim, though with the differences in tone and style natural to two individual bodies.

21,490. It strikes us as curious that there should be two institutions doing the same thing?—More curious than that there should be various colleges at Oxford and Cambridge, or the Royal Academy of Arts and Slade school for teaching painting in London? But in fact in the early stages, in the years 1880 and 1881, before the Prince of Wales determined on starting this college, he, and those who were working with him, made a great many efforts to induce the Royal Academy to join them, but the Academy did not, at that time, see its way to it, and rather repelled those efforts. Lord Charles Bruce served on Lord Spencer's Committee. (*Lord Charles Bruce.*) At the time when the Royal College of Music was about to be formed under the circumstances that Sir George Grove has mentioned, there was an unwillingness on the part of the givers of the scholarships which constituted the National Training School to renew them; but the Prince of Wales thought that as that useful institution was about to terminate its existence, seeing that there was already in existence the Royal Academy of Music which was doing good work, but which really depended more upon paying students than anything else, it was very desirable that some national college of music should be formed, embodying the paying principle with the scholarship principle. Accordingly he appointed a committee to consider the question, and negotiations were carried on by that committee with a view to amalgamating the National Training School and the Royal Academy of Music in one body. Negotiations were carried on with every hope of success up to a certain point, but at the last moment the Royal Academy could not see their way to accepting this proposal. Upon that the Prince of Wales was in furtherance of his scheme, through his exertions and through his appeal for public support, founded the College of Music, which, as Sir George Grove has pointed out to the Commission, has that most advantageous peculiarity, if I may so speak of it, of possessing a number of permanent scholarships, permanent, inasmuch as they are derived from the revenue of this large capital which has been subscribed by the public; permanent, inasmuch as by our regulations no scholarship can be created unless there is a sufficient revenue from the capital subscribed to support that scholarship. These are the circumstances under which the College came into existence. If I may go a little further, though it is not perhaps exactly to the point, notwithstanding the unwillingness on the part of the Royal Academy to amalgamation, a very few years after these negotiations ended Dr. Macfarren died, and Dr. Mackenzie was appointed Principal of the Royal Academy. They for some time had been carrying on a system of local examinations in music throughout the country. We contemplated doing the same, and Dr. Mackenzie came one day to Sir George Grove, the Director, and said, "It seems a great pity that we the two teaching "Chartered Institutions in music of the country "should be conducting local examinations on dif-"ferent lines. Why should we not join hands "together in such a national movement?" We gladly responded to his invitation, and upon that the Associated Board, of which I have the honour to be Chairman, was formed. So that although in past days there was, I will not call it antagonism but an indisposition, on the part of the Royal Academy to join in the scheme of which I have spoken, which led to the creation of the Royal College of Music, yet the most perfect harmony now has sprung up between us. We are like two rival colleges in a University, on the best terms with one another, each doing our individual work, in furtherance of the cultivation of Music and engaged in a joint work in promoting the same object by means of these local examinations.

21,491. (*To Lord Charles Bruce.*) Before I ask you a few more details about the work of this joint committee, I would ask first for our information, whether there are any other associations which give certificates of proficiency in music besides these two?—Yes, there are several. Trinity College have these examinations; the Royal Academy of Music have had them for some time, and there are certain examinations carried on by the Universities of Cambridge and Oxford in music, but they are theoretical not practical. There are a very large number of institutions (I might almost say their name is legion) which keep cropping up, having for their object local examinations in music; but which we on the Associated Board think are not conducted on sound principles. (*Sir George Grove.*) Lord Charles Bruce calls them "institutions." In a great many cases they are not institutions at all except in name, they are mere means of making money, and passing the candidates.

21,492. (*To Sir George Grove.*) The only substantial one besides these two is the Trinity College?—The College of Organists is very important, but they have no local or provincial examinations, and there is the Incorporated Society of Musicians. (*Lord Charles Bruce.*) I may say that it was the unsatisfactory character of these examinations in different parts of the country which actuated the Academy and ourselves in joining together in the development of a new scheme based on different principles from those which had hitherto been laid down. When the time comes, if the Chairman will ask me a question as to the working of that Associated Board, I shall be glad to give all the information I can upon that point.

21,493. (*To Sir George Grove.*) You have no dealings or no association in any way with Trinity College?—No.

21,494. Nor with any other body?—Except the Royal Academy of Music and the College of Organists.

21,495. Before I leave the subject of general education and certificates of that, I may ask you this: of course you give a thoroughly theoretical instruction as well as practical?—Such is our object and intention.

21,496. You have a very large staff of professors and teachers?—The Board of Professors are nine in number, and there are besides 42 more members of the teaching staff.

21,497. Does Dr. Hubert Parry give instruction?—He gives instruction in composition two days a week. He also gives lectures on the history of music, most valuable lectures, and is otherwise much engaged in college work.

21,498. Will you tell us what sort of an examination there is in order to obtain a certificate? Of course you have to find a thorough theoretical knowledge, and in addition to that are the pupils obliged to have any practical knowledge of any particular instrument?—The examination is both theoretical and practical. The candidate names the subject or subjects in which he or she wishes to pass.

21,499. Is one sufficient?—One is sufficient, but they may name two.

21,500. Then they must have a thorough proficiency upon one instrument, coupled with a thorough theoretical knowledge?—I may say that special attention is paid at college to fitting the pupils to become good and sound teachers. I have never forgotten an observation of our President to me shortly after the opening of the college to the effect that teachers were quite as important to the country as solo players or singers; and we have endeavoured not only to form good teachers, but to place them when formed in influential positions where they shall have an opportunity of teaching in the same steady, careful, rudimentary way that they were taught with us. Our roll of organists is large. They are encouraged to go in for the degrees of Associate and Fellow of the College of Organists. We have 21 Fellows of that college on our books, and 23 Associates. That is a very stiff examination indeed; it is quite a blue ribbon among the organists.

21,501. What proportion of women are there?—About two thirds women to one third men.

21,502. (*To Lord Charles Bruce.*) You said you would give us some information about the working of the Associated Board, of which you are Chairman?—Perhaps I can do that best by quoting from a letter which I had the honour of writing, to the "Times," as chairman of the board just when we were coming into existence at the end of 1889. The principles upon which we established our Associated Board are as follows: The examinations are held at various centres in the United Kingdom. "At each of these "centres the Board will have an honorary local "representative, to whom will be entrusted the con- "duct of the business arrangements connected with "the examinations." These examinations are carried out under an agreement, of which I have a copy here, between ourselves and the Royal Academy in conformity with the Chartered Regulations of the Royal Academy of Music and the Royal College of Music. The list of examiners which is appended to the schedule to the paper which is before you, seems to be a very strong one, and for the first time I think we laid down the principle that to each Local Centre instead of one examiner being sent down there should be two, so that our examinations should be thorough. The reports of those at the end of the time of the examination are sent up to the central office, and according to their returns we issue a list of the successful candidates, and award our certificates—honour certificates and pass certificates, of which there are copies here (*handing same to the Chairman*).

21,503. Do these in any way lead up to the rank of Associate?—No, no more than they would lead up to the rank of Licentiate of the Royal Academy of Music. But you will see at the foot of the certificate a significant notice. We found that one of the evils of the existing system of examination was that in a great many cases certificates were being given which enabled successful candidates to attach to their names certain letters, and that the certificates were regarded as a qualification for teaching for which they were quite incompetent. I am not speaking of any particular institution, but that was a fact which came to our knowledge; and therefore at the foot of our certificates we state "These certificates do not entitle "the holders to append any letters to their names, nor "are the holders certified as teachers." For these examinations there is a senior grade and a junior grade, with certain conditions laid down for each.

21,504. I suppose they are sought after by people who wish to become teachers?—Yes.

21,505. I suppose it would help an ordinary schoolmaster if he got one of these certificates?—Certainly. The certificate is signed by the Chairman and the Principal of the Royal Academy, and the Director of the Royal College of Music. Another point to which we attached great importance was that before students could present themselves before the examiners they should pass a paper examination in the rudiments of music. We found many candidates singularly deficient in that subject; and since we have laid stress upon such an examination we have found a great improvement in that direction. Of course a knowledge of the rudiments of music is most essential for the qualification of a good teacher. In drawing up their scheme the Board have therefore made it obligatory on all candidates to pass a preliminary rudimentary examination before presenting themselves for the local examination itself.

21,506. So that they should have some theoretical instruction?—Yes, that they should be well grounded. "In dealing with the subject of the local examination, "the board have been actuated by a desire to make "the standard of qualification so high that the "certificate granted by them may be regarded as a "distinction worthy of attainment, and one which "will encourage its recipients to persevere in the "cultivation of music." That is as leading up, we hope, to their either entering the Royal Academy of Music or our College, or devoting themselves still more thoroughly to the cultivation of music. That lays down the general principles upon which we started the examinations. After we had been in existence a few months we found there were other requirements which we had not met; those young people learning music at schools or from private teachers who were not sufficiently advanced for the Local Centre examinations. We thereon established a system of school examinations. The school examinations are held on somewhat different lines. One examiner is sent down to conduct them. These are all practical examinations, a knowledge of the rudiments of music being also required of the candidates. The certificate which the successful candidates receive is of a different character to that of the Local Centre examination. It is simply a card to show that they have passed the examination. Those who have done best receive a certificate that they have passed with distinction. The school examinations are intended to be preparatory to the Local Centre examinations, and by them we hope to induce young people as early as possible to persevere in the study of music.

21,507. (*To Sir George Grove.*) I think you told us that you had not exercised the power of giving degrees?—No, we have not.

21,508. Do you contemplate doing that at all?—The subject has not yet come before us. My anxiety (and the Council have been very good in backing me up in that) is to make the college first of all a thoroughly good, practical, teaching institution.

21,509. I suppose you are acquainted with the nature of the degrees in our principal Universities, Oxford, Cambridge, and at other places?—Of the musical ones? I think so, they are mainly theoretical.

21,510. Do you think they are of much advantage to a man?—The world seems to consider them to be

Lord C. Bruce and Sir G. Grove, D.C.L.,LL.D.

9 Feb. 1893.

of advantage, or so many people would not apply for them ; but I have never been able to see the advantage.

21,511. They are applied for a great deal?—Yes.

21,512. But you do not yourself, as a practical man, see much good in them?—No, I do not indeed ; probably from ignorance.

21,513. I suppose you are interested, like everybody else, in the establishment of a teaching University for London?—Yes.

21,514. Do you think there would be any advantage in having Music one of the Faculties?—I should have thought it was almost necessary, music is so important and so rising a subject ; and surely it does form a part of all existing Universities, does it not?

21,515. I think of most it does. I asked you the question because I was rather doubtful what your answer would be, as you said you did not think degrees were of much advantage at Oxford and Cambridge?—I was speaking of theory only.

21,516. You think a degree that was given by a University might be practical as well as theoretical?—I should think it might be.

21,517. You see no reason why, at Oxford, it should not be practical?—No ; but there again I am very ignorant.

21,518. And you think that in establishing a teaching University having a Faculty of Music, it ought to be practical as well as theoretical?—Yes, if the degree and examination were of such a nature, that they were really valuable.

21,519. I suppose you mean by "practical as well as theoretical," that a man should be able to play on at least one instrument besides knowing the theory?—Yes.

21,520. And you think this could be done by a University as well as by your college?—Yes.

21,521. You seem to be doing a very large work and an extending work. Do you think any teaching University in London inclined to do the same thing would clash with you or overlap your work, or that there would be room for both?—It would be a case of the survival of the fittest ; I think it would be a question of which was the better. But surely we could work as a part of the University.

21,522. Do you think there would be any means at all of co-operating with you or of your being of any use to the new University with regard to the Faculty of Music ; or are you too much tied by your foundation for that?—I do not see that we are too much tied on our own foundation, any more than any college in Oxford or Cambridge is too much tied to co-operate with those Universities. (*Lord Charles Bruce.*) May I read this extract from the Charter :—"The Council may engage with any "musical bodies as to the conditions on which they "would be willing to join with them, or to be amalgamated wholly or partially with the Corporation."

21,523. (*To Sir George Grove.*) You could do it by your Charter then, no doubt. I do not know whether you have seen the Gresham Scheme?—No, I have not seen it.

21,524. That says that the University is to be formed by an association of colleges, some of which are to be joined in all the Faculties, and others (for instance the medical schools) in only one Faculty. How do you think your college should be associated with a University with regard to the Faculty of Music?—Personally I see no difficulty about it, though I am not acquainted with the scheme of the Gresham University at all ; but in a general manner of speaking it seems to me that each college might be in the same sort of position that any single college at Cambridge is with regard to the University.

21,525. One difficulty is that you are more of an Imperial than a London College, you receive pupils from the whole of the United Kingdom?—From the whole of the empire. We have had several from Australia and Canada, and one or two from India.

21,526. In that way it would be rather difficult for you to be affiliated to a University, which is, at any rate on that particular side of it, only for London?—Would there be any more difficulty than in the fact that an Indian might go and join any of the colleges in Oxford?

21,527. He comes and resides?—Certainly, he ought to do that. There is always in my mind the fact that the instruction should be practical, which would involve residence.

21,528. No one would ask any questions as to the birth of a student. For the time being he would be a Londoner?—Yes.

21,529. You think there might be some means of your working harmoniously with the University?—Yes.

21,530. I suppose it would be rather difficult to have a college which should give a degree, as well as the University. Would you be willing to drop the degree part and leave that to the University?—That I cannot tell at all. It is a question for my Council only.

21,531. I ought to have said rather, would you think it advisable? Perhaps you have not thought of it?—I do not like to commit myself to that.

21,532. We have had several ideas before us. Another idea is, not to affiliate institutions but rather to make connexions with different bodies by appointing their principal professors professors of the University and allowing them to belong to the particular Faculties which they teach, and to have a voice in appointing Boards of Studies of the Faculty, and themselves possibly being elected members of it; the Board of Studies to consult with the Senate with regard to fixing examinations and other things of that sort. Do you think that if we were to make your principal professors professors of the University we should form a connexion with you in that way which would be workable and desirable?—You could not have better professors at your University than my professors in the college. That I can certainly say. But I should not like to answer the question without more consideration.

21,533. You do not wish to go further than to say that generally you think you might with advantage co-operate with the teaching University?—Yes, that is my own individual opinion. Of course I cannot answer for the Council.

21,534. You have not gone into the question of how that could best be done?—No. (*Lord Charles Bruce.*) It would be rather difficult for Sir George Grove to answer that question because the governing body of our college would deal with it, and they really have not gone into it at all.

21,535. (*To Lord Charles Bruce.*) If you were joined with the University, holding as you do, a great position with regard to music, you would like to have a considerable representation on the Faculty? I suppose I may take that for granted?—The Council were anxious that such an important body as this Commission, dealing with such an important question should be made acquainted with what we are doing at the college in the interests of music. You have been good enough to grant our request to be heard, our object being that you should be made acquainted with the work we are doing.

21,536. (*To Sir George Grove.*) Is there anything you would like to add?—In speaking of the scholarships I neglected to say that the scholarships are gained entirely by competition, and competition of the strictest kind. We first of all receive applications from all over the country and from other parts of the empire. Then there is a preliminary examination divided among more than 60 centres throughout the country, for weeding these candidates. These (honorary) examiners are the best local musicians attainable, being appointed thereto by the president of the college; and the examinations take place in the municipal buildings under the care of the mayor of the town. Those who pass the preliminary examinations are brought up to the college itself and there further examined by myself and the professors in different boards in order to reduce them to those worthy of scholarships. The object is really to get the best, and, therefore, all favouritism or influence is *ipso*

facto excluded. The candidates often ask, in reference to the final examination, "What things am I particularly to know?" I always say, "You are to be "examined all round." That is with the object of getting the persons really most worthy for the scholarship in that particular branch.

21,537. You mentioned Dr. Hubert Parry's lectures. Are outsiders admitted to them?—Not at present, because our rooms are so small. In the new building it may be different. Our College concerts are a feature. Every fortnight at least we have a concert in the afternoon or evening, to which the public are invited, and at those concerts excellent chamber music—quartet playing, pianoforte playing, concerted music and singing—is done; and is really very good. Every term we have two orchestral concerts in the same room, and one outside orchestral concert, generally in St. James's Hall. Once a year we give an opera. In the third year of the existence of the College we began with two acts of *Figaro;* the next year we gave Cherubini's *Les deux Journées;* then we had *Der Freischütz;* in 1888 the *Merry Wives of Windsor;* in 1889 *The Taming of the Shrew;* in 1890 *Così fan tutte;* in 1891 *The Barber of Bagdad;* in 1892 Gluck's *Orpheus,* with very great success. It is a very good thing for the students: they learn independence and many things which they cannot learn in the teaching room.

21,538. (*Lord Reay to Sir George Grove.*) Do you impose any test of preliminary general education on these students who join the college?—No, we do not, but we provide for it to a certain degree, as far as the scholars go, by having lessons in general knowledge given them on two evenings in each week. We have a schoolmaster who comes on Tuesday and Friday evenings and gives lessons.

21,539. I suppose for singers at all events the knowledge of foreign languages is very material?—As far as the sound goes. At the strong recommendation of Madame Jenny Lind Goldschmidt, who was our first chief professor of singing, we have an Italian class, but though instituted for pronunciation grammar is too much taught at it. German and French we have not yet tried. I am afraid of overworking the children. They sometimes break down as it is.

21,540. If it could be carried out you would think it very desirable that the knowledge should be acquired earlier?—Certainly. Education, both in mind and manners, is a great help to the study of music.

21,541. You laid, and justly laid, great stress on the normal school department of your college, the education of the teachers. Is the education of your students, who prepare themselves for the profession of teaching, kept distinct from the education of those others who contemplate a professional career?—No, it is not. In the three principal instruments—the violin, organ, and piano—pupils are so taught by their masters that they cannot avoid knowing how to teach, and require no special instruction. I have often agitated the question before the board of professors, who are my advisers in the conduct of the College, as to whether it would be advisable to have any especial teaching for the profession of teaching. They have always said, and I have found it to be quite true, that when the pupils leave the college in such a condition that we are satisfied with them, they are well able to teach.

21,542. With regard to those to whom you give scholarships, what do you find is the general standard of education?—No general standard. We have gone down to a very low stratum of society. For instance, among the first scholars elected in 1883 was a boy whose father was a labourer on a guinea a week. This boy was very deficient in ordinary education, but under the teaching that I described, aided by his excellent wits, he is now a very cultivated man, and in quite a satisfactory condition. Another was the son of a blacksmith, with the same result. Then, again, there was a girl who has become well-known as a contralto all over the country. She came out of a mill in one of the Lancashire towns. Madame Goldschmidt had much anxiety with her; she had had little or no education, and was then very ignorant. Now she reads and thinks, and is quite a well-mannered person. And I could name many others. I do not know how to explain it. It seems to be partly due to the music itself, and partly to be the effect of the thorough, constant accurate pursuit of a noble subject: it acts upon them in a way which I cannot explain.

21,543. As an incentive to acquire what they have not been taught?—I mean that.

21,544. (*To Lord Charles Bruce.*) Do you admit anyone to your local examinations without inquiring where he has had this tuition?—In reference to the local centre examination, anyone. In reference to school examinations candidates can only be presented by the heads of schools, and teachers who have registered themselves by paying a small annual fee as affiliated to the Royal College of Music. They may present anyone they like.

21,545. You have not yet organised any system of inspection of provincial schools of various degrees?—We have not yet done that.

21,546. I suppose you contemplate it?—We have thought that over very much, and from some of the schools we have received so many candidates that really it does amount in many cases to an examination of the school itself. We send our examiners down to schools.

21,547. Are there many of these certificates obtained by private study, or are the successful candidates generally educated at school?—I could not give you the figures.

21,548. Do you think they are accessible?—Certainly.

21,549. Then they could be given, and perhaps you will let us have them?—Yes. Of course, there is a limit of age as regards the local centres. They cannot come into the lower division under a certain age.

21,550. But for the higher division they can enter at any time?—Yes.

21,551. Is the number of institutions which prepare for these examinations on the increase?—Yes, that is so. Speaking of the schools I may say that we have now registered on our books 286 schools and private teachers.

21,552. Is it a musical department in a school, or are these specific musical schools only teaching music?—No, ordinary schools.

21,553. Teaching music as a department of the general education?—Yes; there are returns showing the increased number. Over 8,000 of all sorts and kinds had been examined up to the end of last year.

Candidates.	1889–90.	1890–91.	1891–92.	Total.	
Local centre examinations	1,188	1,495	1,642	4,325	8,582
Local school examinations	—	2,115	2,142	4,257	

21,554. (*Mr. Anstie to Sir George Grove.*) You answered Lord Reay that the cultivation of the musical faculty acted as an incentive to the general intellectual powers?—Yes.

21,555. I suppose one may also say that the habit of accurate study in any one subject, and especially in a study so accurate as music, is itself an intellectual training?—I imagine it is. I said I could not explain the progress towards refinement and intellectuality that was made by many of the scholars who had begun in a very low class, but no doubt you are right in saying that the habit of accurately investigating and pursuing such a noble art as music has had that effect upon them.

21,556. Precision well taught and understood in any subject is a distinctly intellectual advantage?—Precision and attention to expression. I do not know

Lord C. Bruce and Sir G. Grove, D.C.L., LL.D.

9 Feb. 1893.

whether you realise what a difficult art playing an instrument such as the piano or violin is. After all, when you have obtained very great technique with your fingers, you have only gone as far as you have in poetry when you can read a line correctly. You spend years, and enormous labour, in learning merely what is necessary to read literature correctly. After you have read your line correctly you then put into it all your expression, and all your experience of life. It is so in music.

21,557. I suppose you would admit that it is desirable that there should be some commerce with other intellectual subjects than with music alone?—Very much so. I think a remarkable instance of that was Felix Mendelssohn, the composer. His father, who was a very wise person, entered him at the Berlin University at the same time that he was going on with his musical studies, and he completed his course, and took his degree, and published an interesting classical work; but then he was a very remarkable person. He certainly had much more literary training than either Beethoven or Mozart, or many of the other great composers. I should like to mention the case of one of our scholars, whose father was a lay clerk at one of the cathedrals. The boy got a composition scholarship and stayed with us four years, his scholarship being extended for a year because of his great promise and industry. The Council allowed him to reside at Cambridge for the extra year. He matriculated there, taking his music lessons regularly from his college teacher who resided in Cambridge. He was soon made organist of his college; got other musical appointments; took his degree, has written and performed a successful work, and is now much esteemed both in his college and the University.

21,558. Then you would be in favour of supplementing musical education by some degree of conversance with other subjects?—Yes, only I should like to say this which I ought to have said to Lord Reay; that the musical profession is a very exacting one. The pupils are very often overdone by it; and if you give them more than a small amount of learning I think you will find it a little hard for them, unless in extraordinary cases like that of Mendelssohn. At least it is a matter that would require a great deal of consideration.

21,559. Would that be due to any extent to the remarkable precocity that musical talent often shows?—No, I think not. It would be due more probably to the preponderance of nerves in the system of musicians.

21,560. But you do not think that the early age at which they must apply would interfere with the intellectual furnishing?—We do not like to take them before they are 13.

21,561. That is naming a very early age?—Not in music. Any boy or girl who ultimately makes a great figure begins at seven or eight with technique—the absolutely indispensable preliminary technique.

21,562. I think your answer rather shows that there is a great precocity in the development of musical talent, but the common age which we have before us is rather 16 or 17 than 13 at which examinations are passed which are expected to test the literary and scientific attainments?—To finish them?

21,563. No, to begin. University training rather begins at that age?—Yes, University training does; but it is very late for beginning musical training; I mean to say it is very late, because they must begin the working of the fingers. The fingers get stiff as they get on in life.

21,564. What are the periods of life between which you say the musical education lies?—I should say between 13 and 19.

21,565. So that if a boy took a matriculation or an entrance examination at 16 he would then have three years for musical courses in the higher regions of music?—Yes, but if he had not worked under good guidance at his music before he would find himself very much handicapped.

21,566. But would his pursuit of music during those earlier years be so exacting as to prevent his passing a competent entrance examination at about the age of 16?—No, I do not think it would if properly looked after; but these precocious musical children are often poor Jews or something of that sort, and the parents do not know how to educate their children properly, and have no means.

21,567. There is plenty of time between 11 and 16?—Yes, if you could get them to do it.

21,568. You have not given them degrees?—No; We have given the associateship.

21,569. I think there is an arrangement between you and the University of London that you should not give degrees?—No, there is no agreement. A few years ago I remember Sir James Paget and somebody else calling upon me, but there was no arrangement made of any kind or description.

21,570. As a matter of fact the University of London does give degrees in music?—Yes, but theoretical degrees.

21,571. Not purely; it is theoretical in one sense, but for the degree of Doctor of Music a composition is required?—That is practical in one branch only.

21,572. Is the attention of your college mainly directed to proficiency in practical music, to the executive part in practical music?—Composition is included in our studies and several have already done well in it. I would name MacCunn, Chas. Wood, and others. But if you will forgive me you cannot have efficiency in composition and theoretical music without efficiency in playing. As a rule all the great composers have begun by being good players.

21,573. In fact a man could not make a musical composition which was worth anything unless he was master of the art in practice?—That is what I mean. Berlioz is the only exception that I recollect.

21,574. If you united yourself with a University which was competent to give degrees would you think that degrees should rather be given on the theoretical side than on the executive? You would not give a man a degree for being a very accomplished performer would you?—Why should you not give a man a degree for being an accomplished performer? Those who get degrees at present are often not really accomplished. They write exercises in eight parts, and their exercises are often put on a shelf and never heard of afterwards. The great musicians as a rule have not gone in for degrees. The degrees came after they were celebrated.

21,575. Honorary degrees?—Yes.

21,576. Is it your idea that the degree should be given for mere executive talent?—I really have no great idea on that subject; I have never thought about it. I have always looked upon these degrees rather with astonishment.

21,577. That would rather seem to indicate no very great disposition on your part to enter into and form part of a University?—I should hope that any way in which music should be properly treated, properly taught, and brought into greater prominence than it is, would be a good thing for it, and that could be done by its belonging to a University.

21,578. Is it not a fact that on the whole the English composers have suffered in comparison with German composers by their less acquaintance with the laws of harmony?—No, not on that account at all. The relative place of England in music in the modern world is a very remarkable thing, but I think it can be explained entirely on historical grounds; and if I may be allowed I will endeavour to explain it. In the time of Henry VIII. and long before the time of Henry VIII. England was the chief country of Europe for music. English music was sung at Rome, and all through the Low Countries, as the great music of the time. And its reputation continued in Elizabeth's time. If you do not mind I really should like to say a few words about the subject, because it is extremely interesting. The oldest piece of music existing by far, is a beautiful song written by a monk in Reading Monastery, who wrote a poem "Summer is

a-coming in"; he describes the different signs of it; the cuckoos, the ewes and lambs, the cows and calves, the deer, the bursting leaves, the flowers in the meadows, and he set this to a tune as melodious as any that Sullivan writes at the present time. That was in 1225, and the manuscript is in the British Museum now, and all the great critics on the Continent agree in its date. Then came all the troubles—the Wars of the Roses and religious troubles. Everything was burnt and destroyed, and then music went under a temporary cloud. But the fame of English music and musicians, such as John Dunstable, was undiminished abroad. There are ample remains of it in Italy, Spain, and the Low Countries. In the latter part of the reign of Henry VIII., when things became settled, you find the English school with Tallis, Byrd, Edwards, Johnson, and the other great people of that time existing *in corpore* here. English music and English composers were still known and esteemed everywhere, and our English madrigals were as much sung in Italy then as the Italian madrigals were sung here. But then came the trouble with the Puritans, and that put a stop to everything. The cathedral choirs were shut up, and music went down to the lowest ebb. But it did more than this. The middle class of England, the mass of the English people, then took its rise, and the Puritan spirit impressed on this great mass a dislike of amusement, and a devotion to solid serious occupation (that is, to *business*) which has been a vast obstacle to music, and is still largely prevalent, and it not only destroyed the national music, but it brought the foreigner upon us. After the Restoration, and the Revolution of 1688, when society became again settled, the rich people wanted to have an opera as it existed in France. That was about 1715; "Mr. Handel" happened to be in England; 50.000*l.* was subscribed; Handel went over to Italy, and brought back a company of Italians, and Italian music has been on the shoulders of English music ever since, until quite lately. The result of this has been injurious to music in many ways which there is no time to go into here.

21,579. Is it not a fact that at that time when music was so flourishing in England it was learned music?—No more learned music than Gothic architecture was learned architecture. It was the music of the time. It was the only music that then existed.

21,580. Is it not a fact that at that golden period of English music musicians were learned men, I mean learned in their subject?—Everybody was.

21,581. And with the learning of the science of music there went also the execution and general power of the music?—Yes.

21,582. So that it is of importance, is it not, that music should rest upon learning?—Yes, it does rest upon learning. You cannot make music without knowing the rules any more than you can write good poetry without studying grammar and metre.

21,583. Then to encourage that rather elaborate learning would be a benefit to music?—The form of things has changed very much, and, I suppose, it is not only so in music, but other branches. Surely the mode of learning medicine, for instance, has changed very much, and has lost a great deal of the unnecessary learning that was attached to it.

21,584. I speak in the presence of greater authorities on the subject of medicine, but I think they would tell you that a great deal has been added?—You mean that a great deal of technical learning that was attached to studies three or four centuries ago has given place to a practical knowledge?

21,585. They insist very strongly on the necessity of strictly scientific medicine. I suppose you would be prepared to say that there was such a thing as strictly scientific music, and that strictly scientific music was better than unscientific music?—Of course you must do that, and if I could show you what the classes at the Royal College are, you would find that they are absolutely scientific.

21,586. You are in favour, in fact, of a scientific treatment of music?—Of course, it must be so.

21,587. Should you say that it admits of scientific treatment?—Yes.

21,588. Would the connexion of music with the Universities tend to promote that element?—Yes.

21,589. So that on those grounds you would desire to have music recognised and brought into connexion with a system of University teaching?—Yes, it is as great an art as any others. You mentioned a comparison between England and Germany, and with regard to that subject I may say this. At the time rich Englishmen were spending their money on fox hounds, cock fighting, and sporting, the nobility in Germany maintained orchestras and had men like Haydn and Mozart in their houses as their regular servants. That is one reason why practical music has flourished so much more in Germany than it is here.

21,590. Your institution combines the two functions of giving education in music, and certifying results, does it not; you give education in music, and you give certificates of the students having attained proficiency?—Yes.

21,591. In both respects I suppose you would think it proper that your college should enter into and form part of the University?—Yes.

21,592. That your teaching should be recognised by the University?—Certainly.

21,593. And you are also of opinion, I suppose, that you who have this experience in the matter of teaching and this staff of professors would be the best advisers on the subject of musical degrees?—Certainly.

21,594. And you would be prepared and desire to enter into that sort of arrangement?—That I cannot tell you. That is a matter which my Council only can decide.

21,595. Have you not come here rather with that object in view?—No, I am not empowered to answer a question of that sort. Lord Charles Bruce is a member of the Council. (*Lord Charles Bruce.*) As I pointed out to the Chairman just now, our desire in being heard by your Commission was, that you should be informed of what is being done by the Royal College of Music.

21,596. And you do not go further than that?—At the present moment we do not go any further.

21,597. May I ask you as a matter of personal opinion, whether your view would be in favour of uniting with the University?—I am afraid I cannot answer that question without knowing the conditions under which we might be invited, if we were invited, to do so, whether by affiliation, or incorporation.

21,598. Suppose that without being in any way superseded, but retaining your own independence and autonomy, your professors were made professors of the University, their teaching recognised as teaching by the University, and if other institutions were represented as such, then your institution also should be represented as such on the governing body?—If I may answer that perhaps not quite directly, and as merely expressing my private opinion, I think that, should the result of your Commission be the establishment of a teaching University for London on thoroughly sound principles, it would be of advantage to music that the College should be represented at, or connected in some way or other with, the University. In saying this I am not committing myself to anything as to the opinion of my colleagues, because we have really not gone into the question.

21,599. (*Mr. Palmer to Sir George Grove.*) We might say that "practice with science" would be the motto that might be adopted by the Royal College as well as by some other institutions?—Yes.

21,600. What you have done yourself as yet has been to give diplomas in the way of certificates of proficiency in musical science?—Yes, in music, practical and scientific.

21,601. I did not wish to be exact upon that, but it has been for proficiency in your particular art?—Yes.

21,602. And as you have said, the art is a very exact one. The training is exacting, and in the tests which you have applied of that study you have not

Lord C. Bruce and Sir G. Grove, D.C.L.,LL.D.

9 Feb. 1893.

directly given general culture in other subjects besides music; it has not been part of your training?—We have not given it to any great extent. We have given a certain amount of culture to such of our scholars as needed it, but it has been entirely subordinate to the musical part.

21,603. In fact there is necessarily a great deal in the study and in testing the students in proficiency in your art?—You mean that a boy has to be brought up to the piano and cannot be brought up to the piano and the violin too?

21,604. No, I mean that he is doing music and nothing else, as a rule?—If he is going in for it as a professional musician.

21,605. The end of the business of the Royal College is music?—Yes.

21,606. Speaking from a University point of view in the other Faculties, Medicine, Law, Arts, and Science, the degree of the University generally connotes general culture as well as particular proficiency?—Yes.

21,607. I am only putting it to you in this way, that is in the same way as an engineer, for instance, would say: "I must have a degree in engineering or it will be no good to me." Supposing you did not have a separate Faculty for music, and that you had a special avenue in musical teaching which would lead up to a diploma under the Faculty of Arts, as if music or fine arts were a department of a general Faculty of Arts, would you not be able to pursue your study with greater exactitude than if you had to comply with conditions of general culture in addition to proficiency in your art?—Do you mean to institute a comparison between music and engineering, for instance?

21,608. I might take this for example. I think Sir Thomas Gresham makes rhetoric a Faculty as well as music. Assuming you were discussing rhetoric it would be impossible to give a degree of rhetoric alone in a University without considering general culture; but you might make a special avenue for rhetoric to be considered as part of the Faculty of Arts, so that you might ask for it to be considered as a department of the Faculty of Arts?—You do not propose that students of music should take up rhetoric as well?

21,609. No. You do not attach very much value to a degree when the degree in a University connotes things with which you have no concern?—I do not quite understand.

21,610. Why not leave the degree alone and be content with the diploma under the degree in Arts?—I am not a University man myself, and I do not quite grasp the difference between a diploma and a degree.

21,611. It is this. What are called degrees are supposed to indicate general culture as well as particular proficiency. A doctor and a lawyer must have passed examinations in scholarship and what is called general culture. When one deals with specific avenues like engineering in Science, it seems to me to apply somewhat to music in Arts. An engineer wants to have science taught entirely with a view to engineering. His mathematics must be taught entirely with a view to engineering, and if he can get a diploma which his college, through the University, can govern, and can test, he would prefer that to having a degree in which the student would be obliged to be examined in things with which he has really no concern. Would not your purpose be better met by a diploma, we will say of music pure and simple, than by a degree which would, for University purposes, have to connote a great many things with which you have nothing to do?—I should think that practically it would come to this: that the individual would not have time or opportunity to go into these other things. At a later period of his life he might find time, but I do not think that he ought to be obliged to do it. Music is such an absorbing thing, and it seems to me quite different from any other studies that I have been accustomed to. I was bred an engineer myself, and I know something about that. I know I always found time after my engineering to do other things as well, including my music; but I was not pursuing them in a professional way at all. I do not quite see how to answer the question in any way.

21,612. Do you see any advantage in a University degree particularly?—Do you mean to a practical musician, a struggling musician?

21,613. Yes, that the University degree should be given instead of the present diploma of the Royal College?—It would give more letters after one's name, which would add to one's consequence, and perhaps increase one's income—which is the sole object of very many people.

21,614. My difficulty is this. The University would be bound to limit its Faculties in which it gives its degrees, to a certain number; one cannot multiply those indefinitely. Would it not meet your case if music were studied in connexion with the University?—It would be a question, would a man have time to do it. His music would cease to become the one main absorbing occupation. Music seems to be more absorbing than any other pursuit; it is more so than painting, though painting, perhaps, is nearest to it; it is more so than poetry, because poetry is so intimately connected with literature. The idea of musical students being obliged to go in for other subjects rather frightens me. If a man has the opportunity for it, let him do it; but in most cases it would be impossible when there was much ability for music.

21,615. At anyrate you would like to have a free right to obtain the University degree?—Certainly.

21,616. (*To Lord Charles Bruce.*) Referring to the powers of the Council under clause 4 it occurs to me that the words seem to refer to the Royal College of Music combining with some other, and not so much the combination with a University; but if one looks at clause 5, at the end of that clause there are very general words in which the college is directly empowered; it says "and in other matter in relation to "the promotion of music in connexion with Govern- "ment aid which may be thought expedient." You are in possession of Government aid, I think, now—500*l.* a year?—Yes. Last year we received that for the first time.

21,617. And if the University had a Parliamentary grant you would both be connected with the Government in that way?—Yes. On reading that clause you will see that we are empowered to enter into any engagement with the Government should they think fit to entrust to us the inspection of elementary or other Government schools.

21,618. It appears to me that those clauses taken together would enable the Corporation to combine with any other body of the same kind or with Government, but it did not contemplate a University?—Quite so.

21,619. (*Mr. Anstie.*) You might enlarge your powers if necessary of course?—Yes, under the Charter which provides that any alterations in it, after having been passed by the Corporation, must be sanctioned by the President and approved by the Sovereign.

21,620. Or you might get a new charter if necessary or desirable?—Yes.

21,621. (*Sir William Savory to Sir George Grove.*) I think I understood you to say that music was the most absorbing of pursuits?—So far as I know.

21,622. Do you think that music makes a larger demand upon the faculties of a man than any other study?—It makes a larger demand upon his nerves; whether it does upon his faculties is another question.

21,623. Do you include the brain in that?—I do not think it makes a larger demand upon the brain than poetry or painting, but I think it affects the nerves more.

21,624. Do you think as a means of education or a means for evolving the faculties of a man it is superior to every other subject?—I do not know; I cannot answer that question.

21,625. Do you think that general culture bears any relation to music. Given two persons of equal musical talent, would the man of general culture have an advantage over the other?—I do not know that he would be in a better position as far as regards inventing melodies, but I think he would have a great advantage in having a greater knowledge in literature.

21,626. But as far as music itself is concerned?—No, certainly not. Take the case of Beethoven. No amount of general education would have made him a greater musician than he was.

21,627. (*Sir George Humphry.*) Music is more absorbing because it gives more enjoyment than any other Art. Is that so?—Possibly; but I cannot understand why. I am a great lover of music, and I am a great lover of poetry, but I confess that music gives me a keener, a more nervous enjoyment than poetry does. I am often accustomed to say that I know no passages in poetry which give you the sort of feeling that Beethoven's symphonies do, which lift you out of yourself and throw you into another state of existence almost.

21,628. Apart from this question there is another one of general education which Mr. Palmer has been putting to you. Supposing the degree to be given by the University you would not object that a good general education should be required of the student before he entered upon the special musical studies?—I should like to know how far it would interfere with his time his musical instruction.

21,629. I do not mean necessarily that he should pursue at the University the study of Arts or take a degree in Arts, but before he commenced the University work he might be required to show a certain good knowledge of general education or school training?—The things are so very different. Taking Eton and Harrow as experiences for "general education" and "school training," I cannot fancy an Eton boy or a Harrow boy becoming a really good musician.

21,630. You would rather take the view which has been put before us by an eminent man, that no preliminary examination whatever should be required, but that you should let them come and if they have the faculty for music let them follow it?—Yes, whatever they are going to give them afterwards. That is what we do at the college.

21,631. A preliminary examination might on the whole be a bar to certain very excellent scholars in music entering upon the theory of music?—Certainly.

21,632. That is the difficult question in connexion with the University degrees, whether there should be the requirement of a certain amount of general education or not?—If that requirement of general education is going to interfere with their musical training it certainly ought not to be required.

21,633. You have said that you have examinations at the end of each term by the teachers.—Yes.

21,634. That is by the teachers exclusively?—By the professors. There are nine who stand at the head of our teaching staff, and who are called professors, and are united under the Charter in a board.

21,635. And subsequently at the end of the year there is an examination by outside examiners?—Yes, concurrently.

21,636. Are those exclusively outside examiners?—Perhaps I am a little wrong in that. What the outside examiners do is this: they come and watch our terminal examinations and make up their minds.

21,637. They do not conduct it but watch it?—Yes. Of course an examiner is always at liberty to say "I should like to hear that again," and so on.

21,638. So that the examinations are always conducted by the teachers, but the final examinations watched by external examiners?—Yes.

21,639 Then with regard to the outsiders who come in and compete for your certificates, do you find that they are at a disadvantage as compared with those who have been trained at your college?—Decidedly. They are often ignorant and inefficient.

21,640. You give them the same examinations?—Yes, exactly the same.

21,641. You expect them to come up to the same standard?—Yes.

21,642. And if they do not come up to the same standard they just take the disadvantages?—Yes.

21,643. Do you think that your examination of outsiders has exercised a good influence upon musical teaching in the country?—I think so. I should say that there are signs that musical education has improved lately within the last two or three years.

21,644. Therefore you would be unwilling to give up that part of your work?—Very much so.

21,645. The University of London does examine outsiders?—Yes; but there is this very great distinction, that the University of London does not examine in practical music.

21,646. But on the whole you think that your examination of outsiders has a good effect on the country, and you would not wish to relinquish it?—I have no doubt of it.

21,647. You have spoken of the education being practical and theoretical, the two combined?—Yes.

21,648. I believe there is a further very important element in music, what they call the sentimental or the feeling part?—Yes; that comes afterwards.

21,649. Do you give any part to that in your college?—A pupil cannot be taught by the master without the master impressing his own sentiment and his own feeling upon him, but there is no formal teaching of that sort. All that can be taught at college during the three or four years possible is technical and formal; the rest must come afterwards.

21,650. It is said that that kind of teaching can be given only from individual to individual?—See what difference there is between lecturers: one lecturer will not interest his audience at all, and another one will, because he throws a personal element into it.

21,651. And that throwing of feeling into music can only be given from individual to individual, it cannot be given in classes?—It must come from inside. It may be invoked, and it may be led; but it must come from inside.

21,652. And must come from individual to individual, and not in classes?—I do not say that. It would be possible to lecture to a class with quite as great force as to an individual.

21,653. And cultivate that particular quality of sentiment as well?—Yes.

21,654. The general notion one gleans from the interesting account you gave would be that the English are not a less musical nation than other nations?—No, they are not a less musical nation, but they are more devoted to other things. Business, politics, religion, sport, society, all come before music. Take an instance: say there is a very interesting night coming off at the Philharmonic or the Monday Popular Concerts, and a man's wife says, "Will you not go to the "concert, such-and-such a thing is going to be played, "or so-and-so is going to sing"? "Oh, but," he says, "I have asked so-and-so to dinner; I have that "contract to settle with him; I cannot go; it is "perfectly impossible."

21,655. You mean there are so many other absorbing subjects?—Yes. In stumping through the country as I did for this college 11 years ago, people heard me very respectfully, certainly, but if there was any reference to the business of the place or to the commercial success of the town it was another matter, the house came down directly.

21,656. Irrespectively of that absorbing topic are the English inherently, by nature, as children, less musical than other nations?—No, hardly.

21,657. Have you observed any difference between town children and country children in musical capacity?—Well that depends upon the district, the Welsh are very much ahead of English people, and then come the Lancashire people, and the Yorkshire ones.

21,658. Why is that?—I do not know. A little infusion of Jew or even negro blood is an advantage.

Lord C. Bruce and Sir G. Grove, D.C.L.,LL.D.

9 Feb. 1893.

21,659. The Incorporated Society of Musicians is a very considerable body, is it not?—Yes, and one that is coming very much to the front.

21,660. They examine a large number of students?—Yes, but I fear they seem to pass a very large proportion.

21,661. I suppose a great many commencing institutions find it necessary to pass a large number?—That depends on the way you look at it in. We have not.

21,662. You started with a good income. They examine something like 3,000 a year. As they go on and numbers increase perhaps they will be a little more strict?—I hope so. If you look at the number passed by the Associated Board you will find we do not pass anything like so large a proportion. Our object is to pluck, not to pass.

21,663. You have no relation whatever with the Incorporated Society of Musicians, have you?—No, none whatever.

21,664. It is quite an independent affair?—Yes; it began in Manchester.

21,665. I forgot whether it is chartered?—I am not sure, I think so.

21,666. So that their certificate has some value?—Yes. It might give a musical value as well as a commercial one.

21,667. (*Mr. Anstie.*) Is not the development of the teaching of music a good deal analogous that of literature. In literature you have to study the laws of languages, and the history of languages, and you have also to endeavour to acquire, if you can, that which Sir George Humphry has described as the sentiment and the feeling of literature; so I understand you to say you have your technique and scientific system, and also your feeling?—Yes, but the two are very different, because poetry and literature are couched in the language which we speak, and therefore are familiar to all. Music is quite different. You cannot translate music into language. You may say that the composer may have had this or that image or event before him, but you cannot be sure of it.

21,668. There is just the same sort of difficulty, is there not, in literature in inspiring a pupil with what one understands by "feeling," one pupil will learn words and another pupil will learn eloquence?—Yes, to a certain extent, but it is very difficult to explain about music. If you knew it you would see that it was very different; you would see that literature is not an analogous thing, it wants a something to make a perfect analogy.

The witnesses withdrew.

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq.

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq., examined.

21,669. (*Chairman to Dr. Mackenzie.*) You have been kind enough to come here on behalf of the Royal Academy of Music. In the first place I will ask you shortly to give us an account of your institution and an account of what work it is doing now?—You have a condensed account of it in the paper which has been laid before the members of this Commission. I can only add that we have been in operation exactly 70 years.

21,670. You began in 1823?—Yes. The Charter was granted in 1830, but the institution was founded in 1822. It did not begin its operations until 1823. There was a period when the arrangements were not complete, and the real public opening was delayed I believe for a time. It opened on a very small scale. The original number of students was about 12 or 15 and in those days the students were resident—living in the house—both male and female.

21,671. What house do you allude to?—We are still in the same house now, No. 4 Tenterden Street, a house which belongs to the Carnarvon family. Since then we have added to it bit by bit on both sides. We have had to add to it as we required. I may say that at this particular juncture it is inadequate to our needs and wants. In fact we are making every endeavour to have it enlarged.

21,672. You are still increasing every year?—Yes. I have given the numbers for five years only. Five years ago there were 397 pupils; and this year there are 510. That is the number just at the moment, but at the end of the academic year, in July, the number of students is very much larger because the number of entries or admissions increases as the year goes on. I should think that in July we should have 540 or 560 perhaps; it is always larger at the end of the season. But in no former year, at the corresponding period, have we had so many students as at present.

21,673. Could you tell us something about your classes, and what they lead up to in the way of examinations, and in the way of certificates?—The school was originally founded for the tuition of professional pupils, but I fancy that as it has gone on that rule has not been religiously and rigorously adhered to, because the desire on the part of the public for a general education, and the desire on the part of amateurs to learn in Arts has led to their attending art schools of late; so there is a distinct sign that the public wish to be trained thoroughly, as well as professional students; and I daresay the increase is due to the fact that a large proportion of amateurs now study as earnestly as the professional students. I have no doubt that that is one reason for the increase. Our classes comprise every branch which is necessary for the professional musician to undertake. They enter for a principal study, which is one of their own choice, the pianoforte if they like; but they are all compelled to learn harmony so far as they can go in the time, whether the period of their stay in the Academy is a year or three years. When I say "three years" I do not mean that that is the limit, because many students stay with us as many as six, seven, or eight years. I have latterly been compelled to inform students that it was time they went away, because they would still hang on. They like the place so much, and they get accustomed to the nice little University to run in and out of, so they do not go away, and we have to give them a gentle hint. We do not consider that anybody is worthy to be called a pupil of the school unless they have been there three years.

21,674. Are they examined often?—Yes.

21,675. And they get the certificate?—Yes, which is given by me.

21,676. And do they become associates?—No, not necessarily. They may get a certificate or not for teaching purposes; and if they are further advanced that is to say, if they are really good performers and very proficient, they get a certificate entitling them to play in public. Those are the two certificates I am entitled to give. The Associateship is given upon my recommendation to the committee of management, and the committee of management recommends the students to the directors.

21,677. You have no power to give degrees, I think?—No, we have no power to give degrees.

21,678. In fact, you do very much the same work as the Royal College?—Exactly.

21,679. We heard this morning an account of the abortive negotiations between the Royal Academy and the Royal College at the beginning in the hope of an amalgamation which failed; but I understand that now you are on very friendly terms with the Royal College?—Yes, we understand clearly that we are working for the same object.

21,680. And you have a conjoint board for examination?—Yes, that was the only possible manner in which we could join, according to our different charters. Of course, the proposal took place at a time when neither I nor my friend, Mr. Threlfall, were connected with the Academy, and I daresay that the necessity

for another school arose from the fact that, perhaps, the Academy had not kept up with the times, and had allowed itself to become a little sleepy, and many young men going to Germany, found it would be a good thing to introduce a little competition, and I believe it has done both institutions a great deal of good. We work independently in one sense, but the curriculum is precisely the same in every way, and if there is anything which is good for the general interests of musical education we generally consult together, and, if possible, strike out together.

21,681. Is there any chance of your being amalgamated?—That is a question.

21,682. They are a great deal richer than you?—Yes, we have very little, although we are now laying by money to improve the institution. You see we have no house even. We have to pay a large rent of 1,040*l.* a year.

21,683. It is wonderful that you hold your own?—(*Mr. Threlfall.*) We do.

21,684. (*To Dr. Mackenzie.*) Is there any other body of the same kind with whom you have harmonious relations. Have you any connexion with Trinity College?—No, we have nothing whatever to do with anybody.

21,685. There seem to be very few bodies of any real standing?—We have no relations whatever with Trinity College, but so far as I understand, that institution at first was chiefly an examining one, which, of course, is not our main object. The examinations at the Academy have been a second thought.

21,686. You are chiefly practical?—Yes.

21,687. I supppose for your certificate the pupils have to know the theoretical part and be well grounded?—Yes.

21,688. And also they have to be good performers on some one instrument?—Yes, it may be singing, or it may be violin or piano, as the case may be.

21,689. You do not require any general knowledge for your certificate at all?—No, not for the ordinary certificate: for scholarships and prizes we do. In the list of professors here you will find a Director of Literary Examinations, who is Dr. Dulcken, a well-known literary man in respect to examinations, who sets papers in French and German and English literature.

21,690. You require a certain amount of proficiency?—Yes; and certain University passes of course allow the intending students to dispense with it.

21,691. Do you think general culture makes a man a better musician?—Distinctly.

21,692. I suppose you are interested in the subject of a teaching University for London?—Yes.

21,693. As connected with music particularly?—Yes.

21,694. I suppose like other Universities you think it ought to have a Faculty of Music?—I think so.

21,695. And to give a degree?—Yes.

21,696. In the case of most degrees in other Universities the work is entirely theoretical?—Entirely.

21,697. Do you think that is advisable or do you think the examination might be made such as to require practical knowledge as well as theoretical?—I believe that hitherto no University has teaching upon the practical side at all. I suppose I am justified in saying that I received yesterday only, unexpectedly, a draft Ordinance of the Edinburgh University which is now starting. For the first time Edinburgh University will give degrees as soon as the Royal Assent has been given to the new Ordinance, and I suppose there is no doubt that is going to be done. I see there that the Musical Bachelor and also the Doctor of Music will be compelled to undergo an examination on some instrument. That is the first case I have yet heard of. I was rather surprised, and I have hardly taken it in, but I saw that as being quite a step in a new direction. I think that some such test is really necessary. The present examinations are entirely based on the scientific side of music, and really give no clue to what a man's innate talent is. It is a mere question of musical mathematics, if I may put it so, but the tendency lately has been to find some such test. At Cambridge, for instance, I have been an examiner for three years and am still this year; we instituted a test which was then new and not altogether thought quite a wise one, but it assisted the examiners amazingly. That was, to make the candidates compose a piece of music in a short time there and then to some poetry, and as a rule we find that the mere sight of that paper gives us a shorter insight into what the man is made of than all the other work. Still we are not entitled to make it absolutely a final test; we are obliged to keep to the paper work.

21,698. Do you think it might be advisable to make it absolutely the final test?—I do indeed.

21,699. Can you tell us how music differs from other arts, painting and things of that kind, in requiring a Faculty in itself?—Personally I do not hold the opinion that it does absolutely require a Faculty to grant the degrees. It has been the custom in England from time immemorial or at all events very far back, that degrees in music are granted, but England is the only country in which degrees in music are granted.

21,700. Are they not granted in Germany at all? No, the German doctors, men like Schumann and others who have received degrees, did not get their degrees for music at all; they were literary degrees, or honorary degrees; it is a mere compliment; there is no degree in music. Many of us do not see the necessity of the thing, but it exists, and I am afraid it will never be rubbed out probably. It is considered absolutely necessary for a cathedral organist to have a degree.

21,701. And it is advisable to make it valuable?—Yes. The tendency is to make it more difficult. At one time there were professors in all the Universities who were inclined to let things slip through easily, and then again others have been unnecessarily severe; and people have made up for it on the wrong side; and so it may always be. But none of the Universities seem to have a standard; they all differ.

21,702. Which would you say is the most valuable to a musical man. What would you think most of a man having got?—From personal liking, I should say that perhaps the Cambridge degree was the degree which I should prefer, because as I say there is a certain amount of practical knowledge, in so far as a man must write a certain amount of original music, and show what he has in him; and the examination is a very severe one. Then the London degree has always been considered a very difficult one to get, particularly in acoustics and those things which of course belong to the science of music in a way, but which are not absolutely necessary in any way. A man may be a perfect musician and a great composer, but know absolutely nothing of acoustics. It is well that he should, but he does not absolutely need it.

21,703. Is that the case at London University?—I believe that has been one of the chief points upon which stress was laid.

21,704. (*Mr. Anstie.*) Original composition is required also in the London University?—Yes, what is called an exercise; but that of course is prepared before. When I spoke of original composition in connexion with the Cambridge degree I meant original composition without any warning and there and then.

21,705. (*Chairman.*) Impromptu?—Yes. A certain slip of paper is put before a candidate and he has about two hours to work. Of course it is only with piano, it is not necessarily scored. That would not be fair. But it brings out the musical talent of the man particularly. I have always been of opinion that some practical test ought to be applied as well as the mere exercises.

2,1706. If a teaching University was established with a Faculty of Music and taught music theoretically as well as practically it would be doing very much

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq.

9 Feb. 1893.

what you do?—Teach it practically, yes; but how could a University teach, say the violin?

21,707. It must always lean more to the theoretical side?—Always.

21,708. It would not occupy the same ground that you occupy and that the Royal College occupies?—It could not possibly do it. It would not be possible for any University without adding to it a technical school, if I may so put it.

21,709. Would it teach anything that you do not teach?—I do not think so.

21,710. Would you teach all that it would teach and more besides?—Yes.

21,711. Would there be room for it in London besides your work?—I do not think so, not for a technical school.

21,712. I mean would there be room for University teaching of music with professors of music. A teaching University would have music for one of its Faculties. Would there be room for that Faculty besides you?—Yes, confined to its scientific side distinctly.

21,713. Do you think if that was established, you, or you and the Royal College between you, could be joined to the University in any way, or could be represented on the Faculty, or could with advantage take any part in the University?—Of course I cannot speak for my colleagues, nor have I considered the point very much, but I should think the Academy would consider such a proposal favourably. I hope it would. It could only be a service to the University as having taken a technical side which no University could possibly cover.

21,714. At all events, they might act in harmony?—Yes. I am quite sure that we should be in favour of that on the mere ground of general culture. The lectures are always interesting to the students, and indeed they are a very good thing, but I do not think any University could undertake to teach music as we understand it.

21,715. It must always be theoretical with just enough of the practical to test the theoretical?—Yes. I do not think it is even possible to teach harmony, or counterpoint, or orchestration, or anything, by a mere course of lectures. It is interesting, and it helps it on, but the tuition must be to a great extent conducted by teachers as well as in other branches of the University. A mere course of lectures cannot possibly do it. The exercises have to be corrected and things have to be repeated over and over again. It is a very laborious business. No University lecturer could afford the time.

21,716. Could the University be of any use to you or would it be of any advantage to you if any of your professors were made University professors?—Yes, I think lectures on musical history would be things which would assist us very much, and many points connected with the science of music might be at least helped on. May I ask what you mean by professors? You have mentioned the word "professor" twice.

21,717. One of the many plans of founding a teaching University is that the connexion between the University and the different colleges and institutions in London should be not immediate but by means of their teachers being appointed University professors, which would make a link between them and would give these different institutions representation in the University as belonging to the Faculties and electing Boards of Studies which would assist in determining the examinations?—Yes, I think that would clearly be advisable.

21,718. On that one Faculty of Music it would be a help to you to have that sort of connexion?—Yes.

21,719. And it would help the University too?—Yes, I think so. I should think the advantage would be even greater to the University perhaps than to us. I mean the actual practical advantage.

21,720. Another idea would be like that of the Gresham Charter that the University should consist of a grouping together of different existing colleges, some for all the Faculties and some, like the medical colleges, only for one Faculty. Supposing that this plan was adopted do you think you could be affiliated to the University with regard to merely the Faculty of Music?—I should think the Faculty of Music should be kept separate and not stand together with any other.

21,721. If you were affiliated to it with regard to the one Faculty of Music, would that be of any use to you?—Yes, it would be of great general use to the science of music as placing it in a more prominent and serious position. I, personally, have been lately saying a great deal about the necessity for general culture amongst our modern musicians, the students particularly, for many reasons which I need hardly go into at present; in fact it has been a subject which has given me a deal of thought and I am quite sure that any such affiliation would assist the very views I am dealing with.

21,722. And your teaching, in conjunction with other teaching and general culture, and possibly a little more theoretical teaching, would lead perhaps to one of the degrees of the new University?—Yes.

21,723. It would be an advantage to your students to take a degree?—Yes.

21,724. Do many of them go to the present University of London for degrees now?—No, not London; some of them go to Oxford and some of them go to Cambridge.

21,725. But not many to London?—No, and I may say that up to this present moment the number who go for a University degree at all are in a minority. Every year there are two or three cases, but not more.

21,726. Does it help a man in the profession to be a Musical Doctor?—Yes, it evidently does; there is no doubt about that, I suppose it is the same in the Royal College. A great many of our professional pupils are people who are not too well off; they cannot either afford the time or the money to go very deeply into the matter. Some of them become orchestral players, and think they gain quite enough knowledge if they can play well on their instruments and all that sort of thing, which of course is a mistake. But we must deal with them according to their means.

21,727. I suppose almost all your students and all the people who get your certificates have to reside in London during the period of these three years?—Not necessarily. They come up from all parts of the country every week. Some come 60, 70, or 100 miles two or three times a week. (*Mr. Threlfall.*) That is the exception, of course. The majority of the students live in London; but we do not compel them in any way.

21,728. (*To Dr. Mackenzie.*) But you are practically a London college more than anything else?—Yes.

21,729. I suppose pupils might come to King's College or University College and go up and down by train?—Our curriculum is a very comprehensive one for the practical musician. In the first place, they have to get two lessons a week in their principal studies, let us say the violin; then they are bound to take the pianoforte. Every musician must learn the pianoforte. Then they are compelled to learn harmony, the theory of music. These are all compulsory attendances. Then they have to attend sight singing, which really means sight reading, teaching them to read quickly at sight, singing new music. Then there are the orchestral practices. We have a great deal of new music two days in each week, and it is better for the students if they can attend these rehearsals because that is the atmosphere of the school and the very thing you cannot get in private tuition; consequently the student is always better if he lives in town. We try to compress these things into as few days in the week as possible, but when we come to leave time for practice the students have really a great deal to do if they want to get through the curriculum, which is really a very heavy one.

21,730. That would entail living in or near London?—Yes.

21,731. Do you, like the Royal College of Music, give certificates to students who have not been through your course, or do you confine it to those who have been through your course?—Only in one case, and that is the metropolitan examination which takes place once a year, in January. These are certificates which are granted to intending teachers or performers. It has been going on for some 10 years. I may say that it is a certificate which is sought after by teachers and governesses, and it is a very severe examination. The only people who are allowed to use the initials of the Licentiate of the Royal Academy appended to their names, are these. This year we examined 243, and out of that number 69 passed. Ten years ago we examined only 52, and out of those 21 passed.

21,732. These are the metropolitan examinations?—Yes.

21,733. They are allowed to have these letters after their names?—Yes.

21,734. And they are the only ones?—Yes.

21,735. Therefore that is your principal examination?—Not for students. No student is allowed to go up for it.

21,736. Not till he has done his course?—The moment he is out of the Academy he may.

21,737. What is the final examination of the students? Does that give him another certificate?—Another certificate altogether, but not so valuable. This is the more valuable.

21,738. To which all comers are practically admitted?—Yes.

21,739. The Royal College have one of the same kind?—They call themselves "Associates."

21,740. It is exactly on the same footing?—Yes.

21,741. So you do admit all comers?—Yes. (*Mr. Threlfall.*) May I point out that this shows we have a high standard. In 10 years we have had 1,457 examined, and only 404 got certificates.

21,742. (*To Dr. Mackenzie.*) The Royal College passed about half that number?—There are the statistics. The College has passed about 48 per cent. and the Academy about 28 per cent. of their respective candidates. I know it is considered a difficult examination to pass, and it seems to me that it is all the more sought after on that account.

21,743. You have more come up for your examination than the other?—I think so.

21,744. It has been represented to us very strongly with regard to other points that, having two or three Universities tends to lower the degree, because they compete against one another for the sake of getting pupils, but in this case it seems to be the other way. The competition seems to show that the hardest degree is the one that attracts most students?—In this case it would seem to be so. I quite agree with the other view, that the more Universities there are giving degrees, the more likely it is that the tendency would be to lower the degree, unless every University would agree to adopt one standard, because at present the standards vary so much that men run away to other Universities and get them more easily.

21,745. But that is not the case with music it seems?—I am speaking of musical degrees in the other Universities.

21,746. It is the other way?—I am speaking of University degrees. I am quite sure that there are more men who go to other Universities than to those which keep up the very highest standard.

21,747. But with regard to you and the Royal College it seems that the great majority come for the most difficult certificates?—Yes, I should say there is very little difference between us and the Royal College.

21,748. Is there any other point upon which you can give us any information which would be useful to us?—In connexion with our own school the only thing I might wish to draw attention to is the Charter, which, of course, is less fully drawn up than the Charter of the Royal College. I may mention this because we happen to be the only two which possess a charter. At that time, 70 years ago, when the Charter was granted, I do not suppose they contemplated all this. It is quite clear to us that the intention of that Charter was to give us the same powers which were detailed more fully, and not so loosely drawn up, a good many years later. Virtually I should say that we possess everything else excepting the right to create a Chair of Music, to give degrees.

21,749. But was it meant to give you that?—That we cannot tell; but that is the only thing which was not distinctly stated. The fact that the directors can make bye-laws seems to cover everything else if we choose to read it in that light, but of course we have not the right to give degrees. There is no doubt that the intention was, originally, to allow us to have the power, but the Charter is very loosely drawn up and the powers are not distinctly defined.

21,750. Would you have power to join yourself to the new teaching University?—Clearly we have power. Under the bye-laws the directors may do anything they like which is for the benefit of music and the school.

21,751 (*Sir George Humphry.*) You think a good general education is very desirable for the students of music?—I do.

21,752. By a good general education you mean an education in school learning?—Yes, and even that is hardly enough for a musician. It depends on the branch he is taking. If he is going to be merely an orchestral player we may dispense with it, but if he has any talent for composition, or lower down in the school, for mere reproduction, whether he be a singer or a performer on an instrument, the more he knows about the art side of everything the better.

21,753. If a University gives a degree in music you think it desirable that the University should require some knowledge of general education as shown by an examination; that there should be some preliminary examination in general knowledge or school knowledge such as the matriculation of the University of London?—Yes.

21,754. Before a man is admitted a student of the University he should pass some good matriculation examination?—I think so.

21,755. Have you an examination of your students every term?—No, we have an annual one. In one respect we have a terminal one—that the professors individually examine their students and send up a report; but the real examination takes place at the end of each year.

21,756. By whom is that conducted?—That is conducted by various boards who examine in various branches.

21,757. Not necessarily the professors themselves?—Not necessarily. There are boards of five or six or seven professors to examine at the end of the year. All the outside examinations, that is to say, for scholarships and prizes, are conducted chiefly by examiners not connected with the Academy.

21,758. That is for persons not connected with the Academy?—Yes; it is a very difficult thing to work. Personally I should like to see all examinations conducted by outsiders. As a matter of fact, it is more difficult than it seems. In the first place it is difficult to get very eminent men to do it, because as a matter of fact, both the Academy and the Royal College have already got the best men we can find in the school; and where are we to find men to put over their heads?

21,759. Do you interchange?—Yes. I personally have examined at the Royal College some years ago on certain branches, and for scholarships we often have Royal College professors.

21,760. With regard to the outsiders, that is to say, those students who are not bound to the Academy, you examine them for your final certificate?—Yes.

21,761. Do you find that they are at a disadvantage as compared with those who have been studying with you?—Our students are of course admissible; they come in after a time, and I should think they are. I should think the number plucked would point to that.

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq.

9 Feb. 1893.

21,762. That is to say, those who have not had the advantage of your education do not stand the test of your examination so well?—That is so.

21,763. Do you think it is advisable that you should continue that examination of those who have studied at your Academy?—I think so.

21,764. Why do you think it advisable that that should be continued?—I think there must be some very high standard of examination for intending teachers. I mean for professors of music, those who are teaching not necessarily in London but in the provinces. There must be some guarantee.

21,765. You think it is desirable that you should admit to your examinations students who have not been educated at your college; that you should not limit it to the students at your college?—We do not allow the students to come up to the metropolitan examination till they are out.

21,766. Still we may regard those as your students?—Yes, after that they may come. We receive them then as strangers.

21,767. But in addition to those who have studied at your Academy, you admit those who have never studied at the Academy at all?—Yes.

21,768. And you think it advisable to continue that system?—Yes.

21,769. What are your reasons for that?—My reasons for that are that it is necessary to have some high-class certificate for teachers, and, indeed, the prominent schools seem to regard this as the principal certificate.

21,770. That is not exactly the point; I am asking whether you think their examining outside students is beneficial on the whole to the knowledge of music and the study of music in the country?—I think so; but we do it chiefly for the reason that we want to keep up this particular certificate as a certificate of thorough efficiency for teachers.

21,771. But I do not see how you do that by examining those who have not been your students?—We only pass those who can satisfy us.

21,772. You make no difference in the examination between those who have studied in the Academy and those who have not?—No, none whatever.

21,773. And if they do not come up to the mark you pluck them, whether they have been your students or not?—Yes. Of course it sets people working; they have the syllabus seven or eight months before, and everybody has an ample opportunity of working up to it.

21,774. You think it does good in the country generally? I am sure of it. As a matter of fact it is looked upon as the best teaching certificate there is.

21,775. So you do a double work, teaching students in your college, and stimulating teachers in the country by virtue of your examinations?—Yes, I think so. I do not know whether it comes within the scope of the present inquiry, but it is our general opinion in the college and the academy that examination has gone to such an extent all over the country, that it is absolutely necessary to regulate it in some way and be very firm and severe about it, because everybody is being examined. There are all sorts of examinations at the lowest rate. Of course the most of them are totally unauthorised or self-authorised, and the thing has become ridiculous.

21,776. You do not think the examination in music tends to repress the love of music, do you?—I do not think that constant examination of small children can possibly do any good. They are just coached up to play a little piece, and get a piece of paper, and it serves no purpose whatever.

21,777. You think there is a danger of over-examination?—Yes, distinctly. It is a perfect mania at present; and what we would like to see is just one or two stiff examinations in various grades; and that ought to suffice. I question whether anybody can stop it unless by Act of Parliament.

21,778. You think the examinations ought not to be too stiff?—No; certain grades for teachers and for pupils.

21,779. Do you think the preparation for stiff examinations a little tends to blunt the desire for music?—I say the tendency to constant examination as it is now leading from one examination to another—all sorts of examinations—blunts the desire for music, and does no good. We do not want to examine everybody—I mean the Associated Board—and the reason we combined was to think this well over. We do not think it is good to examine everybody. For instance, our last thought was to institute a school examination. By that we virtually examine the teachers in the country, so that we get at the kinds of teaching they are giving. We are really not so much examining the pupils as the teachers.

21,780. You do that now?—Yes, and that I am happy to say has been very successful, for we have had a very large increase of schools, who have willingly come under our rules, and we send the very best men we can get to the schools, and thus we get at all the bad teaching that goes on.

21,781. Who pays the examiners?—The school.

21,782. The school willingly pays it?—Yes, the student pays so much. (*Mr. Threlfall.*) The school pays the registration fee of one guinea, and the parents of the children pay, I think, 15*s.* for one subject and 7*s.* 6*d.* for a second subject.

21,783. (*To Mr. Threlfall.*) And they willingly do it?—Yes, and are glad to get the certificate. I might be allowed to mention that cases have come before the Associated Board where the mistress of a school has had perhaps no personal knowledge of music whatever; she has had two teachers in the school, and the pupils of the one have all passed, while the pupils of the other have all been plucked. That is a revelation to the schoolmistress, who before had no means of finding out whether the inefficient teacher was doing well or ill. May I add one word on some of the general points? Your Lordship asked some questions about the Academy, which I could perhaps answer better than Dr. Mackenzie. Dr. Mackenzie would not like to sound his own praises, but I may say that he has performed the duties of his office with wonderful success. I am chairman of the committee of management; my interest is that of an amateur, and I am entirely unprejudiced. Happily we are great friends with our rival the College, and I think I might say, without fear of contradiction, that both at the academy and at the college there is at the present moment to be obtained as perfect a general musical education as can be, or perhaps the most perfect general musical education that can be had in the whole of Europe. I speak only of the college and the academy, and I have not the least doubt that the education is as good as can be desired. Taking it generally, I consider that both at the academy and at the college, a complete musical education is to be obtained, and at an extremely low fee.

21,784. (*Chairman to Mr. Threlfall.*) Therefore London is as well provided in this respect as any other city?—Yes. I believe I am right in saying that some of the advantages could not be obtained on the Continent. It is possible that if Dr. Mackenzie and I had been connected with the academy at the time of the foundation of the college, there might have remained only one institution. We cannot say for certain, but I think, as things have turned out, the rivalry between the two schools has proved of the greatest benefit to the art of music. It is entirely a friendly rivalry, and the one object between the two institutions is to try and beat the other in the advantages gives to the students. In some branches the College may be more successful than the Academy; in others the Academy may be more successful than the College. I think we are the only two schools in the kingdom where a thorough professional musical education can be given. I do not think any of the unchartered bodies would have any right to attempt to say that they can compete on the lines of our work.

21,785. Has Trinity College got a Charter?—No. (*Dr. Mackenzie.*) I should like to say that as a matter of fact the academy gives really far too much

for the means at its command, because the fee that we charge does not in any way really cover expenses. It just meets them.

21,786. Are you in debt?—No; the public subscriptions, and the Government grant and the legacies which we get occasionally, enable us to increase the schoool and lay by money, which, of course, is only used for the advantage of the school. There is no other outlet for it, but certainly the fees which we get are absurdly inadequate to that which we are giving.

21,787. And do the Royal College charge fees too?—They charge a little more than we do. (*Mr. Threlfall.*) They charge 40*l.*; we charge 33 guineas, but we have an entrance fee.

21,788. (*To Dr. Mackenzie.*) They have many more scholarships than you?—Yes; we have 18, they have more.

21,789. Those who hold the scholarships do not pay fees?—No. I am happy to say that as I was coming here an hour ago, I was told that we had just received another scholarship of 100*l.* per annum.

21,790. (*Mr. Palmer.*) What influence would you expect the University to exert upon musical education. Would it multiply your examinations, which you think an evil?—No, not in that sense.

21,791. Have you considered in what way the University examination would affect your students?—I do not think it would affect our students at all.

21,792. It need not necessarily multiply examinations?—No.

21,793. And it would unify the standard?—Yes. The promising students might attend the lectures.

21,794. If several colleges were in the University, that would tend to uniformity in the standard of examination?—Yes.

21,795. It would not increase the number of examinations?—I do not see how it could increase the number of examinations.

21,796. I understood you to say that in no other country were degrees in music given, except in England?—I believe so, that is, excepting the American Universities, away far west.

21,797. Except so far as a degree is desired as a professional mark, you do not attach very great value to a degree in music itself?—Not at all; personally no.

21,798. And if, by arrangement between the colleges and the University, the due encouragement and testing of musical knowledge were assured, and such a diploma as would satisfy the colleges forming the board of study of music in the University, and a diploma were arrived at in that way, you would be satisfied?—Yes, I think so. I think it might, if anything, keep a good many students in London. Those who wished to take degrees might not go to Oxford or Cambridge, or to Durham. They would have it all at home in London, and so far it would be rather a benefit.

21,799. (*Mr. Anstie to Dr. Mackenzie.*) From the answers you gave to Sir George Humphry I gather that the examination of the general public that you refer to at page 11 is an examination of a much higher standard than the examinations held within the academy?—Yes.

21,800. Is there a considerable difference?—Yes, very considerable.

21,801. I gather from your answer that that open examination was of much higher standard than the examination of the old pupils whom you do not allow to go in for this?—Yes, it is a very high examination; but it is chiefly directed to certain branches. For instance, they come to be examined, in pianoforte playing or singing, and nothing else.

21,802. Not a theoretical examination at all?—No, there is none. That is a branch. Those who come in for theory undergo the same examination. They undergo the examination solely for theory. Some come for pianoforte and singing, but it is not a general musical examination.

21,803. It is a specialised examination; each branch of it goes much higher than the collegiate examination to which you subject your own pupils?—Yes; which is more a general examination. For instance, I should never dream of giving the certificate to a student leaving the academy, play he or she ever so well on the piano (though perhaps he or she might be capable of passing this other examination), if he or she were deficient in harmony and did not know sufficient about the ordinary musicianship which the student ought to have. So it is more a general examination.

21,804. Broader, but at a lower range?—Yes.

21,805. This more open examination is mainly for teachers, is it?—Yes, chiefly. Some come in and want to be certified as performers, but I should say that nearly all are intending or are already active teachers.

21,806. And in giving them a certificate do you specify the branch?—Yes.

21,807. So it is not a general certificate of teaching competency?—No.

21,808. But a certificate of a particular branch of those studies?—Yes, we are very careful to have that thoroughly understood; so it is entirely confined to that which they enter for.

21,809. I suppose you would be of opinion that bodies like your own and the Royal College, which are engaged in teaching, would be really the most competent bodies to give certificates of this kind to the general public?—We think so.

21,810. Having all the experience?—Having all the experience and all the machinery for examinations and for tuition, we consider that we are the people who know most about it. I was going to say something with regard to what you were speaking about. For instance, the difficulty with singers is more apparent than, perhaps, in any other branch. A singer may come up to get this certificate, for instance, and may sing exceedingly well in the sense of artistic singing without any voice whatever, so we had to sub-divide them into teachers and performers, because there are people who really learn to sing; they may lose their voice and that sort of thing. I point that out to show how careful we are to subdivide every branch especially.

21,811. Now, with respect to age. Have you any age limit for the pupils that you admit to the Academy?—No.

21,812. What time do they generally come in?—As a rule at 15, 16, or 17. There are younger pupils but not often.

21,813. You are rather later than the Royal College. Sir George Grove gave us 13?—If there is a talented pupil I would take him in at 13, certainly, but as a rule pupils do not present themselves till they are 15, 16, or 17.

21,814. That is rather earlier than they would usually begin a college course?—Yes, for many reasons. They have to finish their general education before they come into us.

21,815. Do you think that is desirable?—With the class of students and their means. Many of these students have not the time to do both. It is a very severe curriculum, and they cannot do everything.

21,816. You think it would be desirable that they should finish their general education?—Yes.

21,817. And therefore you postpone the age?—Yes. That brings it a little later. Of course, we have classes for French, Italian, German, and Elocution. That belongs to singing chiefly, but for the languages many of them continue in the school after they enter.

21,818. If they come in at that age, say 14, they would have gone through their three years' course at 17. Would you call that a proper age for them to start in their work of teaching?—Yes. As a rule none of those young people leave at that age.

21,819. At what age do they leave?—They stay on till 19 or 20, if they can afford it.

21,820. And would you think that a suitable age, or a convenient age, for them to leave—19?—Of course it is very difficult to give an answer to that

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq.

9 Feb. 1893.

question, because some people are fit to teach music at 17 or 18.

21,821. They would be exceptions rather, I suppose?—Yes, it is quite true; but there are plenty of cases in which students who are gifted and quick teach, and teach very well, when they are very young.

21,822. Could you give any figure as what you consider the normal age for commencing teaching work?—Personally, I think they ought to begin as late as possible.

21,823. You would not object to 19?—No.

21,824. The three years' course in your academy would have been completed at 19 if they enter at 16?—Yes.

21,825. And at 16 they would have been qualified to go through, say, the London matriculation examination?—If they could pass it.

21,826. That is the age?—Yes, but you must recollect that that is only the minimum; that is very little, because it cannot possibly be sufficient; only we say, "You must not expect to do anything under three years."

21,827. In the case of all your pupils they would have had some preliminary teaching?—Yes, we take no beginners. Some of them remain six, seven, and eight years. Up to that point we allow them to stay where we see they are improving, but there comes a time when we say, "You are not doing any good now; you must look after yourself."

21,828. Have your pupils any difficulty in carrying on education in music and education in general culture during the earlier period of their career, and having enough time left to go through a special musical course afterwards?—Yes, I always prefer to have the pupils when they have pretty well finished with their general education; I can do more with them.

21,829. In its University relation a certain amount of general culture would be demanded?—Yes. We do not make any such demand on their entering, but for any scholarship they are obliged to pass a certain examination, and we are always talking to them and telling them what they ought to do. I must say that a great many are sensible enough to see they cannot get on without it, and the majority of them do try to continue other studies at the same time.

21,830. You have not contemplated the great bulk of your students taking degrees?—No.

21,831. But amongst those who are the chosen ones you think they could sufficiently well carry on their musical education and their education in general culture to take a degree which would be fit for a University degree?—Yes, provided they have not to make their living, as many of them have, at the same time. It depends on their position in life. I must say that a great many of the younger students, especially instrumentalists, actually, after they reach a certain standard of efficiency, are obliged to play in theatres and make their living, or at least help. But with regard to others I see no reason why they should not be able to fit themselves to pass that examination at a University, if they work.

12,832. In the event of your entering into and forming part of a University, would you contemplate that your professors should be University professors, and their teaching accepted as teaching recognised by the University in their own subject?—Of course that would mean a selection of professors. We have, for instance, 77 or more professors in the schools.

21,833. I would rather put it that among your professors there should be those who hold the position of University professors, being, I may say, those who would be the most responsible and the most eminent in the body?—Yes, that I quite accept.

21,834. That you quite accept, and that is what you would wish?—Yes.

21,835. Would you also wish that you should be in any way institutionally represented on the governing body of the University, if other institutions were so represented?—Yes; I think that any such movement as a Faculty of Music in London might very well in the general interest be represented by one or two of those connected with the two schools, because it touches us so nearly, and we might be able to give advice. I think it would be, if I may put it so, not quite right if we were not on it.

21,836. You quite agree that a scientific knowledge of music would be an advantage to the progress of music?—Yes, clearly.

21,837. That there is a distinct scientific basis for the art?—Yes, it means everything to the understanding of music.

21,838. (*Lord Reay.*) In the preliminary education of your musical students what are the subjects to which you would give special prominence?—Do you mean University students?

21,839. Yes; candidates for the musical degree?—I should say English Literature, Mathematics, and certainly foreign languages. I was going to consider whether the dead languages were absolutely necessary, and I almost think that Latin is, but I would lay greater stress upon foreign languages. I think it is almost necessary for the musician to know foreign languages.

21,840. You would send them to the modern side of secondary schools?—Yes.

21,841. In the education you give to your students do you make any difference between those who intend to be teachers and those who lay themselves out for a professional career?—No, we practically do not; we have a difficulty in compelling, that is to say in coaxing the professional student who means to become a performer, and this is especially the case with vocalists, to take up the scientific portion of the Art, but by dint of keeping at them we succeed to a great extent. But if they were left alone they would not do so. As a rule people who merely wish to become teachers are much more willing to learn and take all the advantages that we offer, and avail themselves of the offer.

21,842. Then if the University were to appoint professors, the only professors in a musical Faculty a University could appoint would be what you have called the professors on the scientific side, the colleges always retaining the technical part?—That is my view.

21,843. And the degree in music would simply represent the scientific attainments?—Yes.

21,844. And for the technical part your examination would have to be continued?—Yes.

21,845. (*Chairman to Mr. Threlfall.*) Do you wish to add anything more?—I wish to lay stress upon the great advantage which the Associated Board of the Academy and the Royal College might be to the University if the University were to be thinking of taking up examinations on the lines of the Oxford and Cambridge University extension. We have excellent machinery, our standard is an exceedingly good one, and our certificates are of real value, which is more than can be said of those which are distributed at the rate of 90 to 95 per cent.

21,846. Do you work much in London?—In London and all over the country. Our number of centres increases every year. This has been dwelt upon I think by Lord Charles Bruce, so it would be a pity for me to occupy your time. We are associated—I myself am rather closely associated with Lord Charles Bruce in this matter,—and though I have not heard what he said I am quite sure I can corroborate everything he did say as to the advantages of the examinations of the Associated Board and the possibilities which that body gives for an extension of examinations in music generally. The machinery is all ready and has been carefully put together.

21,847. (*Lord Reay.*) Have you never contemplated applying the principle of a conjoint examination to a higher examination?—That is just what I was wanting you to read between the lines. If anything in the nature of affiliation should take place, there you have a body ready made which can examine in music on behalf of the University. (*Dr. Mackenzie.*) When I came to the Academy five years ago we had local examinations of the ordinary sort. I am merely

pointing this out in order to show that it is quite without any ulterior motive of gain, that this matter was started. These examinations were bringing in large sums of money—I should certainly think 800*l.* profit a year—which the Academy could not very well afford to dispense with. But in spite of that I was so displeased with the whole look of everything that I thought it all over; and eventually we threw it all out of the window; and that was the result. We had the courage of our opinions.

A. C. Mackenzie, Esq., Mus. Doc., and Thomas Threlfall, Esq.

9 Feb. 1893.

The witnesses withdrew.

Adjourned to to-morrow morning at 12 o'clock.

Fifty-fourth Day.

Friday, February 10th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.S.C.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Rev. BONAVIA HUNT, Mus. Doc., and EDMUND H. TURPIN, Esq., Mus. Doc., examined.

Rev. B. Hunt, Mus. Doc., and E. H. Turpin, Esq., Mus. Doc.

10 Feb. 1893.

21,848. (*Chairman to Rev. Dr. Hunt.*) You have come before us on behalf of Trinity College. Perhaps you will begin by giving us some account of your institution, when it was started and what work it is doing?—It was started in 1872 as a church musical institution, and gradually expanded its operations until it became a general teaching and examining body in music. In 1875 it obtained a license from the Board of Trade, entitling it to omit the word "limited" from its name, but owing to the pressure of circumstances it acted *ultra vires*, and was advised to dissolve and ask for another constitution and another license. However, the new license on extended lines was opposed, and therefore it was not granted. One thing that we wanted to get rid of was the restriction in the old memorandum and articles of our students to the Church of England. We found it was impossible to keep to that really, and hence we acted *ultra vires*.

21,849. You did not succeed in getting that new license?—No, we did not.

21,850. Are you still confined to the Church of England?—No, we are not; and besides that formerly we were not allowed to admit women students. Now we do.

21,851. Even though you have not had your articles altered?—We dissolved the first company.

21,852. Now you are not a company?—It is in this way. As a college we are constituted by deed in very much the same way as the University College, Dundee, which is now affiliated to the University of St. Andrew's. That may describe very fairly our present position.

21,853. You have no charter?—We have no charter. For the purpose of limiting the liability of those concerned we have a company formed of the principal members, and in the articles of that company there is a non-profit clause, which says that none of the profits of the company shall be appropriated by any individual members.

21,854. (*Mr. Anstie.*) You are registered under the Company's Act?—Yes.

21,855. As the Working Men's College are as a non-profiting body?—Yes.

21,856. (*Chairman.*) Do you teach every kind of music now?—Yes, everything. We have as complete a curriculum as any college in existence.

21,857. Will you give us an account of your governing body and your professors?—We have a Council consisting of 25 members. A large proportion of that Council consists of graduates in music of the British Universities. We have been one of those institutions who have made a strong stand against the introduction of foreign degrees into this country. We have also a fair admixture of Arts men.

21,858. You mean foreign degrees in music?—Yes.

21,859. We were told yesterday that England was the only country which gave them?—When I say foreign degrees perhaps I ought to say Colonial degrees and American degrees. (*Dr. Turpin.*) This is a new and great danger to the musical profession. (*Rev. Dr. Hunt.*) I believe there is a University in Buffalo which gives musical degrees. This admixture of Arts, then, is with us a strong point. We have all along very earnestly contended, and we have been alone amongst all musical institutions in contending, for a basis of general culture for musicians, and for the last 16 or 17 years we have not admitted to our highest students diplomas, that is, a Licentiateship of the college or indeed to the Associatship, anyone who has not been able to pass a fair examination in the subjects of general education, equivalent in our case to the Incorporated Law Society's standard. We thought that was about the right standard for them. We have advocated that very strongly. In 1876, I think the year was, we took part in a memorial, in fact we were the principal promoters of the memorial, to the University of London asking them to establish degrees in music in that University, which they had not done before, although they of course had the power to do so. We did that upon the ground that the general education of musicians was to be encouraged. The test was not required at any other University then excepting that of Dublin, and we wanted to encourage our own students to proceed to musical degrees upon a principle that we ourselves approved and had been advocating alone amongst the musical institutions for some time past.

21,860. Do you examine yourselves, or do you require certificates that the students have passed some other examination in general culture?—We accept equivalents, and the equivalents are as follows. You will find this at page 74 of our calendar:—"The "following examinations are recognised as an equiva-

Rev. B. Hunt, Mus. Doc., and E. H. Turpin, Esq., Mus. Doc.

10 Feb. 1893.

"lent: Matriculation examination at any British "University; Melbourne University Matriculation "examination; Oxford, Cambridge, or Edinburgh "senior or junior local examinations; Aberdeen senior "local, or St. Andrew's LL.A. examination, in which "at least one classical or modern foreign language has "been taken." (That is because that is our minimum.) "The College of Preceptors' Diploma of Associate, "Licentiate, or Fellow, and the first class certificate "of the College of Preceptors pupils' examinations in "which at least one language has been taken; the "preliminary Law or College of Surgeons, exami-"nations; all Arts examinations recognised by the "General Medical Council as qualifying for medical "registration." I may say that some of our students have gone up for the LL.A. examination, and their matriculation and the certificate of Trinity College has been recognised by the St. Andrew's authorities after due examination.

21,861. You give examinations yourselves to those who prefer it?—Yes.

21,862. Do you require mathematics?—Yes, and general subjects, geography and history.

21,863. Just what would be equal to a Little Go at Oxford or Cambridge?—Part I. of the Little Go I should say; the College of Surgeons' examination or that of the Incorporated Law Society. That would be about the nearest equivalent. Our examinations are conducted always by University graduates in Arts, and the presiding examiner at the present time is a double honour man of Oxford in mathematics.

21,864. What do your musical examinations consist of?—They consist of theory and practice. They are divided into two parts, what is called theory and what is called practice, which I think is a very unsatisfactory division, because much of what is called theory is really practical, such as harmony, counterpoint, and the writing of exercises.

21,865. Have they to perform on some instrument or do something practical?—If they want a certificate that they are proficient in any instrument they have that special certificate of proficiency; but it is not necessary in the case of the College diploma that they should have proficiency in any instrument, because the great thing is the knowledge of the science, a working knowledge of the Science of Music.

21,866. You act upon the same principle as most Universities do in giving a degree, confining yourselves to the theoretical part?—Yes.

21,867. How often do your examinations take place?—They take place every half year. Those are what you might call the college examinations; they take place every half year. A person wanting our college diploma must first pass the Matriculation examination. Having passed that, he is at liberty to enter for the Associateship examination, which is about equivalent to the preliminary musical examination, for a degree at a University, say, at Oxford, Cambridge, or Dublin. Then, having passed that, he can on a subsequent examination enter for the Licentiateship of the college, which we consider to be the professional diploma, which we give.

21,868. He is already an Associate?—Yes. He must be already an Associate. Then he passes an examination in some respects equivalent to the degree, but it is not equivalent to the degree in one respect; we do not require the academic exercise, that is, a composition in so many parts.

21,869. That is the highest thing he can take?—He can enter for special distinction in any one branch, say, harmony, or the philosophy of music, or he can take some practical or performing subject, and if he distinguishes himself very highly in either branch he can take the diploma of Fellow. In all these 20 years we have only conferred that diploma on two men; one was upon the special recommendation of the late professor of music at Oxford, Professor Ouseley. The highest regular diploma of the college is Licentiate.

21,870. How long does it take a man to become a Licentiate?—Three or four years.

21,871. How long does it take a man to become an Associate?—About two years' study; one or two years, but generally two years.

21,872. Then in two years, or one and a half years, more he becomes a licentiate?—Yes.

21,873. I suppose a great many are content with the Associateship?—Yes, a large number; in fact a very small proportion take our Licentiateship. Suppose we have 60 candidates for this particular branch. Of those 60 there would be about 45 candidates for Associateship and 15 for Licentiateship; and of the 45, speaking roughly, of that number as candidates for Associateship, I suppose about one half would pass, or, say, 45 per cent.; and then for the Licentiateship about one third at the most would pass.

21,874. One-third of those who go up?—Yes. The standard of marks is this: in each grade harmony is a failing subject; a pupil must get 60 per cent. in that subject, and he must besides get an average of 60 per cent. in the other subjects. He must get 60 per cent. upon the whole to pass, and even if he gets 70 per cent. on the other subjects, if he does not get 60 per cent. in harmony he fails. (*Dr. Turpin.*) I should like to observe that a great many of our own candidates for Licentiateship are already musical graduates of the Universities who come and pass in part. (*For a List of Students of the College who have gained distinctions elsewhere, see Appendix No.* 45.) Their theory is accepted, but they pass in practical subjects such as choir training, and then they receive the diploma of Licentiate.

21,875. (*To the Rev. Dr. Hunt.*) Then they take the degree first?—Some will take the Associateship and then go to the University, pass the degree there, and take up the Licentiateship afterwards.

21,876. Do they take the London degree?—Some of them do. As residence is not required at the Universities, for the degree, or any academical standing whatever, which I greatly deplore, students can go anywhere. It does not matter.

21,877. Where do most of them go?—I think they go mostly to Oxford and Cambridge, because of the names of those Universities; I should think as large a proportion of our students as of those of any other institution have taken degrees, if not more. I think the Registrar of the University of London could speak to our standing there, and also to the places that our students take in the examination. I think more of our students have passed in the first division of their examination than of any other school of music. (*Dr. Turpin.*) That is quite true. I should say it is the habit of musicians to desire to take different diplomas. They are not even content to be Doctors of Music for instance, they like the diplomas of different institutions.

21,878. (*To the Rev. Dr. Hunt.*) And it assists them in their profession?—Yes, it assists them in their profession by giving professional status, no doubt. I have been through the new list of our Licentiates and graduates in music at the British Universities. We have 160 Licentiates, and nearly 70 are graduates. (*Dr. Turpin.*) 21 at Oxford, including one lady, a Bachelor of Music; at Cambridge, 19; Dublin, 11; London, 5; Durham, 2.

21,879. (*To the Rev. Dr. Hunt.*) What sort of proportion of men and women are there among your students?—About two-thirds women and one-third men.

21,880. And they all work together and have to pass exactly the same examination?—Yes.

21,881. They are treated in every way exactly the same?—Yes. They have their separate departments. The common rooms are separate, and all that sort of thing.

21,882. What buildings have you got?—We have at present on lease one of those large mansions in Mandeville Place, close to Manchester Square, No. 13, the corner house. That we have on a 21 years' lease, but we are hoping to build soon.

21,883. Are you pretty well off for funds?—Our gross annual income last year was 11,000*l.*

21,884. Is it chiefly voluntary subscriptions?—No, we have some voluntary subscriptions. Part of this income, a very small portion, 2,000*l.*, arises from students' fees, and then the examining fees are 8,000*l.* Then we have subscriptions and donations, 300*l.* Dividends on Consols, and things of that kind, yielding about 150*l.* Then we let out the lecture-room occasionally for meetings to societies like the Philharmonic Society.

21,885. The subscriptions come to a mere nothing?—That is so.

21,886. It really is the fees?—Yes, the College is quite self-supporting. We have a reserve fund amounting to nearly 7,000*l.* When it reaches a sufficient amount we hope to get rid of the rent, which is now about 500*l.* a year, and to build something which is more in accordance with our requirements.

21,887. Have you a large staff of professors?—Yes, we have, and comparing the various other staffs, I think your Lordship will find that we have as good a proportion of University graduates in music as any other institution, and in fact some of our men are identical with those of the Royal College of Music. For instance, our principal professor of singing is the Royal College professor of singing. There are some whose speciality is so great that we have no choice but to take them. That is very un-academic I must own. In the theory subjects I think we do succeed in getting the exclusive services of men, but it seems that in music there is no etiquette of that kind; a man may run from the Royal College to the Guildhall Schools and then to the Academy, and run the whole gamut of the schools. In the Philosophic Department we have our own men, but in the others we have to get the best men we can; so that you will find our practical professors, that is to say, vocal and instrumental, are to be found on the staff of the Guildhall School of Music, the Royal College of Music, and possibly the Royal Academy too.

21,888. Have you any boarders in this house?—No, they merely attend. We tried the system of licensed lodgings; but we found that after all it had many drawbacks in London. There are not the same facilities of inspection as at the Universities of Oxford and Cambridge.

21,889. I suppose all your students have to reside in London?—Yes, they must, or at any rate they must live at such a distance as to be able to come to the various classes of the college.

21,890. What number of students have you?—We have a little over 260 to 270, very nearly 300. We have three terms in the year. For the first three terms we call them probationers, and if at the end of that time we see that they do not do justice either to themselves or to their college, we send them down (kindly but firmly). But if at the end of that time they have shown themselves suitable students then we rank them as full students. Then at the end of the third year we rank them as senior students. We find that this is useful because it encourages a kind of academic rule among the students. (*Dr. Turpin.*) It might be well to explain that the large sum stated as being derived from examinations comes chiefly from our system of local examinations in music. We have established local examinations in music all over the country.

21,891. (*To the Rev. Dr. Hunt.*) Do you examine in schools too?—Yes. We have in our calendar a list of about 150 local centres with the names of the local committees, from which it will be seen that many of the leading local men take part in this, the mayors, the leading clergy and others in these localities, and they are appointed on precisely the same principle as those for the Universities local examination for general subjects and work in very much the same way, in fact we took that model. Last year the number of our local candidates was 12,000; so we really have, I suppose, about twice as many candidates as any other institution in that way—and they feed the colleges.

21,892. Is your local examination supposed to be easier or more difficult than the examinations of the Royal College and the Royal Academy?—I think they are about the same.

21,893. You seem to be doing very much the same work that they do?—Very much the same, only we did it years before they did.

21,894. But there is room for you all?—I suppose so. We do not grudge their doing it; let them do as much as they like. The Royal Academy first followed our lead although Dr. Macfarren had said it was preposterous, it could not be done, and when it was proposed to them he opposed it for some time, but seeing that we did find it workable he took it up, and then the representatives of the Academy interest suggested that we should drop ours; but having had the expenes and seeing the success of the undertaking we did not feel ourselves justified in doing that.

21,895. You find there is room for both?—Yes. They are very successful with their local examinations. I do not think it was ever whispered—it certainly has not been whispered in public—that the standard of our examination is at all below the others'.

21,896. It has been often repeated to us that where there are competing authorities the one that gives the easiest degree is the one that gets most pupils?—Here are examination papers to bear witness for themselves, and amongst those who examine are members of the examining bodies of Cambridge and other Universities; for instance, Dr. Hopkins, of the Temple, is our chairman of vocal examinations, and he is assisted by Dr. Pearce, who is a member of the Board of Musical Studies at Cambridge, one of the examiners for the Cambridge degrees; and we have other men of that standing. (*Dr. Turpin.*) May I offer the general observation that we are in friendly action with the Royal Academy and the Royal College.

21,897. (*To Dr. Turpin.*) But you have no combined action with them?—No, no official connexion.

21,898. You are on perfectly friendly relations?—Yes.

21,899. (*To the Rev. Dr. Hunt.*) Is there anything more which you wish to tell us about your institution?—Our petition is that our students shall have the privilege of working for the degrees of the proposed new University if a Faculty of Music be established; and we earnestly trust on behalf of music, especially in London, that the Faculty of Music shall be a separate one. It has been a separate one in all the other Universities, and if in the other Universities surely in London above all places it ought to be a separate Faculty. The reason why the musical degree in the other Universities has not been a residential degree is that there has been no proper field of musical study in the Universities. London is the great musical centre of this country, and if music is to be studied in every branch it can only be perfectly studied in London. Supposing they carry this Statute at Cambridge to make it compulsory for candidates for Bachelorships of Music to reside there, they must come to London very frequently to be *au courant* with everything that is going on. London is *the* field for the leading musical school in the country, and therefore, if a teaching University is established, surely it ought to have the advantage of a separate Faculty, being placed locally at a great advantage as compared with all the other Universities in the country.

21,900. Do you think the teaching University should take advantage, in forming a Musical Faculty, of any existing institution such as yourselves, the Royal College or the Royal Academy?—I think possibly that musical teaching wants regulating. It wants the Alma Mater which it has not got at present. It is a foster-child. The students can go for their degrees to any University and take their degrees. They take the degree and put "Mus. B., Oxon." or "Dublin" after their names, but they are not University men, and they have not the University feeling. Consequently the highest part of musical culture from our point of view is neglected; and the only University which could properly cultivate this true spirit, the refinement of musical culture, by bringing it into proper relationship with other Faculties, would be a University in London.

Rev. B. Hunt, Mus. Doc., and E. H. Turpin, Esq., Mus. Doc.

10 Feb. 1893.

We had hoped that the University of London would have adopted some such scheme of affiliation and made itself a living University, like Oxford and Cambridge. But now we turn our hopes and prayers to this new teaching University, and ask once for all that the Faculty of Music should be made a real living thing.

21,901. You told us that the degree given by the University of London is not much sought after?—There are not many candidates. (*Dr. Turpin.*) Yes, it is highly esteemed.

21,902. (*To the Rev. Dr. Hunt.*) It is because it is too difficult that there are not many candidates?—The matriculation examination frightens candidates.

21,903. Do you wish the teaching University to give a different kind of degree from the London degree in any way, or would the same kind of degree suit you?—Perhaps that would be for the Faculty or professors or examiners appointed to consider. It is perhaps a little bit too scientific. (*Dr. Turpin.*) That is the great difficulty.

21,904. (*Rev. Dr. Hunt.*) It is not sufficiently practical. What you want is that the teaching should lead up to it?—Yes.

21,905. That there should be a strong musical Faculty which should give an education which should lead up to the degree in order that the examination for the degree and the education should be in harmony with each other?—Yes, at present we have no precise system beyond that which prepares for our own diploma. We have no special connexion with any University such as would give a direction to our curriculum.

21,906. You would like to have a special connexion with the teaching University of London?—Precisely, because it would give a special direction to our curriculum.

21,907. Have you thought at all whether you would like to be affiliated as a college with regard to that one Faculty, or whether you would like the connexion to take place by your present professors being appointed University professors, and by that means being represented on a Board of Studies which would have, with the Senate, the direction of examinations; or in what way have you thought the connexion might take place?—We plead for the greater boon, and, failing that, we plead for the lesser. We plead for ourselves that we may, perhaps, be of use in helping to formulate some scientific scheme for a Faculty, and by that means be represented to some extent on the same lines as University College, Dundee, is represented in the University of St. Andrew's.

21,908. Is University College, Dundee, a musical college?—No, but that is an instance of an affiliation.

21,909. Would you like to have some connexion with the new teaching University?—Yes.

21,910. And I suppose the same sort of connexion that the other colleges have; the Royal College or the Royal Academy?—Yes, that is our wish, and we wish that we should have the same amount of opportunity of representing our views on these matters to the governing body of the University.

21,911. You have no wish to go more into detail as to the way in which you should be connected with the University?—Not as far as I am concerned; but I am not any longer an officer of the college. My successor is at my side. (*Dr. Turpin.*) We have no proposals in detail at present.

21,912. (*To Dr. Turpin.*) You have nothing to offer?—No, we can only express a general wish.

21,913. That there should be a good strong musical Faculty connected with the teaching University in London which should give a thoroughly good education, and that you should form part of it?—Yes, that is our desire.

21,914. (*Lord Reay to the Rev. Dr. Hunt.*) I suppose a Faculty of Music constituted in London, and composed of your professors and the professors of the Royal College, and the professors of the Royal Academy, would meet your wishes?—Yes, decidedly.

21,915. Rules would be enforced for the curriculum and the examinations for students in residence?—Yes.

21,916. I see that you have in your evidence laid great stress on the point that there should be a system of teaching and of examinations for musical students in residence in London?—Yes, certainly.

21,917. Who should not be obliged, whatever their aims, to go elsewhere for degrees?—Exactly so.

21,918. You want to give the Faculty of Music a local habitation in London?—Yes. (*Dr. Turpin.*) By way of parenthesis, I might add that there is a feeling in Oxford and Cambridge in favour of confining their degrees to residential students. It is so at Cambridge, and I think it is to be traced in Oxford circles too; consequently it becomes all the more important that we should have such a new body as the Gresham University in London.

21,919. (*To the Rev. Dr. Hunt.*) Do you examine schools?—We examine them in the way of general inspection.

21,920. You inspect, but do not examine. You send down an inspector to a school which asks for one?—Yes.

21,921. And you give them advice about improving their methods of instruction?—Yes.

21,922. Is your Associateship, and Licentiateship, and that very rare distinction the Fellowship only open to your own students?—It is open to all.

21,923. And the examination for outsiders and your own students is the same?—The same.

21,924. Your own students naturally have a slight advantage?—Well, they have had the advantage of a special preparation by those who know what the course means.

21,925. Are the examinations always conducted by outsiders?—By an admixture. There are always outsiders to examine with our own men.

21,926. Is there any rule against the teacher examining his own pupils?—He must not examine his own pupils. He may examine in his own subject, but if his own pupil comes into the room he must retire, and in the case of paper work he is not allowed to see the paper.

21,927. But he is allowed to be present when the oral examination is going on?—Yes, when his own pupils are not concerned.

21,928. Is he not present at the oral examination of his own pupil?—No, not at all.

21,929. (*To Dr. Turpin.*) How does your examination for what you call a Licentiate diploma compare with the Licentiateship conferred by the Royal Academy of Music?—There is considerable difference in detail. The Royal Academy would confer the title of Licentiate in special subjects. Someone may offer the clarinet or the piano, and become Licentiate of the Royal Academy, but no one can become Licentiate of Trinity College without passing through an elaborate theoretical discipline; that is the difference. The title of Licentiate of the Royal Academy is conferred upon specialists, even performers upon orchestral instruments. We have no complaint to make upon that ground, only it is to be regretted that there is not some better understanding with regard to the width of the examinations.

21,930. You do not think there would be a difficulty in coming to an understanding with the Royal Academy and the Royal College of Music as to the course of studies and the examinations?—I do not think so. The subject has never been approached. I believe it is almost time to consider it from that aspect.

21,931. You do not contemplate any difficulty?—No, I do not.

21,932. Would you also agree with regard to the tests for a preliminary general education?—Yes. That is fundamental with us. We cannot part with that.

21,933. (*To the Rev. Dr. Hunt.*) And also with the general scientific training?—Yes. Even those who are examined about instruments are asked about the philosophy of the subjects. That is always a part of the examination, although the performing part of it may be the feature of it.

21,934. And that runs through all your examinations?—Yes.

21,935. You used an expression with regard to which I should like to have some explanation. You said that it is rather unacademic to utilise the best men of other institutions. Why should the benefit of the best teaching power in London to a variety of institutions?—What I mean is that it is not in accordance, so far as I know, with precedent in other Faculties. For instance, I do not think the professor of Greek at University College is also the professor of Greek at King's College, or that he would be allowed to hold the same Chair in two colleges.

21,936. The present practice is opposed to that, but you would not consider the opposite practice unacademical?—We should not object to it, certainly.

21,937. You would not object to the creation of University professors, appointed by the University to teach both at your college and at another?—That is another matter.

21,938. You would not object to that?—No.

21,939. What is the average age at which pupils enter your college?—About 18 or 19.

21,940. How long do they remain?—About three years on the average, taking one with another. Some have been there as long as seven years. That is those who are continuing their studies in special departments.

21,941. And aspiring to be Fellows?—Some perhaps.

21,942. While they are at the college, do they get any other education?—Yes, for the benefit of those who wish to pass the matriculation examination we have classes in the subjects of the matriculation examination.

21,943. Which matriculation?—Our own matriculation.

21,944. You actually prepare them for your own matriculation?—Yes.

21,945. They come to you before they matriculate?—Yes, they may, though they need not. They can prepare themselves if they like, but if they wish to obtain our Associateship, for instance, they must pass this examination. We have one man for the general English and classical subject, Professor Hales, a Cambridge man; then we have a professor of French, one of Italian, and another of German.

21,946. Do you find that they generally take a foreign language course?—The women do.

21,947. More than the men?—Yes, the men as far as I recollect take the Latin more. (*Dr. Turpin*). But it must be borne in mind that the foreign language is of actually greater use, if I may so say, to the musician, and we have to remember that our best books are in German and French, for instance.

21,948. (*To the Rev. Dr. Hunt.*) Then how do you account for the men taking up the dead languages?—I think the standard is a trifle easier, or they think it is.

21,949. (*Professor Sidgwick.*) Do I understand that you consider music as an Art to be something that should be taught by a University, or is it only the scientific side?—Of course the philosophy of music, if I may so call it, is one that belongs to a University. The other anyone may teach; only I think the University ought to have the control over both departments—both performing and philosophic.

21,950. You have referred to the action of the University of Cambridge, are you acquainted with the course prescribed there?—Yes, I am generally acquainted with the regulations for the degree.

21,951. Of course in Cambridge there is no idea of either teaching or testing the instrumental performance?—No, there is not, only it comes in in this way, that you are required to play any portions of an orchestral score that may be set before you; still that may be regarded as rather intellectual than gymnastic. (*Dr. Turpin.*) It is not a performance in the strict meaning of the word, it is a mere reading, it is not the performance of a skilled player.

21,952. (*To Dr. Hunt.*) What I wanted to ask was whether in your view a University ought to go beyond what the University of Cambridge now does, in testing students?—No, I think not.

21,953. You think that in fact speaking broadly—I am not able to enter into any question of detail—the lines that the University of Cambridge adopt are the lines which you wish to see adopted?—Yes.

21,954. And what, in your view, is the precise advantage of connecting a school of music with a University in a Metropolis like London? Perhaps to explain my meaning I may say that in Oxford and Cambridge there are certain social advantages which a young man gains, and it is generally supposed that they form a very large part of the inducement to men of all classes to go there; and I believe that one motive in the recent proposals for change to which you have referred was in order to place the students of music in this respect on a par with other educated classes. It was thought it would rather tend to raise the position of music; that it should not be treated as an exceptional study in that respect. But if we take the metropolis it is not at first sight clear how far the inclusion of the School of Music in the University would in any material degree alter the social life of the students in that school, except so far as they were associated with the students in certain other branches of study. Do you contemplate that kind of association to any extent?—I think it would be decidedly an elevating influence to feel that they were part and parcel of a University system. They are regarded now as outsiders, and that is mortifying to those who have ambitions of the right kind, and does not tend to raise those who have none. The very fact that they were part of a large University system and really members of a University, would, I think, tend to draw them to each other and to raise them altogether, to give them a definite status, which they now have not.

21,955. Would you regard as an advantage—what I suppose you would admit as a natural result of the connexion with the University—that the University should control the course of study and the examinations, designed to impart and test the general culture?—Yes.

21,956. Of course it might result in imposing standards in certain respects which might involve a greater burden of study?—In that respect the University would be willing to receive the advice, for what it might be worth, of teachers of music as to how much they could bear.

21,957. There would no doubt be advice given as well as received on the part of the governing body of the University?—But it would have to be a gradual thing.

21,958. But still the connexion with the University would involve a certain loss of freedom?—It would.

21,959. You do not regard that as a drawback?—No, I think it would be a very good thing indeed in many directions.

21,960. Are you acquainted with the system of the German Universites?—No, I am not.

21,961. Can you tell me any University in which music occupies the place which you would desire to see it occupy?—I do not know of any. The nearest approach to it I think is Victoria, where I believe the membership of one of the affiliated or clustered colleges is essential to candidature.

21,962. But the realisation of your idea would be a new departure academically?—Placing them in the same kind of relation to the University as the other Faculties. It might not be done all at once, but some approach could be made to it, and then it would be gradually drawn in, ranking as an independent Faculty, being indeed one of the most ancient Faculties in this country.

21,963. But you admit it would be a new thing?—At the present day. What it might have been centuries ago, I know not, but there is no doubt that the Faculty of Music in this country occupied a far higher position then than it does now.

21,964. (*Mr. Anstie to Rev. Dr. Hunt.*) Your institution as well as the Royal College and the Royal

Rev. B. Hunt, Mus. Doc., and E. H. Turpin, Esq., Mus. Doc.

10 Feb. 1893.

Academy seems to perform two offices. You have a course of teaching upon which you give your own collegiate certificates, and you also have a course of widespread examination by which you affect the general musical culture of the country?—Yes.

21,965. And in respect to that you also give your certificates?—Yes.

21,966. In fact you do the double function that the Universities very frequently do now; you provide instruction and also test instruction given elsewhere?—Yes.

21,967. And the effect of that is to raise the level of musical acquirements throughout the country?—Yes.

21,968. We heard yesterday that the other two institutions have an associated board for the purpose of local examinations. You, I understand, from what you say to-day, would find no difficulty in associating yourselves with the board for the purpose of examination if any advantage could be obtained from the co-ordination of action?—I am not prepared to say that. That is quite a different thing. You see that is an inter-collegiate matter; it would not affect the relations of either of the colleges to the University.

21,969. It might to some extent. You do not examine schools, I understand?—We do examine schools when they apply for it. We do not make a special feature of it as in the case of the Royal College. The Royal College have a special branch upon which they lay great stress, but we have a number of schools enrolled in union with us and by that union are able to obtain an entrance to our examinations at similar fees; and anyone of those schools sometimes by applying to us gets an inspector sent down who examines their students individually or collectively or both, and reports thereon.

21,970. How much of this work would you be prepared to incorporate with University work. Would you desire that the local certificates given by you should have a University stamp of any kind?—No.

21,971. The Oxford and Cambridge local examinations are University examinations?—Yes.

21,972. They give University certificates?—But are they not regarded as extra-academical?

21,973. The certificate is given by the University?—Well I am not empowered to speak upon that point. (*Dr. Turpin.*) Nor should I be prepared to answer that question.

21,974. (*To the Rev. Dr. Hunt.*) Then you have not considered that question at all?—Except in this way: I do not think we should be inclined to give up our system of which we were the founders, especially the practical part of the examinations. We were the first body to examine in practical music in this country. We should not be inclined to give that up; because we have our own special ideas of the standard and so on, and our divisions of the subject are special. There would be a great many difficulties to dissipate. We cannot transfer our candidates to any other body. We have a very large system. Our system is much larger than that of the Royal College or the Associated Board, and I suppose we have double the number of candidates. We have about 12,000 candidates every year. Then comes the question also of the profits we get. That is a very important point, because rightly or wrongly musical students are all poor. I suppose for every 1*l.* the students pay us they cost us for the various advantages we give to them about 1*l.* 7*s.* 0*d.* Until we were obliged to raise the fees in one department we gave 1*l.* 10*s.* for every 1*l.* the students paid us. We make up the deficiency from the profits we receive from the fees for the local examinations.

21,975. That is the paying branch of the College?—Yes, we account for every penny of our receipts in the balance sheets.

21,976. Out of the 8,000*l.* how much do you net?—Of course there are establishment expenses, but the working expenses in connexion with the examination, that is outside expenses and examiners, amount to 4,396*l.*

21,977. Then you get a very substantial revenue?—Yes, decidedly. Then out of the profits we have established various scholarships for our students. (*Dr. Turpin.*) We do not appeal for public subscriptions for our scholarships. We support them ourselves principally. (*The Rev. Dr. Hunt.*) And then we give various performances, which are costly, for the benefit of the students, for which the students could never afford to pay. In this way, without any endowment such as the Royal College has, we give advantages of an educational character equal to those the Royal College affords.

21,978. You do not see your way to unite the three institutions on a pecuniary basis?—It would hardly be fair I think either to them or to us.

21,979. Each has certain advantages of its own You do not see your way to combining those advantages or co-ordinating those advantages in a common system?—Would it mean amalgamation?

21,980. Of course there is a degree of amalgamation implied by it. Practical considerations would determine how far that amalgamation should go?—I suppose it would have to be a matter of conference between the three bodies concerned.

21,980*a*. You have not considered it?—We have never considered that.

21,981. Of course this revenue from examinations is more or less precarious. I mean it would be interfered with by the growing popularity of other examinations possibly?—It has not been affected so far. The Associated Board and Trinity College have now been side by side for the last seven years. During that time our candidates have gone up in number from 8,000 to 12,000, so it does not look as if we were affected thereby. (*Dr. Turpin.*) I may say that since 1887 our income has advanced at the rate of about 1,000*l.* a year steadily. In 1887 it was 6,800*l.* or something of that kind, and last year it was close upon 12,000*l.* There has been no falling off at all, but, on the contrary, it has advanced steadily.

21,982. (*To the Rev. Dr. Hunt.*) I suppose the instruction you give in the college itself is partly theoretical and scientific and partly practical?—Yes.

21,983. Mere execution I suppose would have a secondary place; would it?—We have always been more on the philosophic side. Our very first classes were established in what is called theory.

21,984. You are of opinion that there is a science of music?—Yes.

21,985. And that it may be described as an intellectual department of human activity?—Yes, decidedly.

21,986. You are clearly of that opinion?—Yes, decidedly, we are clearly of that opinion; and amongst intellectual studies it is a distinctive study.

21,987. Would you say that the mysteries of harmony and counterpoint are not less scientific and intellectual in their character than the examination of Greek metres for instance?—Certainly not. For that matter it is more progressive, because you can make your own metres in harmony.

21,988. And that is the side which you desire to see recognised?—Yes, that is the most important part of it, upon a basis of general culture without which we do not think a student cannot profitably prosecute his studies.

21,989. Your limit of age seems to be rather in advance of the other two other institutions. You give 18?—We do not class them as full students until they are at that age. They can come to us at about 13 or 14.

21,990. Then your limit of age is about the same as that of the other two institutions?—Yes. We class them as probationers. We have an asterisk against their names in our calendar.

21,991. Then you give two years of study for an Associate. When does that begin?—We take it that a person with an average acquaintance with notation, sight reading, and so on, beginning to study for the certificate, would take about two years to qualify for the Associateship.

21,992. At what age would that two years generally begin with you?—At about 17 or 18.

21,993. The commencement of the Associate course is 17 or 18?—Yes, that is my experience.

21,994. Have you a schedule of the subjects which you require for your matriculation?—Yes, it is in the calendar.

21,995. Would that contain also the deed of foundation, the deed under which you are registered?—It does. It contains the pith of it; the official seal, subscribers, donors, local secretaries; it is all there. I may say it is being revised now. We are amending it, but it is on very much the same lines.

21,996. I suppose you would recognise that an advantage would ensue if your professors and the professors of bodies similar to yourselves could be united in a Faculty to mutually arrange the course of instruction and so on?—Yes, that is what we have been trying at for years.

21,997. (*Sir George Humphry.*) You have 260 students, and 12,000 candidates?—Yes, they are not our students.

21,998. Those are the outsiders in the various towns and cities of England?—Yes.

21,999. So that your influence over the music of the country is chiefly through the outsiders by means of local examinations?—Yes, who feed the London schools.

22,000. They not only feed your pocket thereby, but you feed them with knowledge and instruction in that way?—We hope so.

22,001. You would regard that as an important part of your work?—Sir Julius Benedict made a speech at Liverpool just before he died. He said he had been a great many years in this country, but he must say that these local examinations had done more good in three or four years, than he had known done in ordinary musical teaching for 25 or 30 years before.

22,002. So that the fees that accrue to you would not be the only reason for wishing to continue that?—Certainly not; in fact the profits that do accrue to us are really more upon the practical than upon the theoretical. The profits upon the theoretical upon which we have probably a larger number of candidates than on the practical are very small. The fees are small because we wish to encourage that branch. I am not sure, but I think that distinguishes us from the other examining bodies. I think they charge as much for what they call the theoretical branch as they charge for the practical. We do not. We have a low scale of fees for the theoretical branch, in order to encourage the intellectual study. (*Dr. Turpin.*) I do not think that is a very marked difference.

22,003. (*To Rev. Dr. Hunt.*) Supposing you were in any way united with the University, you would not wish to give up that part of the work at any rate?—No, I do not think the Council would.

22,004. Supposing the University to have a musical Faculty, and to have a regular course of study required for it, do you think that the University should in addition examine and admit to its degrees persons who have not gone through that especial University course?—That would be a matter entirely for the University to consider, would it not?

22,005. The present University of London does examine persons from all parts of the Empire?—Yes, and it is going to have local examinations as well.

22,006. You would rather not enter upon that perhaps?—I am not exactly qualified to. The warden of the college is here, and I am only ex-warden.

22,007. Are these candidates for these local examinations required to give any evidence of general culture?—None whatever.

22,008. Is that confined to your 260 students?—Yes, it is confined to those of them who wish to qualify for certificates or diplomas for professional life.

22,009. You lay great stress upon that?—Yes, it has been our basis throughout.

22,010. You think it is very important that the students of music should have a good general education?—Yes.

22,011. And you do not admit into any of your Associateships?—Anything which has a kind of title with it.

22,012. Unless the student has shown that kind of general culture?—That is so.

22,013. And your students often have not completed that knowledge of general culture till they are 18?—As a rule. They may have passed the senior local before then, but as a rule they are not ready till that age.

22,014. Your musical course does not commence till they have passed this?—Yes, it does; they can qualify at any time. They can go through the course for the Associateship without having first passed this, but they must pass it before they can enter the examination for the Associateship.

22,015. So that it is not necessarily fundamental to a course of musical instruction?—No, it is not. It is fundamental to a diploma.

22,016. And do you think the musical student undergoes any disadvantage from having at the same time to prepare himself in general culture in some language, and so on?—I can give you statistics of that stretching over 10 years. We have a per-centage of failures, but I have not found one case in which a person having qualified in the arts has failed in music at the same time. They have generally had the two together; they have taken the same concurrently and when they have failed they have generally failed in music. I will put it the other way. In the last 10 years I have not known of one case in which a person having qualified for the Associateship has failed in arts.

22,017. Do you think that the fact of having attained a certain standard of general culture acts as a bar to the pursuit of music by some persons who might be very highly qualified to follow it?—I do not think it does in the least—not for degrees. I think on the other hand it quickens their faculties. (*Dr. Turpin.*) I think most undoubtedly that is the case.

22,018. (*To Rev. Dr. Hunt.*) Is it a fact that you do lose some remarkably able musical students in consequence of their having to direct their attention in another direction?—I have heard that before; it is an aged fiction. I think we have disproved that very strongly by the experience of the last 20 years.

22,019. You have heard it quite recently. Then you do not agree with that?—I do not, and I think the *élite* of the musical profession are coming round to our view.

22,020. And the University by insisting on a University matriculation examination will not be shutting out good musical students?—No. (*Dr. Turpin.*) I think the University will do most wisely by insisting on matriculation.

22,021. (*To Rev. Dr. Hunt.*) You mentioned that the musical teaching of London is extensively carried on and wants regulating by the University?—Yes.

22,022. In what way would the University do well in regulating the present teaching of music?—By mutual counsel which would somewhat assimilate the curricula at the various feeding colleges; and it would also, I think, keep students to their own place instead of their wandering about from one college to another, imagining that certain things are neglected at one college and not at another. If they felt it was all supervised to some extent by one central body it would then be a matter not just of choice to them, but other predilections would come in, which would decide; it would be the same as a man saying:—"I had rather "go to Oriel than to Christ Church because my "grandfather went there." At present there is a tendency to wander; a person may enter at the Royal College and go on there for about a year, but then he will go to the Royal Academy, and the teachers at the Royal Academy will tell the erstwhile, Royal Collegian "You are all wrong; you must begin again on a new system." He will stay there until he gets disgusted with them or thinks he would like a change, and then he will come to Trinity College or go back to the Royal College again. (*Dr. Turpin.*) I think

Rev. B. Hunt, Mus. Doc., and E. H. Turpin, Esq., Mus. Doc.

10 Feb. 1893.

that might be enlarged. Teachers are quite free to adopt their own methods in harmony, and you will frequently find two systems of harmony taught in the same institution.

22,023. (*To Rev. Dr. Hunt.*) You mentioned the teachers run about from one institution to another?—They do.

22,024. Do you think that that might be regulated and the teaching on one particular subject given in one college and the teaching of another particular subject given in another college?—The colleges might have some distinguishing feature.

22,025. London is a large place. Could the students run about from one college to another to attend the lectures on the different subjects?—These three institutions are within half-an-hour of each other.

22,026. So that really there might be some systematic plan of teaching?—Yes, there might be some systematic plan of teaching, but what we should wish to do would be to keep a man to his own college as much as possible. (*Dr. Turpin.*) This privilege of wandering about has become a sort of vested interest in the profession.

22,027. (*To Rev. Dr. Hunt.*) If the student wandered to the teacher it might be better than the teacher wandering to the student?—Yes; at present the whole is too promiscuous.

22,028. You do want some general University supervision to control and benefit the teaching?—Yes, that is exactly what we think.

22,029. You wish for such supervision, but do you wish to be supervised out of existence?—No.

22,030. You would not wish to give up your autonomy. You wish to remain Trinity College although united with the University?—Yes; and then we should expect that the University would impose such restrictions and safeguards upon our proceedings as far as they concerned the University, as the University should think right. Of course we should submit to inspection, and we should expect this; if there was anything that the University body or the Faculty of Music thought wrong or inconsistent with the interest or dignity of the University or musical teaching, they would say "You must alter "this or the connexion will be severed." I look upon that as a safeguard. It is what I have been aiming at for the last 20 years, and now, when I am gradually withdrawing from the active exercise of this work, I should like to feel that the college was going to be continued for the future on the same academic lines as I have endeavoured to keep it all through.

22,031. And you think the University might utilise to its own purposes the teaching in the several colleges by some plan of supervision and adjustment?—Yes; and I believe it would strengthen the hands of those who are aiming at the right kind of teaching in all those colleges.

22,032. It would not be necessary for the University to institute special teaching of its own, but it might utilise the teaching of these several colleges?—After all it would come to this: if the University instituted special teaching of its own it would mean drawing from the existing colleges.

22,033. They might as well utilise the teaching which is now going on?—Yes, or they would only be making another school of music.

20,034. But you would like to retain your autonomy and to retain your funds and utilise them in your own way?—Yes. I may say that we are desirous of being admitted on the same lines and subject to the same safeguards and restrictions as the Dundee College is to the University of St. Andrew's.

22,035. (*Lord Reay to Rev. Dr. Hunt.*) Do many of your students become teachers of music?—Yes.

20,036. What is the proportion of those who enter the teaching profession and those who become professionals?—(*Dr. Turpin.*) It would be difficult to give that proportion. (*Rev. Dr. Hunt.*) A great many teach in schools as masters. They will take perhaps some other subjects. I know a number of our students who perhaps teach English subjects in the same school. Perhaps they teach English with music.

22,037. (*To Rev. Dr. Hunt.*) Then your curriculum for candidates for the teaching profession is not different from your curriculum for those who enter the professional world?—No, it is the same all through, because if a man would have a diploma from the college he must go through the same course, and he may claim to practice independently as a teacher at any time. We do not make a distinction.

22,038. There is no need for giving a man who wishes to become a teacher some additional knowledge of a pedagogic kind?—You mean in the art of teaching.

22,039. Yes.—There are lectures of that kind at the College but they are open to all alike. We do not make any distinction; we do not ask a man "Are you "going to be a professional man."

22,040. But those lectures are attended chiefly by those who intend to be teachers?—Probably.

22,041. Most of your students like to have two strings to their bow. If they fail in the profession they can fall back on the teaching?—Yes, that is so.

22,042. Are there any of your students beginning the musical course at 18 who have no preliminary musical knowledge?—(*Dr. Turpin.*) No, not at that age. Musical talent asserts itself at a very early age. (*Rev. Dr. Hunt.*) We have no elementary students so to speak. They are all fairly well advanced from an amateur's point of view. (*Dr. Turpin.*) Musical talent consists so largely of what may be called instinct and imitation in the first instance and those are powers which are developed at a very early age.

22,043. I only meant whether there are any exceptional cases?—No.

22,044. (*Professor Sidgwick to Rev. Dr. Hunt.*) Might I ask one question with regard to local examinations. You said that Sir Julius Benedict said they had caused very great improvement in the teaching of music. Do you conceive this improvement to have been caused by applying a stimulus to the teachers or by giving them direction?—It gives encouragement to the candidates that they will have something to show for their industry at the end of a certain time; and also it assists teachers by their comparative success in training pupils upon right lines. (*Dr. Turpin.*) I should like to add that the standard of practical pieces we set them is a very high one. We insist upon the performance of music which is the work of great masters, and a music publisher informs me that the effect of local examinations during the past 10 or 15 years has been to alter the character of the sale of music. The common pieces of music have no large sale whatever; a higher type of music prevails for the people who attend the examinations of the Associated Board and our College.

22,045. (*To Rev. Dr. Hunt.*) With regard to the profit I do not think I quite understood what the proportion of profit was?—If you put to it establishment expenses which are separately accounted for, I suppose the profit would be about 25 to 30 per cent.

22,046. 25 to 30 per cent. of the fees you receive are more than you need accept in order to carry on?—Yes.

22,047. Has that ever led to any complaint on the part of people who go into examinations that the fees are too high?—No, we do not charge any more than any other institution.

22,048. I asked because in the local examinations which the University of Cambridge conducts the profit made is very much less than the sum you have named, and I thought it might have led to complaint that you were making too much out of them.—(*Dr. Turpin.*) Not at all, the standard seems to have been adopted. (*Rev. Dr. Hunt.*) Perhaps the Cambridge examiners are paid more than our examiners are.

22,049. (*Sir George Humphry to Dr. Turpin.*) Do you think that in addition to the education which

is now carried on it would be desirable that the University should itself carry on some higher kind of education in music through the medium of professors appointed by itself, what you might call Regius Professors ?—That is a matter of question. A University system is not likely to provide instruction in *technique* and such like.

22,050. The work of preparing teachers ?—The University has neglected the opportunities, and in the meantime we have had all these great schools established. That is the financial difficulty. (*Rev. Dr. Hunt.*) Perhaps I may be allowed to answer the question in this way. There are professors of music at other Universities and one naturally thinks of those when asked about professors. I have read and heard lectures given by these University professors and they are of a standard not at all above what are given in our college to our advanced students.

22,051. (*To Rev. Dr. Hunt.*) Perhaps in those Universities there is not the kind of general good education in music that there is in London, but granted that there is the general good education that there is in London, do you think a higher course of lectures given by high class men who might be, we will say University professors, as distinguished from the teachers in those several colleges, would be advantageous to the study and pursuit of music ?—They would have to be well endowed, because otherwise I do not know how the students would find the fees ; and I suppose they would have very select audiences. Of course the Gresham lectures are not at all of a University degree standard. They are merely popular disquisitions on the subject.

22,052. Would you urge that a University should be enabled to institute professorships of that kind, intended for something higher than the teaching required for the ordinary pupils and given in your college at present ?—You see, we at Trinity College profess to be able to prepare students not only for our college certificates but also for degrees, and we have prepared them ; in fact there are many Oxford and Cambridge Bachelors of Music and some Doctors of Music who have been so prepared by us.

22,053. I am contemplating something higher than the preparations for degrees or anything of the kind, post-graduate courses ?—Of course that would certainly be advisable ; whether it should be conducted by the University apart, or under the colleges, or with its authority in any one or more of the colleges, is a matter of detail.

22,054. Would such an institution be a national advantage ?—It depends upon the point of view. I should think so as tending indirectly to raise the status of the study of music, certainly.

22,055. Would it be such a national advantage that the University might well apply to the nation to contribute towards it. Would there be sufficient ground for applying to the nation to subsidize such professorships ?—I have not given that subject sufficient thought.

22,056. (*Mr. Anstie to Rev. Dr. Hunt.*) You mentioned the Guildhall School of Music. Have you any relation with that ?—None, except friendly relations, no official relations.

22,057. It does high work, does it not ?—Its work principally is among amateurs, and students come to us after having gone through the Guildhall School of Music. They have a good staff quite capable of doing any kind of work.

22,058. Then you think they might not be an improper fourth addition to the Faculty of Music ?—I should think so. I do not know what their internal organisation may be.

22,059. Having regard to the standard of their professors you think they would be fit to hold rank with the other institutions ?—Certainly.

22,060. (*Lord Reay to Rev. Dr. Hunt.*) I suppose your hesitation just now with regard to the question of post-graduate courses might be interpreted in this way. You fear that the University might interfere in any way with the advanced work you are doing yourselves ?—That is perhaps partly my feeling because we feel that we are aiming at the very highest.

22,061. Of course if there was advanced work which was not included in the curriculum of the institutions which are now teaching music, you would not object to the University undertaking that ?—No, we should be glad.

22,062. Have any of your students taken the degree of Licentiate as given by the Royal Academy ?—Yes.

22,063. Without having obtained any other education than that which is given by you ?—Certainly.

22,064. Then you consider that the education given by your college is sufficient to enable your students to obtain that degree ?—Yes, and more than sufficient—with ample margin. There are several of our students in the last list I think. It can be proved by comparing the various lists. (*Dr. Turpin.*) Taking the special department of organ playing we have sent a number of the College of Organists—I think 19 students.

22,065. (*To Dr. Turpin.*) It is a stiff examination ?—Yes, a very stiff examination, both theoretical and practical.

22,066. Is the piano compulsory on all your students ?—No.

22,067. (*Chairman to Dr. Turpin.*) Is there any other institution besides the Royal College and the Royal Academy that fills the same sort of position that you do ?—There are practically four teaching institutions. The College of Organists does not teach, it is simply a special organisation. The four teaching institutions are the Royal College of Music, the Royal Academy, Trinity College, and the Guildhall School.

22,068. And they give very much the same sort of education and the same sort of certificates ?—Yes, the system is different with us but the musical standards are very much alike. I think we may say that fairly. The theory work I think is very much on a par with ours. (*Rev. Dr. Hunt.*) All I know about the Guildhall School is that when it was being formulated the then Chairman asked me to give him all the information I could about Trinity College. I understood that he thought that some of our features were good ones and he was going to recommend them. Beyond that I know nothing.

22,069. (*To Rev. Dr. Hunt.*) With regard to your local examinations could you give me any idea of what proportion of those who come up for examination generally pass ?—In the junior division about 60 per cent. I should think.

22,070. Very much the same proportion as pass your Associateship ?—(*Dr. Turpin.*) Yes, about that. (*Rev. Dr. Hunt.*) My experience is a larger percentage. In the junior division I should say about 60 per cent.

22,071. At any rate it shows that it is a good stiff examination ?—Yes, 60 per cent. is the minimum passing mark.

The witnesses withdrew.

The Hon. Sir William Rann Kennedy examined.

22,072. (*Chairman.*) You have been kind enough to come and give us your views as to the establishment of a Legal Faculty in the proposed new University of London. Will you give us any advice which you think may be useful to us ?—I have read the evidence of Mr. Crackanthorpe, with which I very considerably agree. The point which I think should be kept in view with regard to the formation of a Legal Faculty, and in considering the relation of the Inns of Court to the University, is this. The University, as a University, must regard law to a great extent from the standpoint of the student, that is of the person who

The Hon. Sir W. R. Kennedy.

10 Feb. 1893.

goes through a training in certain branches of law, and is ultimately examined for the law degree, in the pursuit, if I may say so, of the best education. Then, again, from the side of the Inns of Court you have to regard legal education in the interest of those who are working at a later stage than that of the student, for the purpose of earning a livelihood in the legal profession. I would venture to suggest the importance of bearing in mind the distinction between those two classes of persons. Subject, perhaps, to some qualification, I should say you will succeed if you meet the wants and wishes of those who are students, and the wants and wishes of those who have attained the graduate stage. I do not see why both should not be met by a wise arrangement between the Inns of Court and the University. Having read the evidence which has been given, I venture to draw attention to the facts which, in my humble opinion, have to be considered in coming to that arrangement. You have coming to the Inns of Court a large number of men who have been at the existing Universities. Those men have already gone through the student course so far as regards their own general education, and they want to get the professional training. At your University you will have to provide for the same sort of student if you want it to be a University worthy of the name. The class of legal teaching which they will want as students will be a class of education differing in the degree of scientific training and professional training from that of those who want to be prepared for the Bar after they have completed their general education. What I venture to suggest is this: while you adopt an arrangement with the Inns of Court by which the Inns of Court, working with the Incorporated Law Society, should upon proper terms become the Faculty of Law, you ought to provide through them for a training for the students who will ultimately pass your degree; and also to provide through the teachers, professors and readers, what I may call the professional courses afterwards, which should be completely within the control of the Inns of Court themselves. And, if I may so, my ideal would be this, that the degree (as also the degrees of Oxford, Cambridge, and Victoria Universities, if the Inns of Court should be satisfied by a representation on their Boards of Examiners of the fitness of the examination), should be a *sine quâ non* of the call to the Bar, but it should not constitute in itself the test for call to the Bar. That should be reserved for the Inns of Court themselves. The degrees in law of the Gresham University being accepted, then in connexion with this University there would be the lectures for students preparing for a degree in law as students in law as a part of their education, whether they were going to the Bar, or going to become solicitors afterwards or not; and then subsequently, the examination being passed, there should, as requisites for the call to the Bar, be certificates of attendance at lectures, and of proficiency in those branches of technical training in the law which are absolutely necessary for the practice of the profession, but which are not by any means necessary for the degree. My idea is that while the examination of the University should be treated as a requisite for the call to the Bar, the ultimate test of fitness should only be fulfilled when, in addition to the degree, those certificates of proficiency as well as of attendance are obtained in what I may call the professional course. For instance, to take Equity, though it has not been my own branch, you would hardly require for a degree in law the technical proficiency in the details of conveyancing which would be required for a practising lawyer. Knowledge of the technicalities of practice could hardly be required from the stand-point of mental training. My view is that the thing to be worked up to is this: giving the Inns of Court in your examination for the law degree an ample test of what I may call a scientific training in mental education, you must leave to the Inns of Court, and they would properly require to have left to them, the subsequent training in chambers, or classes, or actual lectures, which would satisfy what I may call the professional requirements outside the student standard; and I do not see any reason why if (as Mr. Crackanthorpe, if I follow his argument rightly, seemed to suggest) you accept as the Faculty of Law the present Council of Legal Education, plus the Incorporated Law Society, if they came in, and some outside representatives of distinction you should not have Chairs founded, and have lecturers and readers at work upon the lectures for a degree, and the Inns of Court provides for the certificates which they required for the subsequent stage, which I would call the post-graduate stage, which they would keep in their own hands as a matter entirely of professional fitness.

22,073. You talk of the Inns of Court and the Incorporated Law Society forming the Faculty of Law with others. Do you think the others might be the present teachers of colleges such as King's College and University College?—I think a selection. Seeing they are to find the bulk of the funds, and certainly have within them by far the largest what you might call actual working power in the Law, the Inns of Court ought to have a distinct predominance, and practically not to be interfered with: but, of course, I think it might be well, seeing that for the student course other than students of the Inns would be admitted to the lectures, that there should be some condition, (as to which I think there would be no difficulty in arranging with the Inns of Court,) with regard to additional University influence so far as regards the attainment of a University degree. I think the Inns of Court would properly object to being interfered with, with regard to what I may call the professional training which I for shortness call the post-graduate course.

22,074. Of course the Faculty of Law, even if entirely composed of the Inns of Court, would only have a consultative voice, and the real examinations would probably be settled by the Senate, but subject to the advice of the Faculty?—I think the Inns of Court ought to have with regard to this new University that without which they would not and ought not to, consent to accept the degrees of Oxford, Cambridge, or Victoria Universities, namely a definite and clear control of what I may call the system, subject to some working arrangement such as Mr. Crackanthorpe thought was possible with the University. I do not think they would surrender, or ought to surrender, because they are practically trustees of legal education, the preponderating influence to any other body.

22,075. Of course they would keep their own power of admission to the Bar and their own post-graduate teaching in their own hands, but, with regard to the examination for the degree, would they have the control or would that be subject to the Senate?—Subject to an arrangement to which, if both parties were willing, there would be no difficulty in coming. I do not think there would be found to be any substantial difference as to what ought to be the standard of the degree. I am quite sure the Inns of Court would wish to keep it high rather than low. The one point I want to lay stress upon as worthy of being submitted to the Commissioners is that I should like to see the Inns of Court stand locally with regard to the Gresham University in a closer position than, but educationally much in the same position as, they would stand with regard to the other Universities, getting rid of any question of entrance examination, but making a law degree *sine quâ non*, as to which they could say "We, the Inns of Court, are satisfied "with its effectiveness" for what I may call the non-professional stage.

22,076. The teaching University of London, in which the Inns of Court would be largely represented, and of which they would probably compose the Faculty of Law, would be in a different position from the Universities of Cambridge and Oxford, with regard to the degree being a *sine quâ non*?—Only in this form. I understand it to be contemplated that a proper working arrangement would be constituted

with the Inns of Court, that is why I used the word "locally" just now. They would, through their teacherships and professorships founded by them, be doing much more for this teaching University than they could do for Oxford or Cambridge. There should be a real voice and a sufficient voice in the examinations for the degree, through examiners either appointed by the Inns of Court or appointed to their satisfaction, and then you would get rid of the giving of more examinations to men who have passed the graduate course. I attach, perhaps, much more value to examinations than some others do, but still I think if you had a high standard of degree you might have much more flexibility in the other subsequent qualifications which the Inns of Court might think necessary. We have the East and the West Indian dependencies. It might very well be that for those students who are going out to practise in India, when once they have passed through the degree stage you might accept in lieu of some of the professional training in English Law certificates of study in Hindu and Mohammedan Law. There might be a far greater development in that direction than there is at present.

22,077. Independently of any advantage which the University would get from having its degree taken as part of the examination of the Inns of Court, it would be a substantial advantage to the University and not a drawback, to have the Inns of Court virtually their Faculty of Law?—I think so. If you once interest the Inns of Court in your scheme and make them entirely friendly (of course I speak entirely and simply as a private member of one of the Inns of Court), I cannot help thinking that there will be great opportunities of development given which might otherwise he waited for a long time; and I cannot help believing that the Inns of Court would be most anxious to use any real opportunity of benefiting the University with which they are locally connected.

22,078. In the way of endowment, you mean?—Yes, provided of course, as I have said, that the call to the Bar is left, as I think it must be, in their hands and the whole disciplinary power so far as regards the conduct of men as students at the Inn and barristers is left in their hands, as at present, and no University examination is forced upon them as the only test of call, I think they would be glad to assist in any reasonable scheme for future development.

22,079. Then any degree which might be decided to be given by the teaching University, I suppose might be such a degree as would be useful to other people besides those who intend to take law as a profession?—That is what I contemplated, and that seems to me the pivot of my plan. I do not see why you should not, up to the time of the legal degree, assume that there will be a very large number of men who will take that form of mental training, just as they might take any other branch of mental education which the University ought to recognise, and to that extent the benefit would be very great, as has been pointed out to you by more qualified witnesses. But you must not lose sight of the professional necessities which the Inns of Court are bound to provide for. I think if you once get the academical training which I should divide into a knowledge of the Law historically, and a knowledge of the Law in principle, if you get a man to satisfy the University requirements in that, I think the Inns of Court might look safely to their future requirements in the form of certificates of attendance and proficiency in what I may call the more practical or professional study of Law, which, in my opinion, ought to be neglected entirely so far as regards the earlier and mental training.

22,080. As a mere matter of mental training it would perhaps be as good training as mathematics. I suppose it improves the mind as much as anything, and might be studied for its own sake?—I speak with diffidence. I never took a degree in Law myself, but speaking generally, it would involve a very considerable range of sound preliminary education to pass any examination which would be worth the name of an examination for a degree in Law.

22,081. Do you think it is a study which might be taken up by men who are going into political life, or commercial life, or the ordinary life of a country gentleman, or by other people, besides lawyers?—Yes. I think the division which has been suggested obviates any difficulty with regard to the Inns of Court feeling any hesitation about admitting other than professional students to the lectures. I think they might restrict the attendance at the professional lectures to lawyers while, if they take part in the working arrangement they could not object to students who were University students, whatever might be their ultimate intention, attending what I may call the non-professional or educational lectures.

22,082. Is there any other point you wish to mention?—I do not think I can add more. I was glad to have the opportunity of bringing out the point, because I was looking to the thing as a matter of future development. I do not think things can stand as they are quite apart from the Gresham University question, and believing that the Inns of Court were most anxious to do all that can be reasonably required of them, if the Incorporated Law Society can be found to work with them, it always seemed to me that we might at the same time raise the value of the legal degrees at every one of the Universities by recognising them up to a certain point and yet retain the necessary discipline, retain the control, and retain the selection of purely professional standards of proficiency afterwards.

22,083. (*Sir George Humphry.*) I think your feeling is that the Inns of Court would probably in combination with the University undertake to a considerable extent the earlier or non-professional teaching?—Yes, providing that they were not feeling at the same time that they were giving up their power and their duty to test what I may call professional fitness when they give a man the right to call himself a barrister.

22,084. Leaving aside the professional part, you think they would be willing to institute professors or teachers in the earlier part of the degree?—Speaking again as a private person, I cannot help thinking that it would probably be their duty, providing that substantially their present Council of Legal Education formed the preponderating body in the government of the Faculty of Law.

22,085. Providing those provisions were made they would probably contribute funds for the establishment of those professorships?—I think all the witnesses have contemplated that, and for the purpose of obtaining such valuable assistance it seems only reasonable that a *modus vivendi* which should preserve their necessary and proper rights should be come to with the University. I do not think they would be at all prepared, nor would I, to be (to use a phrase which has been put) absorbed in the University. They would object to that process, and I should object to it. They have great responsibility which I think they ought not to give up to anybody else, but as long as that was recognised, it would be their pleasure and I think their duty to co-operate.

22,086. (*Mr. Palmer.*) I understand Mr. Justice Kennedy to say that apart from holding their professional requirements in their own hands, the Inns of Court would be satisfied with the preponderating influence on the Faculty of Law in the University, and would not necessarily require to have the entire influence. I mean the Faculty should not consist exclusively of themselves. As long as they have the preponderating influence they would be satisfied?—I am perhaps hardly right in expressing an opinion that they would be satisfied; it is what I should perhaps rather hope and look to as a person taking an interest in the matter, and a member of one of the Inns I hope it would be done, and I see no reason why it should not be done. There is no reason why such scheme as Mr. Crackanthorpe sketched should not be made practically a working scheme. The one thing to be guarded against is the danger which undoubtedly would exist to some extent, without some such distinction as I have

The Hon. Sir W. R. Kennedy.

10 Feb. 1893.

indicated being clearly maintained, of the needs of the English barrister being swamped in some sort of academic training which, no doubt, is a proper and necessary foreground, but which does not constitute the entire picture which one wants kept in view.

22,087. Some of us did understand Mr. Crackanthorpe to insist upon the exclusive right of the Inns of Court to control the Faculty of Law?—I should certainly advocate that the practical control of the legal teaching should be held by the Inns of Court. But, apart from Mr. Crackanthorpe's view, what I personally would be very willing to accept, and would desire to have with regard to what I call student education would be additional advice coming from those who were teachers of other colleges and the advice of those who were not practical lawyers but who might be nominated by the Senate to assist the Council of Legal Education.

22,088. (*Mr. Anstie.*) Your Lordship's view would be that with respect to what you have described as the graduate course, dealing in a general sense with the history and principles of law, the Inns of Court should under the safeguards you have mentioned recognise the degrees of other Universities, and should, so far as London is concerned, provide similar education themselves in connexion with a University of which they would form a part?—Quite so.

22,089. Then, having reached that point, you would divide the instruction into, first, the strictly professional part, which you would keep entirely in your own hands?—Entirely.

22,090. What you may call the conditions of practical efficiency?—Yes.

22,091. Then, secondly, you would recognise, would you not, that it would remain their duty to carry on the teaching in the highest branches of law, and to the greatest possible range of elevation?—Yes. I think the Inns of Court would and should still exercise their important duty to maintain, whether the University cares to do so or not, professors in this furthest development of what I may call the Science of Law. I did not mean to exclude that. I was rather keeping in view the other—the professional requirements.

22,092. At the same time you see no objection to there being united with this system such a Chair as as that at University College of Comparative Jurisprudence. That would be in the line which you would desire to see developed?—Yes.

22,093. Which should be developed by the Inns of Court in conjunction with whatever other co-operation was available?—I should see no difficulty in that. I should contemplate as a practical thing that many of those who would be employed as readers and lecturers for the earlier course, would also be probably employed to deal with the more advanced classes, because they would be appointed as they are now through the Board of Legal Studies, working as a committee of the Council of Legal Education selected from men who are actually engaged in practice.

22,094. And you would also consider in these post-graduate classes not only the needs of professional men, but of persons who, like diplomatists, needed the study of a special branch of law?—I think under certain restrictions they might be allowed to come in. The Inns of Court would have to see, of course, that the classes of each reader were not unduly swollen by the non-professional element. I myself should like to see required of those who are called to the Bar in addition to the requirements of a University degree, that which, until very recently, was, and I think still is, required of every student in the Indian Civil Service—namely the practical knowledge that is got by his reporting a certain number of cases in each of the Courts. We cannot, I am afraid, require attendance in a barrister's chambers, but I think that the reporting of law cases would be a valuable supplement to the certificates of proficiency and attendance.

22,095. With respect to the professional classes, I understand you are prepared to divide them in such a way as to suit the needs of those who practice in this country?—That has always been my idea. If you got one good University law degree once given, do not trouble any further with entrance examination, or Bar examination, as such; you have got the requisite standard in your law degree, which nobody can assail; then require certificates, and in requiring those certificates you can be much more strict than we can be at present.

22,096. With regard to such other lectures as lie rather outside the ordinary line of legal practice such as diplomacy, there would be no danger of over-crowding?—No, those would be classes that your ordinary legal man would not go to. If he went he would go as a luxury. Considering that a proportion of law students have hard work to live it is not likely they would waste their time.

22,097. So that a considerable number of those who attended classes of that description would take first what you have called the graduate course, and perhaps not trouble themselves with what you call the professional course, but go straight on to what you may call the more remote and more scientific development of the subject?—Yes; and I should contemplate this rather, (of course it would be a question for the Inns of Court to consider, I do not mean to express a definite opinion,) while men were taking the degree course they should not take the other course. I want to ensure the best education that can be given within a certain time and within a certain range of expenditure, and if they got to the point of their degree they would than have the time and the organisation to carry them onwards, and through direction of the Legal Faculty would know how to pursue the branch of the law they were going to take up, and would pursue it through such classes as were necessary to give them the requisite certificates.

22,098. Then your view would be that in the pursuit of these higher and more remote branches of inquiry it would be a great advantage that the student should be prepared by some practical acquaintance with the problems of law?—Yes. When I say problems of law I do not mean the details of practice or procedure, but the substantial working of our legal system. I always feel some doubt as to how far a man really would be benefited for any work in life by knowing the higher branches of law without having some real acquaintance with what I might call the substructure—the foundation.

22,099. At all events he would be more capable of appreciating the bearing of those large propositions if he had the matter in his mind?—Certainly, and therein seems to me to be always the danger of lectures generally. You ought to organise the lectures to lead from step to step. I think a proper control of the kind of lectures a man should attend up to the graduate course would be necessary, although the examination itself, if properly directed, would necessarily also be of great assistance in keeping the man as we might say in the straight line without going into too many bye-paths.

22,100. You would rely on the directive influence of the examination?—Yes, if properly carried out.

22,101. In that sense examinations are of great value in giving direction to study?—Yes, and in law examinations are probably of more value than in most other things, because the lawyers work is valuable largely in proportion to the extent to which it can be brought out in a given time and in a concentrated form. You do not want a lawyer to take five or six hours in order to produce his knowledge. Examinations show what a man can do on a given problem in a given time, and in my opinion that makes them valuable.

22,102. Would the breadth, completeness, coherence, and permanence which a legal education would gain under the system you have suggested form an answer to the question which is sometimes put as to why the Inns of Court should enter into the University system and form part of it?—Knowing what I do personally of Liverpool, and what I believe to be equally true of Manchester, Leeds, and other great

towns where there is localisation going on, I conceive it to be possible that in process of time the Inns of Court might be able to be satisfied of even what I may call the post-graduate education by getting certificates of that locally; and if they were once satisfied of the examinations in law,—for instance, that the Victoria University was keeping up a sufficiently high standard so far as regards what I may call the student stage,—they might possibly save a man the expense of coming to London for the subsequent stage.

22,103. There is a school started at Liverpool?—Yes, but it is still in a very inchoate condition, and there would require to be considerable organisation.

22,104. (*Professor Sidgwick.*) Can you tell me why you think the University should not concern itself with the professional training of lawyers. If I may put the analogy, it is generally assumed that the University does and should concern itself with the professional training of medical men; why not equally so with lawyers?—One has to use such expressions for the purpose of making one's meaning clear, but one does not mean to use them without qualification. When I say "concern itself with the professional training," in a sense it is concerning itself with the professional training in providing a sound and necessary preliminary basis for that training. What I mean is that for mental study the University should not keep the profession in view. It would be, to my mind undesirable for the men themselves, and it would be, to my mind, doing badly what could be done much more carefully afterwards. It may be both desirable and useful for medical men where they have hospitals and appliances of that kind that both trainings should be given, but certainly it seems to me that at present the Inns of Court have so much greater advantages for giving the professional training in London where the Courts are, and where there are, so to speak, hospitals to work at, that the Universities elsewhere should confine themselves to the scientific study of the first portion of the course, which is also good mental education.

22,105. In Oxford substantially there is now a distinction drawn between the degree in Arts and the degree in Law, and at the same time a considerable amount of legal study is introduced into the degree in Arts. Of course in Cambridge, as you no doubt know, the degree in Arts can be obtained by a study of law which occupies almost the whole of a man's University career. Do you think that that distinction is one that is desirable to apply besides the one that you maintain? That would involve a kind of three-fold division. In case a student tried to take his degree in Arts by means of study preponderantly legal, then a degree in law, and then according to you, the further professional teaching which is required, would that three-fold division be in your view too complicated?—I had rather not pronounce an opinion. I do not think it would be worth having, because I have not considered the point before. I conceive a two-fold division where it would be for the University to consider how far it could give a degree in Arts, either for the whole, or half, or quarter, of the legal degree. It is a matter upon which I can offer no considered opinion. But I do not see any necessity for complicating the matter.

22,106. If I understand you rightly, you think the lectures for the University should be open to professional and non-professional student?—If the working arrangement is come to, it seems to me to be a necessary part of it that there should be, at any rate for the bulk of the lectures, admission to those who were in a position to ask the University to examine them, the Inns of Court retaining the control and appointing the body of the professors and teachers. Nevertheless, they would be teachers and professors in the University; and I assume therefore that there would be admitted to their lectures upon such terms, as to fees and other things, as might be fixed, those who were University students, whatever their ultimate destination.

22,107. Would you allow the professional lectures to be open to both branches of the legal profession?—If the Incorporated Law Society came into the scheme, then I myself should think there ought to be no difficulty in arranging, up to a certain point, at any rate, that the lectures on most subjects should be open to those who were going to either branch of the profession; but, just as I claim for the Inns of Court, unfettered control as to what they should say would be necessary for the call to the Bar, so I take it the Incorporated Law Society would assume for their duties equal freedom, and thus would require, I suppose, special training in solicitors' work. Just as I should contemplate the Inns of Court requiring special certificates of proficiency given by competent teachers for the man who has to be called to the Bar, so the Incorporated Law Society might require at least two years articles in a solicitor's office before admitting a man as a solicitor, though accepting the degree as a *sine quâ non*, but not as the test which alone would justify the admission to the profession.

22,108. You also said that no University examination should be the sole test?—Certainly not.

22,109. But at the same time you think it should be indispensable?—I am inclined to think it should be indispensable. Of course it has occurred to one that at the Inns of Court we get a great many students from all parts of the world, the East and the West. They find there is a difficulty sometimes, as I think Mr. Anstie knows, in meeting the requirements of entrance examination. It seems to me there would be no difficulty at all in their going through the University or student course and taking the degree. If there is any difficulty there might be a dispensing power. Those are the kind of things in which the Inns of Court might retain a dispensing power, as they do now, but I see no difficulty from any other point of view in requiring a degree. There would be an advantage to start with in the Gresham University. It would be here in London, and students would go to its lectures just as they do to those of the Inns of Court. It would seem rather like an unfair advantage to the Gresham University, but, on reading the evidence of Sir Frederick Pollock and Professor Westlake, I should imagine that the Universities of Oxford and Cambridge would quickly recognise the advantage of having a recognised standard like that of the Gresham University, and would give such a test in their teaching and examination in law as would satisfy the Inns of Court as to their law degree, as the Gresham University should do. So my plan would be really an enormous stimulus, so far as the study of law goes, to all Universities.

22,110. I think you said reporting cases in court would be required?—It is always useful.

22,111. You would not make it a condition?—No, I only mention it as one means of professional training. I know that reading with an Equity draughtsman and afterwards in Common Law Chambers is something which I could not possibly have done without. I am sorry to say there is less of it now than there was. You must try in some way to compensate for the loss of knowledge in handling the tools which follows from mere book knowledge or from mere lecture teaching. It occured to me that that which the Indian Civil Service student was required to do, namely, to make from beginning to end a report of cases reported by himself in different Courts, would be one method which would familiarise a man with the practice; and I can conceive that good lecturers might usefully hold moots or discussions. A good teacher might easily foster those moots amongst his students. All those things would be to my mind thrown away in the mere training for the degree, but would come in properly and usefully in the professional stage. The Inns of Court would be able to formulate better than I can suggest various methods of that kind which would aid in the maintenance of a high standard for the call to the Bar.

22,112. Other witnesses who have come before us while entirely agreeing with what you have said as

The Hon. Sir W. R. Kennedy.

10 Feb. 1893.

regards the importance of practical training, and agreeing with you in regretting any diminution of, have been rather inclined to hold that between the academical training in Law on the one hand, and the acquirement of knowledge through practical work in chambers on the other, there was not much room for introducing further valuable instruction by means of lectures. They have been inclined to hold that all the instruction that could usefully be given by means of lectures might be regarded as within the range of the academical work, and beyond that what is required is a means of acquiring practically that which could not be given by means of lectures. If I understand you rightly, there is also an important function for highly technical lectures?—I think so. You must depend upon your lecturers. If you had a man, fit to be a teacher of the professional class, I think he could do much for the students, and might, for example, discuss with them cases of importance which had recently been decided by the House of Lords, eliciting their opinions and getting their views, and from time to time might give them papers of a practical kind to study interrogatories in such and such an action, and so work them up in a practical way. A conscientious barrister, such as those with whom I read, would work with the pupil through every draft that the pupil did for him. I should like to see that done in the training of every professional student, but, as on the ground of expense it cannot be done, you must do the best you can. A good deal may be done by making the men attend the Courts, and a good deal is done by sending men to readers in practice and procedure.

22,113. I suppose you would hold that if this clear distinction between academical and professional lectures was established, one advantage would be that the professional lectures would assume a more distinctive type?—Quite so. You would assemble in the professional lecturerer's room only those who were trying to get the education to fit them for the profession. Then in the University student classes you would assemble those who have not arrived at that stage at all, and who have not the same wants and desires. You would be able to separate from the professional class the men who were students of Law only for mental training, or who were students of Law for the purpose of becoming ambassadors or diplomatists, or who wanted it to help them in any other career, in connexion, say, with commerce, where they thought it would be useful. You would have in the professional class-room men working with one object just as you have when you have half a dozen men in a barrister's chambers coming down early to get the papers in an important case. You want to get men whether it be into the chambers or the class-rooms who really seek to work for a common object.

22,114. This professional course of instruction may, as far as possible, supply the best substitute for practical training in chambers?—The best substitute you can get.

22,115. (*Lord Reay.*) You do not object to the Faculty of Law in the University undertaking the most advanced course of what you have called the mental training part?—No. The more the Universities find themselves able to get a high standard the better, and the teachers, of course, who would take part in the examinations, would help to bring up the teaching to a high standard.

22,116. Those students whom you call mental training students would be taught the philosophy of Law, Constitutional History and International Law, public and private?—I am rather inclined, if I may so with respect, to say that those who wish for such advanced teaching must not look to the student classes. My opinion is not of much value, but in answer to your question I give it. I am inclined to think you must begin a little more humbly with your University course for the degree, because what I should like to see would be the history of Law and the principles of Law, which involve a good deal of reading, thoroughly worked at. I should hardly think the students would have time to get benefit from such advanced classes.

22,117. I was thinking of students who have already obtained the elementary knowledge, and are proceeding to a more advanced stage?—I suppose that any University that is worthy the name, would have, for example, a professor of International Law. Then let him by all means have lectures as far advanced as he can take his students.

22,118. And you think we might have the co-operation of the Inns of Court in starting research classes in the University?—Yes. You are aware now that they provide for education, to some extent at any rate, in all these branches. Certainly International Law has been, and, I believe, is at this moment lectured upon; I do not think there would be any difficulty about that, because it is a recognised branch, though I should not attach much value to International Law from an educational point of view.

22,119. You are aware that an opposite view is taken to the opinion that to keep up the high standard of the mental training you should give a preponderating influence to the Inns of Court?—You have to deal with bodies that are possessed of means and responsibility. You have to invite them to come into your system, and I think the Inns of Court would be justified from their position in requiring at any rate at first, and until they saw how things worked, that they should not materially be interfered with in their management of the educational course, which they largely provide and for the teachers of which they certainly make by far the largest endowment.

22,120. It is your view that the Inns of Court would be justified in keeping the chief control?—Yes. My own belief is that these things have not gone as fast as they might, but there is a general desire on the part of the Inns of Court to do the best they can for the study of the Law. Of course their first duty is to see that the students are properly taught, and they would require a preponderating influence. Practically the Council of Legal Education should be the Legal Faculty.

22,121. (*Lord Playfair.*) I did not quite understand when you spoke of the localisation of professional training in such places as Liverpool, Manchester, and Leeds, whether you meant that even the professional part of the training might be given there by agencies which now exist, or which might hereafter exist?—Which might hereafter exist. What I mean is this: I went myself to localise in Liverpool in 1873, and there were then certainly under 20 local barristers practising. There are now a very large number, and in Manchester, I believe, there are nearer 100 than 50, many of them very competent and able men. In such places it might be that out of the local Bar for the professional courses the Inns of Court, if a system such as I suggest worked well in London, might be able to create such a local staff of teachers as to justify their calling to the Bar the men who had passed a University examination in law and got their certificates in the professional course afterwards locally, without requiring them to come up to London. One must try to provide for the tendency to decentralise and also provide for the economy of expenditure in a profession some of the members of which for a long time earn very little. I do not think that it can be done at present, because the local Bar is still comparatively weak compared with what the Bar is in London.

22,122. You think it would be possible for the Inns of Court and the Incorporated Law Society to send down examiners and be satisfied that the professional training is going on rightly there?—I think so. They would know the men. The solicitors have powerful societies in all the great towns, and there are very able men practising at the Bar locally. I can conceive it possible that if the thing worked smoothly here, those who were working at the Bar locally, and had got the requisite University degree might be provided with a sufficient professional course.

22,123. And that would have the advantage of getting the provincial Universities which have arisen and are arising, into co-operation with the Inns of Court and the Incorporated Law Society?—It might.

The study of the law, which I believe to be a valuable mental training, would be encouraged at the Universities if they could get the Inns of Courts' sanction, as you might call it, for the University degree in law being a *sine quâ non* of the call to the Bar. I wish to say this by way of guarding myself: there would have to be no doubt careful consideration of any scheme as to discipline and matters of that kind, if they allowed men to qualify locally in the professional course. They may or may not be able to adopt such a scheme, but it seems to me a possibility.

The Hon. Sir W. R. Kennedy.

10 Feb. 1893.

The witness adjourned.

Adjourned to Thursday next, the 16th of February.

Fifty-fifth Day.

Thursday, February 16th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir WILLIAM S. SAVORY, Bart., M.D.	Professor BURDON SANDERSON, M.D., F.R.S.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	JAMES ANSTIE, Esq., Q.C., B.A.
Professor GEORGE G. RAMSAY, LL.D.	RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

The Right Hon. the LORD COLERIDGE examined.

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

22,124. (*Chairman.*) You have been kind enough to come here to give us your views as to the advisability of establishing a strong Faculty of Law in the proposed new teaching University of London, and the best way of doing so. I will leave you to take your own course? — I have made a few notes, and if at any point in my evidence any of the Commissioners would kindly interrupt me, and ask me anything they like, I will give them the best information I can. Until I heard it from the noble Earl, I was not quite sure what it was on which you wanted my opinion. With regard to the history of the former legal education, so to call it, I have read carefully the evidence that has been sent to me, and I have nothing to add to Mr. Crackanthorpe's evidence on that subject. Mr. Crackanthorpe knows a great deal more about it than I do, because he has been a member of these different boards and councils, and he has given the Commission the information with a fullness and particularity which I cannot pretend to. As far as my own practical acquaintance with the subject goes, every word of that evidence of fact is entirely to be relied upon, and is most valuable. As to opinion, I ought to say that I have never been a member of any of the councils or any of the boards which the Inns of Court have from time to time constituted. I was made a judge in 1873. At that time Serjeants' Inn was in existence. I left the Middle Temple. I ceased to belong to any of the four Inns of Court; and when they were kind enough to re-elect me, and make me a Bencher again, from circumstances which I need not trouble the Commission with I was not able to go for many years; and therefore I have singularly little practical knowledge of the actual working of the different councils and boards which the Inns of Court have from time to time created. One year I was treasurer of my own Inn. That was the year in which a large and comprehensive scheme of Lord Justice Lindley's, who is also a member of my Inn, the Middle Temple, was put forward and negatived by a very large majority of our Benchers; and, as probably the Commissioners are by this time aware, the negative of any one of the Inns is fatal to a scheme, because we act together, and any one of the Inns refusing its assent to a joint operation is fatal for the time to the scheme which is put before them. That is what I want to say in preface. I may add that I have, like other men of education, and by way of belonging to my profession, thought and had these things before me, and considered the matters connected with them for many years. I would state shortly what the result of my mind upon the matter is. To begin with, I agree with Mr. Crackanthorpe that nothing can possibly be less satisfactory than the public teaching of law, whether as a science or as a profession. Until within the last 25 years there was no teaching at all, and yet the Commission ought to know,—probably many of them do know—that under that system, if system it can be called,—that state of things, I will say, some very great lawyers did manage to grow up not merely great lawyers in English law—I do not like to use the much abused word "jurists"—but men of great legal knowledge; men who knew the laws of their own country and the laws, so far as they became material to their inquiries, of other countries. I do not like to mention living names, and therefore I purposely avoid them, but I may mention the names of Sir James Willes, Sir George Mellish, and Sir George Jessel, who were three of the very ablest men I ever knew, and certainly three of the greatest lawyers, not merely English lawyers, but who had the greatest acquaintance with law, in a general way, of any men I have ever met. They grew up under that state of things. How they acquired their immense and varied knowledge, it is difficult to say, but they did acquire it. Therefore, at all events, this may be said of the old state of things; it did not prevent people, even if they rose to eminence in the practice of the profession, becoming great lawyers. Mr. Benjamin was a peculiar instance; he was an exceptional person, and he is an instance (I shall have to say a word about that later on) of the advantage of a knowledge of law other than the law he had to practice. He was, as I daresay the Commission are well aware, a great southern lawyer, when the States were North and South; he was the leader of the Bar of Louisiana; and in the State of Louisiana, as also I daresay the Commission are well aware, the Code Napoleon is, or was at that time, the governing law. Therefore, when Mr. Benjamin left America, and came over to this country, to the practice of English law (where he achieved a great professional

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

success) he was acquainted, and practically and familiarly acquainted, with another system of jurisprudence entirely different from our own. I have heard many men say, and so far as my opinion is worth anything it is true, that an acquaintance with the Code Napoleon, which is to a great extent founded upon Roman Law, and a different system from our own, was of great advantage to him; not only was it of great advantage to him in actual practical argument, because it gave a breadth and grace and facility of illustration to him which might have been wanting otherwise, but it gave him a grasp of larger, wider, more general principles than if he had not had a familiar and practical acquaintance with the Code Napoleon. He therefore is an example—perhaps favourable, yet an example, as I have always thought and said, of the advantage that may result, and that in a powerful mind will result, from an acquaintance with law in a larger way than is at all necessary for success in our profession. The next thing I would mention is this—probably the Commission may know it, but it had better be borne in mind, because we are on practical matters here—the practice of the profession in courts and in chambers and the scientific study of the law are in this country absolutely distinct. Great success may exist in each without the other. I do not know whether the Commission think I am going beyond what I ought to do in mentioning examples, but Mr. John Austin is a very remarkable example of the one state of things. He knew English law; he knew jurisprudence, so-called, in a large way. I do not know, but I do not suppose that John Austin ever had a brief in his life. There were other famous men, anybody who knows the profession knows or knew of Sir William Garrow. He rose to be Attorney General, and at different periods of his career he was a not altogether unequal rival of men like Lord Erskine, and Sir James Scarlett. He knew so little law that it is said he did not even know the names of ordinary reports that he cited; he quoted Siderfin as "Sid" in the House of Lords entirely wrong. Lord Eldon used to tease him about it. Sir William Garrow rose to the highest eminence that a man can attain in the profession. He became Attorney General, and was Attorney General for several years. There is no doubt that these are extreme examples, but it as well to take extreme examples, because between two extremes there are infinite varieties. But nothing should be more carefully borne in mind in discussing these matters than the absolute distinction there is in this country between knowledge of the science of law and the practice of it. I do not mean to deny for a moment that some knowledge of the theory of law is a very good thing, that even if it is only slightly, to have read intelligently, Justinian and some other of the great Roman lawyers is a great advantage. As I was saying of Mr. Benjamin it adds facility and grace to your argument which you would not have without it. I remember once before Lord Campbell, a man whose name I will not mention, ventured to quote Justinian (he was a man who had written a book about Crete). Lord Campbell showed his contempt for Justinian by asking whether there were any laws of Rhadamanthus which he could bring before the Court as illustrating the subject of his argument. Yet no doubt some knowledge of Roman law is useful even professionally. If however the practice and profession of the law alone is regarded, I doubt very much the use of a Faculty of Law or of University teaching at all. Conveyancing and work in Barristers' chambers teach men a great deal more than they can learn from any lectures as mere lectures, that is to say, listening to a Professor reading a lecture and not asking questions so that there is no catechetical instruction. I do not mean to say that a very able man, and one determined to get on—an exceptional person, and one who would get on under any system—may not derive great benefit from hearing an eminent man lecture, taking notes of what he says, and thinking out what he says afterwards in his rooms. I do not say that it would be useless, and I do not deny that there are men who might acquire a practical and even useful knowledge of their profession from it, but I do say that as far as I know one great case really carefully got up (by really carefully got up I mean the principles of it and the argument really mastered from the beginning) is of more use to a man not merely in his profession in making money (I do not regard that) but is of more use to him in giving him a knowledge of real law and on what law is based than the lectures of many Porfessors. If I may be forgiven for mentioning partly dead and partly living names, I do not doubt that to go and listen to Sir Frederick Pollock on Contracts, or to the late Mr. Dart on Vendors and Purchasers, or to Sir Walter Phillimore on Ecclesiastical Law, if a man brings a determination to excel in any one of those things or to master them he might derive great use from them. But for the ordinary purposes of the profession, and more than that, for a real grasp of the subject matter, one great case studied from the beginning is more important. It has sometimes been my duty, and I have no doubt it has been the duty of many another person, to trace back to its very source the law that has to be argued about to show on what it is really founded, and to go to the very bottom of it in a case in which what he does has to be practically applied the next day or two or three days afterwards. To my mind that is a more important piece of education to 99 men out of 100 than attending the lectures of the ablest men. The 100 men, if they are fairly intelligent, and if they do really master the case as I have said, will learn a great deal; but out of the 100 men full 50 who listen to the lectures will learn nothing at all about them; they will be interested perhaps; they will go away and they will forget pretty much all they have heard, and it will be of very little use to them.

22,125. You think it is no better than reading a book?—I should say that it is not so good because you can look back in a book and make a mark in a book, and if you want to get the thing up you can look at it again, whereas if you are listening to a professor you cannot interrupt him, and if you begin to think you miss the next thing. According to my experience, to listen to a good argument, which is a lecture really, is no small effort of the mind if it goes on long; and with many good men, if you miss a link you get thrown out altogether. Therefore, I am strongly of opinion that for real learning (and I wish to be understood as not meaning merely making money), the profession and the practice of it, if you work in another man's chambers and get the cases up, you learn more than you do in going to another man and simply taking notes of his lectures. There are some books (it seems a paradox, but it is true, and this illustrates what I am upon) which from their very imperfection are excessively useful as trainers in this way. I do not know whether any of the Commissioners are acquainted with Lyndwood. That book has a bad index. Lyndwood is a high authority, but if you want to get a thing up in Lyndwood you have to read a great deal, which, if the book had a better index you would not read. The mere being obliged to take the trouble to fish out of a book with a bad index all that relates to the subject matter in hand, gives you an acquaintance not only with that subject matter, but with a great number of other things in which that subject matter is imbedded, which a book with more easy references would not give you. That is an illustration which shews that work that takes trouble is almost always more useful than work which does not take trouble, and it is much more likely to be left on the mind. I do not want to say a word against classes, for two reasons; first of all, because when I was at Oxford, which is a good while ago, all one's best teaching was catechetical teaching; teaching which we got in lectures and lectures in another sense in our tutor's rooms where we could ask questions, and where the thing was much more easy and conversational than it could be

in a lecture; also, I do not pretend to know what is done in classes. I have no practical acquaintance with the teaching in the law classes, and therefore I could not give any opinion about it, and I must not be understood in what I have said to be saying a single syllable against the classes which the Inns of Court have instituted, because I really do not know how much instruction is given in them, and in what sort of way—whether the lectures are really catechetical or not. If so they will be very useful; but, when I was a young man, the way we learnt our profession, so far as we did learn it, was by going to a conveyancer for a year or a year and a half, and then to a junior barrister for a year or a year and a half, working in their chambers, and seeing the thing actually done; and, to my thinking, mastering such a set of papers as the Marlborough settlements, or the Buckingham settlements, or the Londonderry settlements, taught a man a great deal. I have mentioned these three cases because they happened to be in Mr. Christie's chambers when I was a pupil. Those great families married and intermarried, and all their settlements happened to come under my observation as a pupil, and I saw the working of the conveyancing system in deeds, which I myself had to draw with my own hand, which were afterwards, of course, corrected by Mr. Christie. The mechanical draftsmanship of these things was of a great deal more value than listening to a lecture from Mr. Joshua Williams or anybody else. One got to know what was the real meaning of terms and procedures; which, when one has not to deal with them oneself one does not always understand thoroughly. Therefore, I admit that our teaching was as unscientific as any teaching could be, because there was really no teaching; we were turned loose into the chambers of these great men, and we had to pick out things and get what we could. But what we did get was of great value because it was practical, and we got it by experience, as it were, and not merely by word of mouth.

Having said that I come now to the question about the Faculty of Law in the teaching University. I doubt very much if law, apart from the practice of the law, will ever have much attraction for mankind, for people in general. Some law, of course, persons must have; but the distinction between law and practice is as old as Cicero, and probably older. There is a letter in which Cicero makes great fun of the question. I think it is in one of the letters to Atticus. He says: "I do not know "much about law: I win," what we should call verdicts, "I do not know as much about law as "Scævola, but I have got on." I think that apart from practice the mere study of law as a science will not be found attractive to many minds. There is no doubt that close reasoning; real comprehension of a great system; style (by which I mean the faculty of clear and it may be graceful expression) are extremely valuable to anybody in any profession. We who stand up for the classical defend the classics, because we say they tend to give these things, and I honestly believe they do; and I believe that as long as mankind remain the creatures they are, close reasoning, graceful expression, and real comprehension of a whole, and the thing being put in an intelligible and broad way, will always be attractive, and always worth cultivating. We get these things, or think we get them (we try at all events) from the classics. I do not know much about foreign law, I admit, but as far as regards our own law I do not know that there are many books which, apart from the mere study of the law itself, it would be very well worth while to read. Grotius is one, but Grotius is not a writer who is much studied in this country or who is of much use to us in this country; and I doubt if a lecture on Grotius would be found very attractive in the University of London. There is a remarkable example, to my mind, which shows how very little the world cares, in the matter of law, for these great qualities. I suppose if ever there was a man who wrote as a classic upon law it was Sir William Blackstone, and I suppose there are very few people who care to read a great deal of Blackstone. A great deal of him anybody could read for clearness of idea, beauty of expression, and the grace of the composition; but I think, very unfairly by the lawyers of the present day, Blackstone is undervalued simply because he is a classic, and because he does write law so as to make it interesting to anybody, and it is supposed that because he is a clear stream, he is therefore a shallow one, which does not by any means necessarily follow. Therefore, I doubt very much myself if law, apart from the practice of it, will be found to have great attraction for any great number of minds. Mr. Crackanthorpe says it is very well for a country gentleman to know about the Lands Settlement Act; and no doubt it is. An elementary knowledge of law, I suppose, most gentlemen possess, and if they find it necessary to know what they can do, I suppose they either ask their attorneys, or find out for themselves what they can do. But that is not what is pointed at in the Faculty of Law; that is simply a practical knowledge of the elements that are necessary to be used in every-day life. But the study of law as a science, and as a school of the intellect, apart from the use it can be turned to, I suspect will not be found very attractive to many minds. That is all I have to say about the general subject. What I have to say now is about the Inns of Court, and if any of the Commissioners want to ask me any questions I shall be glad to answer them.

22,126. We gather that a study of law would not be prosecuted, and it would be no use that it should be prosecuted, by anybody, except a man who intends to take the law as a profession, neither a commercial man nor a man going into Parliament or diplomacy?—Nobody, I think, is without a good general knowledge of law. Every merchant knows the law with regard to bills of exchange, and so on; it is necessary for the practice of his profession, and whatever is necessary for the practice of his profession I suppose he will learn. With regard to diplomacy, I should say that some knowledge of international law would be very useful. I do not know practically, but I conceive it would be so. One of the practical considerations is the position of the Inns of Court—what they have done, what they can do, what would become of them, and what it is practicable should become of them in this new University if they formed part of or were incorporated into it. I have read the evidence that has been sent to me, but I do not know whether the Commissioners have before them the income of the Inns of Court. I only know about my own Inn. I have no right to inquire, and I do not know anything about the other Inns; but I do not think I under-rate it if I say they have 100,000*l.* a year. I may be wrong about that. I think the income of my own Inn is somewhere about 27,000*l.* a year. I have always understood the Inner Temple to be much richer. I do not know what the income of Lincoln's Inn is; and I have always heard the income of Gray's Inn put at about 10,000*l.* or 12,000*l.* Therefore, I think I make a fair estimate in saying that putting the four together it would be something like 100,000*l.* a year. That is a very large sum of money, and it is a sum of money which if properly administered (when I say properly administered, I am not aware of anything like improper administration in the sense of being corrupt) and made the most of for professional education. But there are some drawbacks. First of all, there are very large expenses. 100,000*l.* a year does not represent the balance that they have; that is their gross income. In my own Inn there are very heavy charges for a very expensive, and, I am sorry to say, a very badly-built building. None of the present Benchers had anything to do with it, I think. The cheapest thing we could do with it, I should say, is to pull it down; it cost about 50,000*l.*, and, of course, burdened the Inn with a great deal of debt. There are also very considerable sums that we pay now

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

to teachers and professors, and for prizes, and so forth; and then the dinners that we give are exceedingly cheap, and cost the Inn a great deal of money. I do not know about the other Inns, but you get a very good dinner at the Middle Temple, with a half a bottle of wine included, for 2*s.*, which, does not in the least cover the expenses of the dinner. Therefore the dinners are a very considerable expense, and there are a great many charges; but, still, the sum is very large. Next, there is the extreme difficulty of getting the Inns to act together. It is not altogether a thing you could find fault with; an honest rivalry is a thing not to be discouraged in educational institutions. I am old enough to remember how the feeling was between the colleges at Oxford. It is only quite lately that the colleges have come to what seems a sensible arrangement in fusing their lectures. For example, if Balliol has a very good scholar, and New College has a very fine "Science Tutor," which means Aristotle and Plato, and if some other college has a good scholar in History, it has become quite a common practice for New College, Brasenose, Trinity, and other colleges, to go to one college for History, to another for Science, and to another for Scholarship. That seems a very sensible thing to do, but it was a very long while about, and was subject to great objection. In the case of the Inns of Court I have nothing which shows more strongly the feeling I am speaking of, and which you, as a Commission, must take note of, with regard to the extreme difficulty of getting the Inns to act together than the following example. We had considerable difficulty in getting a place where the classes should meet, and where the instruction could go on together; and in order to help this, and make it more easy, one of the Inns of Court offered us a beautiful room for next to nothing. The offer was refused, not upon any financial grounds, because nothing could be more handsome than the offer; it was a mere nominal sum. It was not refused on the ground of want of convenience, because convenient it was beyond all question; but it was supposed that it would give an unfair advantage to this Inn to let this room; that people going to this beautiful place would be attracted to that Inn. I did not see it, but a great many people did see it, and the end of it was that, as I have mentioned, the offer was declined. That is only two or three years ago; and therefore that shows the existence still in the four Inns of great disinclination to become parts of one body, and to act together as one body. In a sense, of course, if I may be permitted to say so, one cannot disapprove of it. I mean that each Inn should desire to do the best for its members in its own way, and should like to encourage its own members and keep its own members together. Those are reasons which no fair mind, I think, would deny are very respectable reasons, reasons to be treated with respect, and to some extent with approval; but they form a very great practical difficulty when you come to think of making a Faculty of which these bodies must be the dominating power.

They must be the dominating power for several reasons. First of all, as Mr. Crackanthorpe has pointed out, they have money, and you cannot make the Faculty without them. Next, certainly, without wishing to be ultra-professional, there can be no question that the leading men in the four Inns are the persons whom you would desire to see the leading men in the Faculty, and therefore, that they must have a predominating influence, and predominating power even, in the Faculty, is quite plain. To get one or two of them would be no use; it would not really advance the matter. If you got one of the Inns moving and the others would not move with it, you would not get any good I think. They would not mind my saying this, because it is a matter of opinion. I daresay they think me very extravagant and wild—very probably—but they would not mind my saying that I think them a little narrow. I am speaking of my own Inn—I cannot speak of the others—but at the same time I am bound to say that having seen them for some years, and having been their treasurer, a set of more high-spirited and independent men—men to take views and maintain them without any selfish motive—I cannot conceive. Therefore you must remember that you have to deal with men who are very important, because they are clever men; they have no personal pocket influence distorting their judgment; they have what I think are prejudices, old, well-settled opinions, and you will have to deal with those if you come to approach them.

Then there is another point which I should be very strong indeed upon. That is the discipline. In our profession it is most important that there should be discipline. Even so short a time ago as yesterday a matter was brought before me and my brother judge who was sitting with me, which I believe we shall call the attention of the man's Inn to. It was a thing that ought not to have happened, and one which was very discreditable professionally. One could not trust the power of exercising a discipline over a barrister to any other hands than those of the profession itself. No other profession does so. The medical profession does not, as I believe, the army does not, and no other profession that I am aware of would tolerate the discipline of its members being taken out of its own hands. I myself should be exceedingly averse to, and I should resist with all my power, any attempt to interfere with discipline. That is a very important matter, because if there is to be a Faculty, and if there is to be a University, it is exceedingly difficult to say that any very great Faculty in that University should be exempt from University control. I feel that that is so, and yet I do not very well see how the Inns of Court could consent for a moment to give up the discipline over their own profession. You cannot pass them by; you cannot subordinate them to the University without an Act of Parliament; you cannot do it, I think, by negotiation with them; and even to infuse a non-professional element into their governing bodies, you will find extremely difficult. We tried it two or three years ago in the scheme I have mentioned of Lord Justice Lindley's. It was the most tentative and slight thing that could be. I was a party to that scheme. We proposed that the Council itself should have the power of co-optating. I forget the exact number, but quite a small number, not a number that could by any possibility have ever dominated, some two or three distinguished non-professional men. My own Inn would not look at it, and that scheme was rejected by the Inn of Court to which I belong. I think myself it was a mistake. I was a party to the proposition, and I voted for it; but there was a large majority voted against it, and it was an indication to me of how very difficult it would be even to infuse into the governing body of this proposed Faculty any element non-professional. I think distinctly, and there is no harm in saying so here, because I said so there, and my opinion is perfectly well known to anybody who cares to know it, that it would be a very good thing. But it is not so regarded, and you would have a very great difficulty in trying to subordinate in the slightest degree the Faculty of Law to the governing body of the University. That is a most serious difficulty.

22,127. Even as to the appointment of professors; and the dismissal of professors?—No, I do not mean that; but I mean discipline over the members of the profession.

22,128. Of course the University would not attempt to touch that, but it would have control over its own professors?—Yes, I was not thinking of that.

22,129. The University would have nothing to do with disbarring a man, or anything of that kind. That would be out of the question?—Yes, I meant to say that. Of course it is rather for you than for me; but having a University with a senate, or whatever may be the title of the govering body, and a great Faculty entirely independent of that governing body in all matters of discipline, is a difficulty which I am very glad your Lordship has to settle and not I.

22,130. You think there would be a difficulty in the way of the University having control?—I think so. There are some remarks with which I entirely agree on page 26 of Mr. Crackanthorpe's evidence. Perhaps, without troubling you by reading them, I may refer you to pages 26 and 27. My answers to the questions your Lordship asked would be very much the same as he gave. Every word is perhaps not important; but he begins at question 13,029 and goes on for the next three pages down to 13,027. I quite concur in that; and I should wish to make that evidence my own upon that subject. The Inns of Court must be consulted, of course, and I should be very glad to see them incorporated as a Faculty of the University; but the power of discipline of their own members must be left intact; the power to call or to disbar must be left intact. At least, I think so. I do not think it would work without it, and I should be glad to see the University have power to add to any course of teaching which the Faculty might choose to prescribe. That goes along with my view that some non-professional element in the governing body of the Faculty itself is very desirable. The Faculty might prescribe what it thought right for practical purposes, or what they call legal education, but if they did not satisfy the governing body of the University, I should be very glad myself to give to the governing body of the University power, not to strike out, but to add anything that they thought important, besides that which the Faculty itself prescribed as a subject of examination or a subject of teaching. I have not had time to read the debate, but I think you will find that this last part is substantially what Lord Selborne, then Sir Roundell Palmer, proposed in the House of Commons, and which was defeated in the House of Commons by a very narrow majority, which majority was very considerably narrowed by a speech which Sir George Jessel made. Sir George Jessel believed in the absolute perfection of the Chancery system, and threw almost contempt upon Lord Selborne's scheme. This scheme was almost carried in the House of Commons. Sir Roundell Palmer very nearly succeeded. I should be very glad to see these great Inns of Court made to be colleges in the University, the University having the power to modify which I have expressed; and I think the University would find it useful, that the Faculty of Law, or those who govern the Faculty of Law, should be allowed considerable sway on the council of the University itself, or on the senate. That really is all that it occurs to me to say on these two heads. I wish to say once more that this is only the expression of my individual opinion. I have not spoken to any human being about what I was going to say, and I must be understood to speak simply as an individual of some age and some experience, but not as in the least degree representing my Inn of Court, who I am afraid would dissent from almost everything I have said from the beginning to the end.

22,131. I gather that whatever body had to carry out the negociations with the Inns of Court would find it very difficult. They would have to negociate with each one separately. The Council of Legal Education have no power to speak for all?—No.

22,132. There is a little ambiguity with regard to the word "Faculty." In the Gresham Charter it means a body of teachers in that one particular branch?—When I used the word "Faculty" I meant a head of learning.

22,133. When you spoke of the difficulty of a University not exercising control over the whole of its Faculties, you meant the whole body of lawyers in London?—Yes.

22,134. You meant that they would belong to the Faculty?—Yes; besides being members of the Inns of Court they would be members of the Law Faculty of the University.

22,135. Every barrister?—Yes. I have carefully not said a word about attorneys. I am not very much opposed to a fusion between the two bodies; but that is a matter which I do not wish to express an opinion upon.

22,136. (*Lord Reay.*) I understand your Lordship to be of opinion that lectures, in which the catechetical element plays a great part, in chambers would be the best training for a lawyer?—That is for the profession undoubtedly.

22,137. Then I also understand that you do not attach much value to the study of the science of law as mental training; that you have a distinct preference for the study of classics?—I do not mean to say that it would not be very useful indeed, just as mathematics are very useful; but I doubt if it would be found very attractive. The classics, in addition to the discipline they are supposed to give, and in my opinion do give, the intellect, have attractions of their own; they not only train the intellect, but they gratify the imagination, the historical sense, the taste, the reason.

22,138. Abroad the Law Faculty is the most numerously attended; in Germany, in France, in Belgium, and in Holland the Law Faculty not only supplies professional teaching, but also mental training for gentlemen. It is the Faculty which all students enter who are in search of a liberal education. How would you account for that?—I was not in the least aware of the fact.

22,139. The result is that members of legislative Assemblies and of the Civil Service as well as of the magistracy are jurists?—I can only say that I do not know law in that way; that I do know the classics, and I prefer what I do know to what I do not.

22,140. Would your Lordship say that the study of a treatise like that of Savigny on the law of possession is not as much calculated to give a man mental training as that of any classic author?—If you ask me whether the mastering of a difficult book is not very good training (I suppose you may have heard of Fearne on Contingent Remainders) I have no doubt that a person who had mastered Fearne on Contingent Remainders would have gone through a mental discipline that the 10 books of the Ethics would not give him. But it would not be nearly so interesting.

22,141. Which of the Inns at the present moment has the greatest number of students?—I could furnish that information, but I have not got it with me. I believe the Inner Temple has the greatest number of students, but that is only my belief.

22,142. May I ask whether, in the Law Faculty, constituted as you have proposed, you would exclude all lectures which were not catechetical?—No, I would not do that. I confess I do not care about lectures myself, but that is an individual opinion. If I wanted to get up anything I should like to do it for myself. If I wanted instruction I would go and ask a man questions. Of course it is very interesting to hear a clever man deliver a clever lecture; but I should not think myself much the wiser for it probably unless there was some luminous view of general law presented.

22,143. Then if you were giving advice to a young man reading for the bar, you would not advise him to attend lectures, but you would rather send him to the chambers of a distinguished barrister?—Of course you must remember that I am an old man, and you must remember that I was brought up on the system that I have tried to describe, which I think was very good for its purpose. It was not scientific I agree, but it was very good for the purpose it set before itself, which was to teach a man how to practise the profession of the law in the courts of English judges.

22,144. And you prefer that system?—If I had to practise in the courts of English judges I should.

22,145. (*Professor Sidgwick.*) I should like to ask one question with regard to discipline. If I understand, your Lordship foresees a difficulty in the way of effecting a combination between the Inns of Court and the University in the fact that the Inns of Court must have complete control over discipline. I should like to distinguish the two questions of control over the call to the bar, the admission to the profession—

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

and, of course, in extreme cases the power of disbarring—from the question of control over the students. As regards the former kind of control, I do not conceive that it has ever been proposed that the University should in any way or degree share the power now possessed by the Inns of Court. All who have given evidence before us have assumed almost as a matter of course that the whole of the control over admission to the profession and the control afterwards of those people who had been admitted would remain entirely in the hands of the Inns of Court; but with regard to students who are learning law, no doubt the University, if the combination were effected, would have to be allowed some control; do you conceive that that would be a serious difficulty?—I am not quite certain what you mean by control in your sense. I spoke of discipline. I do not like to use too grand a word, but moral discipline is what I meant. I did not mean anything but control over the profession, saying, for instance, that a student must behave himself as he ought. Happily it very seldom happens, but we can expel students as well as disbar barristers. I only meant to say that I think the Inns of Court would never give up, without Parliament compelling them, the complete control over those who are or are intending to be barristers.

22,146. But they would not perhaps object to the University exercising control also?—That would very much depend on the character of the control. In the abstract I should say no, but in the concrete it would probably be found very difficult.

22,147. But there need not be any serious difficulty if the Inns of Court were left free?—The only difficulty is a theoretical one that you have a sort of *imperium in imperio*. You have a set of persons belonging to the University, and in a sense under the University discipline, who are really not for practical purposes under it but under discipline of their own. Might I give an example of what I mean? Suppose that at Oxford there was a large medical school. In Oxford it would be extremely awkward if a medical student was not under the proctors and the vice-chancellor. That is what I meant.

22,148. That is also what I meant. In the case of Oxford and Cambridge no practical difficulty arises in the way of a collision between collegiate control over the members of the colleges with the University control. The college is perfectly free to deal with the offences of its men and the University is also free?—That is not quite so at Oxford; I do not pretend to know about Cambridge. At Oxford the proctors have a right to go into any college. They pursue a man into his college.

22,149. I only meant that a University is not a court of appeal from a college?—No; I agree.

22,150. And it is in that sense that the decision of the college in a case of discipline is final?—Certainly.

22,151. Do you think that that kind of combination would not be capable of being effected in the case of the Inns of Court and a new University?—I think it would be found very difficult to work.

22,152. You say that the mere study of law would not be found attractive by many men except those who were going to enter the profession. I suppose if the Inns of Court agreed to enter into this combination with the University they would not refuse to throw open the lectures given by the teachers to others?—I should hope not; but I am bound to say that the proposition was distinctly made to and distinctly negatived by my own Inn, that persons on paying a certain fee, which we were to fix, might be allowed to attend our lectures. It was distinctly negatived. These are fluctuating bodies who are all subject to the spirit of the time. Therefore I do not at all say that it might be so now, but it was so two or three years ago.

22,153. Do you think there would be a possibility of making a distinction between the two kinds of teaching, one purely professional, dealing—perhaps in the form of class teaching which your Lordship suggests—with the needs of those preparing for the bar?—As a matter of individual opinion you express mine. I see no objection to it whatever. But if you ask me whether the Inns of Court see any objection, I can only say that my own Inn does.

22,154. But suppose the situation were changed, and they thought it desirable that a part of the teaching should be given in the University would not that almost carry with it the throwing open of the lectures?—There is no practical difficulty. Of course if there are 20 students and ten other men come in who are not students, there is no practical difficulty in the world about it. It is only that the Inns of Court did not like it. At least my Inn of Court did not. It is all a question of opinion and feeling, and you have to do with very independent and difficult bodies.

22,155. (*Mr. Anstie.*) Notwithstanding the difficulties which your Lordship has seen in practically carrying it out, am I right in thinking that you are of opinion that it would be desirable that in London there should be a University with a provision for legal education?—I do. I have always been of that opinion.

22,156. And I think I am right in suggesting that the Inns of Court should and indeed must form part of any such institution?—I think you would find it would break down if they did not. They are too powerful, and they have possession of the ground: I do not think you could do without them.

22,157. Retaining entirely their professional control?—I think so.

22,158. But entering the University as professional bodies?—I see no objection to it whatever. I should wish it myself.

22,159. Then I suppose it would not be consistent with your view that a degree should be made essential to the call to the bar. The determination of what should be required for call to bar should be left in the hands of the existing authorities?—That should be so. Of course you could alter it by Parliament, but I do not think any power less than Parliament would induce the Inns of Court to part with the absolute control over the call to the bar.

22,160. Referring to the Bill which was brought in by Lord Selborne, that Bill was brought in to make it compulsory on the Inns of Court to accept its educational requirements?—I know the Inns of Court were dead against his Bill, but I do not recollect upon what ground.

22,161. To that extent your Lordship's opinion would be also dead against the Bill. You would not desire to see a degree made essential to the call to the bar?—No, I should not.

22,162. With regard to the point which was referred to by Professor Sidgwick as to the admission of those who are not students of the bar to the lectures, it was pointed out by Baron Pollock the other day that as long as things are on their present footing the objection to the admitting of the outside people would be obviated if the legal education were made part of a University course. Would that be your Lordship's opinion?—I am not quite sure that I understand what is meant.

22,163. Baron Pollock pointed out that there might be considerable reluctance (in which I think he intimated that he shared) to allowing the presence at the lectures of the Inns of Court of those who were not members of the Inns, but he thought no such objection would exist if the Inns of Court entered into and formed part of the Faculty of the University, and the University gave that instruction?—I have never thought about it, to tell the truth. Answering off hand, I should say that probably Baron Pollock was right.

22,164. And would you agree with him?—I should think so, but it is really not a matter I have ever thought about, because the present feeling is so strong against the admission.

22,165. That would remove it to some extent from the professional area which is covered by the Inns of

Court as the constituted authority in the matter of call to the bar?—Yes.

22,166. With reference to the nature of the instruction which under those conditions it would be desirable to give, if I may be permitted to say so, I am glad to subscribe to what your Lordship said about Blackstone's Commentaries; but is not a good deal of the pleasure derived from reading that book the skill with which the whole matter is arranged and brought under a systematic view which, whether correct or not (as to which of course there are some differences of opinion) is very clear?—That is more of a literary than a legal question. I have a sort of hereditary interest in Blackstone, because my father edited the last edition of Blackstone in which Blackstone appeared as a classic. Now they put Stephen into the text, and I think it spoils the book as a classic and a book to read. You asked me this, or I should not have intruded it. Nobody who had not edited Blackstone could tell what a hopeless congeries of matters Blackstone had thrown into shape and made luminous, intelligible, and interesting. Whatever anybody may say about the profundity of his knowledge of law, he was a very able man indeed, a great scholar, and a beautiful writer. How much of that complicated result is due to his law and how much to his accomplishments it is very difficult to say.

22,167. Those are qualities which, at any rate in the higher ranges of law, your Lordship would think valuable?—Yes. If I may be permitted a personal illustration I would say this: to me, one of the great delights of listening to the speeches of Sir George Mellish or Mr. Benjamin was the beautiful order and the way in which the whole argument was conceived as a sequence of reasoning. They were not exactly orations: but Sir George Mellish's were consecutive and clear arguments and Mr. Benjamin's were always speeches: they were not the less learned but the learning was subordinate to a luminous intellect which presented the thing as a whole. Such things are scarcely to be heard now, from the great difficulty a counsel has, at least, in some courts, of ever finishing a sentence, still more of ever being allowed to present a connected scheme of reasoning.

22,168. Then would not your Lordship be of opinion that something might be done in the education of students, in giving them possession of those higher qualities not only of learning but I may say even of advocacy?—You see I am an old man. I think classics do that, and I think classics do that better than Fearne on Contingent Remainders. Fearne on Contingent Remainders is an admirable piece of writing; for its own ends it is very close and clear.

22,169. But is there not something peculiar to the matter of law itself, which might, if one went sufficiently deeply into Roman Law, be derived from that study, but which in our system and in our circumstances must be got out of English law?—It is a terrible business to get it out of English law.

22,170. That being so, would it not be of advantage to the student that he should be helped in getting it?—Certainly, as an abstract proposition; but I very much doubt if you would get much (I have not used the word up to this time) culture out of English law books.

22,171. Might that partly be due to the fact that, with the exception of Blackstone and a few others who wrote their books in the performance of their duties as professors, legal literature has not been cultivated much in England?—I think that is true. Our law books have been written for the direct practice of the profession.

22,172. So that it might tend to the improvement of those higher qualities if a system were created in which the occupants of the chairs felt it their duty to improve legal literature?—Yes, in the abstract I should say so; but I do not think the students who want to get on, to use a common phrase, would care much about it. They want to get on, and they will go to the men and pursue the course that enables them to master the difficult, and, speaking for myself, somewhat repulsive study.

22,173. But under this consideration we should not have to consider so much those who want to get together a practice and obtain the emoluments of the profession, but those who were prepared to make some intellectual contributions to the study?—I may be quite wrong, and I do not want to insist on my own view, but if I am right, I think the people who desire that are very few.

22,174. Might not their number be increased by holding out to them greater opportunities of improvement?—Yes, it might be so.

22,175. Have you considered whether it might not be desirable to increase, promote, and regulate the study of the historical view of law in the way in which it has of late been done in America more largely than here?—It is a matter of great importance, in my judgment, constitutionally and every way to understand the history of law.

22,176. There might be also instituted a system of lectures dealing with cases with reference to their principles and in a way less fettered by the immediate surroundings of those cases?—Yes. I say that rather doubtfully, but there is no doubt that we are very much behindhand in histories, or any attractive histories, at all events literary histories, of our law. I do not know any one but Reeve.

22,177. You distinguish between lectures and classes, but may it not be the case that lectures in the hands of accomplished men may afford a great stimulus to the pursuit of the higher branches of law? Take, for instance, the public lectures by Sir Henry Maine?—Sir Henry Maine was a man of genius, and besides being a man of genius he was a man who had hit the public, and whatever he said was attended to. He was a great success; and if you could have lectures that met with the success that Sir Henry Maine's met with I have no doubt you would very much increase the study of the subjects to which Sir Henry Maine devoted himself.

22,178. Would not the constitution of a University on these lines give us a greater opportunity of capturing and keeping those men of power and genius?—You must catch your men of genius first. It is not very easy.

22,179. No doubt; but sometimes we lose them by not catching them?—I can only say that Sir Henry Maine, in admiration of whom you cannot exceed myself, was a very remarkable man.

22,180. Was not he a man who was lost in practice?—He never had very much practice.

22,181. And but for what I may call the University direction which was given him by the institution of the lectures of the Inns of Court, probably none of the books which he wrote would have seen the light, nor would the codes which very much resulted from his investigations ever have been made?—No, I think he was really a genius. He wrote admirably well, and he wrote merely as a man of letters. But such men are very rare.

22,182. Still you would desire to see their powers used if means could be found to do so?—Yes.

22,183. (*Mr. Palmer.*) Your Lordship mentioned, I think, that the Inns of Court would be colleges in the University?—I said I should like them to be.

22,184. Have you considered the possible analogy which has been very favourably made here on the part of the medical profession, that, for instance, the Royal Colleges of Physicians and Surgeons, on the part of the medical profession, which would be quite outside the University so far as institutions are concerned, might combine with the University for purposes of joint examination, leaving the professional bodies absolute control over the license to the medical profession, as they have now, and requiring such further examination as they might desire with that end, but leaving the University, on the other hand, to have such further examination as may be desirable for its degree?—If you mean, do I see any objection to the University having a real law degree, as there is a sham law

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

degree in the old Universities, I see none whatever. I wish the degree could be a real one. I do not see any more reason why there should not be a real examination and a real degree in law than one in classics, mathematics, or anything else. What I did insist upon was that I do not think the examination of the University which made a condition precedent to its degree in law, ought to be a title to call to the bar. That is all I said.

22,185. Do not the difficuties with regard to the control of the profession and the discipline disappear, if one regards the professional and University bodies as essentially distinct, but only combining for certain University purposes, in which the professional colleges would form either the whole or a leading part of the Faculty?—I am not quite sure that I apprehend the question. I do not like to answer an abstract question.

22,186. If colleges in the University they would remain perfectly distinct as heretofore; the Faculty would be composed largely of the members of those colleges, and joint examinations might be held both for the purpose of University degree and for the purpose of professional admission and control?—If you mean that it would be a good thing in the abstract to liberalise somewhat the English law, and give people the desire to be acquainted more with the principles than they are now, I should not object to it. I should like it very much. But what I said and what I want to say is that I think you are making a mistake if you forget that you are dealing in this country with an eminently practical profession, and that you will not get the members of the law profession any more than you will get the members of the medical profession, or the army, or any other profession, to read or study that which does not tend to the practice of the profession they are going to practise. Of course one knows perfectly well that a great number of surgeons and a great number of physicians are very highly educated men, but that is because they choose to be, and I believe it is entirely outside their professional education.

22,187. You think that institutions like the Inns of Court and the Royal Colleges should remain with their present control over discipline, and merely join with the University as part of the Faculty for University purposes?—I see no objection to that, but I do not see much advantage in it.

22,187*a*. (*Sir George Humphry.*) Your Lordship has been kind enough to give us information with respect to the income of the Inns of Court?—You must take that as very general, please. I only know, and that in a very rough way, the income of my own Inn, because I was Treasurer one year. I have always been told the income of the Inner Temple is larger, and I have always been told the income of Gray's Inn is between 10,000*l*. and 12,000*l*. a year. What that of Lincoln's Inn is I have not the remotest idea.

22,188. You have been kind enough to tell us that the expenses are very great?—They are very great.

22,189. But I suppose you can hardly give us any idea of the surplus and available income?—No. I have no doubt that as far as the Middle Temple is concerned I could get you the information, but we are so separate that I could not get it from any other Inn.

22,190. It is very important to know what is available?—Yes. It would be very much less than the amount I have stated. The expenses at the Middle Temple are very large indeed, as I told you. We have been building largely, and we were very heavily mortgaged for some time in consequence.

22,191. The Inns of Court, I think, are more and more willing to use the available income which they have for the purposes of education?—Yes, I think so. I think one may fairly say, thanks very much to Lord Selborne, that a very different spirit is in the Inns of Court from what there was when I joined the profession.

22,192. One may hope, therefore, that, supposing there to be a University instituted, the Inns of Court would be willing to co-operate?—I only speak of my own Inn; remember I know nothing about the working of the other Inns; but to do them the barest justice, they are the most generous of men. They have not the least desire to put a halfpenny into their pockets. They only want to administer the fund to the best advantage. They are only narrow, at least, it seems to me.

22,193. The feeling is more and more to appropriate the funds to the best effect for the purpose of education?—That has been so lately.

22,194. In the Inns of Court to a considerable extent?—I think if there was brought before our Inn any scheme of which they approved the expense would be the last consideration.

22,195. Therefore, supposing them to have a fair representation on the University boards, and a fair direction of the method of education, the Inns of Court would probably be willing to promote such education?—I think they would be most anxious to do it. I do not think they would let anybody else touch their money. That is another matter altogether.

22,196. With regard to the discipline, your Lordship did not refer, I suppose, to discipline in matters of education. It was rather the moral discipline?—That is what I meant when I spoke of discipline. Of course if they join the University they would have to consider on what terms they would do so. They might think it right to give control to the general senate, or whatever it may be called, of the University in educational matters, but how much or how little it would be very difficult to say till one saw the scheme.

22,197. Has any other University in England control over those who take its degrees; have they the power to take degrees away?—Yes, at Oxford they do sometimes take away degrees for disgraceful things. I have known it in more than one instance.

22,198. Speaking as a person quite ignorant of the study of law, one is rather sorry to hear from your Lordship that the pure science of law is not attractive?—One has one's feelings about those matters. I must not abuse law, for it has been very good to me; but if I have an hour to spend I do not spend it over Fearne. I would rather read Virgil or Sir Walter Scott.

22,199. One has a sort of feeling that all sciences have attractions?—Yes, only you see in this country, and I suppose in most countries, law is an eminently practical thing; it deals with the practical relations of man.

22,200. But in law, as I am sorry to say is the case to some extent in medicine, the practical rather damps and swallows up the love of the scientific?—I should not have thought that.

22,201. (*Sir William Savory.*) Assuming, my Lord, that the Inns of Court elected to join a new University, I gather that in your opinion the chief difficulty would be in settling the exact relation in which the governing body of the Inns of Court should stand to the supreme body of the University?—I do. That is what I meant to say.

22,202. You would consider that in no way would they delegate any of their powers to the hands of the senate?—I think at present they would not. What they may come to I do not know.

22,203. Even supposing that they were adequately represented on the senate?—I can only give you the examples that I have given you, that they rejected a scheme in which the infusion of the non-professional element was reduced to a minimum, though there was the non-professional element, and that they will not even allow persons to belong to them who do not attend the lectures.

22,204. In the case of a man entering the legal profession he might begin at a University and get there what might be termed the general part of his education, and then he might at the end of that get a degree which your Lordship has called a real degree in law. Then after that, is it not true that he would have to go through a great deal before he was called to the bar?—Yes.

22,205. A further education?—Yes.

22,206. Would it not be possible that the governing bodies of the Inns of Court might, so far as the education of the man at the University was concerned up to the time he took the degree, be in some measure subordinate to the supreme authority of the senate; after a man had taken his legal degree and entered upon what you would call the practical study of law the Inns of Court in regard to him would be entirely independent of the University?—These are practical questions, which it is very difficult for me to answer before they arise.

22,207. Supposing a man elected to enter the legal profession, if he took a degree first (a real legal degree) at a University, and then addressed himself to the practical study of the law, could he do better than that?—No, I should think not; if you mean do better, I should be sorry that he gave up his classics.

22,208. The classics should be part of the general University education?—Yes, I think so.

22,209. And therefore I gather that your Lordship would be strongly of opinion that, taking two men of equal ability, the one starting at once, or after the ordinary school education, upon the direct study of the law, the other man passing through a more enlarged education at the University, and then passing to the practical study of the law, would have an advantage?—I should say so.

22,210. Might I put it a little more closely in this way. Take two men, each having a certain number of years before him; one devotes part of that time to general education, and the obtaining of a University degree, and then goes to the direct study of the law; the other man spends the whole of that time in the direct study of the law?—I should be very glad to be the first, but I think I should not make so many guineas.

22,211. But if I may use a word, which I notice your Lordship rather shrank from, there would be more culture in the first man?—I did not like to use the word because it is so much abused. I do not shrink from the word "culture" I am sure: only it has got to be a very cant word.

22,212. Then with reference to your observations upon lectures, do they apply to law only, or to lectures of all sorts?—I am afraid to lectures of all sorts.

The Right Hon. the Lord Coleridge.

16 Feb. 1893.

22,213. (*Lord Reay.*) Whatever the subject taught, lectures, your Lordship thinks, do not afford the best means of instruction?—Not so good as catechetics, I think, for this obvious reason if you consider it. I gave it before. In lecturing, a man goes on and reads fast, and if it is at all closely reasoned, it is not one man in a hundred that takes it all in; whereas if you are talking to a man as I have the honour of talking to you, if I do not understand you, I can ask you and get something definite.

22,214. But there are some lectures in which a good deal of demonstration takes place?—I was not thinking so much of clinical lectures.

22,215. Or anatomical?—Of course I did not mean that. I meant upon intellectual subjects. I did not mean to say anything about clinical lectures.

22,216. (*Mr. Anstie.*) When Sir Horace Davey was here he referred to that rejected proposal which your Lordship has also referred to. He said he felt not quite at liberty to refer to it, but he thought your Lordship might not feel under the same restraint. Would you think it right to give us a copy of that proposal?—I have not got one. That is a matter rather for the Inn. I will see what I can do, and I will send it to you with great pleasure if I can get a copy. Lord Justice Lindley refused to attend you, I think, did he not?

22,217. On the ground that he is Chairman of the Council of Legal Education. He is the person to apply to.

22,218. (*Sir William Savory.*) Is it not possible that the Inns of Court would consent to join the University subject to a senate, under this arrangement, the student to be under the control of the University up to the time he took his degree, and then would the Inns of Court have entire charge of him afterwards?—I had rather not answer that question, because I really do not know.

The witness withdrew.

ROBERT WALLACE, Esq., examined.

R. Wallace, Esq.

22,219. (*Chairman.*) You are Professor of Agriculture and Rural Economy in the University of Edinburgh?—Yes.

22,220. How long have you held that position?—Eight years.

22,221. And before that I think you were Professor of Agriculture?—At the Royal Agricultural College at Cirencester for about three years.

22,222. There is a degree in Agriculture now given at Edinburgh?—There is a degree in Science in Agriculture.

22,223. It is a branch of the scientific degree?—Yes, it is a branch of the scientific degree.

22,224. Is the scientific degree divided into any other branches? Is there a branch for Engineering?—There is a pure science degree, which is the one most commonly taken up by the students, and then there is the degree in Engineering as well as the degree in Agriculture—two applied Sciences, besides that of Public Health, which is an applied science, but which is given under distinctly different conditions.

22,225. These are all branches of the same thing. Are they treated accordingly, or are they entirely separate?—They are concurrent so far: the idea is that up to a certain point in the case of Agriculture, it should be the same as the degree in pure science, and as regards the preliminary examinations, which correspond pretty well to the matriculation examination in the English Universities, it is the same; and the first B.Sc. examination is the same as that in pure science. When it comes to the second examination then divergence is made.

22,226. It is kept entirely distinct from the engineering branch?—Yes, entirely. There have been ordinances recently issued both for Engineering and Agriculture by the Scottish Universities Commission, which is now sitting. Those ordinances I may perhaps hand in, but I will first of all point out some leading features of the ordinances. The preliminary examination of which I have spoken consists of an examination in (1) English; (2) Latin or Greek; (3) Mathematics; and one of the following subjects: Latin or Greek, if not already taken; French, German, Italian, Dynamics. That is heading (4).

22,227. That is in order to show that there is some general culture?—Yes, that is the main idea held by the Commissioners; that a man should, in the first instance, be a man of culture and then he should be able to show by the character of his degree the line in which his studies have gone. Then the first Bachelor of Science examination is in the following subjects: Mathematics or Biology—we look upon the subjects of Zoology and Botany as forming Biology; secondly, National Philosophy; thirdly, Chemistry. Those three subjects form the work for the first professional examination, or the first B.Sc. examination.

22,228. Then the final?—For the final in the Agriculture branch we have Agricultural and Rural Economy; Agricultural Chemistry; Geology; Veterinary Hygiene; Agricultural Entomology; Economic Science as applied to Agriculture; and then one of the three following subjects: Forestry, Experimental Physics or Engineering; and lastly, Engineering Field work—surveying, levelling, and that sort of thing.

22,229. These are the leading features of the regulations?—Yes; these are the leading features of the ordinance which has been issued. It is a corrected ordinance after it has been discussed by the Univer-

R. Wallace, Esq.

16 Feb. 1893.

sity authorities. It is now issued in a form in which I think it will pass the House of Commons.

22,230. Has this degree been much sought after since it was first established?—Yes, we have had a considerable number of men who have gone through the work and gained the degree—I should think going on to 30.

22,231. Thirty in six years?—Yes.

22,232. Is it increasing?—Yes, the numbers are progressive within the last two or three years. The last year is exceptional altogether, owing to the extremely bad times and to the uncertainty of the regulations, because these regulations which have been given are the amended regulations of the Commission. I think the change and the break between the old regulations and the new have kept back men from joining. The old conditions are given in the last published University calendar, but they are now out of date. I think the Ordinance is as good as passed. This ordinance is the outcome, of course, of a great deal of discussion; there are all sorts of people interested, interested not only in Agriculture but in General Culture.

22,233. Who decides upon the regulations, what authority?—These regulations have been drawn by the Universities Commission after consulting with the Senatus of the University and the University Court.

22,234. So that they are fixed. They cannot be altered by any University authority?—No, there will be no objection to those. They will go through the ordinary time that they lie on the table to get the sanction of Government and of Her Majesty; but so far the University authorities are all agreed upon them.

22,235. They could not change them if they liked?—No; I suppose they could strike out anything but they could not add or alter, because if they did so they would probably change the numbers referred to in other parts of the ordinance. It would be impossible to make any change now. It could be thrown out of the House, but not changed.

22,236. What kind of men pursue the studies? Are they men who intend to follow farming?—A great many students attend the University both with the object of graduation and with the object of getting some knowledge of the subject and going back to farming. The great majority of the students is composed of farmers' sons.

22,237. Who intend to follow the profession of farming?—Those who take the degree very often intend to go on to something different from practical farming. A large number of them go in for being teachers. They get appointments as teachers in all parts of the world.

22,238. Teachers of Agriculture?—Yes, teachers of Agriculture.

22,239. Is there a great demand now for teachers of Agriculture in the United Kingdom?—Yes, there is a considerable demand owing to the development in technical education.

22,240. During the last year you mean, the county council movement?—Yes, the county council, the last two or three years. But we have been filling posts in the colonies and all over India and Egypt. There is a list here of the names of successful students who have secured appointments, but I do not suppose it is of any importance. Most of the men who get the appointments get them in connection with teaching establishments. The great majority of those who take the B.Sc. in Agriculture go in for teaching.

22,241. There are not many who go straight from taking a degree to the management of a farm?—Some of them become estate agents, but the great majority of them go in for education work. The work for the degree occupies three years.

22,242. And it is above the means of an ordinary tenant farmer? He could not afford the time or money?—No, the ordinary tenant farmer could not afford the time or money.

22,243. Then the use is chiefly for teachers?—Yes, and the more wealthy farmers.

22,244. You think that what has succeeded so well in Scotland would probably succeed in England too?—Yes, I think with modifications the subject could be introduced into the University of London examination, for instance, say, under the heading of the subject of Agriculture; but it would be necessary to more or less define what that subject should embrace in addition to the ordinary subjects generally understood by the term Agriculture. I would suggest that it should include Agricultural Chemistry, Veterinary Hygiene, Agricultural Entomology, Economic Science as applied to Agriculture, and levelling or surveying Agricultural engineering field work it might be called.

22,245. It could not come under the general term of "Technology" or "Applied Science," or anything of that sort. It would have to be a thing of itself, you think?—Yes, I think it would have to be a thing of itself; it is such a very important subject and such an extremely wide subject, my great difficulty is that it is of such an enormous size. But call it Agriculture and include those different subjects, and I think it may very well form an optional subject in the group of subjects for the degree given by the University of London. Then there are some very important subjects which would very naturally be taken up by a man who passed in Agriculture, I mean, for instance, Chemistry. The ordinary subject of Chemistry taught at various Universities with the object of graduation in Medicine would form the basis on which the agricultural student would develop his knowledge of Agricultural Chemistry.

22,246. The knowledge of Chemistry that would be required for Medicine would be quite different from that required for Agriculture?—Chemistry as taught in all our Universities is mainly the Chemistry which is required for Medicine—the general principles of Chemistry, organic and inorganic—and that an Agricultural student must know before he begins his studies in Agricultural Chemistry, or else he would not understand it. A man graduating in Agriculture might take Chemistry, Geology, and Agriculture. These subjects are more or less linked to each other and would form a very excellent basis of scientific study.

22,247. What other Universities give a degree for Agriculture besides Edinburgh?—There is the Durham College of Science at Newcastle.

22,248. Has that anything to do with the Durham University?—Yes, I think it has. Then my answer must be the Durham University. Of course the branch in which Agriculture is taught is at Newcastle, where they have that Durham College of Science. That is the only other degree besides the University of Edinburgh degree in the United Kingdom that I know of.

22,249. Is there anything else which you wish to say on the subject?—The question as to whether London would be a proper centre for teaching Agriculture is another question which I keep quite separately from the question of its being a centre where examinations might be held. I do not think London would be a very suitable centre for teaching Agriculture, because at present there is, as I understand, a course of scientific Agriculture given at South Kensington, attended by a very limited number of students. I mean a course on a University basis. I think there are only some seven students on an average from year to year, and those are mostly schoolmasters, men who are going in for teaching science. I do not think it is a good thing to encourage men who have not the practical basis, to go in for such a thing as an agricultural degree, because they cannot have the solid basis which is necessary to make agricultural authorities of them unless they have experience in practical work.

22,250. You have no model farm attached to your Faculty at Edinburgh, I suppose?—No, there is no model farm; but we do have a practical connection by visiting all sorts of leading farms of different descriptions on Saturdays.

22,251. It is a very good neighbourhood for it?—Yes.

22,252. Better than you would find near London?—Yes, there is a greater variety—sheep farms, dairy

farms of different sorts, corn-growing farms, forage crop farms, in the neighbourhood of Edinburgh, besides sewage and irrigation farms. I believe very strongly that that is a much better way of making a connection with the practical side than by having a farm; because a farm can only be a farm which will show one system practically, whereas during the season we see a dozen different systems, and we see those systems carried out on a commercial basis; and a farm if carried on at a teaching centre cannot be useful to students, because you cannot have students running all over the place without destroying experiments. That applies to crops in the field, and even more especially to experiments conducted in the yard in connection with feeding stock: if you do not keep the animals quiet you cannot get satisfactory results. The experimental station ought to be apart from teaching institutions. Practical farming must be carried out on a commercial basis to make it useful. Therefore a model farm is not at all desirable in connexion with a teaching institution; because if it is a model farm it is carried on at a rate of expense which is altogether beyond the ordinary farmer, and the students would not be taught on lines which they would be able to follow afterwards.

22,253. I gather that on the whole you are doubtful whether London would be a very good centre?—I do not think it would be a very good centre, because you are so separated from the class of men in London who go in for studying Agriculture to the greatest advantage; I mean men who have been brought up in the farming line, and who have, before they begin to study science, a good deal of the more or less hereditary and instructive knowledge, if one may describe it in those terms, or who have early associations with the practical side of agriculture, which I believe to be of the very greatest importance indeed, if a man is ultimately to become a great authority on the subject.

22,254. What kind of staff have you at Edinburgh belonging to the agricultural branch of the Science Faculty? Have you any coadjutors?—Yes, of course the general subjects—for instance, Chemistry, and Botany, and Geology—are taught just as is thought best from the point of view of teaching those Sciences to begin with. Then some of the other subjects I have mentioned, such as Agricultural Chemistry, Veterinary Hygiene, Economic Science as applied to Agriculture (I just give those as illustrations, but not to complete the list), are taught specially to suit the requirements of the agricultural student.

22,255. Which is your own particular department?—Agricultural and Rural Economy; and such subjects as rent and taxes, and so on, are taken up in Economic Science. All the subjects are not taught in the University; an outside school has been established under the name of the Incorporated Edinburgh School of Agricultural Science, with a license under the Board of Trade, under the Limited Liability Companies Act.

22,256. Is that for younger pupils?—No; that is simply with the object of completing the curriculum. Students go there during the time they are studying for the degree; some of the subjects are not taught at the University.

22,257. Then they study for the University degree outside the University?—Yes, for certain subjects. The two special subjects are Veterinary Hygiene and Agricultural Chemistry; these are not taught within the University. These are the only two important subjects which are not taught within the University at the present time.

22,258. And they do not contemplate ever bringing them into the University?—Agricultural Chemistry we have made arrangements for introducing; but the Veterinary Hygiene cannot be taught in such an institution as a University. You must have a practical side for such work, and that is done at the Veterinary College. There is really no special inducement to make it a University class when the work has to be done at an outside college. I think the Veterinary Hygiene will remain the only subject which is not taught within the walls.

22,259. Does this refer to all cattle?—Horses, cattle, and sheep. If you wish to know what the subject of Veterinary Hygiene embraces I can tell you. The subjects taken up under the title of "Veterinary Hygiene" are "the comparative osteology "of horse, ox, and sheep; the physiology of dentition "in horse, ox, sheep and pigs, more especially as indicative of the age of the animal; the physiology of "gestation; the diseases incidental to the pregnant "state; and also those consequent to the act of parturition; the description of the digestive organs of "horse, ox, and sheep, separately; also their physiology on most common diseases."

22,260. Would that be taught in London outside the University? I suppose there would be facilities for that?—That would have to be taught at a veterinary college of course; you could not teach that in a University: "contagious and other diseases "of farm stock, prevention and cure of disease."

22,261. That must be taught outside; but you examine in it?—Yes.

22,262. (*Sir George Humphry*). Who are the examiners engaged in all these subjects for the degree?—They are especially appointed by the University Court. They are appointed to hold office for about four years now, under the new regulations, and are not eligible for re-election until they have been out of office for one year; so that we have a change of examiner for after each term of four years. These are the additional examiners, as they are technically called,—extra examiners.

22,263. Are the fees high for attendance at this course of lectures?—Three to four guineas for full courses of 100 lectures, and two guineas for half courses of 50 lectures.

22,264. (*Mr. Palmer.*) I think the degree of Science in Agriculture was mainly due to your advocacy, at least to a great extent?—Yes, I believe so.

22,265. How long has it been in existence?—I think about six years; I am not absolutely certain of the date, but I think about six years.

22,266. About how many in the year take the degree?—I think we have nearly 30 altogether who have graduated—they vary in number from year to year.

22,267. And I believe your students have been very successful in the Senior Scholarships of the Royal Agricultural Society in England?—Yes, they have.

22,268. With regard to what you were saying about London as a centre for University teaching, if you had to suggest a centre for University teaching in Scotland, where would you place it—outside Edinburgh?—I am against, and opposed all through, the proposal to establish a central University at all, because I believe that work cannot be so successfully done at a great centre like that. In the first instance you exclude from participation in the benefits the very men that you want to teach. You want to teach the men locally, as far as possible, where the expense of travelling from their natural occupation will not be so great.

22,269. The French *Institut Nationale Agronomique*, which is placed in Paris in the Report of the Privy Council Department, is stated to have been advisedly placed there, I think, for these reasons: "Since, "however, it is the specialisation of studies which "best promotes new scientific discoveries, and secures "nearly all improvements, whether in knowledge or "in practice, instruction by direct contact with the "special leaders and pioneers of each necessary "branch of scientific thought was wisely decided on "as indispensable for an agricultural education of the "very highest grade." You would admit that there is some force in that?—There is some force in it, and that applies really to the very few men who occupy a prominent position in the teaching world, or the agricultural world generally; but I would not have a

R. Wallace, Esq.

16 Feb. 1893.

University or any school for the advantage of the great body of people put in any one centre, because I do not think that many could take advantage of it, For instance, I should say from my own department. perhaps one man in the year would be able to take advantage of such a central institution. I do not think their position warrants the establishment of an institution for such a small number of men.

22,270. When you are speaking of the University, are you quite sure that you are not thinking very much of an educational establishment, or a school? What would be necessary for a school for teaching might not be just the same conditions that would be necessary to obtain the highest results in science. A school would naturally not be in a great city; but a place where the highest standard of teaching might be maintained among those teachers whom you sent out with your degree would probably have to be somewhere where they would have access to the other great pioneers of thought?—I do not know that they would have much access even in a case of that kind. If students were to come to study at the University of London, I do not suppose they would have great facilities for coming in contact with pioneers of thought who had proved themselves to be such; because it is only after a man has really come to the front rank that he could be attractive to such men. Theoretically it may look very well, but I do not think it would work out satisfactorily.

22,271. The objects of the University would be quite distinct things as far as agriculture is concerned. One would be to place at the disposal of the farmers the results of science, which everybody wants; and the other would be to influence education, which might run up from the good primary elementary schools of the kingdom to such a degree as that which you give in Edinburgh?—Yes.

22,272. And you said just now, speaking to his Lordship about model farms, that you deprecated the use of those very much in the way of scientific training; and, therefore, would not scientific teaching for University purposes—say, in some great city, be distinct from practical training in agricultural?—If you begin and provide facilities for instruction, if it were really the case that those facilities which are at the disposal of the community at present were not sufficient, then I think there might be something said for the establishment of a central University; but I think that a central University would be established, if it were a great success, at the expense of such successful institutions as the Royal Agricultural College, and the other agricultural colleges; and I do not think that the facilities you could possibly offer would be any greater than, or even equal to, the facilities offered by existing institutions, because however excellent or scientific instruction might be given in certain ways, there would be disadvantages in others. There is no doubt that there is a dislike on the part of students to come to a place such as London to study scientific agriculture, as compared with residence in a country place like Gloucestershire, where the Royal Agricultural College is placed.

22,273. But is there not a great distinction between studying in Gloucestershire and having the results of that study tested, as it were, in London?—The examinations which a University like London would hold of course, would be held in such a way that men who had really studied scientifically, and at the same time had a certain amount of practice, would be able to show the strong sides of that practice, or something of the lines on which his practical experience had been gained, because no man can gain thoroughly practical knowledge of all the branches of agriculture. That I am perfectly certain is the fact. I am certain no man could pass unless there were elasticity in the examination. No man can pass a rigid examination in all the phases of agriculture in the United Kingdom.

22,274. In France the diploma of the *Institut Nationale Agronomique* is, of course, given to those who have studied in, I think there are, four or five grades of schools throughout the kingdom. It serves to maintain the standard as well as to give a diploma which is very much sought after, not only for the classes you have mentioned in the first instance, those who wish to become teachers, but also for landowners, also for agents, and also for practical farmers. Would not the institution of any University diploma or degree be wanted for very much the same purpose?—We have those here now. We have those in this country at present. The Royal Agricultural Society gives a diploma which is really a very valuable certificate.

22,275. I am speaking of a University diploma or degree?—I look upon a University degree as something very superior to those diplomas, because it has the University stamp upon it. I do not believe that a University diploma would be regarded as much more valuable than those well-known diplomas which exist at present.

22,276. Is there any difference between the University diploma and your diploma in Science, or rather in Science in Agriculture?—Yes. In the University we have a diploma in Education. That carries no University stamp beyond the diploma itself; the man has not any of the privileges of a graduate. It is merely a certificate of merit.

22,277. You attach a great difference to the name "diploma" and the name "degree"?—Yes. It was suggested that this science degree in agriculture should be made a diploma, and in a memorandum which I wrote to the Commission I pointed out that it would not rank above the diplomas of the great agricultural societies of the country, and would not be appreciated at all by the students.

22,278. But still the view has been held in foreign countries especially, that where the study and the nature of the science is so very special it requires a special stamp to be set upon it rather than that of the general degree of science?—I quite differ from that view which has been very strongly urged before the Scottish Universities' Commission, and which has been thrown over by the Commission in Edinburgh.

22,279. Having been to Cirencester you are acquainted with the general conditions of agricultural teaching in England at the present time, I dare say?—Yes.

22,280. There are in England, perhaps, some six special schools of agriculture all told?—Yes, something like that.

22,281. Cirencester, Downton, Aspatria, Bangor, the Yorkshire College, Leeds, the Durham College of Science, Newcastle, and Hollesley Bay?—There are one or two other smaller places, but those are the principal ones.

22,282. Those are, of course, the only places at which a certain amount of general teaching in addition to the special instruction in agriculture is given, or supposed to be given at varying standards?—Yes. The Durham College at Newcastle is perhaps younger than some of the others, but I fancy it is developing more rapidly than any other.

22,283. The numbers at those colleges are not very many?—At some about 50.

22,284. Can you give us the number at Cirencester or Downton?—More or less 100 at Cirencester, sometimes above or sometimes below, and perhaps half that number at Downton.

22,285. But it is an infinitesimally small proportion of the students of Agriculture?—Yes, and they are not as a rule farmers' sons.

22,286. The great bulk of farmers' sons, and other people, learn farming by private pupilage and apprenticeship?—The farmers' son learns farming from his father as a rule.

22,287. I mean including his learning of it at home. Therefore school teaching in a scientific way as it at present exists is very small in proportion to the general class of people who ought to learn?—Yes, it is increasing rapidly, of course, in connection with the development of technical education under the County Councils. A very great stride has been made in the teaching of Agriculture in different parts of

England, more particularly than in Scotland. We are behind in Scotland altogether in that direction.

22,288. I do not know that it is quite germane to the point, but I would ask in what particular way. In lectures?—Lectures; and in connection with the Science and Art Department, South Kensington, the schoolmasters have been teaching the principles of Agriculture.

22,289. I am afraid the farmers' sons have not availed themselves of the lectures in the country generally?—The results are very various in different parts of the country. In some parts lectures are successful and in others they are failures.

22,290. As in France, in England some people have found the want of bridging over the time between when a boy leaves the elementary school, and the time when he enters business. At any rate in a system of teaching, you must make great allowance for the way in which everything is taught. In addition to the schools, farming is taught at home and by private teachers?—Yes.

22,291. And those in the schools must have an avenue to your degrée?—The secondary schools which we hope to see established all over the country, I trust will have an agricultural side, or Agriculture will form part of the curriculum.

22,292. A few years ago you will remember there was a proposal to form a central normal school in England?—I was one of the chief opponents of that scheme, and I stated extensive and very elaborate reasons in the evidence which I gave before the Commission.

22,293. But if there were a normal school or separate schools of that kind, they would undertake a great deal of the teaching which at present you appear to think indispensable to the department of the University?—I look upon the objections to an agricultural school in London as being very much on the lines of the objections to a central normal school for England. There are a great many objections common to both. All my opposition to the central normal school would naturally apply to the London centre, with other drawbacks in addition.

22,294. That has not been the experience in France at any rate where the national schools, which one may describe as three local national schools, of Agriculture, have fed the central institute in Paris, and have also taken their pupils from the other classes of elementary schools which were behind them?—I have no doubt the schools will be filled; I have no fear about that, but they would be filled with the wrong men.

22,295. You mean they will not be filled by agriculturists?—They will not be filled by the people to whom we want to teach Agriculture. I do not think that in France they will be filled by the very best class of people who might fill them. And besides, French agriculture is on very different lines; they have small holdings there and people who can get State aid are likely to take more advantage of instruction and benefit more by instruction in agriculture than the people in this country.

22,296. No doubt there are differences, but the small holdings would not tend to give people very great means for educational purposes; and yet we find that, whereas what might be termed schools with model farms have gradually dwindled in proportion as scientific agriculture has increased the other form of public school which is precisely upon the lines of Aspatria and Cirencester without its farm, has increased?—Yes.

22,297. The old-fashioned farms are in the most ignorant parts of France?—Yes.

22,298. That is the opinion of the agricultural reporter to the Privy Council?—That is exactly what I should have expected. The so-called practical side in a scientific college is of very little value, and the practice must be learnt on a farm by a small number of individuals at a time. That is, a considerable number of students cannot learn the practical work on one farm together, because large numbers immediately make the conditions artificial.

22,299. But the *École Pratique*, that is to say the technical schools of the nature of those at Aspatria and Cirencester have increased very largely in proportion as *Fermes Écoles* or model farm schools have decreased; and at the time when the education in France was begun, which was 70 years ago, we may presume that things were not more forward than they are now in England?—No.

22,300. The agricultural instruction which is given is very scientific. Could you say that that which is given at the Central Institute in Paris does not reach standard?—The men who find their way into schools like Cirencester are not the men who would benefit most by scientific education.

22,301. Would not that refer rather to a sort of improvement in the connexion with the County Councils which you have referred to as between elementary schools and local technical schools so as to enable the labourer's son or the farmer's son to learn farming scientifically?—I am afraid it is a natural dislike on the part of the practical farmer to be so associated with those schools. I am afraid it is not a matter of adding a few steps to the ladder, but the disinclination of the men who really ought to benefit by it to begin to mount it at all.

22,302. You have not thought out any particular scheme by which education as a whole might be influenced by the teaching in a University beyond what you have told us?—Yes; I have thought if the right sort of men were got, those who have been brought up agriculturists to begin with, they might be induced to go to various centres by scholarships granted by the County Councils, but I should not restrict them to one centre. I have agitated that for a considerable time. Let it be entirely decided by merit, and I think those who are not able to afford it themselves (a number of the best men) might be induced to go to various institutions in different parts of the country.

22,303. In France the *Fermes École* and the *École Pratique* are schools founded upon apprenticeships where the boy who leaves school is paid 10*l.* a year in order to enable him to get his technical instruction. Assuming that in this country the County Councils were to apply money in the way of apprenticeships instead of paying lecturers, do you think that would tend to induce a love of technical teaching?—No, I do not think so, because in the first instance we do not want to teach men who come from other branches of occupation than the agricultural branch. There are enough agriculturists already.

22,303*a*. I am speaking of the ordinary village labourer?—Or the man who is employed in agriculture of course. His work is worth a considerable sum of money to his parents to begin with,—even from the time he first goes out as a boy of 14; and unless you could pay him a wage, as it were, which he could give to his people, he would not be allowed by them to join an institution. His work is worth money to them, and while working at home, or hired out to an employer he begins to learn his business.

22,304. You do not think he could be paid for it?—If County Councils would pay something to him and give him his instruction as well, so that his parents could live, well and good; but I do not think that would be practically possible. Of course if his labour were worth nothing it would not be difficult to secure his presence at a school of that kind. But his labour is worth something, and it is worth more in the market than his true value as compared with other labour, because he is so unskilled to begin with; and there is a certain demand for that class of labour.

22,305. Then you fear that the right people do not get educated, and the difficulty is how to get the right people to come to the education?—That is the difficulty. I am afraid the education on the lines we have been going on to a considerable extent, and not only in this country but in America, is not given to people of the right sort, because they are not possessed of the right sort of practical training to make the

R. Wallace, Esq.

16 Feb. 1893.

scientific education of true value. Scientific education without a practical basis is, in my opinion, of no good at all.

23,306. A remarkable instance has been given here with regard to the cultivation of beetroot in which scientific education has shown the way to practical?—But in that case the chemists would have had practical acquaintance with the field as well.

22,307. Then I understand that you do not appreciate central teaching whether for school purposes or the testing purposes of a University?—No; I believe the teaching can best be done in local centres. Mere numbers are against real efficiency in a big institution; but at the same time I am strongly of opinion that an examining centre of the status of London University would be a very great benefit to all parts of the country.

22,308. You wish an examining centre and not a teaching centre?—An examining centre distinctly and not a teaching centre.

22,309. (*Mr. Anstie.*) You are in favour of the London University giving a degree in Agriculture?—Well, not a degree in Agriculture, but a degree in science with an agricultural side it may be. Such a thing as a degree in Agriculture I think is quite impossible to have to be of any value, because you must have a breadth of scientific basis upon which Agriculture is simply added as a final coping, as it were.

22,310. You mean there is a group of sciences which have an immediate relation to Agriculture, and that group should be recognised as a group in which the degree should be granted, say a scientific degree?—Yes, or it might be called Agriculture, with these important sciences included under the title of Agriculture.

22,311. That is substantially the same thing, is it not?—Yes, substantially the same.

22,312. You desire that the sciences which are germane to Agriculture should be treated as a group, and a degree given in those?—I am not quite sure that that is exactly what I mean either, because, for instance, Geology is a subject which has a connection with Agriculture; so has Botany and Chemistry. I should not class those under the subject of Agriculture, but I should allow Agriculture to appear in a list of optional subjects in which such subjects as Chemistry, Botany, and Geology also appear.

22,313. When you use the term "Agriculture," I want to know what the contents of it are?—By the term "Agriculture" I mean the general subject which naturally occurs to a man's mind when speaking of farming. When you speak of Agriculture you speak of farming and the practical management of live stock. In addition to that I should define Agriculture as embracing agricultural chemistry, veterinary hygiene, agricultural entomology, and economic science as applied to Agriculture.

22,314. Economic science is very wide?—As applied to agriculture it naturally leads you to think of rents and taxes and all sorts of conditions with regard to land tenure.

22,315. Including bi-metallism?—I think that is one of the most important of all.

22,316. That you would give a prominent position to?—Naturally if a man began to study economic science he would come into a position in which he would be able to judge of it, and I think he would form a high opinion of it.

22,317. Do you think an examination for, what I may call for want of a better term, an Agriculture degree, would include studies in Political Economy and Finance?—Yes, as regards agriculturists: terms of contract, leases, and the value of money.

22,318. Then this degree includes Law?—Of course you can hardly get away altogether from the subject of Law.

22 319. And the economical condition of the nations of Europe during their different stages of development?—There are parts of economic science which are apart altogether from Agriculture: but what I mean is, those subjects such as rent, taxes, and all sorts of land questions which you cannot study unless you study Economic Science.

22,320. We all live on the face of the earth, so I suppose there is no study which is not in some sense germane to us, but are you not able to give anything more limited as the contents of your subject than you are giving now; I do not know what it excludes?—I cannot draw a line showing exactly what I should like to see excluded, or what I should like to see included. I can only give illustrations showing what I should like to see included.

22,321. But the illustrations seem so very wide as to imply that the examinations for the Agriculture degrees are to be examinations in Economic Science, Law, and Medicine. I hardly know what it does not include?—Certain branches of the subjects must be included.

22,322. Can those branches be understood without knowing the scientific basis of the region to which they relate?—You must, to understand Agricultural Chemistry, know something of General Chemistry, both Organic and Inorganic.

22,323. What is Agricultural Chemistry as distinct from Organic and Inorganic Chemistry?—The most simple answer to that question would be to read what is taken in the work for the degree in Edinburgh. For instance, we begin with "soils, their chemical and "physical character, compositions and functions of soils," and so on, that is organic and inorganic, but that is not taught by a professor of Chemistry in a University who delivers an ordinary full course. For instance, Prof. Crum Brown would not go into those subjects in such a way as to make the subjects of use to a student of Agriculture. He might mention them incidentally.

22,324. This is, as you admit, included in Organic and Inorganic Chemistry, but is in some way a further development. Can you indicate how?—The application of knowledge which a man would gain by studying the general principles of Chemistry in the two branches, Organic and Inorganic. He cannot follow out his agricultural Chemistry until he has got that basis, but having got that basis he wants to study a subject which no other man wants to study in a certain way.

22,325. The degrees in which organic elements are at present in the soil, and can contribute to production?—His having studied Organic and Inorganic Chemistry enables him to follow out the lines of study he wants to follow. In the same way a man who goes in for a Public Health degree studies Organic and Inorganic Chemistry, and then he studies Health, and studies Chemistry in its relation to health, particularly in connexion with laboratory work which, of course, he does very elaborately.

22,326. Is that capable of being reduced to such a methodical form as to the subject matter of a scientific course?—Yes, but it has to be dealt with by those who know exactly what is wanted. My difficulty with a great number of curricula which have been suggested in different parts of the country is that those people who know the subject of general chemistry perhaps are asked to draw a syllabus of the work for agriculturists. That is not possible in my way of looking at it.

22,327. Perhaps I am rash in saying so, but I think I follow the description which you give of this agricultural branch, which, in fact, is the application of Organic and Inorganic Chemistry to the conditions of farming?—Yes. After soils we go on to plants.

22,328. I put it generally, farming. The cultivation of the land is what agriculture means?—Yes.

22,329. Then I understand so far that the cultivation of the land is in your view a subject which may be methodically and scientifically treated, resting on the basis of strict science, which is Organic and Inorganic Chemistry?—Yes; if a man has had a practical training alongside his scientific training. But a man cannot begin and study from a University point of view all that he wants to know, and attain any useful result.

22,330. Your object is that a man under the guidance of this sort of instruction shall be able to produce the greatest amount of animal and vegetable result from any given area?—I do not believe in the greatest amount being the proper measure of success. I believe in the least expensive production per unit.

22,331. The production of the greatest amount at the least cost, treating it on a broad footing, from a given area. That is Agriculture?—Yes.

22,332. That being Agriculture, and the scientific application of Agriculture, I follow you so far, but I do not quite see what that has to do with the economic problems to which you have referred, and the historical development?—In this way: if a man has more rent to pay than he has any right to be paying, it makes it impossible for him to farm at a profit.

22,333. That is a question of business calculation. It is not a question of scientific investigation?—The business is too much based upon haphazard, or chance, or experience. I think business ought to be based on scientific knowledge as well. I think if we had had our business men with a greater knowledge of science at the present time we should not have had them making the mistakes they are making.

22,334. Let me put this question: Is it in your view essential for the Agriculture degree that it should include the study of, and examination in, these external matters?—Yes, I think it is indeed.

22,335. And without that you would not care for an Agriculture degree?—I do not think so. I do not think it would be up to the standard which would make it of any greater value than an ordinary diploma, the degree is something which ought to be better than an ordinary certificate.

22,336. Better for what? "Better" means better for some end. Better for what end? For cultivating the land to greater advantage? Allow me to illustrate it by this. Engineers have given evidence before us, and they have insisted on the importance of a scientific education for engineering purposes. They say a man will be very much better for scientific knowledge, but no engineer has come and said that he must for the purpose of being an engineer study the problems of Political Economy and Natural History. Do you say that with respect to Agriculture all that is different?—Yes, I do. I say Economic Science is perhaps the second most important subject on that list, Chemistry first, Economic Science next, and then Veterinary Hygiene, or some of the other subjects afterwards.

22,337. (*Professor Sanderson.*) Your object is to ask the University of London to give a degree in Agriculture, is it not?—I quite agree with the proposal.

22,338. Which, however, is not to have the title of degree in Agriculture?—No: that the subject of Agriculture should be made an optional subject in a list of subjects which might be offered for the choice of a student who wished to graduate.

22,339. That is to say, you wish to have some subjects which are not included in the ordinary scientific subjects introduced into the final examination?—Yes.

22,340. Are you aware of the standard of the degree of Bachelor of Science in the University of London?—I have more or less a knowledge of it in a general way. I have not passed the degree myself so that I do not quite know, but I know it is a very high standard.

22,341. Do you imagine that if a man had to be examined on all the subjects you have enumerated, including the anatomy and physiology of a horse, farming, and the rest, he could be expected to know about them, and at the same time possess a knowledge of science sufficient to qualify him for a degree in Science?—No. He would require to have a knowledge of Science, of course, apart from that, but those subjects might very well come under the name of——

22,342. Not of science surely?—I should say they are applied science. I call them science, but in the applied branches.

22,343. What do you think would be the object of the University of London in giving such a degree?—The degree, in the first instance, of course, is a guarantee of a man's culture.

22,344. Scarcely so, if you substitute unscientific subjects for scientific?—I should only propose to make Agriculture one of the numerous subjects taken up in the degree. For instance, all the preliminary examinations would remain exactly the same, and in his final examination a man would take agriculture in place of geology. He would, perhaps, take agriculture, as I have defined it, in place of botany. I should upon no consideration lower the standard of the degree. What we want to do is simply to make agriculture such a subject as will enable it to rank with chemistry, botany, geology, or any other science subject.

22,345. Is there any University, except the Scotch Universities, which gives degrees in Agriculture?—The Durham University in this country.

22,346. Does it give a degree?—A degree in a department; the same science degree as the other degree in that University.

22,347. Would it not, in your judgment, be better if a man were able to take a diploma in agriculture in addition to the ordinary degree in science, *i.e.*, that the University should grant him a diploma of a competent knowledge of agriculture after he had taken a degree in science?—My objection to that is just this: you handicap the agriculture student to the extent of the time he has to spend in taking his diploma. You debar the agriculture student from going on the same platform as the pure science student. That is, an agriculture student would require to spend a year or a year and a half longer at the University to secure his certificate of qualification over and above the time that a man who goes in for pure science would require to study.

22,348. You only put him in the same position as the medical student?—But if he is a man going in for a public health appointment, of course, it is rather different.

22,349. I mean in the case of the ordinary medical student the Bachelor of Science degree would help him, and it is a thing which he takes independently?—Yes, but that Bachelor of Science degree which he takes first is a very superior certificate for him in going in for competitive appointments which are the subject of competition. He has got it; it has taken him a longer time to get it.

22,350. Would not that suit the purposes of the agriculturist?—No, because naturally he would not have so many grades of competitors, that is, he would be competing simply with people of his own rank as it were, who would all have to go through the same course of study. He would be competing with men of his own rank, so that all would have to go through the same amount of work before they could get a qualification at all.

22,351. You think it would make the education too prolonged?—Yes, it would.

22,352. (*Professor Sidgwick.*) I think you said that you did not consider London was a good place for the academic teaching of agriculture or for the preparation for an agriculture degree?—No, I do not think it is a place where, we shall say, a whole curriculum on the subject associated with agriculture could be gone through.

22,353. So that the degree you wish to be given would be given by an examining University and not by a teaching University?—Yes.

22,354. (*Lord Reay.*) Agriculture is, I suppose, one of the branches of applied science, and we have been told by witnesses who have given evidence about applied science that it was necessary that the pure science teaching for engineers should be given with a view to obtaining, not a degree in engineering, but the degree of science connected with engineering. That would also apply to agriculture?—Quite so.

22,355. Botany, zoology, and chemistry should be taught with special reference to the degree in science for the agriculturist?—Yes.

R. Wallace, Esq.

16 Feb. 1893.

22,356. From your answer to Prof. Burdon Sanderson just now you conclude that there should be a wholly separate curriculum in science for your students?—Yes.

22,357. That is your view?—Yes, that is it. The first part of his work is a guarantee of culture.

22,358. That is preliminary, but when the student comes to the University in the Faculty of Science he gets in botany, in chemistry, in physical science and in geology lectures being on agriculture?—Yes.

22,359. With regard to what is called rural economy and rural legislation, that subject is taught in the three French Colleges of Agriculture?—Yes.

22,360. Economy and legislation ought to be taught as part of the agricultural curriculum?—I should look upon it as very important.

22,361. Also zoology and zootechny?—Yes.

22,362. Agricultural engineering?—Yes, to a certain extent.

22,363. Agricultural technology, physical science, and meteorology?—Yes, I did not mention meteorology, but it is an important subject no doubt.

22,364. With regard to rural economy, one of the important subjects, I suppose, is book-keeping?—Yes.

22,365. Ignorance of the first elements of book-keeping is mischievous?—Yes. They do not know what their position is.

22,366. Would you give the Commission your view with regard to the differentiation of this degree of science in agriculture, and the diploma of the College of Cirencester? In what respects would this degree represent a higher state of knowledge and culture than the diploma which is obtained at Cirencester College?—We find of course that a man who could obtain the diploma at Cirencester College, that is the ordinary pass man, would not be able to take such a degree as I suggest ought to be taken.

22,367. Does it represent more knowledge?—It represents a higher standard altogether, and in addition to that there is the University connection, which is also a very important matter.

22,368. All these lectures which I have mentioned could be given in London where you would have laboratories, and everything that is wanted?—You could have a considerable amount of the work done in London. There is no doubt about that.

26,369. Your difficulty is with the surrounding farms?—Yes, and more than that the difficulty of course is in inducing the right sort of men to come to study. Our experience of the men who come to Kensington is, that they are not the practical men who have experience in practical farming, but men who come with the object of becoming teachers of the science.

22,370. But if we give the teaching the demand would follow?—Yes.

22,371. For instance, in London, during part of the year a great number of landowners live in London. It is quite obvious that they might wish to attend some of these lectures?—Quite so, and a great many of the science subjects—of course all the pure science subjects—could undoubtedly be taught in a London University, but not such subjects as veterinary hygiene.

22,372. Then we have sewage farms in the neighbourhood of London?—Yes.

22,373. Would you inform us whether a degree such as you have mentioned, is given in any of the colonial Universities?—I am not certain that it is. I do not think there is a degree given at any of the colonial colleges. But in America there are degrees given.

22,374. Degrees given by Universities?—Yes.

22,375. And called Science degrees?—Yes.

22,376. Not Agriculture degrees?—Not Agriculture degrees. Cornell University, for example, gives a degree in Science.

22,377. With an Agricultural avenue?—Yes.

22,378. Then you say you found that in India the tendency was to raise the study of Agriculture to the Academical status?—In Bombay they have only given a diploma.

22,379. But still there is a tendency upwards?—Yes, and more; it is quite acknowledged that a degree will be given, but it was too big a departure to take up at once. It was thrown out, as I understand, on this basis; that some little experience ought to be gained as to the class of men, the standard, and that sort of thing.

22,380. A good deal of resistance had to be overcome, but still it was being overcome?—Yes.

22,381. Then have you not got a normal class or teachers in elementary schools in Scotland?—Yes, we have a class, but it is not on University lines.

22,382. Taken by yourself?—Yes.

22,383. And the number of students is increasing?—We could get any number of them.

22,384. Would you describe the curriculum?—The pass course, that is a course which prepares schoolmasters to pass the examination required for the purpose by the Science and Art Department in London, is in Agriculture and Rural Economy (the subject of my own class) and Chemistry. We have 40 lectures in Agriculture, and 25 in Chemistry, besides practical work in the Chemical Laboratory, and at the end of the month these men are enabled to pass the first class in the advanced standard of the Science and Art Department, South Kensington.

22,385. And the result has been satisfactory, has it?—Yes, most satisfactory. For instance, in my last year's class of 80 men, there were 37 first class, and 27 second class. Those who were previously qualified did not sit at the examination.

22,386. Does it apply only to the University of Edinburgh, or does it apply to the University of Glasgow as well?—No, Edinburgh only. This is the only University in Scotland where there is a chair of Agriculture.

22,387. And no attempt to institute one has been made at any other?—There have been attempts made, but I am afraid without success.

22,388. You expect that the result of the new ordinance will be that the number of students availing themselves of agricultural tuition will increase?—Distinctly.

22,389. And you think the right persons will take the degree?—Yes, proprietors and farmers' sons.

22,390. You expect them to attend and take this degree?—Yes. We shall never have a great number, but it will increase.

22,391. Factors and agents also?—We have very few. But there are men who will develop into factors who have been brought up in the practical agricultural profession.

22,392. But you would consider it extremely desirable that factors or agents should have had this education?—Yes, it is most important.

22,393. It would be most important if they could influence tenant farmers and their landlords, and show them the value of this knowledge as applied to Agriculture?—Yes.

22,394. (*Mr. Anstie.*) If this chair is to do all these things, why should there not be a teaching chair, and a normal school in London? I cannot put the two parts of your evidence together?—It is just this, that farmers sons, those who I say would benefit most by it—the only ones in fact who could really properly take advantage of a thoroughly scientific course—would not come to London.

22,395. Why not?—That has been our experience. They do not go to Cirencester.

22,396. Cirencester is not London?—But Cirencester has greater attractions than even London could have.

22,397. Why could they not come to London if they go to Edinburgh?—There is a great difference between the Scotch students of Agriculture and the English students of Agriculture.

22,398. Do you desire to perpetuate that difference?—No. It is not a matter of educational supply or demand which makes the difference, but it is a matter

of the individual and the cost of maintaining oneself at an Institution of the kind. I should think the cost in Edinburgh would be perhaps about half the cost in London.

22,399. Is that the reason?—It is one of the reasons.

22,400. What other reasons are there?—You would not have the facilities for study in the same way.

22,401. You would not have the grass market, of course, but there is plenty of country about London?—Yes. there is plenty of country about London, but you would not have the variety, for instance for practical demonstration in the field.

22,402. And that you think is a sufficient circumstance to distinguish the two cases?—Yes. I do not think under any circumstances you would draw Scotch students, and in England you cannot get the right sort to begin with. There is an extraordinary difference between English and Scotch farmers and their ways.

22,403. (*Mr. Palmer.*) Do you think they would draw more professors to London who would be in touch with the other professors in London?—London might be a greater attraction to the professors than to the students.

22,404. If the Royal Agricultural Society is situated in London, and the Department of Agriculture is situated in London, it would be well that the scientific Professors of Agriculture in the proposed London University were in London, and there would be room for the other professors also?—It would be capital for the professors, but I do not think the students would come, and I do not think the students would benefit by the presence of the Agricultural Society.

22,405. (*Mr. Anstie.*) But the budding professors? Until they have budded they do not know whether they will be professors.

22,406. (*Mr. Palmer.*) Are you quite right in saying that the students do not go after good professors. It has been my lot to go to Aspatria, and more than half of the pupils have gone from south of the Thames?—And there are a number from Scotland who go to Aspatria.

22,407. (*Professor Sanderson.*) You have an objection to the creation of a degree in Agriculture.—Yes.

22,408. On what grounds?—It would not be a proper description of it if it were the sort of degree that I would like to see established, because you would have to call it a degree in Agriculture. In the first instance, if it is what we want to see it, it must be a degree in Science.

22,409. Why?—Because, otherwise, there are not enough subjects, as it were, to study. You could not cramp it down to the subject of Agriculture alone.

22,410. Why would it not answer your purpose to call it a degree in Agriculture?—Because it would not describe the thing properly, if you want a wide scientific basis. You do not give a man credit for all the work he does. For instance, with regard to this degree in Edinburgh, I should say three-fourths of the work involved is in pure science. If you call it a degree in Agriculture you do not give the man credit for three-fourths of the work he has done. He gets his degree on the other fourth.

22,411. How long do you expect him to be at work?—Three years.

22,412. Do you think in three years a man would be able to qualify himself for a degree in Science, and at the same time to learn all these various subjects?—It is just this; he spends his whole time on the work, and his work is guided in the lines which we expect are the best for him. Of course he cannot get up the entire range of the subject. There is no doubt about that. But if a man spends three years at his work, three-fourths of which period is devoted to pure science, and the other in the applied Agriculture branch, then we think he is fit for a degree in science.

22,413. And you think that is a possible course of study?—Yes, distinctly so.

The witness withdrew.

CHURTON COLLINS, Esq., M.A., examined.

22,414. (*Chairman.*) You appeared before us some time ago with Professor Stuart on behalf of the University Extension Society, and you had an opportunity of hearing his evidence?—Yes.

22,415. In the main you agree with him?—Yes. But there was one point on which I should like to say a word. Your Lordship, in commenting upon certain remarks which he made, said that the University Extension students were under the great disadvantage of only being able to afford a fraction of their time for the studies. But that would only apply to the men; it would not apply to the women; and the women pupils are a very important element indeed in the extension scheme, numerically they are, perhaps, as three to one to the men. We find, too, that we get very remarkable work of very good quality indeed from the women.

22,416. The women can only attend in the evening, I suppose like the men?—In the afternoon as well.

22,417. Have you classes in the afternoon?—Yes.

22,418. The men do not attend in the afternoon?—Not as a rule.

22,419. Are these women of leisure, or have they their own occupation in the daytime?—Many of them are women of leisure who can give their whole time to the work. In many cases they are mistresses of schools. In the evening classes a great many of the women are mistresses in the board schools, and in various institutions about London.

22,420. And they really can give more time, and they benefit more by the University Extension movement than the men do?—I think so.

22,421. I believe there are some views which you are anxious to put before us with regard to the University Extension Education in general which apply not only to University Extension classes, but to the general subjects. I leave you to make your statement without interrupting you, and then I will question you upon it afterwards if anything occurs to me?—I have been engaged for many years in educational work in and about London, and I have found that there are certain very important and very definite educational wants which no existing institution is at present adequately supplying; and we hope that the University which is now contemplated may supply those wants. I should like, with your Lordship's permission, to lay before you one or two pieces of evidence in support of that, and to add also that I fear that unless the regulation of the studies of this University which is contemplated, is not placed in some respects under State control, or, at all events, not left entirely in the hands of the academic bodies who now regulate higher education in London, we shall not get what is certainly required. The experience of the University Extension has shown incontestably that there exists a very large and increasing number of men and women, ranging from the ages of about 18 to 30, who are not only eager but ripe for advanced instruction of a liberal kind. And they know what they want. They know the lines on which they want their education to run, and those lines are not the lines upon which education in these sides is running in academic hands. What we want now is, if I may use the expression, the education of the citizen, which is a conception different from what I may call the purely academic conception of education. By the education of the citizen I mean æsthetic education which is the interpretation of the best literature in ancient and modern times—poetry, oratory, criticism, and I would especially emphasise the literatures of Greece and England;—ethical education, consisting of the interpretation of such books as the

C. Collins, Esq., M.A.

16 Feb. 1893.

Republic of Plato and the Ethics of Aristotle, and such other works in ancient and modern literature as are usually comprehended in this branch of study;—political education, that is,the study of political philosophy, and the study of history in close connexion with political philosophy. I am sure the people are ripe for this education, and they want it, but they cannot get it. May I give one illustration of an experience we have recently had? Some of us have always felt that the University Extension Board ought, if possible, to encourage the study of Greek literature among extension students. One of our lecturers not long ago gave two popular lectures on the Homeric poems, and at the end of the lecture, or at the end of the second lecture, he appealed to the audience to see if,it would be possible, or if any of them would wish, to form a class for the study of the language. He was obliged to point out that it was quite impossible to pay any teachers because we had not any funds, but, he said, if there were any University men present in the audience who, in the interests of the experiment and for the love of the thing, would conduct a class for the study of Greek, he would be obliged if they would give him their names. At both of these centres two gentlemen among the audience at once came forward and offered to conduct a class One of them was selected at each centre, and at each centre a class was formed for the study of Greek. They had about ten months, meeting two or at most only three times a week. The majority of the students were engaged in school work, and one of them was a clerk in the city. These people in ten months time (of course they had a break at Midsummer) had made such progress in the Greek language that they offered for examination the one class the First Book of the Anabasis of Xenophon, and the other an equivalent proportion of a Greek reading book by Mr. Colson, which is about the same standard as the Anabasis, together with all the grammar and the parsing. They were examined by Mr. Wells, who is a Fellow of Wadham; and I have his report of the examination in my hands. I need not read it all, but perhaps I may be allowed to read a sentence:—"I must confess I have "been astonished at the wonderful progress these "candidates have made in the short time they have "worked at Greek. Seven of the ten candidates "would without a question have passed the Respon-"sions." That is to say, these people, who were average specimens of the better class of our University Extension Students, in ten months time, with only three lessons, generally only two a week, managed to do what we find our school boys take six years to do, or rather in many cases, not to do. I could give you many other instances of the extraordinary capacity, energy, and intelligence of the people with whom we are dealing in these University Extension lectures. In two cases the papers which have been sent in to me have been printed in magazines, the editors of which have thanked me for sending the papers to them. But we are working under the most hampering and unfavourable conditions, and it is impossible for this movement to effect what it might otherwise effect, as long as it continues to work under the condition under which it is now working. As we are altogether dependent on the charity of the centres at which we lecture we are obliged to make our lectures popular, we are obliged to rely on the popular element in them, and at the same time we are obliged to make them solid for the benefit of those students who wish to do solid work; and it is a matter of very great difficulty to carry on at the same time these two things. What we do earnestly hope is that considering this experience, which is corroborated I think all over England, namely, that a great revolution is passing over this country; that the people are awake and intelligent in all directions, wishing for instruction—feeling as they do that the old ways are breaking up with regard to religion, and that ethical instruction must to some extent take the place of the old purely theological instruction, needing as they do instruction in literature and political philosophy; considering too the immense body of people craving for this kind of knowledge, ripe for its being imparted to them; we hope that all this will be taken into account in the scheme of the new University. We look to the new University to supply this sort of instruction, and to educate those who will popularly disseminate it But we shall not get this if the regulation of the studies is left in the hands of those who now regulate academic studies in London. I am saying, I think, no more than is generally acknowledged when I say that the curricula of the London University as now constituted are not satisfying these educational needs. If those examinations had been framed for the express purpose of encouraging mere cramming they could not have been framed more appropriately. The result of those examinations is mere cram work, and I know from ample experience on all sides that the candidates feel that the educational value of those curricula is not great. They come to our lectures to get as it were some broader views with regard to literature. So I would plead that in this new University the regulation of study should not be left entirely in academic hands, but that they should be placed, partially at all events, in the hands of directors appointed by Government. Once and once only in our history have we had a perfectly adequate curriculum of study, and that curriculum will not only show the model on which I contend the curricula of this new University should run (I am speaking of history, philosophy, and literature), but its fate will show how liberal education fares in academic hands. In 1854 Macaulay drew up a scheme of education for the Indian Civil Service students. He designed this plan not simply in the interests of the comparatively few students who would succeed in the examination, but in the interests also of those many students who would not succeed in the examination but who would have spent three or four of the best years of their lives in preparing for it. His object therefore was to provide as full and efficient a course of culture as he could. He gave a prominent place not to the purely philological but to the liberal study of the Greek and Latin classics. He so framed it that the test of a classical scholar should be not a man who would cram up particular books, but a man who could read Greek and Latin with facility and accuracy; and for that reason he provided that all the passages for translation should have been unprepared. He also thought that if a student took in Greek and Latin, it should include also the history of the Greek and Roman literatures, and he provided also that a paper should be set in the history of the Greek and Roman literatures. He provided also that papers should be set in the histories of Greece and Rome. He not only did that but he considered that English literature was of very great importance, and he gave very high marks for English literature. He did the same thing for the modern history of Europe. Papers were set in the literatures, and papers were set in the histories of the chief nations of the continent. A more perfectly satisfactory curriculum of advanced liberal education on the side of literature and history it would be quite impossible to conceive. But what was the effect of that scheme? It turned out that in Cambridge, for example, at that time there was no instruction whatever given in modern history; there was no instruction whatever given in English literature: there was hardly any instruction given in the histories of the Greek and Latin literatures; the Classical Tripos was to a great extent philological. At Oxford in the Moderations in those days a man had simply to get up specified eight "books." He had no power whatever of unseen translation, because he was not exercised in unseen translation at all. He was not instructed in English literature or in the histories of the Greek and Roman literatures, and he had no instruction in modern languages; so that the result was that the preparation for this examination was confined practically to the men who were called crammers. Mr. Wren and Mr. Scoones had virtually for many years the monopoly of the Indian Civil Service Ex-

amination. To call the preparation for those examinations "cram" is sheer absurdity. I can speak from experience; for I was engaged for 13 years in this work; and I can only say that during the whole of that time I lectured on English literature in the broadest way. I never looked at examination papers at all; and I may add that I gave candidates almost identically the same lectures in English literature as I am in the habit of giving to University Extension students. I lectured in precisely the same way on the Greek and Roman classics. Of course the very existence of these so-called crammers depended on the success of their pupils in the examination, while the chief object of the examiners, who were such men as the late Dean Church and Mathew Arnold, was to set such questions as should baffle "cram." Such was the fate of Macaulay's scheme, to be branded as encouraging "cram," simply because it substituted a liberal for an academic ideal. Now I only fear that the result with regard to what we need now will be the same if the regulation of the examinations on the side of history, literature and philosophy are left solely in academic hands. I think I am correct in saying that we are the only nation in Europe with whom the direction of the higher education is left entirely in the hands of academic bodies. In every other country it is, at all events, partially under State control, and I would earnestly submit to the Commission that the regulations of the studies, not on the side of science, because, of course, science is secure everywhere, but on the side of these particular subjects, may, for the reasons I have stated, not be entrusted implicitly and entirely to the academic bodies in whose hands the direction of academic education in London now is.

22,422. (*Chairman.*) When you say that the examinations at present given lend themselves to cram much more than if the subjects were such as you teach, and as those people have been in the habit of learning, do you mean that the instruction required is more capable of being pressed into a short space and taught in that way than the instruction which you give, or why is one kind more capable of being taught by cramming than the other?—Permit me to illustrate what I mean by a small example. When the History of English literature is capriciously divided, cut up into certain small epochs, say the history of English literature between 1716 and 1744, the effect of that is that the students cram up every detail—the names of all the small authors and the names of their writings, and the matter simply becomes one for the unreflective exercise of mere memory dealing with mere trifles. And when history is treated in the same way the results, educationally, are the same.

22,423. Your plan was more violently opposed to the general teaching when Macaulay drew his memorandum than it is now because the Universities lean much more to your system now than they did then?—That is so at Oxford and to some extent at Cambridge, but it is not so in London.

22,424. But still what you call academic bodies are as a rule wedded too much to the old system, and are not inclined to be sufficiently elastic to new ideas or to adopt them and that is why you object to the academic element?—Yes.

22,425. In other words, those who themselves have been brought up under the old system are more likely to wish succeeding generations to be taught in the same way?—Yes.

22,426. Do you think that the members of the governing body appointed by Parliament would be more likely to adopt your view than those who have been educated in the old Universities?—I think so. Certainly much more than those who are now regulating the studies in the University of London and in the University and King's Colleges. I would suggest that those who have just recast the Indian Civil Service Examination and restored Macaulay's scheme might be consulted on this question—the Civil Service Commissioners.

22,427. You not only want them to be consulted, but you want that sort of man to be admitted on the governing body?—Yes, the legislative body.

22,428. Then supposing the senate to contain not only professors but a certain number of outside people who would bring this kind of influence to bear, do you think that they, being the governing body, might act with the advice and concurrence of Boards of Studies consisting entirely or mainly of professors. Would the existence of people such as these outside people on the senate be a sufficient guarantee for the breadth and elasticity of the new education even though the Faculty consisted exclusively of professors?—I would ask, my Lord, would it not be possible so to choose the two elements in the constitution of the Board that the outside element should not be swamped by the inside. There would be always a danger that the professors, the internal body, would sway very much against influence exercised from the outside unless the elements were adjusted skilfully.

22,429. In short, without going into detail, you want more of an outside element than there has been in some of the schemes which have been printed and circulated?—Yes.

22,430. More than there is in the Gresham scheme?—Yes.

22,431. But you would still be in favour of the teaching element having a large voice in the University?—Yes.

22,432. But not exclusive?—Not exclusive.

22,433. (*Professor Sidgwick.*) If I understand you, your objection to academic bodies is primarily directed against the University of London. You selected that for special censure?—I do not presume to censure. I was simply stating facts. And I was referring to those who are at present regulating academic instruction in London, and I referred to them. I selected that because I presume that the regulation of the studies in the University which is now contemplated would be directed by those who are now directing the examinations of the University of London.

22,434. Do you know that this Commission is sitting to consider a Charter that was granted for the establishment of a teaching University in London?—Yes.

22,435. And you are aware that one of the strong grounds on which a teaching University was demanded was that the influence of the teachers was not sufficiently great on the examinations of the University of London?—I was not aware of that.

22,436. I think you will find if you will refer to the movement that led to the appointment of the former Royal Commission, and the granting of the Charter, an objection of precisely the opposite kind to that which you have been urging was made to the University of London. It was considered that the University of London was in an unsatisfactory relation to the teaching, because the teachers did not exercise sufficient influence. So that if the University of London is from your point of view the chief offender, so far as there is any force in that argument it would seem to point to the conclusion that the influence of the teachers ought to be increased rather than diminished?—I have not been touching on that question at all. I have been pleading against intrusting the regulations of the studies of the new University solely to those who are now regulating academic studies in London, because I think, judging from their present regulations, they are not likely to be in favour of the more liberal regulations required. I am judging only from the position which they are now in with regard to London, and from the fact that University College and King's College are not holding that position in London which, educationally speaking, we should expect such institutions to hold, with the enormous advantages of endowment that they have, and the very able men who represent their teaching, and I contend that the reason those bodies fail adequately to impress educationally, London, is not because of any deficiency at all in themselves, but simply because they are

C. Collins, Esq., M.A.

16 Feb. 1893.

following a system which is now almost an anachronism, they are not keeping pace with what we now want in education. I suppose the curricula of their examinations are controlled practically by the London University.

22,437. Have you examined the constitution of the University of London?—I have.

22,438. Is it your opinion that as at present constituted the governing body of the University of London is one in which the persons engaged in academic teaching in London exercise too great an influence?—I think so.

22,439. Is it your view that it is a body in which the teachers exercise too preponderant an influence?—I do not know about the teachers, but persons in whom purely academic notions of education prevail undoubtedly do.

22,440. (*Mr. Anstie.*) When you speak of Parliamentary appointment, how in your view is that tobe exercised?—I mean that the regulation of studies in the University that is contemplated should not be left entirely in academic hands, but that such persons should be appointed by Government as would be likely to give this broader touch to the spirit of the teaching.

22,441. My question was: appointed by whom and how? How would you have these persons appointed? That is a matter of detail which I have not considered.

22,442. But it is rather important, is it not?—Would it be possible for the Commission to recommend that the regulation of the studies should be a subject for Government consideration?

22,443. Is that your solution of the question that the Government should regulate the appointments?—Yes, but not a solution, merely a suggestion.

22,444. Meaning by the Government?—Persons appointed by Government. Will not this ultimately take the form of a Bill?

22,445. What would be the form of the Bill?—Would it not be possible for the Commission to recommend that the regulation of the studies should be placed in the hands of a body who should not be merely representatives of the existing academic institutions in London, but who should be appointed from the outside.

22,446. If you would permit me to say so, that substantially the constitution of the Senate of the London University; and some of us venture to think it is not a perfectly successful experiment?—The difficulty there is that those who are associated from the outside simply do not attend: they are merely nominal figure-heads.

22,447. Without admitting that that is so, how would you guarantee the attendance of persons who were so little interested in the matter as to be disposed otherwise to stay away?—It would surely be possible to nominate persons who would be interested in the matter. That is a difficulty.
How is it done in France and Germany?

22,448. (*Mr. Anstie.*) We are told that there it is very largely in the hands of the professors. That is the evidence before us.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Fifty-sixth Day.

Friday, February 17th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
The Right Hon. the LORD PLAYFAIR, K.C.B., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

JOHN MACVICAR ANDERSON, Esq., F.R.I.B.A., examined.

J. M. Anderson, Esq., F.R.I.B.A.

17 Feb. 1893.

22,449. (*Chairman.*) You are President of the Royal Institute of British Architects?—I have that honour, my Lord.

22,450. Will you kindly give us your view of the nature of the work of an architect, and how he differs from the members of other professions in the amount of knowledge he requires, and the diversity of knowledge?—The work of an architect is of a very complex nature; it differs from the work of most of the other professions in that respect, and therein consists the difficulty of defining what an architect is. In brief, he may be said to be an artist, a constructor, and to require as well considerable capacity for business. With regard to artistic qualifications, which I maintain are most important, he must, in the first instance, possess the power of design, the imaginative quality which creates an artist. That, I look upon as essential with regard not only to the design of the exterior, which is the popular notion, but with regard to the arrangement of buildings, including the design of both plan and elevation. Most buildings are meant to be lived in, as well as to be looked at. It is said that it is impossible to create an artist, either by teaching or by any system of examination, and that, of course, is true in one sense; the artistic quality is a natural endowment, which you cannot impart. At the same time, it is equally true that by a system of educational training you can foster any such native qualification, encourage and develop it. It might with equal truth be said that it is impossible to teach a student painting, but we know that art classes are established by artistic organisations for the express purpose of teaching the art of painting, and fostering the native qualities that a man possesses; and it is the same with regard to other professions. Then it is necessary that, in addition to the power of design, the imaginative quality which an architect should possess, he should be well versed in the literature of his profession; he should have a

thorough knowledge of the history of architecture, and of the leading characteristics of the architecture of different nations and epochs; he should be well versed in construction; it is well to know how to design, but an architect must know how to build, which he cannot do without scientific knowledge; he should possess a thorough knowledge of the nature, properties, and strength of all building materials, stone, brick, timber, metals of different descriptions; he should possess a knowledge of sanitation, which is in these days a most important consideration: he should possess a knowledge of electricity which is now being introduced into most buildings; and that his educational course should be such as to impart to him a knowledge of different sciences, chemistry, geology, geometry, acoustics, mathematics, and many others into which I need not enter just now; all those things are essential in order that he may be qualified to practise the profession of architecture.

22,451. With regard to the education an important thing is a knowledge of proportion, I suppose, is it not?—I ought to have mentioned that in connexion with the artistic power of design, which embraces a knowledge of proportion and a knowledge of form. In practice, moreover, it is necessary that he should know how to describe the work that he designs in order that the artificers should know how to carry it out. In other words, he should know how to write a clear and distinct specification, a branch of the architects work often relegated to another person. That is not right, as no one can so well describe the work to be carried out as the man who has designed it. He should also know something of the dissection of buildings from the drawings embodied in what are called bills of quantities in order that the work may be priced. Then he ought to know, if not how to draw a contract, how to interpret it, and to hold the balance between the employer and the contractor, and see that the rights and responsibilities of both are maintained. His position in that respect is that of an agent standing between the employer and the contractor. Hence, in consequence of the varied nature of the architect's work, and of the studies that it is necessary for him to go through in order that he may be able to practice such work, I think it is of importance that there should be a distinct and comprehensive course of teaching such as would impart to him knowledge of all these branches, and enable him to practise each. The educational system in this country hitherto has been, as perhaps you are aware, a system of pupilage. A youth is expected to pick up all the knowledge necessary to enable him to practice as an architect, if not entirely, to a very large extent, by becoming an articled pupil in an architect's office. The period used to be seven years, but it has in recent years been reduced to five and sometimes even to three. There are great advantages in such a system. It enables a youth to acquire practical knowledge from actual contact with work which no purely academic course could impart to him. Therefore, I should deprecate our whole system of pupilage being superseded. In contrast to this the system of education in France may be described as a purely academical system. The youth has to pass so many years in the *École des Beaux Arts*, and if he is successful afterwards in winning a Grand Prize he is sent to Rome. The details of this I will not enter into, but it is a contrast to our own system, and I should not like to see it adopted here. I should like to see our own system of pupilage maintained, supplemented by a distinct course of University teaching.

22,452. It is an entirely open profession, is it not? There is nothing really to prevent anybody, myself, or any other ignorant man, putting "Architect" over my door and starting to-morrow?—That is so. We have established a certain qualification for the Institute in the nature of examination, but that is a qualification for becoming a member of the Institute, not for becoming a member of the profession.

22,453. And the public probably would not generally employ a man who had not that qualification. A man would not be employed as architect unless he was an associate of your Institute, would he?—It does not follow.

22,454. Do the public employ people who are not members of the Institute?—Yes, the Institute is a large body, but there are architects in practice who are not members of it. I should like, if your Lordship will permit me, to give one or two particulars of what we have done at the Royal Institute of British Architects bearing upon education. The Institute was founded in 1834, and incorporated under Royal Charter in 1837. The object with which it was incorporated, as stated in the Charter, was for the purpose of forming an institution for the general advancement of civil architecture, and for promoting and facilitating the acquirement of the knowledge of the various arts and sciences connected therewith. The question may fairly be asked what in view of that object as stated in the Charter we have done to carry it out. I might point out that in the first place we have created and collected a valuable library of reference, probably the most valuable library extant; that we have, ever since our foundation, held sessional meetings at which subjects of professional interest are discussed; that we have issued, and do issue, publications imparting valuable information on professional subjects at a cost of somewhere about 1,500*l.* a year; that we have the privilege of recommending to Her Majesty each year a recipient for a Royal gold medal, which is the gift of the Queen. The Royal gold medal is annually conferred on such distinguished architect or man of science from any country as may have designed or executed a building of high merit, or produced a work tending to promote or facilitate the knowledge of architecture, or the various branches of science connected therewith. Since the establishment of this medal in 1848 there have been 45 Royal gold medallists, and 16 of those have been foreigners. We do not restrict it in any way to our own country. We have further established valuable prizes and studentships. Competitive designs are annually invited and submitted by students, to which prizes are awarded by the Council of the Institute. They consist of the essay prize, which is a silver medal and 25*l.*; the prize for measured drawings of ancient buildings, which is a silver medal and 10*l.* 10*s.*; the Soane Medallion, which consists of the medallion and 100*l.* That is the most valuable prize we give, and the student has to travel abroad for not less than six months after he wins it; the Pugin studentship, the prize for which is a silver medal and 40*l.*, and the student has to travel in the United Kingdom for a period of not less than two months for the purpose of studying mediæval architecture; the Godwin bursary, which is a silver medal and 40*l.*, and the student has to travel abroad for a period of not less than five weeks to study modern architecture more immediately in connexion with practical subjects, sanitation, and so on; the Owen Jones' Studentship, which consists of a certificate and 50*l.*, in which case the student has to travel abroad for not less than two months, for the study especially of ornament and colour; the Tite prize which consists of a certificate and 30*l.*; the unsuccessful student having to travel in Italy for a period of not less than four weeks for the purpose of studying Italian architecture. Lastly there is the Grissell prize, which consists of a gold medal and 10*l.* 10*s.*, and which is given for the best design in construction.

22,455. With regard to the travelling students, have they to make any report to the Institute of their travels?—Yes; in the year after their return from travelling. Then the Institute, further, has during the last few years established allied societies. They consist of different societies established in various centres throughout the United Kingdom. There are 14 such societies now in alliance with the Institute.

24,456. Is there any other architectural association with which you are not connected? Have you any rival?—There is a younger body which is not a rival in any way of the Institute—the Architectural Association.

J. M. Anderson, Esq., F.R.I.B.A.

17 Feb. 1893.

22,457. You are in friendly communication?—Yes.

22,458. You are the standing authority?—We are the representative body of the profession incorporated under Royal Charter. The advantage we expect to derive from having admitted these societies to alliance with the Royal Institute is that they will become educational centres throughout the United Kingdom.

22,459. Did you start them or did they start themselves?—They were existing societies, and we have not incorporated them, but allied them with the Institute so as to constitute one complete educational organisation throughout the country. Then, as further evidence of what we have done, I should like to refer in passing to the examinations which have been established at the Institute. The first was in the nature of a voluntary examination. That was established in 1863, and continued to 1881; during those 18 years 65 students passed, and it was never looked upon as a success. That was followed in 1882 by the obligatory examination, which is what I referred to some little time since as the qualifying examination for candidature to the associateship of the Institute.

22,460. (*Lord Playfair.*) Obligatory on whom?—On the students in this sense, that only by passing that examination can they be qualified to be elected associates of the Institute. In regard to this examination I should like to leave it to my friend and colleague, Mr. Arthur Cates, to speak, as he is Chairman of the Board of Examiners, and is better informed in relation to it than any other member of the profession. I merely wish to show by having made this reference to the Institute what we have already done to justify the objects for which we were incorporated and established; and to emphasize my opinion that the most important organisation which we have hitherto established is the examination referred to, inasmuch as it has given a stimulus to educational bodies throughout the country, which is quite remarkable.

22,461. (*Chairman.*) What part do you think your institution could take, or could it take any part in the scheme for a teaching University in London; do you think you could be affiliated to it in any way?—The Institute is not a teaching body. It is only an examining body.

22,462. Would you be able to delegate your examining powers to a University?—That is a subject which I have not much considered.

22,463. I gather that you think a teaching University ought to have an architectural faculty—a faculty devoted entirely to architecture. Is that the case?—My general view is that it should embrace a course of teaching.

22,464. The subject is divided into two, the artistic part and the practical part. The artistic part I think you admit could hardly be taught at all?—I do not altogether admit that.

22,465. Would that be a proper subject for teaching in a University?—Certainly, as regards drawing, delineation, and the principles of design.

22,466. That would be common to many other professions; that would not be peculiar to architecture, but it would probably be taught in connexion with other things?—Possibly.

22,467. Then with regard to the actual practical part, supposing there was a degree to be established for engineering under any name, "technology," or "applied science," or anything else which would be sought after by those who were going into the profession of engineers, would that cover the practical part of the education required for an architect?—That is what I believe is done now in America. The degree that is conferred there, embraces engineering, as well as the scientific part of architecture.

22,468. And that and the general culture which would be given under the head of "arts" would cover all your ground, would it not?—It might do so.

22,469. You leave any other question to Mr. Cates?—Yes, with regard to the examinations, I had rather leave it to Mr. Cates.

22,470. (*Lord Playfair.*) Do you conceive there is a necessity for founding a teaching establishment or a teaching school for architects in London?—I do.

22,471. And do you see any way of doing so without parliamentary aid. The present London University has no means. Do you think a teaching school for architects will be established by private efforts or by civic efforts?—If this scheme of a Gresham University were established, I do not see why it should not form part of that. I do not know where the funds would come from. I am not sufficiently informed with regard to that.

22,472. You alluded to the American attempt to get up good teaching in architecture?—Yes.

22,473. Do you happen to know the large new Institution which has been built in Boston for that purpose?—I do not.

22,474. It has cost a large sum of money and the staff of professors is not yet complete. Do you think that in London there would be such a tendency to support teaching in architecture that we might rely upon the new teaching University, obtaining funds for that purpose from voluntary or civic efforts?—I should think so, because if existing schools which are in the nature of separate institutions, were embraced in one scheme there would be a mass of students brought into one focus.

22,475. And your important institution would be able to help such an institution considerably, would it not?—In any way we could, it would be our desire to do so.

22,476. I am not sure whether any of your important associations have made attempts in Parliament to get up a system of examination like that of the medical colleges?—By registration?

22,477. Yes?—The Royal Institute has opposed that always. The Bill has been brought forward by the Society of Architects, which was established a few years since, I believe, with that object.

22,478. I happen to know a little about that because they asked my aid, which I would not give. Why did you oppose that systematic attempt?—First of all because it was brought forward by a society which is not in any sense representative; and which is composed of men comparatively unknown in the profession. On that ground we opposed it, and on various others. For instance, the first result of such a registration would be that anyone calling himself, or choosing to call himself, "architect," as many men throughout the country do, who are really auctioneers or estate agents, or even undertakers, and so on, would become registered architects, and this of itself would be a great disaster.

22,479. Would you have any objection to make the new University the door by which persons might become qualified to exercise the profession of architect in the same way as it is in medicine?—That would be closing the profession. At present it is an open profession. I am not prepared to go that length.

22,480. You would let them rely upon their own merits?—Yes.

22,481. (*Sir George Humphry.*) A very large part of the education would be included in that for engineering?—The scientific part you refer to.

22,482. It would be very largely included in engineering, would it not?—Some parts of it might, no doubt.

22,483. What part of it would not be included?—The artistic, the literature, and the practice courses. The practice of an architect is distinct from the practice of an engineer.

22,484. Would those be legitimate subjects for University education and University examination?—Why should they not be?

22,485. Otherwise, without exception, the greater part comes under the head of "Engineering"?—No, I think not. Architecture does not. The literature of architecture does not, and the practice of architecture does not.

22,486. They have become more separate lately?—Possibly. Of course teaching on similar subjects would be to some extent required by both.

22,487. Material and proportion?—Not proportion.

22,488. Would not that be under the head of "Engineering"?—No, certainly not, though it may be regretted that engineers do not study proportion more.

22,489. (*Chairman.*) They are not bound to please the eye?—Not bound, but it is desirable they should.

22,490. (*Mr. Anstie.*) I should like to get a little more clearly the position which you think architects ought to occupy. So far as relates to construction, the use of materials, stresses and strains, and matters of that kind, you would be occupying the same position as the engineer?—To some extent no doubt it would be so.

22,491. Would it be at all different?—With regard to those subjects you mentioned, the strain of materials, and so on, an engineer requires, no doubt, knowledge as well as an architect.

22,492. There you would be on common ground with them?—To that extent.

22,493. With respect to the more scientific branch of design, which depends upon mathematics, optics, acoustics, and so on, you would occupy no exclusive position, but would benefit by the teaching of science, pure and applied, which would, of course, necessarily be provided?—Yes.

22,494. So far you would agree. Then you come to what would be more specifically architectural in the University course which you propose. You would have the history of design, I suppose?—Yes, of Architecture.

22,495. And the literature of design?—Yes, of Architecture.

22,496. Including in that all varieties of form, and the mode of varying the more rigid rules by æsthetic considerations?—Quite so.

22,497. That is a matter which you think might be made one of teaching as distinct from the practice which might be obtained in an architect's chambers?—I think so.

22,498. You think it is sufficiently reducible to principles to make it the subject of a course of teaching?—Yes, I think so.

22,499. Then that is what, specifically, you would desire to add to the University course for the sake of your profession? Is there anything else you would desire to add for the sake of your profession?—If I understand you, what I call the artistic course would be separate; but you think the remainder might be embodied in the general course.

22,500. The remainder seems to fall under one or other of those heads which must be provided for in any case. Is there anything besides that which you would desire to super-add?—My notion is that there might be a distinct course for architecture, and, if a sufficient number responded to it, it would be worth while to have it.

22,501. Do you think there is such a variation in the scientific treatment of materials you have to deal with, and the mode in which you have to deal with them, that the course would be different from the course required for an engineer?—I think so.

21,502. You have mentioned a number of matters which it is important for an architect to know, but from what you have said I do not gather that you desire that those should be made the subject of specific training, such, for instance, as a knowledge of the law of contracts, and matters of that kind. You would not desire that there should be a special class for that purpose. I put the question, because a gentleman came to us the other day who told us that in order to study agriculture you must have a knowledge of the economic and political relations of different nations at various periods of history. You do not desire anything of that kind, do you?—I do not see why a general knowledge of such matters should not be imparted.

22,503. It would make the construction of a University rather complicated if each object aimed at is to have a separate course constructed for it. Might it not suit your purpose if those subjects which were more particularly essential to the architect's profession had a place, and for the rest, for the subject matter which they had shared in common with other professions, they went into the common classes?—As in the Cornell University, I believe it is so there.

22,504. You are against closing the profession?—Yes.

22,505. I suppose in a matter which depends so much upon natural endowment, it would be very unwise to require a University to teach the practice of the art?—I think so, in so far as it would tend to close the profession.

22,506. I think Captain Fowke was not an architect, was he?—No.

22,507. (*Lord Reay.*) Has the Institute any funds?—Certain vested funds, the interest of which is required to make up income.

22,508. And none of its funds would be available for the endowment of Chairs in the University?—No; they are very small.

22,509. You mentioned that the associates had to pass a qualifying examination. Are those who succeed in that qualifying examination invariably elected as associates?—They are qualified to be so by virtue of passing that examination. Then they must be formally nominated in order to be elected; but a man who has passed the examination is elected, if properly qualified in other respects.

22,510. How is the election managed?—The election for associates is taken by show of hands at a business meeting of the Institute. They are regularly nominated, of course, by a paper signed by proposers.

22,511. After a man has been an associate some time, he becomes a Fellow?—If he wishes to become a Fellow, he has to make an application for Fellowship on a nomination form, signed by proposers, stating what they know of him and his work.

22,512. But all Associates do not in course of time become Fellows?—No, not all.

22,513. Who are left out; you say not all Associates become Fellows. What is the test of Fellowship?—There is at present no actual test, beyond this, that a Fellow must have been seven years in practice as a principal, and be not less than 30 years of age. With those two requisites, and if he is properly proposed from personal knowledge by three Fellows, he comes forward for election. Under the charter we have power to go further with regard to Fellows. "After the expiration of five years from the date of "this our Charter the Royal Institute shall have power "to declare that every person desiring to be admitted "a Fellow, shall be required to have passed such "examination or examinations as may be directed "by the Royal Institute. But in special cases, the "Council shall have power to dispense with such "examination or examinations." That is now under consideration.

22,514. And the rule is, that there is no examination?—At present there is no examination for Fellows.

22,515. Then it depends mainly upon the circumstance whether the candidate can find three gentlemen to propose him?—And he must have been seven years in practice as a principal, and be 30 years of age.

22,516. Is any attention paid to the work he has done in practice during those seven years?—The council have for the last year or two followed the practice of requiring drawings of some of the candidate's work to be submitted.

22,517. Therefore a certain guarantee of ability exists?—Yes, to that extent; and the proposal now under consideration is to make that a more effectual guarantee.

22,518. (*Chairman.*) How many Fellows are there?

J. M. Anderson, Esq., F.R.I.B.A.

17 Feb. 1893.

—At the present moment there are 621 Fellows and 806 Associates, and of these 806, more than one half have passed the qualifying examination.

22,519. Do the Fellows pay any subscriptions?—Yes. The Fellows pay at the rate of four guineas a year, and the Associates two guineas a year.

22,520. That is merely nominal. It is not enough to keep anyone out?—No.

The witness withdrew.

A. Cates, Esq., F.R.I.B.A.

ARTHUR CATES, ESQ., F.R.I.B.A., examined.

22,521. (*Chairman.*) You heard the evidence of the last witness; I will ask you, generally do you agree with it?—I generally concur.

22,522. I believe you are prepared to give us a little more detailed information on some of the points. You are Chairman of the Board of Examiners in Architecture?—I am.

22,523. And you are a past Vice-President?—I am.

22,524. Is there anything with regard to the position of the Institute with reference to education which has not been said which you would like to say?—I could only repeat what the President has said; that the Institute is not a teaching body, but by its prizes and studentships has, since its foundation, encouraged and influenced architectural education; more recently it has, by means of the examinations which it has established, still more beneficially influenced the education of the architect. It further materially aids that education by the free use that it gives to students of its very important professional library, which is open to all its members, and to students properly introduced daily, from ten in the morning to nine in the evening, thus giving those who are occupied in offices during the day opportunities for making free use of it until as late an hour as is reasonable, except on Saturdays, when it closes at 2 o'clock in summer and at 6 p.m. in winter.

22,525. Where do those who come up for examination generally acquire their knowledge. How do they get their necessary education, as a general rule?—Up to quite recently there has been no recognised course of study, and the means of education have been insufficient.

22,526. The course of study is laid down by you, but who gives it?—The subjects in which they are to be examined are laid down, and they seek the knowledge necessary to follow that course in any way they can. They acquire it by private study: by tuition from coaches; by attending classes at University College and King's College; and by attending classes at the Architectural Association; with respect to all of which I shall be able to give you fuller information.

22,527. Then will you take your own course?—Up to quite recently the principal sources of professional education were the mere haphazarded chances of pupilage in offices; there was no definite course laid down, and there was no definite standard of education or acquirement as a qualification for membership of the Institute.

22.528. When was the Institute founded? -- In 1834. In 1882 a byelaw passed in 1877 came into operation, making the passing of a qualifying examination a condition precedent to admission as a candidate for election as an Associate, and it was hoped and intended that the preparation for this examination should guide the young architect desiring to become a member in his studies, and that he should apply himself to a definite course in a systematic manner, and lay a sure foundation for acquiring further knowledge in artistic, scientific, and professional subjects, and thus in time secure that the members of the Institute should be a body of well-educated and qualified professional men. It was the commencement of a course which we hoped then would, and which we are now assured will, lead to that result. The first qualifying examination was held in 1882, and up to the end of 1892 the following have been the results: We have had 657 applicants, of whom 612 were admitted and 472 passed, with the nett result that of the 806 Associates now on the oooks of the Institute, 424 entered after having passed this examination. The others were members before 1882, and therefore were not subject to the test. I can give you the figures for the last year, 1892. There are two examinations held in the year, one in March and one in November. As a rule we find that we have a greater number of applicants in March than we have in November. I presume they devote themselves in the winter months to study, and probably in the summer they find other means of spending their time. In March we had 92 applicants, of whom 81 were admitted and 32 were relegated, so that only 49 passed; in November we had 50 applicants, of whom 41 were admitted, 24 relegated, and 12 passed.

22,529. (*Mr. Anstie.*) Does "relegated" mean plucked?—No, they are not plucked. Considering that this examination is intended for educational purposes, and is not in any sense competitive, if a candidate reaches a certain standard of marks he is not plucked, although he has not obtained sufficient to enable him to pass, but he is relegated to his studies for a year or six months, or he is relegated only in certain subjects. A man may have passed extremely well in the artistic part and yet be deficient in the practical. He is then sent back to complete his studies in those sections, and has credit given him for the marks he has got on the others. Occasionally we have had candidates who have come up twice, or some few perhaps three times, but those have been cases in which, perhaps from ill-health or other causes a candidate has not been able to follow out his studies as otherwise he would have done.

22,530. (*Chairman.*) There is no hard and fast rule; you exercise your discretion?—The Board exercise their discretion in the matter. By the 20th section of the Charter the Institute is authorised to hold examinations. "Examinations by or under this our Charter, "or which the Royal Institute now is or may here- "after be empowered or required by statute to hold, "and such other examination or examinations as "the Royal Institute may from time to time think "fit to establish shall be held at such times and "places within the United Kingdom or India, or "any colony or dependency of the United Kingdom, "and in such manner as the Council may from time "to time determine." Then the 21st section is: "The Royal Institute shall have power to grant such "diplomas or certificates in connexion with examina- "tions or otherwise, in such manner as byelaws may "from time to time prescribe." Following upon that, and with the result of the experience that we have had of the examination in the five years between 1882 and 1887, which satisfied us that there was a great deficiency of educational resources; that there was a great necessity for gradually raising the standard of acquirements; and that there was I may say (although I regret to say so) found to exist a lamentable deficiency in preliminary education; a want of training in mathematical and geometrical accuracy, and serious defects in draughtsmanship and artistic education, and an absence of precision and exact knowledge in technical subjects; a general conference of architects, which was held on May 4th, 1887, was devoted to the consideration of this subject of architectural education. I may perhaps be allowed to hand in a report of this meeting, with an introduction and notes by myself (*handing in same*). There is an introductory note by myself, and it is followed by an appendix which comprises particulars of the architectural courses followed at the Cornell University, at Ithaca, New York; the Columbia College, New York; the Massachusetts Institute of

Technology, Boston; École des Beaux Arts, Paris; L'École Speciale d'Architecture, Paris, and the Architectural School of the Royal Academy of Arts, London. I printed that pamphlet, and circulated about 2,000 copies of it amongst members of the profession, with a view of securing the establishment of a progressive series of examinations so as to cure the very serious defects which existed in the one examination which had no preliminary test to lead up to it. The scheme of the progressive examination was subsequently adopted by the Royal Institute at a general meeting, and will be found on page 21 and the following pages of these particulars (*handing in same*). I may shortly state the heads which have been arranged at present for the three courses of those progressive examinations, the preliminary, the intermediate, and the final, the final being the examination, the passing of which is obligatory upon every individual desiring to be a candidate for the associateship of the Institute. The preliminary, which is for young men of the age of 15, 16, or 17, desiring to enter the profession consists of writing from dictation, English composition, arithmetic, algebra, and the elements of plane geometry, geography and history, French, German, Italian, or Latin, geometrical drawing, elements of perspective, elementary mechanics and physics, and freehand drawing from the round. When a candidate has passed the preliminary and been admitted as a probationer, he will have two years or more for further study, and then he will be prepared to come up as a candidate for the intermediate examination, but in order that he should be admitted to that examination it is necessary for him to produce certain "testimonies of study" showing the work he has been doing in the interval between his being admitted as probationer and coming up as a candidate for the class of "student." Those "testimonies" consist of seven sheets of drawings in the art section, with a descriptive memoir and sketches; and four sheets in the science section. The subjects of the examination are:—The orders and classic ornament, English architecture and mediæval ornament, building materials, calculation of strength of materials, the elementary principles of construction, elementary physics as applied to buildings, mensuration, land surveying and levelling, plane applied geometry, projection and developments of surfaces, followed by an oral examination upon the whole subject, in which oral examination the testimonies of study are carefully looked into by the examiners, and form a portion of the examination of the candidate. This examination has been so recently established that the time has not yet arrived for holding the final examination, which is really the important one, the other two being merely introductory. There are now some 55 students preparing for it.

22,531. Will that be more severe than the old qualifying examination which was established in 1882?—Certainly. In the written examination and the oral examination the same principle of requiring "testimonies of study" is followed out, so that we have some knowledge of the work done by the student in the interval since he passed the intermediate.

22,532. How do you ensure that the plans and things he sends are really done by himself?—He makes a declaration that they are so done. Those drawings are submitted to the examiners; the student takes his portfolio to each examiner, and in his own particular section the examiner deals with those "testimonies," looks into them, and asks him questions which are generally a very fair test. Moreover, the candidate's power of draughtsmanship is tested by the execution of a design in the examination, and the drawings then made can be compared with those submitted at probationary work or "testimonies." I have not yet met with any case with regard to the "testimonies" which would have led me to believe that the drawings were not really the production of the candidate; and we require also that his master should send a letter, or some well-known person should send a letter, to the effect that to the best of his belief he can certify that those drawings are the work of the candidate's own hands. The full details of those particulars of testimonies of study will be found on page 41 of the pamphlet I last handed in; but I may summarise them by describing them as including drawings of classic architecture shaded by rule, a study of mediæval, classic, or renaissance architecture in perspective, in outline, or shaded. Two studies of ornament from the round, classic or renaissance and mediæval; a complete design for a building of moderate dimensions; drawings of some historic building from actual measurement, with the original sketches appended; sheets of constructive drawings, with the calculations for strength fully worked out, sheets of diagrams of constructive masonry and groined vaulting; notes of the progress and conduct of actual works. The written examination will comprise the history of Architecture illustrated by sketches of well-known buildings in the various styles; the features, mouldings, and ornaments of the various styles, illustrated by sketches; a design for a building of moderate dimensions, or some part of a large building made in one day from particulars given; materials, their nature and application in buildings, strength of materials, stresses and strains; their calculation and graphic determination; constructive details in all trades; sanitary science; drainage; water supply; ventilation; specification and contracts; measurements and estimating; the legislative enactments relative to buildings. Then there is an oral examination on the whole as before. Then as to the actual working of these progressive examinations. (*The witness handed in particulars of the Progressive Examination; see Appendix No.* 46.) The first preliminary was held in November 1889, in London, Dublin, Bristol, and Manchester, and we have now 438 probationers on the register. The first intermediate examination was held in November 1890, and 55 who have successfully passed are entered as students on the books. In the five examinations which have been held we have had 85 applicants, the testimonies of study of 12 not having been sufficiently satisfactory, 73 have been admitted; of these, 55 passed, the remainder being relegated, as I said before. I think that the result in the number of candidates that have been relegated, although the standard has not yet been placed very high, and has been rather adapted to the average requirements of the students, shows that the education has not been entirely satisfactory; and it appears to me that this arises very much from that want of appreciation by the young architect, and very often by his master, of the necessity for definite study, which is the result of long years' neglect of education, and of the system of looking to pupilage as the sole means of acquiring the necessary artistic and professional knowledge.

22,533. Then with regard to the influence of these examinations upon education, which is your next head that would lead you to what I asked before as to the way in which, as a rule, these people prepare themselves, which, as you said, was partly by private study, partly by coaching, and partly by the teaching of University and King's Colleges?—The examination has produced, I think, a very excellent effect: evidenced, first, by the large number of probationers who have entered, and also by the proceedings at King's College and University College. As regards King's College I am able to give you some particulars. If I recollect aright the first professorship at King's College, which was held by Mr. William Hosking, was the professorship of the arts of construction, and dealt chiefly with constructive matters and not with architecture in the sense in which Mr. Anderson has just now explained his views.

22,534. More engineering?—Yes, he was followed in the same chair by Professor Robert Kerr. On his retirement Professor Banister Fletcher was appointed to the chair of Architecture, Building Construction, and Modern Practice, and from him I have received these particulars of the courses that they have established,

A. Cates, Esq., F.R.I.B.A.

17 Feb. 1893.

chiefly, I believe, as the result of the establishment of the examinations by the Institute (*handing copies to the Commission; see Appendix No.* 47). On the first page you see that these courses are "specially "arranged to enable architects' pupils, improvers, "and other gentlemen intending to follow the pro- "fession of Architecture, to prepare for the progres- "sive examinations of the Royal Institute of British "Architects as set forth in their Kalendar;" and not only have they established day classes, but by the assistance of the Carpenters' Company, who have behaved in a most generous manner in providing funds at King's College and at University College for promoting architectural education, they have established these evening classes which are described on pages 6, 7, 8, and 9, which afford to the pupil engaged all day in the office an opportunity of acquiring knowledge in the evening (*see Appendix No.* 48). But besides that the Architectural Association have taken a very great move lately (I think I may say absolutely in consequence of what has been done by the Institute) in establishing what they consider to be a complete curriculum for architectural education.

22,535. Can you tell us what the Architectural Association is?—The Architectural Association was founded in the year 1846. It was established then by pupils, draughtsmen, and clerks in some three or four offices with the object of gaining mutual instruction by means of classes of construction and classes of design, and the reading of papers, and discussions. It has grown now to be a body numbering, I think, 1,000 or 1,200 members, a great number of whom are also members of the Institute.

22,536. Does it possess any funds?—None whatever. The original subscription was 10*s.* 6*d.* a year, and I think the present subscription to new members is a guinea. It has no capital; it is dependent solely on the contributions of its members, and it has with very great courage endeavoured to establish this curriculum, particulars of which I now hand in (*handing same to the Commission; see Appendix No.* 48).

22,537. (*Lord Playfair.*) It stands very much in the same relation to your Institute as the different societies outside the Institution of Civil Engineers stand to that Institution—the Society of Mechanical Engineers and the Society of Engineers?—Hardly so, I think, because the members are really junior members, and a large number of them also members of the Institute. Nearly all the members of the governing body of the Association are members of the Institute. It is strictly a students' body.

22,538. (*Chairman.*) These are classes leading up to the examination?—Yes.

22,539. How do they get the professors? Do they serve for nothing?—Many of them serve for nothing. Some outside lecturers are paid. Their great difficulty has been the procuring of funds for the purpose. Funds have been provided by subscription, and provided also by the fees they receive, and the Royal Institute has contributed 100*l.* a year for three years towards the establishment of these classes.

22,540. (*Mr. Anstie.*) It is a kind of college, is it not?—It is something like it, but without any foundation funds. It is this condition of things which I have briefly explained which makes it appear to us important that architecture should be distinctly recognised, that it should not be mixed up with engineering or with any other profession, although the course of architecture would in matters of construction and science to some extent run on similar lines to, and perhaps for some distance on the same lines as engineering. It seems important to us that architecture should take its position as a distinct curriculum.

22,541. (*Chairman.*) You think there should be a separate Faculty for Architecture?—A separate course or Faculty for Architecture utilising the other courses which were cognate to it so far as they were necessary.

22,542. And leading up to a degree in Architecture?—No. Considering the position of architecture as a mixed profession combining science and art together, it is hardly desirable to establish a degree in Architecture. A Bachelor of Science degree in which the architectural course might be the principal element might be well; but, Bachelor of Architecture or any degree in Architecture I think would not be desirable.

22,543. Of course there would be a Faculty of Arts; and suppose there was a Faculty of Technology or applied science, which would chiefly mean engineering, between the two would the architect be able to get a good education, supposing there were papers in the literary part which would apply more particularly to the history of architecture, and in the engineering part which would apply perhaps more particularly to the practical side of architecture. Between the two the architect would probably get a good education in a teaching University without any special faculty for architecture?—Possibly in parts, but not on the special and essential side of art, without which architecture is nothing. The course of architecture should be defined; and there are many subjects which would come in that course which would not be found in the ordinary Faculty of Arts, or in the Faculty of Engineering, because the question of drawing, the question of design, and the question of study of ornament,—the more strictly artistic part of architecture,—would not be provided for.

22,544. Then do you want a Chair for Architecture—a special professorship?—I presume that there would be a professor of Architecture, and that under his guidance a curriculum would be arranged which would comprise such portions of the other courses of the University as would be adapted for the purposes of architecture. On that subject I may refer to what has been done in certain colleges in America, and in other places. You will find at pages 68 and onwards in my grey pamphlet which I handed in the programmes of the Cornell University, Ithaca, New York, the Columbia College in New York, and the Massachusetts Institute of Technology; and there is another college at Illinois following very much on the same lines. (*See Appendix No.* 49.)

22,545. (*Lord Playfair.*) I dare say you know that the institute in Boston has made great development last year. That pamphlet will not contain last year's report, will it?—No, I will give it you presently. At the Cornell University their courses are divided into two sections, one of them for Bachelors of Science in Architecture, and the other, which you will find at the foot of page 69, a special course of architecture, which is for two years only.

22,546. (*Chairman.*) Besides architecture what can a man take the degree of Bachelor of Science in? Can he take it in anything except architecture?—Yes, this is merely a section. There are a great number of sections there.

22,547. They divide their Bachelorships of Science into a great number of different heads?—Yes. The Cornell University was founded by the liberality of Ezra Cornell, whose ambition it was to found an institution "Where any person could find instruction in any study." It was incorporated in 1865, and having been organized in accordance with the requirements of its charter, was opened in 1868. "The "University comprises the following special Faculties: "Arts, literature, philosophy, science, agriculture, "architecture, chemistry and physics, civil engineer- "ing, mathematics, mechanical engineering, and the "mechanical arts, natural history, history, and poli- "tical science."

22,548. A man may take a degree in any one of those?—Yes; each of those is a special Faculty. "The course in architecture is so arranged as to give the "student instruction in all subjects which he should "understand in order to enter upon the practice of "the art. The instruction is given by means of "lectures and practical exercises. Its object is not "merely to develop the artistic powers of the student, "but to lay a foundation of knowledge without which "there can be no true art."

22,549. They do not give a degree in architecture, do they?—"Bachelor of Science (Architecture)."

22,550. (*Mr. Anstie.*) It is specified in the title of the degree?—"Bachelor of Science (Architecture)." I presume it means that he is a Bachelor of Science, and that he has taken the section of architecture. I should say that the movement in America arose to a great extent from the energy of Professor William R. Ware, who was the Professor of Architecture in the Institute of Technology at Boston, and at page 63 of my grey pamphlet you will find a communication from him dealing with the difficulty of combining engineering and architecture. The curriculum at the Massachusetts Institute has quite recently been modified.

22,551. (*Chairman.*) So as to separate the two?—Yes, so as to separate the two. I can give you, if you desire it, the whole of the subjects which are taken in Massachusetts Institute in accordance with the curriculum of 1892.

22,552. (*Lord Playfair.*) Are you aware that in the last year they finished a large separate institution for the teaching of architecture in connexion with that school?—Yes. It is in that building that this curriculum is carried on. A very large expenditure has been made there.

22,553. (*Mr. Anstie.*) What is the curriculum on page 73?—That is the curriculum which was in force in 1887, but since this large building has been completed they have modified that slightly. I can give you the particulars of the building. This is the building for the Department of Architecture at the Massachusetts Institute of Technology at Boston. The building measures 66 ft. by 58 ft., and it is five storeys high. "One half of the basement is a "museum for building appliances; the other half is "a laboratory for the testing of cements, mortars, "&c., and has also a complete plant for experimenting "on the siphonage of plumbing traps. The system "is arranged to be in exact accordance with the "plumbing practice in private houses in order that "the experiments may be thoroughly practical and "useful. The first floor is devoted to lecture rooms. "The second and fourth floors are drawing rooms, "lighted from both sides." Those are of course rooms for drawing. "One half of the third floor is a "drawing room, and the other half is a library. The "library is very fully equipped and catalogued, and "has every convenience for reading, and consultation "of its 800 volumes and 10,000 photographs. The "fifth and upper storey constitutes one large drawing "room arranged for the classes in freehand drawing "from the cast and from life, and for the classes of "water colour, modelling, and so on." With reference to the question of the museum, I may mention that at King's College, Professor Banister Fletcher, with the assistance of the Carpenters' Company, has been establishing a museum of drawings, photographs, and architectural models and details, of which this is a catalogue (*handing same to the Commission*).

22,554. (*Lord Playfair.*) Are you aware that all the public bodies when they are going to build any new institution send to the New Institute at Massachusetts their materials in order to have them tested in that lower floor, where they have such good machinery?—I believe that to be the case. There is something of the same kind now at the City and Guilds Institute; and I think there is one being established at University College.

22,555. (*Mr. Anstie.*) There has long been one at University College?—Yes, there has; and it is now, I believe, very largely extended.

22,556. (*Chairman.*) Those four institutions are the only ones in America, are they?—They are those of which I have the particulars at hand. I have not given the particulars of the one at Illinois because they are very similar. The Columbia College has a department of engineering.

22,557. There are an enormous number of universities in America; but none of them have an architectural Faculty except that one?—I cannot say how far the results of Professor Ware's energy have yet extended, but they certainly are extending. At Columbia College, which has a school of mines, there is a distinct school of architecture entirely distinct from the engineering.

22,558. Then the French schools are entirely separate from the Paris University?—Yes, entirely separate.

22,559. Does the Paris University teach architecture?—Not at all.

22,559*a*. (*Mr. Anstie.*) I should be glad if you would tell us something about the *École des Beaux Arts*?—At the *École des Beaux Arts* they have a teaching course by lectures, by exercises, examinations, and competitions, and by competitions in the *ateliers* affiliated to the *école*. The course of education of the architect in Paris appears to be that the student joins the *atelier* of an architect, where he acquires his elementary knowledge of architecture, drawing, and design, to enable him to be admitted to the *École des Beaux Arts*; and at the *École des Beaux Arts* besides the instruction he receives in design and the competitions in the *école*, for prizes for designs, architectural competitions, and the like, leading up to the "Grand Prix de Rome"—the great object of ambition for the students—he follows a certain course of lectures, those lectures being 16 in number. They comprise the subjects of general history, anatomy, perspective, with all the incidental subjects connected with perspective, such as shadows, reflections, and so on; mathematics and mechanics, including mensuration of surfaces and volumes and conic sections. In general history, anatomy, and perspective they have 20 lessons; in mathematics and mechanics they have 36 lessons; and in descriptive geometry, which is a subject of the greatest importance to the architect they give 40 lessons.

22,560. Which is descriptive geometery?—The projection of surfaces which leads up to the application of stereotomy—the cutting of masonry in arches, vaults, and so on. Also applied geometry in carpentry and other trades.

22,561. Is it what is called in this country geometrical drawing?—Partially so; but geometrical drawing may be simply the drawing of plane figures, but this would include the projection of solids.

22,562. I meant to include that?—Including that it would be so. They have geology, physics, and chemistry. Then a long course upon construction; also upon building laws; and those building laws, under the head of *Private Works*, cover contracts for works; relations of client and architect; relations of client and workmen; servitudes affecting property; rights of neighbours; dangerous and noxious trades; rights and responsibilities of property; responsibility for repairs; leases; dilapidations; police regulations controlling constructions; line of frontage; levels; height; projections; paving of streets. Then under the head of *Public Works:* organisation of the service; competitions; estimates; financial arrangements; conditions of contract and execution of the work; compulsory acquisition of property; public rights. Then they deal with the history of architecture, and also with the theory of architecture, and they have courses on ornament, decorative composition, literature, history and archæology, and the history of art and æsthetics. Then, in the *École des Beaux Arts* they have established an examination for a diploma which is designated *Diplôme d'Architecte*. That is granted upon condition that the candidate shall have obtained certain honours in the first class of the *école*. He must produce a certificate of having, for at least a year, assiduously attended the execution of works under a State engineer, a Government architect, or a public or private administration, or of having personally directed works. He is then examined on two questions, the one relating to building laws, the other to the practical executions of works. In the graphic section he has to prepare an architectural design, conceived and developed as for actual execution, comprising the plans, elevations, and sections, all the

A. Cates, Esq., F.R.I.B.A.

17 Feb. 1893.

details of the construction, a descriptive memoir, specification, and an estimate of part of the building, and following that he is subjected to an oral examination. The oral section consists of an examination on the different parts of the design; on the theory and practice of the construction; on the qualities and defects of the materials, their resistance and treatment; on the history of architecture; on the elements of physics and chemistry applicable to construction; and on building legislation, professional practice, and accounts. "The adjudication is made by a commission specially "appointed each year, thus constituted: two of the "professors of architecture, *chefs d'atelier*; a pro- "fessor of an external *atelier*; the professors of con- "struction, of chemistry and of physics, and of "building legislation." Then in Paris there is another school, which has been established by M. Émile Trélat, called *L'École Spéciale d'Architecture*. The courses of lectures there are: stereotomy and its applications, in which he gives 50 lessons; physics, so far as indispensable to the architect, 27 lessons; chemistry, so far as indispensable to the architect, 25 lessons; stability of constructions, 25 lessons; geology and metallurgy, 12 lessons; natural history and botany, 10 lessons; construction, application of theory, 35 lessons; shadows, 5 lessons; perspective, 15 lessons; physics, as applied to buildings, 18 lessons; chemistry, as applied to materials, 24 lessons; machinery and mechanical appliances, 12 lessons; specifications, estimates and accounts, 12 lessons; hygiene, 12 lessons; building legislation, 15 lessons; political economy, 12 lessons; history of civilisation, 12 lessons; history of architecture, 30 lessons; theory of architecture, 20 lessons.

22,563. (*Chairman.*) Those are the French schools. Now we come to the instruction of the Royal Academy in Architecture?—The school at the Royal Academy gives instruction in architectural drawing and design. That instruction is given on, I think, three evenings a week, from 6 to 8.

22,564. Have they always done that since their foundation? — No, they have not. The Royal Academy has always had a nominal class of architecture, but the admission to that was by submitting probationary drawings, and then the execution of certain designs and drawings within the walls of the Academy; and if they were passed and were satisfactory the candidate was admitted as a student. He received a bone which was a free pass to the exhibitions and authorised him to study in the antique school and attend the lectures for, I think, for five years, but he received no instruction in architecture. Beyond that there was no obligation on him till quite recently to attend any lectures or to attend any classes. Now the candidates submit certain drawings for admission as probationers; then, if approved, they are within six months to prepare within the Academy drawings of a similar work, and they are then admitted to the lower school; but before they can be passed into the upper school they have to make a certain number of designs and drawings in the school of the Academy and attend the lectures on perspective and the other lectures that are given on architecture, painting, sculpture, anatomy, and chemistry by the professors; six lectures, I think, on each subject.

22,565. They deal merely with the artistic and not the practical part?—They do not deal with the practical part at all. Then they offer prizes for the best designs executed in the school; for drawings of buildings from actual measurements; for perspective drawing; and sciography, &c. A gold medal for a design in architecture, also carrying a travelling studentship for study abroad of the value of 200*l.*, tenable for one year, is offered bi-ennially. A travelling studentship for travel and study in England of the value of 60*l.*, tenable for one year, is offered in alternate years for a design in architecture. I think the academy school may be said to consist of those who are desiring to go in for those prizes and can only obtain them by going through the school. I am not aware that it has a very large attendance.

22,566. As far as I can see you wish to have what no other University has in France or here, and that is, a distinct course of architecture in the teaching University of London?—There are in Italy, in Berlin, and in Vienna, courses of architecture. I will put in as an example a programme of the architectural course at Vienna. (*See Appendix No.* 50.) In the University of Palermo as well as in the chief cities of Italy there is a complete course of architecture. There it is called the Royal School of Application for Engineers and for Architects, annexed to the Faculty of Philosophy and Mathematical Science in the Royal University of Palermo.

22,567. Do they teach architecture and engineering together?—No, they have absolutely distinct courses, the architect using so much of the engineer's course as is applicable, but being kept entirely distinct.

22,568. Then supposing this course to be established in the teaching University, how would that affect you? Would you still continue to give your examinations as now?—Certainly, because they are examinations to qualify candidates for admission to the membership of the body.

22,569. You would still continue to do your work, but perhaps some of the preparation for your examination would be carried on by the students at the University?—We should look to the courses of the University to give the education which we should ultimately require as a condition of membership. We are progressive; we are desirous of raising the standard; we are desirous of securing that every man who is a member of the Institute shall have passed a test which shall show that he has qualifications in every branch, not that he is super-excellent in arts or super-excellent in science, but that he has a reasonable and sound knowledge; and we wish to see the course arranged in such a way that combined with the direction given to the studies by our course of examination, the aspiring architect may be guided and obtain opportunities for study, not (and this is a most important element) superseding the professional education which he gained in the office, which is absolutely essential.

22,570. That would come afterwards?—Yes, that would come afterwards or concurrently with the latter portion of his course.

22,571. (*Lord Playfair.*) But would you not take the graduation in the University directed to architectural qualification as equivalent to that portion of the examination that you give in your Society?—I am not prepared to say that we should; that would depend upon a great many elements that we should not consider here. I should not be disposed to admit it at the moment. We should hope to secure a thorough and systematic training—artistic, scientific, and practical—and that that training should be based as a most important element on a sound general education, by which means we should hope that the architect would become a reliable and trustworthy adviser, and be also a well-educated man.

22,572. (*Chairman.*) You would not be prepared to take the degree as part of your examination?—I am not prepared to say that we should take it, certainly not for the whole.

22,573. For part?—We might take it for part.

22,574. If a man wanted to take a degree and at the same time to become a member of your institute, he would have a great number of examinations to go through?—I think our examination, as I have described it, goes further than any examination that would be established in a University, and having passed that University examination, with further professional study he would pass ours with facility.

22,575. I think I have gathered what you wish for. You wish for architectural instruction to be given by the new University?—We desire, as I have just now said, that an architect should have an opportunity of systematic study under the direction of professors of the highest standing.

22,576. (*Lord Playfair.*) I think there must be some misapprehension. There are certain subjects in

the preliminary scientific studies which are perfectly common to you and to any University examination?—Certainly.

22,577. I suppose in mechanics and chemistry and such subjects as those which are common to both you would not wish a graduate to be re-examined in those subjects?—I think the probability would be that he would be exempted from the preliminary and partially if not wholly from the intermediate and would come up for the final, but I would not pledge myself to say that we would accept the certificate of another institution to qualify for admission to ours. I should advise that in the case of anyone producing certificates from the teaching University that he had passed certain courses he should be exempted from the preliminary and partially from the intermediate in respect of such subjects.

22,578. (*Lord Reay.*) I understand that you propose that the University should lay down certain courses of instruction which would be specifically useful for intending architects?—Certainly, a curriculum of architectural study.

22,579. We need not go into all the details, but that curriculum would take some of the subjects which I find on page 43 of your programme of examinations; it would not take them all. You would exclude of course everything that is practical. The University cannot undertake it?—Not in the application to professional work, which should be acquired in the office, and in the actual conduct of work and contracts.

22,580. Then it includes certain subjects which are taught in the Arts Faculty such as the history of architecture and courses of archæology. They would be given in the Faculty of Arts. Other courses would be given in the Faculty of Science?—Yes; so far as the satisfy the requirements of the architecture.

22,581. You want lectures to be given for the architectural students?—Not necessarily as separate lectures through the whole course, but that the course of architecture should have for its own particular purpose certain definite lectures, such as the history of architecture and others, and utilise the other general courses, such as those of chemistry——

22,582. And electricity?—Yes, and light, and so on, so far as necessary for the studies of an architect. That graduation of course would be settled, I presume, by the professors of architecture of the special classes who would determine how much of the general classes should be followed by their students in order that they should acquire that particular knowledge.

21,583. They would be grouped as a Board of Studies?—Yes.

22,584. Professors in the Faculties of Arts, of Science, and also a professor of the Law Faculty who would teach what I see here indicated as "Legal handbook"?—We put it "Legislative enactments relating to building."

22,585. They would form a Board of Studies and decide in what courses the architectural students should be separate and in what courses they should be amalgamated with other students?—How much of the other courses should be taken by the student of architecture in order to complete his education.

22,586. Which courses should be taken in common with other students and which should be taken separately?—To a certain point the engineer and the architect go together, then they diverge.

22,587. That leads me to ask you another question, whether you would be equally satisfied if you had an independent school of architecture similar to those you described this morning in France and America, where all these studies are consolidated in one institution?—I think it would be rather on similar principles to those in America which I take it are not distinct like those in France, as I have shown in the Cornell University case. In France you have the *École des Beaux Arts.* That is an entirely distinct Institution and I am not aware that it has any relation whatever to the University of Paris. The other architectural school of M. Trelat is entirely independent. It is a private venture.

22,588. Then do you agree with the evidence given by Mr. Anderson that the French system is not adapted to our wants?—I am not satisfied that the system of the *École des Beaux Arts* is in all respects, and more particularly as to its methods of teaching design, well adapted to our requirements here; it introduces too much of the academic in the principles of design. I desire to see the architect in England preserve his independence in that respect, for nothing can be more fatal to the development of freedom in architectural design than the academical restrictions which follow a complete course of study in design like that of the *École des Beaux Arts.* Designs for building get very much as if they were cast in the same mould. The views of the professors are followed by the students; success in getting the medals and the *Grand Prix de Rome* depends upon their following a certain line of design, and there is not the same freedom of design in France as in England. French, German, and Italian architects commend and envy the freedom and wide scope of design which there is in England, which the academic system would tend to curb and restrain. What we should desire to see in the artistic branches would be a thorough training in the elements of design a thorough training in what I may describe as the vocabulary and the grammar of the Art, and as regards the design itself leaving the scope of the student free without what I have described in other places as the pernicious academic influence which tends to form the minds of the designers all in one mould. I am an exceedingly great admirer of the architecture of past years in Paris, but there is too much identity in it.

22,589. There is in France too much centralisation?—Yes.

22,590. Then you do not contemplate that lectures on design should be given in a University?—I contemplate that instruction in the elements of design should be given, which should comprise the whole range of architectural design.

22,591. You think that could be done in a University?—Yes, in the same way that lectures upon history are given.

22,592. And would you put those lectures on design in the Faculty of Arts?—Using Arts in its proper sense as Fine Arts.

22,593. Do you admit persons to your examinations who have not passed the preliminary and intermediate, or do they form a sequence which everyone is obliged to undergo?—In a short time they would form a sequence which everyone desiring to become a member would be obliged to undergo; but we have not yet held the final. I can appreciate circumstances in which the Council of the Institute would exercise its dispensing powers, and would admit to the final examination candidates who from circumstances should be exempted from the two first, as the examination is a newly-established matter, to get over the interval between the whole course getting into full work and closing the door of admission to the Institute absolutely; except in certain and special cases in the discretion of the Council as provided for by the Charter. There are many cases in which the Council should exercise their dispensing power; and also I think it is very possible that if an architectural curriculum was established, which would satisfy the conditions which I have indicated, the certificate of having passed that course would be accepted as exempting wholly or partially from the preliminary and the intermediate examination.

22,594. Any lectures and any examinations with which you were satisfied in the University, you would not care to duplicate in your system of examination?—We have no desire to duplicate them at all. Our examinations are carried out with great personal sacrifice on the part of the examiners, who do not receive any remuneration or fee or reward, but freely give a very large amount of time to the conduct of the examinations.

22,595. You have spoken of the great want of precision and exact knowledge in scientific subjects in the

A. Cates, Esq., F.R.I.B.A.

17 Feb. 1893.

preliminary examination? Is it not largely due in your profession, as we have had evidence it is due in other professions, to the fact that the secondary education of the country is not organised and does not give that precision and exact knowledge which the Realschulen in Germany impart?—Certainly. I speak from experience. I may say that of the 600 candidates who have been admitted to the qualifying examination, I have, with the exception of perhaps 50 at one examination when I was not present, been in personal contact with every one of them. Before they have been set I read the papers in the preliminary and intermediate examinations and also in the qualifying examination. I have attended at Glasgow, Leeds, Liverpool, and Manchester, and held examinations there; I have presided at every oral examination which has been held (except one), and I have based the statement that I made in opening my evidence, where I regretted the want and the absolute deficiency of accurate knowledge, upon the experience which I have gained in that way. And, further, as Chairman of the Board of Examiners, I have announced publicly, and you will find it printed in the pamphlet, that I am ready to see any candidate and to give him any advice in my power. A large number of candidates have come to me, and I indulge them with a very short examination of my own, which is generally quite sufficient to test their ignorance, with the result that generally they go back, alter their course of study, and act upon myadvice. I have found, in many instances, that the education they received before they commenced special studyhas been lamentably defective.

22,596. Because the number of institutions, where such education is given, is extremely limited?—I believe it is.

22,597. (*Professor Sanderson.*) Your view is that it is not desirable there should be a degree in architecture?—I think not.

22,598. I think you said you thought it would be much preferable that a modified degree in science should be created?—I think that would be the better course; that is, so far as I am at present informed.

22,599. But supposing the University created a Faculty of Fine Arts, would it not be more reasonable that your degree in architecture should be a degree in fine arts?—If they created a Faculty of Fine Arts it could not, upon that Faculty alone, grant a degree in architecture, because there would be a scientific side which is exceedingly important and cannot be overlooked, and which must be taken into account. I will tell you what my view is of what an architect should be. This is the ideal of an architect which can only be realised in individuals, so far as their own personal characteristics would admit: he should combine the imagination of the artist and the artistic knowledge which would be acquired in the Fine Art Faculty, with the intellectual clearness and precision of the mathematician, and with those he should combine the experience and the readiness of the practical man of business, which cannot be given by any University course, which can only be acquired by experience in the office, and by contact with men and things. Therefore, a degree in architecture granted by the Fine Art section would simply deal with artistic power. If you combine with that the scientific you would say, "This is a man who has "passed a degree in two thirds of the elements "which should be combined to make the architect;" and it is upon that ground that I object to a degree in architecture. It is on account of the complex nature of the profession and the art.

22,600. But if you wish to combine both elements, I mean the fine art element and the scientific element, does it not almost follow that the easiest way of doing so would be to have a degree in architecture which would combine both elements?—But there is a third element which I should like to make clear; that is, the practical experience—the professional element. The education the student would obtain in the Faculty of Fine Arts, and that which he would obtain in the Faculty of Science would be only the foundation for the third element which makes him the practising architect.

22,601. Do you think the University could help you in securing the third element?—No; but if the University would give us the education which we desire it would make the acquisition of the third element more easy, and would also supply the essential two-thirds of the three elements which I have just now specified to make up the architect in the end.

22,602. Then according to you the architect ought to have two degrees, a degree in science and a degree in fine arts?—No, I go further, because I take three elements, and the third element is an exceedingly important one. It is not only important to the architect himself, but it is important to his client, and the importance to his client is so great, that I think it would be misleading that any man should take a degree and say, "I am a master of architecture," unless he had acquired that knowledge which cannot be gained or learnt from any University course.

22,603. Are you satisfied that the course you have mentioned is a practically good course?—As far as it goes.

22,604. Does it include all the elements? Might it be taken as a model?—For the strictly architectural subjects; but we wish that the architect should have in the University an opportunity of acquiring, not simply the architectural subjects, but also those subjects which are essential towards obtaining the education of a gentleman.

22,605. What is your idea as to the relation between the degree studies and the practical work that a man has to do in an architect's chambers?—At present, as Mr. Anderson explained to you, the pupilage is now generally about three years. It used to be seven; then some 40 uears ago it was reduced to five; now it has been reduced to three. I think a three years' course at a teaching University, followed by a year, or say two years, in an office, ought to turn out capable men, at all events men who have had the opportunities of acquiring the knowledge which is essential to the practice of their profession.

22,606. But a student could take his degree before he began that practical work, could he not?—In some cases he would take his three years' course at the University, and having passed that then enter an office for, say, two years further, or he would take his three years at the University, and in the last year or even earlier he would be also following his studies in the office of an architect.

22,607. Would you mind saying where you think the present means of instruction are most defective, in what part of the course of studies the means for efficient work are most wanting?—I should almost answer the question in one word, *passim*. That is without any derogation to the efforts being made by Professor Roger Smith at University College, or Professor Banister Fletcher at King's College.

22,608. The whole thing requires to be done on a better scale?—Yes.

22,609. Does that apply to the fine art part or to the part which relates to the business of the architect?—No, the whole of the subject that we deal with in our examination.

22,610. Not for scientific subjects, but rather the special line of study which the architect requires. Then with reference to the position of the *École des Beaux Arts*, in Paris, you cannot consider that as so separate from other institutions for higher instruction in France as to make it undesirable that the University of London should assume the functions the *École des Beaux Arts* performs. For the *École des Beaux Arts*, as much as the University, is under the direction of the Minister of Public Instruction?—I am not aware that we have a Minister of Public Instruction and Fine Arts in this country.

22,611. Not in this country, but there is a Minister of Public Instruction in France and under him a De-

partment of Instruction in the Higher Branches of Science and Literature as well as a Department of Fine Art?—Certainly, and also in Germany, in Austria, and in Italy in the same way.

22,612. (*Mr. Anstie.*) With regard to your creation of an architect?—I say that as far as his personal characteristics will admit he should aim to satisfy those conditions, making good as far as possible by education and study his natural deficiencies.

22,613. You frame your scheme with a view to giving him all these qualities. I gather from you that there are three branches which you think necessary to consider in the matter; one the imagination, the plastic power; second, the scientific basis; and third, business aptitude. Am I right in thinking that that is how you would scheme it out?—It appears to me to be a convenient method of subdividing it.

22,614. I want to see how far these things are within the proper scope of the University. As to scientific basis I think I follow you so far as relates to what I may call the engineering section on the 43rd page; "strength of materials," "stresses, strains," and so on; but there, I confess, I begin to fail, because I find in your science section these things put down; sanitary science, including plumbing work. Then I come to specifications of contracts. The knowledge of specifications I should have thought must be acquired from office work. Then, building leases and building contracts. Then there is a separate head of dilapidations and fixtures, and the development and management of building land. Then again we come to law, principal and agent, Building and Sanitary Acts, and then measuring and estimating. What strikes me is that a good deal of that, nearly all of it I may say, is really practical business and not academic education in any sense of the term; and what is called law there is not what any lawyer would consider law, but simply a knowledge of detailed regulations such as are properly required in the examination which follows at page 45. Do you consider those to be branches of University training?—Their principles should all be included in the course as is the case in the instances I have cited, although this application could not be part of University training. I do not know where the word "law" is used. I have not used it myself.

22,615. I thought you did to Lord Reay?—I used the word "legislative enactments relating to "building."

22,616. I understood you to say to Lord Reay that professors of law were to be detailed to deal with those subjects?—Architectural jurisprudence is an essential element of knowledge for a practising architect.

22,617. But I should have thought that fell rather under the head of business knowledge to be acquired by practice and reading in chambers? Is it a part of the function of the University to give instruction and to conduct examinations or details of this description—the development and management of building land?—That is a matter entirely for practical acquisition in his experience in practice.

22,618. Whatever the importance may be for a professional examination of keeping in subjects of that description, do you not think that in connecting it with a University we might strike out such heads as those I have been referring to?—Would you go back to page 43; "Measurement and valuation of buildings and materials." That is one item.

22,619. I am not taking the two first heads. I have passed over those which I understand to have a good deal of science connected with them; to be founded, in fact, on scientific considerations and to be properly applied science. But with respect to this sanitary science, including the practice of plumbing, specifications, and contracts, dilapidations, and measuring and estimating,—are not those matters which belong to chamber practice rather than to a University course?—Yes, they do in practice, rather than to the ordinary recognised University course; but in the curriculum for architectural study lectures might be with very great advantage given upon these subjects and upon the subject of the legislative enactments relative to building.

22,620. That I quite concur with; but is not that matter rather for the profession and the professional institutions to look after than for a University to concern itself about?—If the University proposes to establish an architectural curriculum. I think it is desirable, if not essential, that those elements should be dealt with. In the cases which I cited of other Universities and other colleges, they are all dealt with as part of the system.

22,621. But then the question of course arises whether under these conditions it is desirable that the University shall establish an architectural course, the fulfilment of which shall mark a man as competent in the exercise of his profession. That is not the view which is taken in any other branch of the subject?—No. I should very much regret the establishment of a course which should mark a man as qualified in his profession. As I explained to Professor Burdon Sanderson, that is the ground of my objection to a degree in architecture, because that would tend to mark the man as qualified to act in his profession. And about that I think I may say advisedly that I do not know of any University course which would make a man qualified to act in his profession; it would lay a basis for his qualifying himself.

22,622. Then, however material it is that a man should know these things, is it not better that the determination and control of matters of this description should be in the hands of professional authorities, rather than of a University Senate?—There are no professional authorities which could take it in hand.

22,623. Yours?—We have no power except by testing his knowledge by examination to satisfy ourselves of his fitness to be admitted to the membership of the institute; and what we desire is that he should have means of acquiring that knowledge; and further that even those who may not desire to become members of the institute should have the opportunity of obtaining complete education.

22,624. Is not it rather for special schools to provide for the teaching of subjects of that kind, like the development of building estates, than for the University to have a course for the teaching of that subject?—We do not wish the University to have a course of teaching in those subjects.

22,625. That is one of the subjects?—No, it is one of the books that is mentioned as recommended for study.

22,626. I suppose that is upon a subject which has to be studied?—That is one of the subjects which a man would acquire in the third division by his practical experience in an office.

22,627. Is it not, in fact, true that a large part of this, in fact the whole of it, which relates to his business aptitudes and dealing with the affairs of life, if one may call them so, as distinct from the scientific branch of the profession, ought to be left to office work and to those institutions which are specifically in charge of the professional interests?—It can only be left to the opportunities he may have of acquiring that experience, but his education in following out the University course should prepare him for acquiring that knowledge, and it is that preparation which we desire him to have.

22,628. My question was whether it was necessary or desirable that the University should do it. I do not at all question its being desirable that he should have it. The question we have to consider is whether it is desirable that the University should take upon itself the responsibility of providing education of this description?—I think it is in that sense.

22,629. You would not make that essential to the recognition of architecture as a branch of University instruction?—No; however desirable it may be, if there were difficulties in the way of realization I should not make it an essential element; but in the particulars of the programmes I have already laid before the Commission, I think all these subjects are

A. Cates, Esq., F.R.I.B.A.

17 Feb. 1893.

included, and if possible they should be included in the courses of a teaching University.

22,630. That is why I am asking you upon them?—They are not merely included in the programmes upon which you are examining me, but they are included in the programmes of those other colleges and Universities which have taken up the idea of establishing courses of architecture; and I am perfectly satisfied that the professor of law in a teaching University could with very great advantage to the students give in a few lectures the principles of those legislative enactments which relate to building, to public health, to the laws of contract, and so on, which would be of the very greatest service to the student, and enable him to appreciate more readily the circumstances of actual life when he went into an office or entered into practice himself.

22,631. Of course you are very familiar with the Building Acts in your professional experience. You think they would form an exceedingly interesting topic?—They would form an exceedingly difficult topic requiring good technical knowledge.

22,632. A sufficiently high remuneration might possibly induce some lawyer to address himself to the dissection of the Building Acts?—Possibly; but apart from that there are general principles of law which it is very desirable that the architect should have some knowledge of without entering into the absolute detail of the Building Acts, upon which authorities differ very much, and of which we have no authoritative exponent except the very highest court of the realm.

22,633. A schoolmaster, for instance, who is dedicating his life to the instruction of youth or a man who is teaching more advanced branches of classics or mathematics may be at a great disadvantage if he does not know how to shape a contract with the man who employs him. Law is universal; it touches every part of life?—But it touches the architect more closely than it touches the instances you have given because the architect is acting as the agent and as the representative of others. Upon his advice the expenditure of large sums depends, and if ignorant of the principles and practice of the law so far as it relates to architecture he may land his client in very serious difficulties.

22,634. Of course opinions may differ upon that. For my own part I would rather do my own law and leave my architect to do the building?—The architect must be guided in many things by a certain knowledge of the principles of law.

22,635. Would you put a doctor through a course of lectures on coroner's law?—Not of "coroner's law;" but it is very desirable, I presume, that a doctor should have some knowledge of the law relating to medicine, and the law relating to inquests and coroner, which form a part of the course of medical jurisprudence, as in like manner the subjects mentioned would form part of a course of architectural jurisprudence.

22,636. Now to come to another branch of the subject. I should like to follow out a little further what Professor Sanderson was referring to. You seem rather to reject the idea of architecture being ranked with the Fine Arts?—No, certainly not. Architecture is the mother of Fine Arts; Architecture, Painting, and Sculpture are the three arts that should go together hand in hand; architecture provides for its handmaidens the arts of painting and sculpture the means of displaying their abilities, and the first and most important of the three elements constituting architecture is the artistic—without which the other two would not constitute architecture.

22,637. So you do not object to its being ranked with the Fine Arts?—It should rank as the first of the Fine Arts. Then it is also a complex art. It combines, as I have just now explained, shortly, three broad elements, the art, the science, and the practice.

22,638. Yes, but everything in the world does so, and what I want to see is in what relation art can be brought to the University. However unlimited the architect may be. I must limit him for this purpose. You are of opinion that treated on that side as a fine art it would be a subject of scientific, historical, and literary treatment?—And artistic treatment also is absolutely essential.

22,639. I suppose you would not expect a University to look after the manipulation?—No.

22,640. You would not make it conduct examinations in drawing, for instance?—Not necessarily so; but still there should be classes in drawing. They would be essential.

22,641. You would think that the University should hold classes in drawing?—If a teaching University. There are classes now held in drawing at King's College; there are classes in drawing now held at University College, and there is an architectural studio at King's College.

22,642. But how far would you carry this instruction in drawing, and where would you begin? Would you begin with rudimentary drawing, and would you give a prize for excellence in drawing?—Prizes are given for excellence in drawing and for excellence in other subjects at King's College now at this moment.

22,643. Would you advocate that as desirable. Is it in your opinion desirable to establish a course in which the University should reward successful skill in drawing?—If the University establishes classes in drawing, the students, I think, would look forward to the opportunity of gaining distinction by prizes.

22,644. There are two ways of looking at drawing not only in this respect, but in several other respects; engineering, for instance. There is drawing which is an object in itself, and there is such drawing or such manipulatory power as enables a man to pursue the more scientific subjects which he has to deal with. In which of those do you consider lies drawing for this purpose, a thing of itself or a means?—A means.

22,645. A means of pursuing the more scientific subjects?—Yes, and chiefly of the artistic; that is the aim and object of our curriculum. It is the aim and object of the testimonies of study, which are all drawing.

22,646. Then the basis on which you desire to rest the University course, and the University method of dealing with the subject is strictly a scientific one, including in scientific, literary, and scholarly?—No, not strictly scientific, the artistic must be the chief.

22,647. Can you carry it further than that in its University relation?—The elements of design are not to be classed under the scientific head.

22,648. By science I mean not merely to include things which may he expressed in mathematical formulæ, but knowledge?—I hardly apprehend your meaning.

22,649. For instance, I see here, "Fergusson's "History of Architecture in all Countries." Then you have, "The Principles of Design in Architec-"ture; monuments ancient and modern: history of celebrated architects:" all that I should include under the general term, architectural science?—Then will you go to the next heading, "Mouldings, fea-"tures, and ornament:" that is entirely graphic; entirely drawing.

22,650. But how is that; because I see "Principles of Athenian Architecture." Is that entirely graphic?—Under that head I say it is.

22,651. Ancient architecture. Is that graphic?—Yes.

22,652. That is scientific, surely! Then "The Geometry and Optics of Ancient Architecture?"—That comprises geometry, and also mouldings, features, and ornament. It is impossible to divide the book and say such and such heads only.

22,653. It occurred to me in looking through the subjects, that probably it went a great deal beyond?—It goes a great deal beyond those books because it involves the study from actual buildings, the measurement of works executed, old work, and the study of ornament which would be obtained under classes for

the teaching of the ornamental design such as you have just now indicated.

22,654. Take for instance one of these things. I suppose it would deal with such a question as the fine curved lines on the principle of which some of the finest remains of antiquity are built?—That book of John Pennethorne's deals with that, and Penrose's book deals with that, but that is not a portion which would come under the head of "Mouldings and Features." That is strictly scientific. Mouldings and features deal with the component parts of architecture.

22,655. What do you mean by "the component parts of architecture?"—In classical architecture the capitals of the columns, the mouldings, the proportions, the bases, the cornices. In the same way with mediæval architecture, arched mouldings, the piers in churches, the mouldings and ornament of capitals, friezes, bases, and so on.

22,656. I call all that the science of architecture?—I call it the art.

22,657. It is not the practice?—It is a portion of the art, a knowledge of which is essential for the practice.

22,658. It is a knowledge of the materials with which you have to deal as an architect?—As I described just now, it forms a portion of the vocabulary and grammar of the language in which the architect has to express himself.

22,659. And all that you agree would properly fall under the University recognition?—I think that would well fall under the University recognition, and that instruction might be given in all those subjects which would lay the foundation for the future study of architecture and give him that which he does not readily obtain at present—the basis of a sound education.

22,660. Conceding all that, have you in what you have given stated all that is really proper to the architectural region as dealt with by a University?—No, because what I have said is limited to the mouldings, and so on, and not included in the principles of design.

22,661. Now we come to the history of architecture at various times, including, I suppose, the *rationale* of the styles: then comes these moulding features and ornament under which a whole mass of scientific matter lies hidden. I have conceded all that; but when that group is dealt with, have you not dealt with the whole matter which, on its architectural side, can be made the subject matter of a University course?—No, I think not, because if you follow the science section you will find "Materials: their nature and application," and "Strength of materials and construction."

22,662. That all falls under engineering?—It falls to a certain extent under engineering, but the engineering course would go very much further.

22,663. Perhaps so, but this would be within it?—What I have said is this: for some distance the engineering and the architectural course would go together, but it would not be desirable or essential for the architect to follow out the whole of the engineering course, because his time would be occupied in the art section instead.

22,664. Of course the differentiation might be made in the examination, or by the pupil himself under examination?—What I should aim at would be that the professor of architecture, or the Board of Studies, should arrange the course of architecture in such a way as to provide for the architect those special subjects absolutely which are not taught in any other way in the University, and to appropriate so much of the other courses as would be essential for the education of the architect.

22,665. That is to say, it might be necessary to establish one or two special classes to deal with the materials which are common to the two professions in a way specific to architecture?—Not necessarily limiting it to architecture, but to divide the course in such a way that architects and engineers would follow it to a certain point together, and then the architect need not follow it further.

22,666. Assume for a moment that architecture were recognised by a University, and that it had a Faculty representative sitting and acting with the Science Faculty, would not that be sufficient to guarantee to architects that such proper arrangements were made as suited the purposes of their profession?—I do not know that it would guarantee it, but it would probably tend towards it.

22,667. That might be something worth having if you could not get the whole complete ideal that you desire?—If that was not possible, but I should not like to suppose that the complete ideal which I have aimed at is not obtainable.

22,668. (*Sir George Humphry.*) The adjustment of a University and University teaching to the requirements of architecture is not an easy matter?—I perfectly admit that.

22,669. It appears to me that you desire two periods of educational study in architecture, one of which we may call the University period, and the other the period of pupilage in an architect's office?—Or the period of practical experience.

22,670. So far as the University period is concerned you desire in the first place that the student should have a good general education?—Certainly.

22,671. That would be obtained through the medium of the preparation for what is called the Matriculation Examination of a University?—Yes.

22,672. Secondly, you require that he should have a good basis of scientific knowledge?—Yes.

22,673. A knowledge, we will say, of chemistry, physics, acoustics, optics, and so on?—A fair general knowledge of the principles.

22,674. Such subjects as are usually taught in a University, and such as constitute to a greater or less extent what is called the preliminary scientific examination?—Probably so; I should not desire to carry those sciences very far.

22,675. Still you would wish the student of architecture to run *pari passu* with students in other branches of science in those subjects?—Certainly.

22,676. So far the matter is easy. Then we come to certain subjects which are common to architecture and engineering?—Yes, they are common to a certain extent.

22,677. I will not profess to define which?—They must go hand in hand.

22,678. Such subjects as sanitary science, strength of materials, and construction. A great deal of the architect's work would be common to the engineer's work?—Up to a certain point.

22,679. So to that extent they might run *pari passu* with the engineers?—Yes.

22,680. So that in the early part of the education they would run *pari passu* with ordinary scientific students. Then in the practical period there would be a great deal of instruction obtained, such, I suppose, as specifications, methods of estimating professional work, and I suppose mouldings, features, and ornament, illustrated by sketches?—That would be in the Art section; that would be entirely independent.

22,681. A great deal of that might very well come in in the final education with the architect in the architect's office?—I want to lay the foundation for that in the teaching University.

22,682. Suppose there were to be a Faculty of Fine Art. That he would obtain there?—In the section of architecture.

22,683. Mouldings, features, and ornament, and so on, would all come in as fine art?—Yes.

22,684. Then there does not remain such a very large amount if we subtract that which is common to the student of science, that which is common to engineering, and also that which is obtainable in his final period with the architect. Subtracting that, there does not remain such a very great residue. It will pretty nearly clear off the education required?—No. You have not touched the principles of design, or the question of drawings or geometry, and projection.

A. Cates, Esq., F.R.I.B.A.

17 Feb. 1893.

22,685. That would come in with the engineering?—The Geometry might to some extent come in with the engineering.

22,686. There would remain a certain residue, but not such a very great deal?—It would be a very important residue; the art of design, in fact.

22,687. It might be very important. Then would not your own institutions be likely to undertake education in some of these residuary subjects? You examine, but you do not appear to give any course of instruction?—No; we have no means or funds available.

22,688. Is it not likely that courses of instruction in subjects of that sort, which are rather special to architecture, would be likely to be opened up in your institution?—As regards the Institute we have no funds, nor have we place or organisation for that purpose.

22,689. I am afraid the University as far as we know is in that position too. It is necessary to cut coats according to cloth, and I was just inquiring whether it is not probable that your institution would be likely to enter upon some courses of education of that sort. Of course it is no use in a University multiplying to too great an extent educational courses in the various directions of human life; there must be some limitation?—I quite admit that, but I can cite the instance of King's College at this moment.

22,690. That work is partly carried out already in King's College?—Yes.

22,691. And it is partly carried out in University College?—Yes.

22,692. So that altogether perhaps the bases of what you require are pretty nearly laid. There is general education, preliminary scientific education, education carried out still further in that form which is common to engineer and architect; and then comes that which is given to a certain extent in King's College?—The class at King's College would form the basis on which I would develop the course of architecture. (*See Appendix No.* 47.)

22,693. Would not such further development be appropriate to architectural institutions rather than to one common University?—But at King's College those very subjects are actually part of the course.

22,694. Then they do not want any further development?—They want development in their application. We want to extend them.

22,695. Should not that development in application be undertaken by yourselves rather?—We are not in a position to do it, and I do not know that it would be well to do it. That would tend to some extent to the academical.

22,696. What I am rather wanting to avoid is too much of the academical. You have found that French architecture suffers from the academical?—No doubt; that I have clearly expressed.

22,697. Therefore it would be well that the University should not carry out this academical process, but if left to institutions like your own it would be under your own direction and would have less of the academical?—But I did not propose that the University should carry out a system of instruction in design such as is carried out at the *École des Beaux Arts* in Paris.

22,698. I do not know to what extent you desire it should carry it?—I did not indicate that at all.

22,699. But in that sort of way, seeing what is likely to be done by a University (because, of course, there must be limitations to what is done at King's College), it might be supplemented by what you might yourself do, and which might complete the education?—What is already done at King's College if expanded with reference to either of the curricula which I have brought before you would, combined with the other lectures which are given there in the other courses, give the opportunity for forming a pretty complete course of architecture as a distinct course of architecture utilising the other courses which are given, which would satisfy, to some extent, what I desire.

22,700. And it would be proper University work?—It would be proper University work.

22,701. Carrying out the principles of scientific knowledge in such a manner as would be suitable to the engineer and the architects. That would form a good basis?—If you take it in this sense the architect must also have the artistic knowledge which is absolutely essential.

22,702. But there are a large amount of common principles which might be taught very well in a University?—Certainly.

22,703. (*Mr. Palmer.*) Do not a great deal of your answers to Sir George Humphry imply that a normal school of architecture might cover a great deal of what is attributed to the possible school in a University?—We want a great deal more than a normal school.

22,704. But assuming for a moment that you had one, these preliminary scientific subjects and the instruction both in the elements of science and art would be exactly what would be done by a normal school of architecture, and the testing or influencing by a University would then be comparatively simple?—Would you kindly explain the meaning you apply to "normal school?" Is it not a "Training School"?

22,705. Sir George Humphry referred to your institution, and said, could not a great many of these things in preliminary science be taught in your institution? It occurred to me to ask you, quite apart from facts, whether on the hypothesis that there was a normal school in which, with regard to the special purposes of architecture, preliminary science and arts were taught, you would then be able to present your pupils to the University for a degree in Arts or Science, or a diploma in Fine Art, according as the proficiency might be certified?—That would be from an institution distinct from the University altogether.

22,706. What I am driving at is this. Do not a great deal of the answers which you have made to those questions imply the desirability of a normal school of architecture, in the first instance?—It may be so, and it is the condition, I believe, in every country but England, that there is such a school of architecture; in some cases independent, in others affiliated to an University.

22,707. Where you have a special branch of study which may not be altogether classified under Art or under Science, or even quite akin with the other Fine Arts, does it not imply the necessity for some special school which I have called a normal school in which all that preliminary instruction could be best given?—That would imply an entirely new organisation. It would imply a duplication of forces which, I think, would be undesirable. What I aim at now is, that the courses which are given in the University shall be utilised by the arrangement of the Board of Studies for the education of the architect in all those subjects with which his education would be concurrent with them; and the few special subjects should be dealt with as special subjects, giving the architect a distinct course to follow, not mixed up with engineering or any other subject, but simply a course of architectural study, utilising all the teaching machinery of the University; and as at King's College and University College there are now professors of Architecture, and as at King's College, in accordance with the pamphlet I have put in, there are classes formed meeting, to some extent, so far as they are at present developed, the requirements I have laid before you, it seems to me that there should be no very great difficulty in arranging the courses in that way.

22,708. Then you assume that it would be part of the function of a Board of Study in a University to do that which University College and King's College are doing now as teaching schools of Architecture. I understand you to quote University College and King's College as giving instruction in those very points which you expect might be done under a Board of Study in a University?—I presume that a teaching University would combine in it the professorships and

the courses of study now existing at King's College and University College, and further extend and develop them.

22,709. You think it would not be beyond the scope of a Board of Study to go and teach those things, which are now being taught by University College and King's College?—I presume that Board of Study would be controlling the teaching there.

22,710. I am suggesting that there must be a limit to the scope of the University on the one hand, and the institution which I call the Normal School on the other?—Would King's College and University College be dissociated from the teaching University.

22,711. For the present purpose I am taking them simply as teaching institutions, not as a University at all?—But they would form part of the teaching University, would they not?

22,712. Not necessarily?—Then I am at a loss to understand what a teaching University would do.

22,713. With regard to the exact position of what is called the degree of the University, I take it that you lay stress on the fact that architecture is essentially one of the fine arts, and so far distinguishable in category from the Faculty of Arts in the University, or the Faculty of Science?—Yes.

22,714. In any way that you would wish for the ultimate recognition by the University of your students, you would wish that there should be obtainable a proficiency in fine art proper?—Certainly.

22,715. (*Chairman.*) You do not test in any way the taste of a man who comes up for examination?—No, certainly not. It is not a question of taste.

22,716. It would be impossible to do that in any way, would it not?—It would be most undesirable to enter upon anything of the kind.

22,717. No man is plucked for absolute want of taste, however complete it might be?—When you speak of a question of taste, one of knowledge, and one of ability to design, is a different thing from a question of taste. A question of taste is a question of opinion.

22,718. If one wanted to build a church, or a house, good taste in the architect would be one thing to look to. You would want a beautiful building?—That is using the word in an entirely different sense.

22,719. That comes from qualities which cannot be tested?—Yes.

22,720. There must be some qualification for an architect which could not be tested by any degree which you could give him; so that this diploma would be no real guarantee that he possesses the qualities necessary for an architect?—Certainly not.

22,721. And this artistic side would always distinguish an architect from a medical man, or a lawyer, or an engineer, or anybody else who would take a degree, and with regard to whose qualification the degree would really be a sign and a proof. A degree in architecture would not prove that a man was a good architect?—It is on that ground that I have objected to the degree in architecture. What we desire is that whatever the artistic capabilities of the man may be, they should be developed, and also that he should have the other essential requirements which I have repeated often here, which are absolutely necessary for a man to be a good architect.

22,722. (*Lord Reay.*) May we take for granted that the demand you have made is that architecture in the University should be as far as possible recognised in either one or more Faculties, and that in making that demand, and explaining it, you represent the Royal Institute of British Architects?—Certainly I have with that object been requested by the Council to attend here as representing the Board of Examiners, and they requested that the president and the honorary secretary should attend here also.

22,723. Therefore we may take it that there are eminent men in the profession who desire that architecture should have that recognition in the course of instruction at the University?—Certainly. Assuming that the institute represents the most eminent men in the profession; I am sorry to say it does not include the whole. I may add that the provincial societies allied to the Institute are making strenuous efforts to secure improvement in educational facilities for architects in their respective localities, and are seeking the establishment of courses in the local colleges and Universities to supply this want. Further, in 1890, forty-five of the leading architects of Edinburgh addressed to Her Majesty's Commissioners for the Scottish Universities a memorial praying for the establishment of an Architectural curriculum, which could by academic training tend to elevate the professional standard set before themselves by students, would give them the scientific knowledge so necessary to control the operations in which they would be concerned, and enable them to take a more independent position in relation to those with whom they are brought in contact in professional life.

The witness withdrew.

JOHN SLATER, Esq., F.R.I.B.A., examined.

22,724. (*Chairman.*) You have heard the evidence given by the two preceding witnesses. Is there anything you would like to add to what they have said?—The only thing I should like to add would be this. I think it is exceedingly desirable, if it can be attained, that there should be a public, distinct, and specific recognition of architecture in the new teaching University. What we have done at the Institute in the way of instituting examinations has undoubtedly had a great effect, as far as its influence has been able to permeate, upon architectural education, but we can only get at the students after they have decided to become architects; and I myself hold very strongly that if it were possible to get architecture recognised in the curriculum of a University, as is done in the States, and as is done in some of the local colleges in England, we should then be able to impress upon the parents and guardians of young men who are thinking of following the profession of Architecture, that it is distinctly one to which they must devote a great deal of study. There has been far too much idea that anyone who could make pretty drawings might conceive himself to be an architect, and that very little more has to be done; and it is because I think some little recognition of this kind would obviate the difficulties that that has given rise to, that I very strongly support the view of the President and Mr. Arthur Cates as to the distinct and specific recognition. Of course I quite appreciate what has fallen from many members of the Commission as to difficulties of detail, but if we can get that recognition it will be a very great thing. Perhaps I should say that the present means of education which students of architecture have after they have gone into offices is limited to evenings, and it is perfectly impossible for them by evening work, after having had their ordinary work in the chambers of an architect, unless they are geniuses, or have had a good preliminary training, to acquire a knowledge of the subjects which an architect is bound to know.

22,725. Is there anything else you wish to add?—No.

22,726. (*Mr. Anstie.*) At what age do lads generally enter an architect's office?—Far too young. Many of them enter at 16.

22,727. Would that be the usual age?—It is very frequently the case. I always endeavour to insist upon their staying at school or getting an education longer than that, if I can, whenever I am consulted upon the matter; but I think if you were to poll the architectural pupils in London, you would find the average age to be very little over 16.

J. Slater, Esq., F.R.I.B.A.

17 Feb. 1893.

22,728. At what age would you desire them to enter?—I should prefer that they waited till the age which men would be who had gone through a University course after leaving school.

22,729. Say three years?—Yes.

22,730. And you would fill that time by the University course, which you desire to see recognised in architecture?—Yes.

22,731. You would wish your recognition by the University in architecture to go to the extent of settling, to some extent at any rate, an architectural course?—I would hardly go so far as that. I see great difficulty in that; architecture and engineering go very much on the same lines, but I do not wish architecture simply relegated to be a part of engineering. I want it recognised as a separate branch of study.

22,732. To put the question in another form, would you desire that the University at the same time that it recognised architecture should introduce any architectural colour or character into the course of the intending architect?—I think to a certain degree that might be done.

22,733. If they do not do that what is the value of the recognition?—I want them to do that to such an extent that it will be a recognition. That is what I mean. In examining Mr. Cates you mentioned a great many subjects which you seemed to think would be very difficult indeed to form part of the University curriculum. I entirely appreciate the force of that, but I do think a curriculum could be framed and put forward as one which it would be very essential for architects to follow.

22,734. You do desire, then, that there should be an establishment of something like an architectural curriculum?—Yes.

22,735. Though you would not include in that curriculum all the subjects which have been referred to by previous witnesses as matters that ought to be embraced in it, you would have some course which would be distinctly characterised by its architectural destination?—Yes, that is precisely it.

22,736. And that sort of general view you would accept as sufficient to satisfy your demand?—I had rather have more if I could get it.

22,737. But practically?—Practically I see there are very great difficulties.

22,738. That would be coupled with this—the representative or representatives of architecture would have their share in determining the curriculum, the syllabus of the University?—Certainly.

22,739. They would sit with the other members of the Faculty and Boards of Studies, whatever the educational authority was, that laid down the course of University training?—Certainly; I think it is most desirable.

22,740. And that, if not fulfilling all your ideas would be, you think, valuable?—Most valuable.

22,741. And you would be content with "B.Sc. Arch." as has been pointed out?—Personally I do not think that multiplication of names for degrees is desirable at all.

The witness withdrew.

W. Emerson, Esq., F.R.I.B.A.

Wm. Emerson, Esq., F.R.I.B.A., examined.

22,742. (*Chairman.*) Have you anything to add to what has been said by the previous witnesses?—Nothing much; but I should like to say this with regard to one question that was asked of Mr. Slater with regard to the age at which pupils generally go into architects' offices. Only the other day a lady—a widow—told me that an architect advised her to let her son go to him at the age of 16. She, herself, told him that his education was only half finished. Youths enter the profession without sufficient education to carry on their business, and when this examination at our Institute was started, it was that feeling with regard to the deficiency of education which caused the body of students themselves at the Association to actually come to the conclusion to form a school of education amongst themselves. That they have done very successfully only lately. But of course it is imperfect, and the meetings are all held in the evening. With regard to the education for architecture coming after their stay at school, I do not think it should. I think it should go concurrently with it, and that if the University had a Faculty for Architecture at the same time that when they were obtaining their general education, they would be running in the grooves which would lead them to have the necessary qualifications for becoming architects afterwards and picking up the points when they went to learn the practical part. I think, also, that to join architecture to engineering would be a mistake. Some time ago we had some papers read at our institute which proved clearly that Germany had suffered in consequence of this. At Berlin they have one department for science in which architecture and engineering are combined, and there is very little doubt that the German buildings in Berlin have suffered very much from that. They may be strong and well built, but they are excessively ugly, most of them, and not at all artistic. In France the other line has been taken up, namely, that of letting the education for architecture run more on the lines of art in connexion with painting and sculpture; and there is very little doubt that the French architects are a more artistic set of men than the Germans. I do not think architecture should run altogether with engineering, but distinctly have a different line all to itself.

22,743. The artistic part is most difficult to teach, is it not?—Yes, but they can learn drawing. An architect has to construct buildings with the greatest regard to economy and strength of materials, but still an architect can sometimes put aside economy.

22,744. Do any women come up for examinations?—I think we have had two just lately who offered to do so. None have come up, but they offered to do so. They have not come up. That is in accordance with our rule.

22,745. Have you anything to add?—No. I think Mr. Anderson and Mr. Arthur Cates went into the matter in such detail, that there is nothing I can add.

22,746. You agree with the previous witnesses in everything you have not said to the contrary?—I think I do in everything.

22,747. (*Lord Reay.*) It was not at the University of Berlin that there was this combination of architecture and engineering?—It was at the Bau Schule.

22,748. You say there are mixed classes for engineering and architecture?—Yes. The two have been running concurrently.

22,749. And to that you object?—I think the effect of that has been rather disastrous to Berlin architecture.

22,750. You think that even in those classes where the instruction of an architect approximates to that of an engineer, it ought to be kept separate?—Perhaps not in the very elementary stages.

22,751. But in the later stages?—Yes.

22,752. (*Mr. Anstie.*) One question with regard to this Architectural Association. I have been looking through the book that has been handed to us, and it strikes me as being very promising. May I ask you is it well founded—solidly founded?—They have no funds. It is entirely supported by voluntary contributions.

22,753. No funds at all?—No; it was done simply because there was nothing else. It shows the necessity of further education. It was taken up by the students themselves.

22,754. Is it not assisted by the Institute?—The

Institute has made a subscription to it, but it is voluntary. We are not bound to do so.

22,755. To a very large amount was it?—100*l.* a year for three years. That is a subscription simply.

22,756. Was this taken up and started out of the Institute's funds?—We have no funds to do it. We are a poor body.

22,757. Perhaps a little agitation on your part might succeed in obtaining funds?—I do not think so. It is likely to go on for a few years.

22,758. Even if it is worked at a loss, you, the Institute, are not going to allow such a promising school as this to fail, are you?—Our institute is not an educational body at all. It is for the advancement of the profession, but not from an educational point of view, except so far as our examinations have been instituted to test the proficiency of those who wish to join the profession.

22,759. At any rate, you have no idea of giving this greater strength and vitality. That is not one of your purposes?—I had rather you would ask the President that question (Mr. Anderson). The Institute have to the extent of their power helped the Association to start this scheme, and in addition to that there were considerable sums subscribed by members of the Institute individually to enable them to do so.

22,760. (*To Mr. Anderson.*) Have you any opinion as to the probability of the future with regard to the development of this Association?—It created a good deal of enthusiasm, and the members have looked upon it with very great sympathy and as an instance of what we desire to see.

W. Emerson, Esq., F.R.I.B.A.

17 Feb. 1893.

22,761. What suggests itself to one on reading this pamphlet is that it forms an architectural school of such a kind as does not exist in the Metropolis, but you do not seem to anticipate much of a future for it?—It is difficult to predict. (*Mr. Slater.*) I might say with regard to that that the great difficulty they find is to get the subjects in. The students who come to these classes have difficulty in getting the time.

22,762. (*To Mr. Slater.*) That and not the financial one is the chief difficulty. Is that so?—It does not need great finances.

22,763. (*Mr. Palmer to Mr. Emerson.*) You are quite clear that there must be a special course for Fine Arts in the University, including a certificate of proficiency and a special course ending in proficiency in Fine Art. I mean it is quite contrasted with the condition of the theologian, who is content to take a degree in Arts generally. Whatever may be your connection with other Arts and Sciences you must have your Arts course?—Yes, I think so decidedly.

The witnesses withdrew.

Adjourned to Thursday next, 23rd February 1893.

Fifty-seventh Day.

Thursday, February 23, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor A. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

General DONNELLY, C.B., examined.

Gen. Donnelly, C.B.

23 Feb. 1893.

22,764. (*Chairman.*) I think you are at the head of the Science and Art Department at South Kensington?—I am Secretary of the Science and Art Department. I was Director for Science before being made Secretary, and that office I still hold; so that I hold the two appointments.

22,765. Can you tell us all about that Department; what work it does and when it was instituted. I daresay we could get that information elsewhere; but if you could tell us it shortly it would facilitate my asking questions?—The history of the Department is given in the Calendar which is published annually. The foundation of the Department is due to a Select Committee of the House of Commons in 1835 which created the Art branch. In 1852 a Department of Science and Art was formed under the Board of Trade, and it remained under the control of the Board of Trade until the Education Department was constituted by an Order in Council of the 25th February 1856, and the 19 & 20 Vict. c. 116 to include "(*a*). The Educational Establishment of the Privy "Council Office; (*b.*) The Establishment for the "encouragement of Science and Art now under the "direction of the Board of Trade and called the "Department of Science and Art." These two Departments were placed under the Lord President of the Council, assisted by a member of the Privy Council who is called the Vice-President of the Committee of Council on Education, and who acts under the direction of the Lord President, and for him, in his absence. Probably you do not wish me to go into any detail further on this point. The Department has developed greatly since that time. I suppose the part that this Commission is principally interested in is the College at South Kensington, which was called, till lately, the Normal School of Science, but is now the Royal College of Science. The object of the College of Science is stated in the Science Directory and in the Prospectus of the School. Perhaps I had better read the passage:—"The Royal College of Science "at South Kensington is an Institution supported by "the State to supply systematic instruction in the "various branches of Physical Science to Students of "all classes. While the College is primarily intended "for the instruction of teachers and of students of "the industrial classes selected by competition in the "examinations of the Science and Art Department, "other students are admitted so far as there may be "accommodation for them, on the payment of fees "fixed at a scale sufficiently high to prevent undue "competition with institutions which do not receive "State aid. The Royal School of Mines is incorporated with the Royal College of Science. Students "entering for the Associateship of the School of

Gen. Donnelly, C.B.

23 Feb. 1893.

"Mines obtain their general scientific training in the "Royal College of Science." As regards the statement that the College is "for the students of all classes," I think it may be as well if I point out to the Commission a somewhat important difference that there is between this college of science as well as most of the classes for science instruction under the Department and the general run of schools and colleges in the country. The difference is this: a large section of people obtain the pedagogic part of their education before they take part in practical affairs; on the other hand there is another large section of society who take to practical affairs very early in life, and who have to supplement what little pedagogic instruction they have received in their youth by evening classes and such like. I think it may be taken that one special function of the Science and Art Department is to look after the educational interests of that latter class of persons—those who have not received the pedagogic part of their education in the ordinary course through the elementary school, the grammar school, the college, and the University, but who have had to pick it up as best they could by instruction in evening classes, at mechanics' institutions and other establishments of that kind.

22,766. Are all your students at the College of Science either teachers or men who are going to be teachers?—No.

22,767. I merely asked that because you said they want the pedagogic institution. I suppose pedagogic instruction is only useful to people who are going to be teachers, is it?—I was taking it in rather a different sense. I was looking at education broadly as consisting of two parts: the pedagogic instruction that one receives at school and college, and the other part which one receives in practical or virtual apprenticeship in the affairs of life.

22,768. I fancied you referred to the instruction necessary for teachers?—I was taking broadly the pedagogic part of one's education as the education that one receives at school, and not in practical life. I ought to have defined it. I have a statement of the number of students at present in the college for the last three years. That will give an idea of how they are distributed. Altogether in 1891–92 there were 294 individual students, of these 133 were what we call Government students, that is, say they were Royal Exhibitioners, National Scholars or Local Exhibitioners, teachers in training, and free students. Besides these there were 161 free paying students, that is to say students who enter the schools without competition but simply by payment of fees. A certain proportion of the students are going through a course for the Associateship of the School, which is a three years' course; and there were 21 of those in 1891–92. Then at the School of Mines, which is, as I explained, associated with the College of Science, there were 35 students going in for the Associateship. Of the Government students about 60 are persons who come to be trained as teachers of Science, and are selected not by competitive examination but on various grounds, such as the examinations they have passed, their occupations, and so on, on which it is adjudged whether they are likely to succeed as teachers. There are about 60 of them undergoing training as teachers in Science.

22,769. Those are the whole lot, not those at the School of Mines alone?—No, the whole lot. Then there is another function of the College of Science which is to give short courses of instruction in the summer to persons who are employed in the country as science teachers. 246 were so instructed in 1891–92. That is about the average number. These are persons who are engaged in teaching in various kinds of science classes and schools in the country and are very glad to come up. They get their travelling expenses paid and come up to London to get a course of lectures and laboratory instruction at the College of Science. We generally have about 600 or 700 applications, and have to make a selection of about 240 or 250.

22,770. You have not room for more?—No, we have not room for more.

22,771. How do you select?—We take those who have done best and try and distribute the selection over the country as far as possible. Where we think it will be the most benefit to the locality to get their teacher up to South Kensington we give him this kind of assistance.

22,772. (*Profesor Sidgwick.*) Might I ask what is the age, ordinarily, of those 200?—Of various ages, some of them are men of the age of 40 or 50; but there are many of 23 or 24. They are very glad to come up to a good laboratory and have instruction given by some of the most eminent men of the day, by which they obtain, not only much absolute instruction in science, but also many hints in teaching.

22,773. (*Chairman.*) Have you had greater demand for those classes since the technical grant was made by government? Do a great many people wish to give lectures on technical subjects in connexion with the county councils and apply to you in consequence?—Yes. The demand for trained teachers in science has been enormously increased. The amount of instruction in science which is now being given, owing to the stimulus afforded by the grant under the Local Taxation Customs and Excise Act, has enormously increased, and local authorities are of course anxious to get good men to teach. In fact the demand for trained teachers from the Science and Art Department is very largely in excess of what it can supply.

22,774. Is there any chance of your being able to make room for more, do you think?—The question of building additional laboratories has been before the Government for some time, but I do not see much prospect at the present time of getting them built.

22,775. If you did you could have a larger class?—We could have a larger class of teachers. We have been increasing the number of Government students and "pro tanto" excluding fee-paying students, because there is no room for them, we only profess to take in private students so long as there is room. We have been increasing the number of teachers under instruction, the number of Royal Exhibitioners, and National Scholars, and we have been obliged to curtail the number of places for the private students. Every year a considerable number have to be rejected. I should say that there is no matriculation examination in the ordinary sense for admission to the college; but there is this restriction imposed. I am speaking now of the private or fee-paying students. The Directory says:—"Without some preliminary knowledge of "mathematics, mechanics, chemistry, and physics, it is "not possible for students to follow the courses with "advantage. No private or fee-paying student will, "except under very special circumstances, be entered "for the Associateship course unless he has passed in "the first class of the elementary stage of mechanics, "mathematics, chemistry, and physics, or in some "higher stage of those subjects, at the May examinations of the Department of Science and Art, or "can show to the satisfaction of the Council of the "College, by having passed the examinations of other "recognised examining bodies, that he possesses the "necessary elementary knowledge of those subjects, "while for occasional students who desire only to "take up certain specific branches of science some "preliminary knowledge of mathematics will be required." The private fee-paying students send in with these applications for admission a statement showing either that they have passed the requisite examinations of the Department in May, or that they have been to some school where they have got that instruction. This, of course, is not quite the same as the matriculation examination at the Universities; it is not an examination in general culture, but simply information as to whether the student has sufficient elementary knowledge in the specific subjects of science which he will be taking up to profit by the advanced instruction of the College. It is really to protect the student, because as the professor at the college of science has to assume a certain amount of elementary

knowledge on the part of his pupils it is useless for them to join unless they have that elementary knowledge.

22,776. If you have always got a demand for admission by more people than you have room for, you want a test to shut out persons who are not so well qualified as others?—Yes, that is so. But what I want to point out is that this is not a test of general knowledge, but a test of specific science knowledge. We have not any matriculation examination such as is required by Universities in England, nor such a requirement as is laid down for a German University or for a German polytechnicum. To neither a German University or a polytechnicum can a student be admitted who has not the leaving certificate of the highest class—or the highest class but one, I forget which it is—of the *gymnasium* or the *Real Schule* or the *Gewerbe Schule*, and that restriction is, I have been told, most rigidly adhered to, because it is thought necessary, not only from an educational point of view, but from a military point of view. But such a restriction would be absolutely destructive to the objects of our college, because, as I endeavoured to point out, one of our special objects is to provide for the instruction of those persons whose school education has been broken off early in life.

22,777. (*Professor Sidgwick.*) I did not quite gather what the preliminary test was for the students who do not pay fees?—They cannot obtain any of the scholarships or exhibitions unless they have passed those tests. It is a *sina quâ non* to obtaining a scholarship that they must have passed certain examinations.

22,778. Does that apply also to the 60 persons who applied as trained teachers?—Yes.

22,779. (*Mr. Anstie.*) In fact they cannot come up without a scholarship, is that it?—The students in the school consist of Government students, that is to say, Royal Exhibitioners, National Scholars, and Local Exhibitioners, and in order to qualify for their scholarships they must have passed the examination in certain branches of Science, and of course to win a scholarship in the competition they must have done a good deal more, but they cannot obtain the scholarship without an elementary knowledge of mathematics, mechanics, and so on. Then besides the Exhibitioners and Scholars who come up for the full three years' course for the Associateship there are the teachers in training who are brought up for a course of training in one or more branches of science. And if we bring a man up to go throgh a course of training, say in Chemistry, we should not select one who had not previously done very fairly well in the May examinations of the Department in that subject, or whatever subject he was to be trained in.

22,780. It is your selection, in fact, according to the result of his examination?—Yes, to some extent; some knowledge of the subject is a *sine quâ non*.

22,781. (*Chairman.*) Do you think that if a teaching University for London was established, you could be brought into the scheme in any way? Could you be affiliated to it, or could your teachers be made professors of the University, or could there be any link established, connecting you in any way with the teaching University?—It seems to me that the only three ways in which the College of Science could be brought into this teaching University must be by absorption, affiliation, or recognition. By recognition, I mean that the only connexion with the teaching University is that it recognised certain courses of instruction, which were being given in the College of Science—recognising them, that is, as sufficient for any degree curriculum that the teaching University had laid down. And that seems very feasible. But I do not think that absorption is possible. You have at South Kensington a State Institution under a Minister directly responsible to Parliament. This Institution has very definite duties to fulfil and objects to serve for which certain courses of instruction are laid down, under the responsibility of the Minister. I do not see how the College could be absorbed without conflict with that responsibility.

Gen. Donnelly, C.B.

23 Feb. 1893.

22,782. Does the Minister interfere practically with the working of it or is he only nominally at the head?—Of course, as your Lordship will know, in a Government Department the permanent officers of the Department, who are the staff of the Minister, bring before him from time to time anything that it is necessary for him to decide. When the College was organised and the courses laid down, the whole question was very carefully considered by, and, indeed, modifications in the proposed scheme were made by the then Lord President and Vice-President. Every year the professors have an opportunity of modifying the prospectus, and that is submitted for approval. Of course if there is no material change of any kind it would be my duty simply to submit it to the Lord President or Vice-President and say "There is nothing new," and it is sanctioned. If, on the other hand, there were any important change proposed, or anything more than a modification of a syllabus, it would of course be the duty of the permanent officers of the Department to bring the matter specifically before the heads of the Department, and then it would be for them to say whether it was to be sanctioned or not.

22,783. Then not only nominally but really they do exercise a considerable voice in the management with regard to great matters?—Certainly; and from time to time, as you know, in these cases there are questions asked in Parliament and objections and exceptions are taken, so that they are not only nominally but really held responsible.

22,784. It would make a complete revolution in the whole of the arrangement if they gave up that to the University authorities, which would be the meaning of absorption?—Yes, I do not see how they could possibly be responsible for an institution whose rules for admission, matriculation, fees, and courses of instruction were in any way under the control of the governing body of a University, meaning by absorption such a bringing in as would place the Institution under the control for instruction, admission, and so on, of the governing body of the University. Then as regards affiliation, which is a term used in various senses, that would be possible just so long as, and just so far as, the powers given to the governing body did not conflict with the responsibility of the Minister; but if it was a real affiliation I think it would in all probability lead to great difficulties. I do not see how it would be possible for the professors, the staff, to serve two masters.

22,785. With regard to affiliation you conclude that that would be quite impossible?—I think so. If the governing body of the University had any real power or control over the terms of admission or the fees or the course of instruction to be given in the affiliated colleges then I think affiliation would be impossible, because it would be interfering with the responsibility of the Minister and would be placing the professors of the College in the impossible position of serving under two masters. But recognition, that is to say, the mere recognition of certain courses of instruction seems quite possible. If the teaching University were to say "For our degrees"—(I suppose it would have the power to grunt degrees) "we will accept attendance "at the course of instruction in Physics, in Chemis- "try, or Biology at the Royal College of Science," I can see no difficulty in that, but very great advantage to the students of the college certainly, and possibly also to the University. Under those circumstances it seems to me that it would be desirable that the College of Science should, as it were, stand aside from this question until the University is formed and in working order. I think there would be great difficulties in making arrangements while you are organising the University as to what part the College of Science should or should not take and how far its courses should be accepted. But when the University is formed and in working order then it seems to me that it would be quite easy to arrange how far the instruc-

Gen. Donnelly, C.B.

23 Feb. 1893.

tion given at the College of Science should be accepted by the University towards its degrees.

22,786. In the same way that the University ot Cambridge recognises the instruction given by the University extension movement they should allow it to count instead of a certain amount of examination, or instead of a certain amount of residence ?—Yes; they should take the instruction *ad hoc* if they found it appropriate to what they considered necessary for their degree.

22,787. And that is the only way in which you think the two institutions can unite. You think that is really the only connexion which could exist ?—I think so.

22,788. Have you looked through the Gresham Charter ?—I only looked through it a long time ago, before I thought I should be called upon to give evidence. I have not go it by me.

22,789. You know the principle of affiliation. The principle is that the colleges affiliated are represented on the Senate and that their teachers are members of the Faculty and assist in electing the boards of studies, which, practicallly, under the Senate have the management of the examinations. There is nothing in the Charter interfering with the autonomy of the college. You do not think that under that system the College of Science, of which you are the head, could be affiliated ?—I think not. Take the question of the election of professors and the settling of the examination by a board of studies. The appointment of professors in the College of Science and the form of the examination must rest absolutely with the minister responsible for it to Parliament.

22,790. The appointment of professors was reserved to each college ?—I did not know that.

22,791. But you think it would be impossible for the Government and the University to work together ? Yes.

22,792. That you have no doubt about ?—I have no doubt it would be impossible to work any scheme of absorption or affiliation which interfered with the full control and responsibility of the Minister.

22,793. You have disposed of the only two plans of absorption and affiliation. With regard to recognition, that you think might be arranged for ?—Yes. It would be certainly of advantage to the College of Science, and I should think possibly also to the University.

22,794. I suppose any University really has power to recognise any institution in that way ?—Of course it would depend upon the Charter, but I should think the Charter would give that power.

22,795. It would be advisable that they should have that power ?—Yes.

22,796. (*Sir George Humphry.*) But there could be no recognition of the teachers. Though the University might recognise the courses of lectures, it would not have the power of recognising the teachers ? —I do not quite follow the distinction.

22,797. The University might say "we will not "recognise the courses unless we have some power of "appointing or recognising the teachers ?"—Then if they said that, it would exclude the college. My idea was that they might say "we find that the in- "struction in chemistry is as good as, and of the same "standard as, that of the other colleges connected with "the University, and we will accept attendance at "the College of Science as we would accept attend- "ance at one of the affiliated colleges."

22,798. For that purpose they would have the power of inspecting and ascertaining what the teaching was ? —Certainly, as far as it was necessary to satisfy themselves, but not to give directions for alteration.

22,799. (*Chairman.*) What does your teaching lead up to ? Does it lead up to a diploma or a certificate ?—There are certificates in each course given to those who only take up separate courses, and there is the Associate ship of the school given in various branches. I am sorry I did not state it at the beginning ; I will make it clearer now. Students entering for the Associateship take up in the first term in the first year Chemistry, and in the second term Physics with Mathematics and Astronomy. Then in the second year in the first term they bifurcate. One lot, those who are going out eventually in Mathematics, or Physics, or Chemistry, or Metallurgy, or Mining take up a course of Mathematics and Machine Drawing, whereas those who are going out in Biology, Geology, or Agriculture take up elementary Biology. Then in the second term all the students take up elementary Geology and Mineralogy. In the third year they specialise ; the student who wants to go out in Mechanics takes up the mechanical course ; in Physics he takes up a year's course of advanced Physics ; in Chemistry in the same way, and in Biology, and in Metallurgy and in Mining the student takes a year's advanced course in those Sciences. When the students go out in any of those divisions they receive a diploma, or rather it is not really a diploma but a certificate of the Associateship of the College or the Associateship of the School of Mines as the case may be ; and that Associateship has now got to have a very considerable value in the country, almost ranking as a degree, because it has now become known and so many of the students have distinguished themselves.

22,800. Is an examination necessary ?—Yes, there is an examination at the end of each course.

22,801. Is this Associateship an examination which might be taken by the University instead of the Little Go or anything they might choose ?—Yes. What I was really speaking of was attendance at a course with its laboratory instruction, but if the University chose to go further and accept the examination at the end of any term, and the certificate of the Department, then so much the better. It has not been the practice until very recently, but I should say that now all the examinations are conducted by the professor and an associated outside examiner. There was one point that I missed which perhaps might be of interest. I was asked about ages. Yesterday I asked the Registrar of the School to let me know what were the ages of the occasional students, that is to say, of students not going in for the Associateship but who enter just to go through a specific course, taking up Chemistry, Physics, or Geology alone. He gave me the ages of 32 of the occasional students at present in the school. That is only a fraction of them, but I think it fairly represents the different ages. One is 38 years of age ; one is 36 ; one is 33 ; one 29 ; one 28 ; one 26 ; one 25 ; one 23 ; three are 23 years of age ; one 22 ; four are 21 years of age ; five 20 ; one is 19 ; five are 18 years of age ; three are 17 ; and three are 16 years of age.

22,802. They vary from 16 to 38 ?—Yes. You will see that the older ones are people who have come to supplement their earlier education.

22,803. Do they all become teachers ?—No ; these are occasional students who have paid fees, and some of them hold official positions in the colonies or are employed in manufactures or mines at home or abroad, and they have come to go through a course of Chemistry or other Science which may be useful to them.

22,804. These are what you call the fee-paying students ?—Fee-paying occasional students not going in for the whole Associateship course that I described just now, but merely taking up a specific subject.

22,805. They are distinct from the summer school ? —Yes.

22,806. Is the School of Mines entirely filled by people who are going to be teachers ?—No, most of them take posts in mines.

22,807. Inspectors ?—Inspectors and managers of mines.

22,808. Is there anything more you can tell us that you think would be useful to us ?—I was asked about the extension of the school. I may perhaps say that it was decided after full consideration what the limits of the school should be, even if we got as much laboratory accommodation as we wanted. It was decided that it was to be kept within very definite limits, and especially with the view of not competing unduly

with other institutions. The numbers laid down were these. Chemistry and physics are, as it were, the throat of the Institution, because everybody going in for the Associateship must take up Chemistry and Physics. It was determined that the laboratory should provide for 75 Government students and 75 fee-paying students in Chemistry, and the same number in Physics. Then provision was to be made for 50 advanced students in Chemistry, and 30 advanced students in Physics. The provision for the rest of the school is in proportion, as the size of the chemical and physical laboratories really govern the size of the whole Institution.

22,809. There is nothing to prevent it being added to except that you want more money?—No. The scheme for extension is now before the Treasury.

22,810. Is there any reason for fixing a limit?—It is so as to have some definite idea. After all if you get a chemical school with more than 200 students, it becomes unmanageable for one professor; and it was considered that that was quite as much as the Government ought to undertake in that way.

22,811. That is with regard to the regular students. Would there be the same objection to enlarging the summer courses?—That would enable us in summer to bring up 200 students in Chemistry if it were wished, because there would be laboratory accommodation for 200. Then if you could bring up 200 in Chemistry and 180 in Physics, you might greatly enlarge the number of students you bring up in the summer.

22,812. What prevents that being done?—At present we bring up as many as our laboratories will hold. We cannot take in more than about 250 students at the present time. If the College was enlarged, as it is proposed to be enlarged, we could bring up a good number more.

22,813. Then when you say that the Government was afraid of competing with other institutions, which institutions would those be?—At one time there was an idea that possibly the laboratories and schools at South Kensington might compete unfairly with the laboratories at King's College and University College, and for that reason the fees for the fee-paying students at the College of Science were fixed considerably larger than the fees at University College and King's College: I think half as much again.

22,814. You have no connexion whatever with the various training Colleges for teachers throughout the country, have you?—There is no connexion between the College of Science at South Kensington and the Training Colleges which are under the Education Department; but there is a connexion between those Training Colleges and Science and Art Department, inasmuch as the Science and Art Department by its examiners examines in science in those Training Colleges and makes payments to them, both for the Science instruction and for the Art instruction given in them.

22,815. Then there will be nothing to prevent many of the Training Colleges being connected with the new University. That is an entirely different subject?—Yes. Of course that is a matter that I have no right to enter into. It has nothing to do with our Department.

22,816. They have no connexion with you which would interfere with that?—No. With relation to the question of training teachers for country schools, it may be of interest to the Commission to know that last year, at the May examination of schools, there were 2,560 science schools in the country under the Department, and 1,534 Art schools and classes. In many cases the Science school and the Art school were in the same building, so that altogether there were 2,701 buildings which had either a Science school or an Art school, or both, in them. The number of pupils under instruction in Science was 177,000, and in Art 115,000. The number of chemical laboratories was 470. These laboratories in provincial schools vary very much in size; there are some that have bench-accommodation for 60 students at a time, and some have bench accommodation for only 4, 8, or 10. Many of those are night classes, but there are 70 organised Science schools, that is to say, schools giving an organised course of science instruction in the daytime. These are generally in the large centres, Sheffield, Birmingham, and so on, and the boys go there from the elementary schools, so that they are really secondary science schools.

22,817. They are all under the Science and Art Department?—Yes, they are all under the Science and Art Department.

22,818. But they have no connexion with the Normal School?—I gave those figures to show what the Normal School had to supply with teachers. They look to us for their teachers. Not that all the teachers are supplied from the Normal School, because many of them obtain their certificates without having ever been to South Kensington. But the College of Science is the culmination of the instruction that I have referred to in the Science schools throughout the country.

22,819. And the students selected by competition are selected from the schools?—Yes, as a rule, but anyone may come up to the May examinations of the Department and compete, and a certain number of outsiders are successful in obtaining Scholarships and Exhibitions.

22,820. (*Lord Reay.*) Do the Government students as a rule take the Associateship?—The Royal Exhibitioners, National Scholars, and Local Exhibitioners do. The teachers in training, as a rule, do not, because we only bring the teachers in training up for one or two courses, chemistry or physics, or the biological subjects, and they are taught in those specific subjects, and then they go away. The Royal Exhibitioners and National Scholars who come up by competition having won their scholarships at the May examination, go through the Associateship course and obtain the Associateship if they pass.

22,821. Do a large number of fee-paying students take the Associateship?—There is a good number of them; but this return does not differentiate them. I can give you the information, and it can be put in afterwards.

22,822. You mentioned advanced students. Do you understand thereby students who, after having obtained the Associateship, make further progress in original research at the College of Science?—I do not remember in what connexion I used the words "advanced students."

22,823. You used it in connexion with extended laboratories?—I think the connexion was this: that in the case of everybody coming in to the college his first term is devoted to chemistry, and his second term to physics. That is more or less elementary chemistry and elementary physics. In his third year if he goes out in chemistry, or if he goes out in physics, he works at those sciences during the whole year, so that is, of course, much more advanced chemistry, and much more advanced physics, and no doubt a great deal of the time is spent in what is called research work.

22,824. Do any of the associates continue to attend for purposes of research afterwards?—Yes, often. We have a considerable number at the present time, and special arrangements are made whenever the professor recommends, that a student who has been in the schools should be allowed to continue at research work. He is allowed to continue in the laboratory without paying any fees; but that is only done on a recommendation by the professor, that that kind of Government grant, if one may so call it, would be well bestowed.

22,825. Are any of the additional laboratories of which you have spoken contemplated to promote research, or merely to satisfy the wants of more students?—The distinction is this: the present College of Science is housed in a building that was originally made for the School of Naval Architecture, and the College of Chemistry which was then in Jermyn Street, with some additional laboratories on the other side of Exhibition Road. The laboratories

Gen. Donnelly, C.B.

23 Feb. 1893.

were considered very fair laboratories at the time they were built, in fact the designs were all submitted to Dr. Hoffmann, who was then Professor of Chemistry at the college; but in the last twenty years, the ideas about chemical laboratories have been revolutionised, and those rooms are not at all adapted to the modern requirements of chemical instruction. What is now proposed is, that that building shall be used for instruction in Mechanics, Biology, Geology, and Metallurgy, and that two new laboratories with lecture rooms, &c., should be built on the other side of Exhibition Road, one for Chemistry and the other for Physics; and that there should be in connexion with them large examination laboratories and examination rooms, to be used both by the Science and Art Department, and the London University for its examinations. But as far as the Department is concerned, what it wants is new chemical and physical laboratories which would be both for ordinary elementary work, and for advanced and research work.

22,826. I believe the Devonshire Commission recommended that those new laboratories should be chiefly used for the purposes of research?—I do not remember. The Devonshire Commission was a long time ago.

22,827. Do any of your students take the degree of Bachelor of Science in the University of London?—Numbers, and many of them have been very successful in the Honours List. I believe that a very considerable proportion of the honours in Chemistry, Physics, and Biology have fallen to students from the College of Science.

22,828. And the teaching which is given at present is sufficient to enable them to obtain that degree?—Yes, in Science; but of course for the London University they have to supplement it with knowledge of languages and other matters that we do not profess to teach them.

22,829. Where do they as a rule obtain it?—I suppose from private tutors.

22,830. (*Mr. Anstie.*) That would be only so far as it related to the matriculation examination?—Yes.

22,831. After they have passed that, they have nothing further to do?—I was meaning for the matriculation.

22,832. (*Lord Reay.*) My question was with regard to the degree of Bachelor of Science. You give them all the science instruction they need?—Yes, of science.

22,833. (*Professor Sidgwick.*) I understand your view to be that there are two reasons why the connexion between the College of Science at South Kensington and the new teaching University should be only of the loose kind that you described as "recognition." The first reason is that you desire to retain as the prominent aim of the College of Science the teaching of students who ought not to be compelled to pass the kind of Matriculation Examination which University students ought to be compelled to pass. That is one primary reason why the two should be kept apart?—Yes. I take exception, as far as our students are concerned, to the Matriculation Examination which the ordinary students are required to pass. It is not my business to take exception to the Matriculation Examination for other students. I confine myself to those with whom we have to deal.

22,834. At the same time you do not object to the existing system under which students going through a University course are admitted as fee-paying students. If I understand your numbers fee-paying students are now rather the larger part of the whole?—Yes.

22,835. Do you think that in consequence of the future development of the Science and Art Classes, and of the system of Scholarships and Exhibitions, the fee-paying students will diminish in number compared with the others?—Yes, I think so. It will be necessary to reduce their numbers, and the idea was to have half and half.

22,836. But is it your view that—merely as regards the question of room—a University in London ought not to be able to count on your finding room for the students in any department?—Yes, I think so. I do not think we could undertake to find room.

22,837. You would admit them in fact so far as you have any spare room?—Yes.

22,838. But you would always insist that your laboratories and your plant in general should be primarily reserved for the students brought up from the country?—Yes, for the regular students of the College.

22,839. Then the other objection, as I understand, is that you think that no kind of control over the appointments would be granted by Government to a University?—I should not like to say it would not be granted under any circumstances by Government, because I should be answering for what I cannot answer for; but I think it most improbable, because it seems to me that it would be an impossible scheme to place an institution like the College of Science, for which a Minister is responsible to Parliament, under the control of an outside body.

22,840. (*Mr. Anstie.*) I understand you to say that the instruction, which you give at the School of Mines is such as qualifies your students to compete for and obtain with honours the degrees of the London University in Science?—Yes, I believe so.

22,841. We need hardly be told that you have an extremely able and eminent staff of professors at the college?—That is so.

22,842. The position then which was suggested to you by his Lordship, of being a body whose classes might be taken as doing the same sort of work as the University extension, and taken for partial purposes, would hardly seem to be adequate to the position and reputation which your school at present holds?—I took it as a kind of analogy, although not on all fours. I did not understand that a comparison of the amount of instruction, or the nature of instruction with that under the University Extension Scheme was intended, but that it was given as an illustration of how a University body might of its own free will accept certain outside instruction.

22,843. The difference is rather a vital one. Whether you are regarded as a body for only doing that which might be taken as equivalent to certain portions of the University course, or whether you are doing that work which would lead up to and properly culminate in a degree. Your present position is the latter. Would you be willing to accept instead of that the former?—My idea was, that for a University degree you should probably require Science and something else. If so, that the University might accept the Science (it might be Chemistry or it might be Physics) as taught at South Kensington; they might accept attendance there as they would accept attendance at one of their affiliated colleges, and possibly, if they went a step further, accept certain of the examinations imposed on students there, in the same way as they accepted the examination at one of their own colleges. I did not suppose that the course at South Kensington would ever fulfil all the conditions of the degree imposed by the University. Of course, if it did it would be another matter.

22,844. We will put out of sight the Matriculation Examination. After that the bifurcation comes, and then the scientific education or medical education commences?—Yes.

22,845. And with respect to all that portion of the education, the most important and the highest, you consider you are capable of carrying the student up to the highest levels in it?—Yes.

22,846. You would not therefore accept the position as parallel with that of the University Extension?—No, not in that sense.

22,847. There is another point which is a little important, which is this. By the Gresham Charter no one is to take a degree who has not been resident for two years in University College or King's College. That, I suppose, would hardly suit your views?—No.

22,848. This, therefore, makes it rather important to consider the matter at this stage, and we can hardly

leave it for the consideration of the University when in working order, because we have to consider what would be the conditions under which the University is to act. It may be founded in a mode which would exclude you altogether from the position which you now occupy?—My position was rather to say, do not consider it at all in connexion with the arrangements you are making, but afterwards, if the arrangements which appear best for the London University are also consonant with accepting the instruction at South Kensington, then accept it. But it seems to me you will complicate your problem very much if you try to consider the South Kensington body at the present stage. Of course it is a matter of opinion.

22,849. If a clause of that kind were inserted requiring two years' residence at a college it would conclude the question, and would not leave it open to the University to deal with you at all?—No, not a teaching University, but, of course, for those who wanted to take degrees you would have still the old London University degree to go to, which I presume would not be interfered with.

22,850. But that would preclude the question so far as the teaching University was concerned?—Certainly.

22,851. And would preclude the question, if the London University is to be reconstituted in order to be a teaching University?—Yes.

22,852. A good deal turns upon the question of the way in which the various institutions in London which are doing work of a University nature, are recognised by the University and associated with it, to use a neutral phrase. I gather from what you have said that supposing the University were framed upon the principles of recognising the teaching of persons whose eminence and ability satisfied them as being the proper persons to give University teaching, under such a system as that your school might very well be associated with the University?—Yes.

22,853. Although the appointment must, as you say, rest in the hands of Government, yet I suppose you would feel no objection to the University saying this: "We cannot accept the teaching of the pro- "fessor so appointed unless we are satisfied of his "competence." I do not suggest that that would occur or that it would be likely to occur; but, still you would think that the University would very naturally say, and have a right to say, "We cannot "recognise the teaching unless we are satisfied that "the teacher is a competent person"?—If I were Minister in charge, I should make my bow and say, "Very well." If the Minister in charge is responsible he cannot subject his responsibility to a University body. He cannot be subject both to Parliament and the Senate of the University.

22,854. No, quite so; but the minister having made his appointment it would be open to the University at any time to say: we will or will not recognise that teaching?—Certainly, and it was for that reason that I said, accept the teaching *ad hoc;* they are not obliged to commit themselves always to accept the teaching. That would be more than you could ask the Senate to do; but if from time to time they believed the teaching was going on satisfactorily and on their lines they should accept it.

22,855. So that there would be no objection in that mode of dealing with the matter, to the University accepting the teaching of the professors at the School of Mines on the same footing as that of the teachers and professors in other institutions. In fact, a University might be constituted on this basis: "We re- "cognise the teaching of such persons as we judge "to be competent, and accept as competent," and in that way your teaching would come in in the same way with the teaching at other institutions?—Yes.

22,856. And similarly your intermediate examination or attendance leading up to a degree, might be recognised in your school and other schools of the same kind?—Yes.

22,857. As furnishing or providing an access recognised and admitted by the University to the final examination for the degree?—Yes.

22,858. That you would see no objection to?—No. I think it would be most desirable. And it would have the further advantage of avoiding an increase in the number of examinations.

22,859. In fact, you would look upon it as an advantage that it should be in that way connected with the University system?—Yes, I think it would be a great advantage that the students of the school beside getting their certificate from the Science and Art Department should be able to say that they had taken a degree at the London University. We find that they go to the London University now. No doubt they would go to the new University in the same way if its degrees were accessible.

22,860. And the only modification that would be necessary under such a condition as that would be that the University, instead of passing your students through the intermediate examination, would allow your intermediate examination as certified by you to count towards the final examination, which would be a relief?—Yes.

22,861. (*Sir George Humphry.*) How much is the Government grant to the College of Science?—I have not a copy of the estimate here, but I will put in the amount. [It is for 1893–94 17,605*l.*, of which 3,800*l.* is for Exhibitions, Scholarships, &c. About 4,000*l.* a year are received in fees.]

22,862. It is an annual grant from Parliament, is not it?—Yes.

22,863. It is a College of Science and Art. You have said a good deal about Science, but not much about Art?—There is a Royal College of Science, and a National Art Training School at South Kensington as well.

22,864. And it is all under the same jurisdiction?—It is all under the same jurisdiction, but the two are not connected together except as coming under the general staff of the Department.

22,865. They are not in the same building?—No.

22,866. Are the Art students under the same conditions; are they Government students?—Yes, a large number of them.

22,867. Does the number that you mentioned, 294, include the art students as well as science students?—No, those are only the students in the College of Science. The number of students in training for Art teachers in the year ending October 1891 was 39 and of National Scholars 16. Besides these, 191 students attended the school without payment of fees, having obtained free admission by passing a certain examination; and 13 attended on payment of half fees. A total of 636 students attended the school; so that the remainder of those were fee-paying students, some during the day and some during the evening instruction.

22,868. Then there were a greater number attending the Arts School than the Science School?—Yes. There are evening classes in the Arts School as well.

22,869. They obtain the position of Government students in the same way as the science students?—Very much. There are a certain number of students brought as teachers in training and a certain number of National Scholars.

22,870. The Professors in the College of Science are appointed by the Minister. I suppose they are recommended to him in the same way?—The process is this: people apply and send their testimonials, and it has been the tradition and the custom for the Lord President, with whom the appointments rest, to ask the professors to give their opinion. It is generally done by their putting the applicant in what they consider the order of merit. It rests with the Minister to take the first or the last if he likes. He is the responsible person. Of course he does not take the last, but I have known of his not taking the first.

22,871. Then they are nominated to the Minister?—Yes.

22,872. The course for the Associateship is how many years?—Three.

22,873. What is your idea on the whole of the

Gen. Donnelly, C.B.

23 Feb. 1893.

principle of a matriculation examination. Your students undergo no matriculation examination; the students at a University are generally required to undergo a matriculation examination. Would your judgment on the whole be that it is advisable that students should undergo a matriculation examination?—I should say not.

22,874. That was the view of Professor Huxley?—One hears it sometimes said, for instance, that a man cannot be a good chemist unless he knows German. Well, if he turns out, under a proper system of examination, to be a good chemist you may assume the German. The fact is, it seems to me that the difficulty is this; to be a chemist he requires to know German in the useable way—to be able to read German books and to speak the language. That is a very different thing from the examination in the grammar of the language which the literary examination always takes the form of; and which is often a stumbling block.

22,875. The idea of a matriculation examination is an examination in ordinary school knowledge; and the impression of most persons who have come before us is that for whatever subject a man has to study, whether physics, natural science, art, architecture, engineering, medicine, or whatever it be, it is better that there should be indicated good school knowledge before he commences, and that the person who has indicated that good school knowledge will make better advance in the special subject to which he directs his attention. Would you on the whole take that view?—I have no doubt he is better for having that knowledge, but I think the question as to whether his passing a matriculation examination to show that he possessed it should be made a *sine quâ non* is a different thing. We find that as a matter of practice is not necessary. For years and years we have not imposed a test of that kind, and yet there can be no doubt that we have turned out as good students as any other teaching institution of the kind and size.

22,876. It would not perhaps be quite so much the question of whether you have turned out some first rate students as, whether the average student would make as good progress in his special department without showing good school knowledge?—I know this. If we had had a matriculation examination we should have been precluded from scientific instruction to certain men whom it would not be fair to name, who have done exceedingly well. They would not have been able to get that scientific knowledge if a matriculation examination had been imposed.

22,877. Of that there is no doubt; but the further question arises whether on the whole it is advisable that the students proceeding in these several directions should have indicated a good preliminary knowledge and training?—I should say not, distinctly. I do not mean that I think it not desirable that students entering for advanced instruction in Science should have had a good preliminary training in general knowledge. But I mean that the non-passing a Matriculation Examination in languages and other matters of "school knowledge" should not be made a bar to entering for advanced instruction in Science and taking his degree in it if he can.

22,878. I will put it in a somewhat different way. The question is whether a University should grant its degrees and its diplomas to persons who have not shown good early education. You see there is this institution, the School of Science and Art in which the student may obtain his special training without matriculation examination, and that being the case there being that avenue to the poor student, would it on the whole be wise that the University should admit to its degrees and diplomas and various examinations students who have not shown a good preliminary training?—My vote would certainly be in favour of their not imposing such a restriction, but I have not the faintest belief that my vote would carry any weight in the matter, and I do not think such a scheme would be adopted, but from what experience I have been able to pick up I am very strongly of opinion that these arbitrary restrictions do more harm than good. They would shut out a Faraday.

22,879. I asked the question because you have experience in that particular direction and there are not many institutions in which that experience is gained. Then you would feel it an advantage to your scholarships if the University were conjoined with you in the matter of these examinations, and you think it would be more likely to obtain a grant from the Government for the purpose?—Yes. The University would be conjoined only *quâ* the rooms we were going to use—not in the examining staff but in the rooms. It is obvious that you only want these examination laboratories and examination rooms for a comparatively few number of days in the year, and when there are several institutions wanting them it is absurd that the same set of rooms should not be used by each in turn, which would save a great deal of money.

22,880. It might facilitate the Government giving a grant for these additional laboratories if they were utilised for the University of London as well as for your own particular purpose?—Certainly. All students in certain subjects who pass in the written examination in "honours" in the May examination of the Department, are brought to London to be examined practically—we do not give "honours" unless they have passed a practical examination—and it is very detrimental to the work of the College of Science to have to turn the pupils out for a day or two days in order to examine these country students. There ought to be some proper rooms always available for examination purposes only, and not for teaching purposes.

22,881. You think there should be examination laboratories as well as student laboratories?—Yes. They are wanted very much. There are at least three sets of examinations now going on: London University examination; our examinations; the Civil Service examinations, and possibly others. Temporary laboratories for examination purposes are constantly being rigged up at great expense.

22,882. (*Chairman.*) Have you plenty of ground; have you a site?—There is a very good site on the other side of the road from the Science College.

22,883. (*Lord Reay.*) You would not object to a system of secondary education more or less organised like that of Germany?—Not the least. On the contrary. Of course you ought to have a real continuous scheme of secondary education. All I was insisting on was the propriety of giving those people who have not had an opportunity when young of following a continuous course of education an opportunity of obtaining the knowledge later in life.

22,884. You would concur with the evidence we have had from several witnesses with regard to other institutions that the number of your students and the good work done in the College of Science would be very much increased and facilitated by the existence of a greater number of secondary schools in which the modern side of education was carefully organised?—Yes; and it was for that reason that I particularly laid stress on the number of organised science schools, which I said was about 70. A few years ago there were about four, but there are now 70. These are distinctly secondary schools, taking the boy on after he has left the elementary school; taking him on from 13 years of age to 16 or 17.

22,885. The main purpose of your work is to supply the demand in the country with teachers for science?—Yes, of the College of Science.

22,886. (*Chairman.*) Only in Science?—As far as we are concerned the Department can only give grants to Science or Art instruction. We cannot pay for instruction in languages. A development, however, that is now taking place is this: the Department grants for Science and Art instruction are considerable, and the local authorities, the County Councils and other municipal bodies, are using the money placed at their disposal by the Local Taxation (Customs and Excise) Act, or part of it, to enable these schools to give instruction in other matters. They

can apply it to the purpose of commercial education, and modern languages come within the Technical Instruction Act.

22,887. (*Lord Reay.*) And it is very desirable that this multiplicity of agencies should make way for a more systematic organisation ?—Yes.

22,888. What we want is systematic secondary education ?—Yes, that is so ; and the Vice-President, Mr. Acland, has a committee sitting at the present time on that subject with a view of systematizing the machinery of secondary instruction.

22,889. (*Mr. Anstie.*) How many of those 70 organised schools are in London ?—I think only three or four, and they have only recently been established.

22,890. Is that really so ?—I think so.

22,891. I think I have come across more than that ? —I may be wrong, but I don't think there are more. There are many that are teaching Science, but they do not comply with the conditions requisite to constitute an organised science school. I find that the actual number of organised science schools in the metropolitan area is seven.

The witness withdrew.

H. H. Cozens-Hardy, Esq., Q.C., M.P., examined.

22,892. (*Chairman.*) You have been kind enough to come here to give evidence, chiefly, I think, with regard to the formation of a Legal Faculty in the proposed new teaching University ?—That is so. I have no right or claim to speak upon anything else than that. I may say say that I am a law graduate of the University of London, and I was for five or six years one of the examiners in the Law Faculty of the University. I do not know whether the attention of the Commission has been directed to the past or present state of things in the Law Faculty of the existing University of London.

22,893. We should like to hear about that. We have not had much evidence on that part of the question ?—Until 1866 the law degrees in the University of London were only open to graduates, that is to say, no one could enter for a law degree unless he had already taken the degree of Bachelor of Arts or the degree of Bachelor of Medicine. The examinations were, I think I may venture to say, of a very peculiar character. The degree of Bachelor of Laws was given on an examination in some part of Blackstone's Commentaries, and in some parts of Dumont's Bentham. Nothing else was exacted for the degree of Bachelor of Laws. The honours were given on an examination in one or more of several subjects, the first and most important of which was called the principles of legislation. The University Law Scholarship was given as the result of the examination. The result of that state of things was that the so-called Law Faculty, by which I mean here not the Faculty proposed in the sense in which you have been using the word, but the body of the whole graduates, consisted to a very large extent of gentlemen who had really no knowledge of law and no relation to the law. On more than one occasion the University Law Scholarship was gained by a clergyman or a dissenting minister, who had happened to write very good papers on the principles of legislation, which, as interpreted by the examiners, meant pretty much an essay upon some subject bordering upon general politics or political economy. That was recognised I think by all who considered it, as not being a wholly satisfactory state of things, and an entirely new start was made, I think, in the year 1866 or 1867, but a reference to the Calendar will show whether I am quite right. From that time forward there has been an intermediate examination for the law degrees which is open to all matriculated students, that being a great change as you will observe. Before it wasonly open to graduates, but now students can start from the matriculation and go in whatever direction they choose to the Arts degree, to medicine, or to law. There is now an intermediate law examination in — first, Roman Law ; next, Jurisprudence, two papers in each of these subjects ; and one in Constitutional Law and Legal History ; the honours examination being only in Roman Law and Jurisprudence. That is followed by the final LL.B. examination, which is two papers in Common Law, one paper in Real Property Law, one paper in Equity Law, and one paper in Roman Law. The honours at the final LL.B. examination are confined to the English Law subjects, that is to say, Common Law, Equity, and Real Property Law. I do not enlarge upon the LL.B. degree, the final degree in the Faculty, but I shall be happy to give any information which the Commission desire to have. The new regulation is dated 1st August 1865, so that it came into effect, you may take it, in 1866.

22,894. And there has been no change since 1865 ? —No material change since 1865. That change or rather those changes have led to a very large increase in the number of Law graduates. The figures appear on a table which is given in the University Calendar. I have not got them on hand, but I know that the number of law graduates have very largely increased, and although I am deeply conscious of some rather serious defects in the examination, yet speaking from my experience as an examiner, I cannot doubt that very good work has been done. I think that the University of London has furnished to students, not merely of the Inns of Court but of the Incorporated Law Society, and to other persons who are studying law, an opportunity of showing the extent to which they have acquired a knowledge altogether beyond mere professional knowledge, and I believe the University of London has done good work in that direction.

22,895. Are the degrees much sought after ?—Yes, the numbers are comparatively very considerable. The numbers are probably 50 or 60 for each year. Those are entrances ; of course the number of rejections is considerable ; the Faculty of Law was at or some time after the time when I was examiner a Faculty which was increasing in numbers more than either of the other Faculties. I cannot speak with any certainty as to the numbers since I ceased to be an examiner.

22,896. Do the Inns of Court recognise the degree in their examination ?—No, the University of London I think in 1873 appointed a deputation to meet the Council of Legal Education ; I, being an examiner then, was requested to attend, and did attend, and we applied to the Council of Legal Education that they should recognise our examination in Roman Law as dispensing with or as an equivalent for the Inns of Court examination in Roman Law. But the Council of Legal Education did not accede to that.

22,897. They do recognise some University teaching, do they not ?—They recognise the Oxford examination in Law ; and speaking as a London University man I think they have done very wrong in not recognising the London University Examination in Law ; for I am satisfied that the London University Examination is a more real, and a more difficult, and a more thorough examination in those subjects than the Oxford examination.

22,898. Did they give any reason for not recognising it ?—I do not think they did.

22,899. If they had more voice in determining the examination perhaps they would be more willing to recognise it ?—I should think so, and I should not desire nor do I think it would be right to ask that the Inns of Court should in any way recognise any examination in any University in which they have not a voice or control. But the Inns of Court do recognise the Oxford Examination in Roman Law although they have no voice in it or control over it.

22,900. Then you, I gather, are pretty well satisfied with the degree as it now stands ?—No, I cannot say that I am. Speaking again from my experience as an examiner I felt that there was a great want of more

H. H. Cozens-Hardy, Esq., Q.C., M.P.

23 Feb. 1893.

intimate relations between the Senate of the University and the examiners. I felt that we were allowed to go on in our own groove very much without consultation, without any assistance, without direction, and without knowing what anybody else was doing. I found this, to give an instance which I hope will not be considered too technical: in my own subject, which was Real Property Law, there was one very small branch of law which we call the Law of Merger which had been examined upon for nearly eight years. I think I can almost defy any examiner to set more than eight or ten questions within the reach of ordinary pass students upon such a limited subject as that. I cannot believe that such rigidity would have been found in the curriculum if there had been more intimate relations between the examiners and the Senate, and if the examiners themselves had had a greater opportunity of meeting together and consulting as to what ought to be done and what changes ought to be made in the curriculum of the examination; I therefore think that the existing system is not satisfactory, because it is really conducted and controlled more or less by a body of examiners who never meet except casually when the results are counted out round a table, and who are never brought into connexion with the Senate of the University.

22,901. And there ought to be teaching leading up to the examination?—That is another point; but I was rather now addressing myself to the want of relation, the want of harmony, and the want of intercourse between the Senate on the one hand and the examiners as a whole on the other, and between individual examiners in one subject and their colleagues in the other subjects. I do not think any system can be satisfactory in which you have such complete isolation and such want of co-operation and sympathy. That is all that it occurs to me to say with regard to the existing examinations of the University of London and the existing law degrees; but I should desire to say something about the more general question of a Law Faculty in the proposed teaching University. In the first place it does seem to me that a Law Faculty is absolutely essential to every complete University; and if that is true as a general proposition it is surely pre-eminently true in London where, and where alone, south of the Tweed, law is in any sense a real, a living, a learned, and an active profession; and I should regret more than I can say to see any University in London founded without a strong Law Faculty. In this matter I am speaking of course as a lawyer, fond of my own subject, and, if I may say so, proud of my own subject. Then I think we may learn a lesson from experience in London. I think experience shows us that you cannot maintain any successful law school except in connexion with the Inns of Court. My reason for saying that is that I know something of what has gone on in University College, of which I am a Fellow, and I know something of the history of the law classes at University College. In the early days of University College we had Mr. Austin whose work on jurisprudence is even still a text-book, and he was beyond all doubt a very great man; we had also Professor Amos who was a very distinguished man. At that time there were no other means of acquiring legal knowledge in London; it was a new idea to have means of learning law from professors; and the result was that the classes at University College were crowded; the students were counted, I think I am right in saying, by hundreds. But that is a thing of the past.

22,902. Was that on account of the personal eminence of these two men?—I think not. I speak, as Lord Reay knows, as one who has had the honour of serving a good many years at University College, and I should be very sorry to say that the men who have since occupied the Law Chairs were not in every way competent for the task. I do not suggest that you have an Austin every year, but I do not think anybody who knows the situation would attempt to say that the governing body of University College have not chosen the best men who are available for the post. But the classes have dwindled down until I would almost say they are non-existent. Perhaps that is going a little too far, but they are not in any serious practical sense of the word classes of importance which may be regarded as a material element in the teaching of law in London. I am speaking of what I actually knew up to about three years ago; and, as far as I am aware, there has been no material change. Lord Reay knows about that now very much better than I do. What is the reason of that? I think the reason is very easily found. In the first place the Incorporated Law Society started some classes for solicitors, then the Inns of Court started a system of legal education for the Bar students; and the result was that the wants were supplied. And I think you must recognise this as a fact beyond controversy, that in London you cannot hope to get any large number of law students apart from and at a distance from the great professional corporations and institutions, by which I mean the Inns of Court and the Incorporated Law Society. It does therefore seem to me that you cannot have any Law Faculty worth naming, except it be in connexion with the Inns of Court; and I venture to think that the connexion between the Inns of Court and the University of London is important to both sides. In the first place, I think it is absolutely necessary to the University. It is necessary to the University, because the Inns of Court have the money in the first place. I am a Bencher of Lincoln's Inn, though I am sure you will understand that I am speaking only my individual opinion, and must not in any way be understood to bind my colleagues in the least. We have very large funds, which we are bound, in words if not in strict law, to apply, so far as needful, to educational purposes; and I do not think there can be any doubt that for all practical purposes, the funds of the Inns of Court must be considered applicable to a very large extent for purposes of legal education. We have, therefore, the money at the Inns of Court. Next we have the men, because we have a large number of students studying law there. The connexion with the Inns of Court would also remove from the University, its principal and its only rival, because if you started a new Law Faculty or a new Law teaching school, with the Inns of Court as a competitor, I am satisfied you would fail. Then there is another consideration which I confess influences me much. I value the connexion between the University and the Inns of Court, because I regard law as after all a practical matter. I know there are some academic authorities who almost regard law as though it were a branch of pure Mathematics, but it is not so. It is more nearly Applied Mathematics, and I do not believe that even the so-called theoretical branches of law can be properly taught except by men who are in touch with the actual conduct of affairs, and who know not merely the abstract principles, but the concrete applications of those priciples. In fact, I do not believe in a law of contract apart from particular forms of contract, to illustrate it, explain it, and enforce it; and in so far as you separate yourselves from the great professional Corporations, you are in great danger of falling into that dilemma. Then if it is necessary for the University, and I think it is not merely advantageous but necessary to the University, is it necessary to the Inns of Court? I do not think it is necessary for the Inns of Court, but I am bound to say that I think it is advantageous for the Inns of Court. I think it is advantageous for the Inns of Court, because I think it would greatly facilitate the distinction which now does not exist, as much as it ought, between matters which are strictly fit for the professional instruction of the barrister, and matters which are merely conditions of practical efficiency. For instance, there is a tendency in the Inns of Court to regard purely technical matters too much, rather than what I may call the professional outfit of a barrister. I think the connexion with the University would greatly check that. I think, too, the connexion with the University would encourage branches of

instruction, which are not directly connected with practice at all. I may say that through the courtesy of your Secretary, I have been furnished with the evidence of Mr. Crackanthorpe on that point, and I desire to adopt entirely what he said with reference to the importance of the teaching of certain branches of law, which are now rather given the go-by to by reason of their not having a direct bearing upon professional practice. There is one other matter in which I think the Inns of Court would greatly gain. The connexion with the University of course involves the opening of classes to all comers, and not merely to Bar students. I cannot see any possible justification for the shutting of our doors to anybody who likes to come in and pay the fee. When I was a student at the Inns of Court, it was my good fortune to hear Sir Henry Maine deliver what was afterwards published as Ancient Law. Why anybody who desired to hear from the lips of Sir Henry Maine such important and novel instruction as he was giving, should not do so, I have never been able to understand.

22,903. As far as the lecture rooms go, would there be room?—Abundant. The halls of the Inns in which the lectures are delivered are some of the largest rooms in London. There is ample room. Then if the connexion be, as I venture to say it is, necessary for the University and advantageous for the Inns of Court, is the connexion possible? Is there much hope of bringing it about? Here of course I can only express my own opinion; I do not think it ought to be otherwise than possible, subject to certain conditions. The first condition, which I regard as vital, is that the University must not touch or interfere with the powers of the Inns as to the call to or the discipline of the Bar. If, for instance, the Inns of Court choose to consider, as possibly they may, and I think they did in the past, reading in Chambers for 12 months with a practising barrister necessary, the University must not interfere with that in the least. I am quite sure that any attempt to interfere with conditions of that kind would be absolutely fatal to any kind of scheme. Then I think you ought to provide, too, that the Inns of Court should have nothing to do with the conferring of law degrees; but I think you ought to arrange, and you would have no difficulty in arranging, that the Inns of Court should accept either the whole or part of the degree examinations of the University as examinations qualifying for the call to the Bar in subjects for which an examination is necessary. For instance, if the call to the Bar involves an examination in Roman Law, that part of the degree examination which involves a pass in Roman Law should be accepted by the Inns of Court as an equivalent for an examination in Roman Law, and as exempting from all further or other or separate examination in that subject. But that is not quite enough. You cannot expect the Inns of Court to do this, I think, unless you make the Inns of Court, I will not say entirely, but substantially, the Law Faculty represented on your governing body in some shape or other, not merely by means of their teachers, but by means of representatives chosen by the Inns of Court. Mere representation by the law teachers I do not think would be satisfactory to anybody connected with the Law. I do not believe that you would get professional confidence in an institution which had not on its governing body men other than those who were the actual professors of Law. I would not exclude them in the least, I think they are most desirable persons, but I think that the presence on the governing body of the University of men other than teachers, such as some of the most eminent judges and some of the leading members of the profession, is absolutely essential to give professional confidence to the whole scheme and to induce the Inns of Court to come in.

22,904. Would it be enough to have those who are not teachers on the Senate, or would it be necessary also to have them on the Faculties and Board of Studies?—I do not think I can answer that question without knowing quite what is the relation between the Faculty and the Senate. If the whole of the control of the curriculum is left with the Faculty I certainly think that representatives of the Inns of Court ought to be on the Faculty; and if it be true, as I think it is, that the Inns of Court will furnish both the money and the men, it is not unreasonable that they should be put in a position of power and influence on the Faculty itself. There is one other condition and one other only which occurs to me; and that is I do think it essential that the Teaching University to which the Inns of Court are invited to come in should be something very large and important. I mean, I do not think it would be possible to ask the Inns of Court to come in as a mere subsidiary subordinate element to King's College and University College. I am quite certain they would not do it voluntarily, and I do not think you could bring Parliamentary pressure upon them to force them in. I do not shrink in the least from Parliamentary interference. Indeed I do not believe that this University of London question will ever be settled without Parliamentary interference. Oxford was not reformed without the intervention of Parliament. Cambridge was not reformed without the intervention of Parliament; the Scotch Universities were not reformed without the intervention of Parliament; nor was Dublin; and I think it is idle to suppose that London can be. But in considering that, of course, it is important to see the strength of the case and the reasonableness of the case which has been brought forward.

22,905. You think the Inns of Court should be practically the Legal Faculty if they are expected to come in at all?—Yes; and they should not be expected merely to come in behind University College and King's College and as subsidiary to them, but they should come in as part of a much wider and more important scheme.

22,906. You agree very much with Mr. Crackanthorpe?—I think so, except that I am not quite sure that he gave altogether sufficient credit to the Inns of Court for what they are now doing in the way of education. I am not a member of the Council of Legal Education, but I can testify to this, there has been no stint of money and I think no stint of time or of endeavour to make the teaching of law there really effective and valuable.

22,907. Any negotiation with the Inns of Court would have to be carried on with each particular Inn; there is no common body; they have no mouthpiece?—That is one of the difficulties of our constitution. No one Inn can do anything without bringing the other three with it.

22,908. Your general idea is that they would be willing to come in on favourable terms?—I should be sorry to convey the impression to your Lordship that I am able to form any opinion as to what the other Inns might do. I think Lincoln's Inn would; I can only speak about Lincoln's Inn; I am not in a position to say anything about the other Inns.

22,909. (*Sir George Humphry.*) I do not quite understand what you said with reference to Parliamentary interference?—I do not thing you will be able to bring in any of the professional bodies, either medical or legal, and make them form part of your University, without Parliamentary intervention.

22,910. You think Parliamentary influence should be brought to bear a little upon the Inns of Court?—Certainly.

22,911. Do you think that could be done with a probability of success?—I think so if you get a reasonable scheme.

22,912. We have heard from other very important persons in law that it would be more likely to be brought about by agreement than by legal interference?—Of course if you can bring it about by agreement, by all means do, but what I meant was that failing agreement, I think the necessity of Parliamentary interference must be contemplated.

H. H. Cozens-Hardy, Esq., Q.C., M.P.

23 Feb. 1893.

22,913. You mean that the Commission should endeavour to ascertain whether there is a probability of agreement with the Inns of Court before they close their work. The Commission would have to recommend one thing or the other. The recommendation of Parliamentary interference with the Inns of Court is rather a serious measure, is it not?—It was contemplated by Lord Selborne's Bill with reference to the School of Law. It has been contemplated more than once. The idea does not shock me at all.

22,914. Do you not think it would be resisted by the Inns of Court?—It probably would.

22,915. I suppose they are powerful bodies in any matter relating to law?—Yes but if you get a good cause and public opinion at your back I should not shrink from that.

22,916. And you think there is no great possibility of the Inns of Court together assenting to any particular proposal that the Commission might make?—I do not think the Inns of Court would be likely to assent to an indeterminate and undefined proposition. I do not know what proposition would be laid before them, but I think they would want to know whom they were going to take into partnership.

22,917. You have indicated a kind of line, supposing such a proposal as that were presented to the Inns of Court, do you think they would be likely to assent?—Speaking only for Lincoln's Inn, as being a Bencher of Lincoln's Inn, I think such a proposition would be passed by the majority of Lincoln's Inn. Beyond that I am not in a position to express any opinion.

22,918. Supposing any proposition passed by a majority of one or two Benchers, do you think it would be likely to be assented to by the others?—No, I do not think that is so at all.

22,919. As you have said, the Inns of Court are doing a great deal in the direction of education?—Yes.

22,920. And they have considerable funds?—Yes.

22,921. It was stated by an authority that the gross income of the Inns of Court was not less than 100,000*l.*?—I have not the least idea. I do not know anything about that.

22,922. It is very strange that nobody seems to know the income of the Inns of Court. There is no statement as to finance brought before the Benchers in any of the Inns of Court, is there?—I can give you no evidence upon that.

22,923. Do you think it probable that they would be likely to expend their income in such a manner as to be useful?—The Inns of Court do now spend many thousands a year on education.

22,924. And the education which they give might be sufficient for a University degree as well as call to the Bar?—So far as it covers the same ground, yes, but there are other subjects which might be entered upon by a University, which are not now dealt with by the Inns of Court.

22,925. The University has no funds at the present time?—No, and that is why I think it is so essential for you to work with the Inns of Court.

22,926. Do you think the Inns of Court might be likely to supply the requirements of the University as well as those of the call to the Bar?—My own view is that they ought to be brought to do it.

22,927. To give the whole education both for the degree and for the call to the Bar?—Yes.

22,928. (*Mr. Anstie.*) I daresay you know that there is a Chair of Comparative Jurisprudence at University College endowed?—Yes. When I left the Council I think that Chair had not been filled up.

22,929. At any rate that is the sort of Chair which it would be very proper to join on to the system as established by the Inns of Court?—Yes.

22,930. I do not know whether you are aware of any other Chair beyond that which would bring any endowment or any substantial support?—I know no such Chair, and with reference to that Chair I should think it would be a grievous misfortune if the Quain Professor were not at liberty to give his lectures at the Inns of Court, where all the students are, and where alone he could expect to get an audience.

22,931. But you would admit him as a representative teacher in the system?—Certainly.

22,932. Adding that Professor, say, to the teachers appointed by the Inns of Court, and who would make the bulk of the Faculty, you pointed out that you thought a determination of the curriculum and of the course of examination by the Faculty so described alone, would not be satisfactory. Would it meet your views if the Inns of Court and the Incorporated Law Society also formed part of the Senate of the University, and if the element so contributed by them co-operated with the teachers in settling the curriculum and course of examination?—I think so; but that is a matter of internal regulation, upon which I had rather not express an opinion. The only point I wish to make clear is that it is my view that not merely the teachers but the members of the governing body of the Inns of Court must have a sufficient voice in determining the legal curriculum. If you will allow me to correct this (I am glad you have mentioned the Incorporated Law Society), I will say that when I referred to the Inns of Court I did not for a moment intend to exclude the Incorporated Law Society. They do furnish a very important amount of teaching, and I think they ought to be represented.

22,933. It has been suggested to us by one or two witnesses on their behalf that although they have at present no adequate system of instruction, yet they have funds secured to them by statutory fees which might be suitably applied to purposes of this kind. I suppose you see no objection to their contributing that to the maintenance of legal education and sharing in its control?—No; but on condition that they work back from the bad direction they have lately taken of doing away with all teaching and starting merely correspondence classes.

22,934. You are in favour of there being a teaching course, and I think you promised to say a few words about the importance of having a course of teaching. You are of opinion that it is important that there should be a course of teaching?—Undoubtedly. I think it is of extreme importance.

22,935. Is it not of great importance with reference to examination purposes merely that there should be a course of teaching as a basis on which the examination should rest?—Yes, but I would not limit the right of entry to those who have attended the classes of teachers.

22,936. But you would look upon the course of teaching as forming the basis of examination to which others if they saw fit to dispense with the teaching might be admitted?—Yes; and that, I may say, is the present principle adopted by the Council of Legal Education.

22,937. I think I am right in saying that it has always been the principle adopted by the Inns of Court that you could go into the examination although you had not attended the classes of their Readers?—Yes.

22,938. And a great many do so?—Yes; I myself did so.

22,939. Different opinions have been expressed before us as to the importance and the necessity (I use the two terms advisedly as meaning different things) of Roman Law in the necessary preparatory studies for barristers?—I am not one of those who regard Roman Law as a fetish. It is no doubt a system of law which has been developed through centuries to a great degree of perfection, but it is not the basis of our law; and I venture to think it is a mistake to insist upon that as a *sine quâ non* for the entrance to the profession and to give it the importance which is now attached to it.

22,940. Your view in fact is that the study of Roman Law would be important but not necessary?—Yes.

22,941. Perhaps its importance can only be rightly

appreciated by those who make a study of it with some degree of zeal and personal interest?—Certainly.

22,942. To the ordinary student who goes through Roman Law but leaves it behind him, it is practically of no value whatever?—I think so.

22,943. But to those who study it in its principles it may be of value and is of value?—Yes.

22,944. The extremely theoretical turn of mind which sometimes arises out of it, you would deprecate as not being consistent with professional law. I do not mean for the purpose of practice but as regarded from the point of view of the affairs of mankind?—Yes.

22,945. Your view is that theoretical subjects should be pursued to some degree but not so far as to defeat the practical objests of legal training?—I think it is a mistake to exact a knowledge of jurisprudence apart from and before acquiring a knowledge of at least some one actual system of law.

22,946. Then in your judgment some knowledge of the material of law, the matter of fact of law, is essential to a true comprehension of the theory?—Yes, I do not think it could be understood without a reasonable knowledge of some one system from which you could take examples.

22,947. You would rather concur in the view of Sir Frederick Pollock and others that there is no such broad distinction as is sometimes supposed to exist between theoretical and practical law?—Entirely.

22,948. There is no such thing as theoretical law apart from practical law?—No.

22,949. As you have referred to the practical bearings of the case, may I put this to you: A witness of great eminence has appeared before us on the strictly collegiate view of the question, and he laid down this proposition, I should like to see how far you think it would be practically possible; that no one should be recognised as a University man, student or graduate, who has not been trained in a University college; that no college should be recognised as a University college which does not include a powerful literary side and a powerful scientific side, including on the scientific side mathematics, chemistry, experimental physics, and, if possible, physiology and anatomy. You will observe that the result of that, coupled with the fact, which he also stated, that there were only two colleges of that kind in London, University College and King's College,—would be that no medical degree could be given to any person who was not a student at one of these colleges. How far would you think that would be a practicable solution of the question we have in hand?—Is your question addressed to the Law Faculty?

22,950. I will apply it to the Law Faculty?—I cannot imagine anybody thinking it within the regions of possibility that University College could be the sole legal college in the University. It would be equivalent to saying that there should be no Legal Faculty in the University. That would be really what it would come to.

22,951. I am putting the question to you as having a great deal of knowledge of the facts and circumstances with respect to London University. I will put it with regard to medicine. Considering that there are 11 Medical Schools of great importance, would you think that that would be a practical solution in the case of medicine?—I do not think it would, but, at the same time, I had rather not go into the evidence upon the medical question, or upon the general question.

22,952. I would put the same question as to engineering?—I should make the same answer, that I should prefer not to go into the general question.

22,953. So far as you have had the opportunity of judging of it, that does not strike you as a practical solution of the question?—No.

22,954. I should like to know how far you would agree with what appears to be the basis of fact on which this supposition rests. The view apparently taken by some persons is that in a college of the description I have mentioned a man is brought up along with, side by side with, and as much as possible in contact with, men pursuing totally different kinds of education from his own, and he would have, therefore, an appreciation of how great an effect may be produced by other types of education from that which he is himself receiving; and that that is the critical thing which should be insisted upon by the University as such. I should like to ask you from your experience of University College how far it is the fact that those who are in the Arts Department at University College are brought into contact with those who are in the Medical Department?—I cannot imagine a more complete isolation than there was between the Arts and the Medical students in my time. As far as I can recollect there was only one medical student I spoke to all the time I was there.

22,955. As I have been at King's College I think I may say the same thing. If it had not been for the fact that I had a cousin in the Medical Department, I should not have known a single medical member. Then you agree that that advantage, however valuable it may be, is not one given by the education carried on?—I think it is purely theoretical and not in the least practical.

22,956. (*Professor Sidgwick.*) With regard to the relations of the Inns of Court to the University, if I understood your views rightly, it is in the main that which has been taken by other witnesses who have come before us in reference to the department of law, but in particular I think you said you agreed with Mr. Crackanthorpe's views?—I do not know that Mr. Crackanthorpe quite put it in the same way that I did, but I was referring rather to what he said about the governing body, the Benchers, being represented there, and not merely the teachers.

22,957. I think it is understood that the Inns of Court ought not to constitute the Faculty of Law entirely, or to control the Board of Studies entirely, but that they should be combined with other elements?—Yes, but I do think that they ought to have the substantial voice and control of the matter. For instance, the Incorporated Law Society would come in, and the Quain Professor, or something of that kind, and possibly some others.

22,958. Do you think it is likely to be an objection or not, from the point of view of the Inns of Court, that the Incorporated Law Society should be allowed to have a share of the control?—I cannot imagine that there would be such an objection. Speaking for myself, I am sure there ought not to be such an objection.

22,959. I understand that they have always held very strongly to the idea that those who are preparing to be solicitors should not be admitted to their lectures?—I am sorry to say it is so.

22,960. Do you think they might take a different view when they appear in this new character, as part of the University system?—Yes; and I am not without hope that that change may be introduced even before this University scheme is completed, and apart from it. There is, I may say, a movement in that direction now.

22,961. If such an arrangement as you propose were made, do you think it would be desirable that the Inns of Court should have a system of instruction of a more purely professional kind alongside with that which they would in the main regulate as a part of the University course?—I think you must leave that to the Inns of Court entirely. The University must not in the least interfere with that.

22,962. Do you think it would be a desirable thing?—I think in some respects it would be desirable. For instance, I can quite imagine that it might be thought desirable that a practising barrister, and perhaps still more, a practising solicitor, should go through certain dry, dull details of actual, almost mechanical, work which the University would not in the least require.

22,963. And that supplemental course of instruction would naturally be confined to barristers?—Certainly. Nobody else would try to go in for it. I would not exclude anybody else, but practically nobody else would try to go in for it.

H. H. Cozens-Hardy, Esq., Q.C., M.P.

23 Feb. 1893.

22,964. I suppose you would agree in thinking that if the Inns of Court could be persuaded to enter into an arrangement of this kind, it is much to be preferred that they should come in by persuasion than by the coercion of an Act of Parliament?—Undoubtedly.

22,965. That should be tried as a last resort?—Yes. Only as a last resort; but I think the examples of Oxford, Cambridge, Edinburgh, and Dublin, go to show that no ancient corporations are easily, apart from Parliamentary compulsion, brought into any new scheme.

22,966. In the case of Oxford and Cambridge Universities there were vested pecuniary interests of a large kind, and there were also ecclesiastical questions which created great opposition?—Yes; but in the Inns of Court there are also pecuniary interests. I do not wish to go into that, but there are questions whether our property is not private property which we could do with as we liked. I do not wish to raise those questions or to discuss them; but there are considerations of that kind.

22,967. If I understood you aright it is your view that the Inns of Court have in respect of the administration of their funds acted in a more liberal way, and with a greater regard to public interest, than one or two of the witnesses have perhaps recognised?—I think they have. They have not spared money, they have been perfectly willing to give any money that could reasonably be required, and I believe they are willing to do it in the future.

22,968. (*Lord Reay.*) Your view is that the University in settling the curricula and the examinations leading up to the degree in law, should have paramount power, but that it should not interfere in any way with the exercise of their own control and supervision by the Inns of Court over candidates for admission to the Bar?—A little more than that; that the University retaining paramount power should be for this purpose mainly represented by, or consist of, the representatives of legal corporations.

22,969. I was coming to that. Assume that the University were organised in this way; the Faculties to be composed of the teachers, who would be represented on the Boards of Studies, and on the Council of the University. If the Inns of Court were adequately represented on the Board of Legal Studies and on the Council of the University, would that not meet your view?—That would depend upon what functions you would reserve to the Faculty.

22,970. The Board of Studies would be the principal body concerned in educational and examinational questions, referring them when necessary to the Faculty and to the Council of the University?—Before I could answer that question I should want to know what functions you would reserve to the Faculty. I should consider it highly objectionable that the Faculty should consist solely of teachers.

22,971. In any Faculty?—In any Faculty, but in the Law Faculty pre-eminently so. I speak of the Faculty which I know best.

22,972. You wish the Inns of Court and the Incorporated Law Society to be represented on the Faculty as well?—Yes.

22,973. In case the Faculty had to deal in however limited a degree with education and examination?—I do not think you would get professional confidence in an institution without that.

21,974. And although the bulk of the students would be professional students you would look forward, once this Legal Faculty had been placed on a proper basis, to other categories of students, politicians who are now excluded from the curriculum, such as landowners, and men looking forward to enter the diplomatic service, the Civil Service and other professions?—Yes.

22,975. And you would welcome them?—Certainly.

22,976. (*Mr. Anstie.*) May I put to you whether in substance what you demand is not this: that the Inns of Court or their representatives should form a part of that body, whatever it is, which is practically intrusted with the determination of the curriculum of study and the courses of examination?—Yes. My only difficulty in answering Lord Reay's question was that I did not know what the distribution of functions between the Boards of Studies and the Faculties might be.

22,977. But that broad proposition would cover it?—Yes.

The witness withdrew.

SILVANUS P. THOMPSON, Esq., D.Sc., F.R.S., examined.

S. P. Thompson, Esq., D.Sc., F.R.S.

22,978. (*Chairman.*) You are a member of Convocation of the University of London?—Yes, I have been for about 15 years.

22,979. And you have taken some part in the proceedings, particularly lately, when they formed a scheme which they presented to us?—Yes.

22,980. Among other things they wish to establish a Faculty of Divinity?—Yes.

22,981. And I believe a strong minority were against that?—Yes.

22,982. You were one of those?—Yes.

22,983. You would like to tell us your objections to forming such a Faculty?—It might be convenient and shorten the time if I gave you a copy of the six points that I wish to lay before the Commission. Before I give them to you might I say that I appear here absolutely in an individual capacity. I do not come here representing any body of persons, though as a matter of fact I have taken the opportunity of conferring with a number of my fellow graduates who were amongst the minority on the division in Convocation.

22,984. Did you divide upon that subject?—We did.

22,985. Could you give us the numbers?—The number of graduates who were present at any time during that meeting of Convocation was only 286.

22,986. Out of over 3,000?—Yes. The number of graduates who actually took part in the division was 140, of whom 103 were in favour of the clause relating to the Faculty of Divinity in the draft scheme, and 37 were against it.

22,987. Will you proceed with your points?—The points I wish to lay before the Commission are most of them rather matters of argument than direct evidence; but I believe the arguments will be found to be of great importance. The first point is this: "That "whilst proposals for creating a Faculty or degrees "in such subjects as Education, Engineering, Lan- "guages, and Music, have been from time to time put "before Convocation for discussion before adoption, "the proposal to create a Faculty of and degrees in "Divinity has never been so placed before Convocation "for discussion until presented to it now as a side "issue in a large scheme of reconstruction." We have had in my experience of Convocation many long debates on these other questions—the question of a degree in engineering, the question of a degree in languages, and so on—but we have never had a discussion direct or indirect on the question of a Faculty of Divinity or a degree in Divinity until it comes to us now in this shape.

22,988. Theology would be the same thing of course?—Practically the same thing.

22,989. And that has never been discussed?—No.

22,990. Was there notice given that Divinity would be discussed among other subjects?—The draft scheme was circulated to members of Convocation about ten days before the meeting. The draft scheme was prepared in the first instance by a Sub-committee of the Annual Committtee of Convocation. Then it was adopted by a small number of the Annual Committee of Convocation; then it went before Convocation,

and as the scheme of Convocation at large it was adopted on a vote.

22,991. You were not a member of the Committee?—I was not a member of the Sub-committee of the Annual Committee, but I am a member of the Annual Committee.

22,992. Then it was not adopted unanimously by the Annual Committee?—No, it was not adopted unanimously by the Annual Committee. There were some dissentients. I should say that owing to illness in the month of December I was not able to be at a single one of the meetings—there were only two I think—at which this draft was discussed in the Annual Committee, so I did not take any part in the vote for or against these clauses when they were before the Annual Committee of Convocation. Further I may say that although there are some 36 members of the Annual Committee who it might be supposed, seeing that this is nominally their scheme, would take at any rate the trouble to come to Convocation to vote in favour of it, there were only nine members of that Annual Committee, that is to say, one quarter of the body, who took part in the division upon their own scheme, and of those nine seven only voted in favour of it, and two against it.

22,993. Have you reason to believe that at the meeting of Convocation to which I have already referred there were more in proportion present of those who were in favour of a degree in divinity than of those who were against it?—From my knowledge of the meetings of Convocation, at which I have been a diligent attender for some time past, and from my knowledge of the faces of those who attend I should say that it was not at all a representative meeting—that there had been certain efforts made by those who were in favour of a Faculty of Divinity to be well represented at that meeting. At the same time I ought to say that I should be quite prepared to admit as probable that if the whole of Convocation were polled on this matter among the whole of the 3,700 graduates there might be a majority in favour of a Faculty of Divinity, though I do not think it would be so large a majority in proportion of numbers as was the actual division, 103 against 37.

22,994. Now will you go on to the second point?—My second point is "that the proposal to create a Faculty of Divinity with degrees of Divinity is opposed not only to all the traditions of the University but to its fundamental historical basis as being a non-theological institution; and is a reversal of the broad principle laid down in Article I. of the existing Charter under which theology is expressly excluded from its operations."

22,995. It is actually forbidden is it?—The concluding paragraph of Article I. of the existing Charter is this:—"And we did further will and "ordain that the said Chancellor, Vice-Chancellor, "and Fellows should have power after examination "to confer the several degrees of Bachelor, Master, "and Doctor in Arts, Laws, Science, Medicine, "Music and also in such other departments of "knowledge except Theology as the said Chancellor, "Vice-Chancellor, and Fellows by regulations in "that behalf should from time to time determine."

22,996. (*Mr. Anstie.*) You are referring only to the preamble. If you look at clause 38, which is the operative clause, you will find the same words?—The words are the same. It gives power to the Chancellor, Vice-Chancellor, and Fellows to confer "the several "or such as they shall think fit of the degrees of "Bachelor and Master of Arts, Bachelor and Doctor "in Laws, Science, Medicine, and Music, and Master "in Surgery, and also to confer the several degrees of "Bachelor, Master, and Doctor in any department of "knowledge whatever except Theology."

22,997. (*Chairman.*) Then it would require a new Charter to enable this new degree to be given?—Yes. My point is not that a new Charter could not do it, but my point is that a new Charter containing such a recognition of a Faculty of Divinity or a Faculty of Theology would be a reversal of the principles which are fundamental in the present Charter. My third point which is a natural consequence of it is:—"That "no such radical departure from the fundamental "basis of the University should be taken, save as the "result of a very much larger expression of opinion "than there has in fact been."

22,998. There are no means, are there, of taking a larger expression of opinion except by inducing more people to attend, no constitutional means. You cannot vote by paper or anything of that sort?—It has not been done I think on any important question. By the instructions of the Chairman of Convocation there was a circular sent out along with the draft in December last, or January, and some question has been raised as to the legality of sending out such a draft circular. The circular asked the absent graduates to reply whether they were in favour of the draft scheme. They were not asked to reply whether they were for or against the draft scheme, but they were simply asked to reply whether they were in favour; and the point was raised in Convocation whether this was not an absolutely unconstitutional mode of trying to take the opinions of the graduates.

22,999. (*Mr. Anstie.*) You mean as sent out by the Chairman?—By the Clerk of Convocation under the direction of the Chairman.

23,000. It was the official character of the communication?—Yes, the communication being an invitation to express an opinion one way and not the other. It was not like a voting paper which you could fill up one way or the other. You were asked to fill up the declaration in favour of a scheme.

23,001. (*Chairman.*) That you objected to?—That we objected to. Then my fourth point is:—"That "quite apart from the granting of degrees, the "establishment of a non-dogmatic Faculty, and of "non-dogmatic examinations in divinity, is impractic-"able; and that such impracticability is evidenced by "the theological and speculative character of many of "the questions that have been set in the scriptural "examinations in recent years in contravention of the "whole spirit of the existing Charter."

23,002. To what scriptural examinations does that refer?—To the scriptural examinations of the University of London. The University of London has for a good many years past, I believe on the initiative of the late Dr. Arnold, held scriptural examinations, and for these it gives a mere certificate of pass. It leads to no degree. These scriptural examinations which are supposed to be unsectarian and non-dogmatic have gradually been growing into examinations of a speculative and theological character.

23,003. Do the examiners belong to different denominations?—I do not know to what denomination the existing examiners belong.

23,004. You propose to give us some illustration of the way in which the questions are dogmatical?—I wish to bring this in merely as an illustration of the proposition in the first part of this fourth point, that it is impracticable to set up really a non-dogmatic Faculty. Here is an example in what is called the "Further Scriptural examination 1890":—the Wednesday papers—on "Evidences of Christianity." There occurs a question such as this (No. 3):—"By "what criteria may false miracles be distinguished from "true." That, I maintain, is a question which necessarily touches the religious belief of the candidate, and therefore is of a dogmatic character. In the same paper, question No. 8 is "Enumerate the various branches of evidence in favour of Christianity."

23,005. That would not be dogmatic, because a man who did not believe in Christianity might enumerate them?—Yes, but it would have been fairer to ask the question in some such way as this: "Tabulate the various branches of evidence as alleged for or against Christianity." Then the 10th question in the same paper is "State, briefly, the "argument in favour of Christianity derived from the "moral evidence afforded by Christ's character." To that I should take no exception, but it goes on to ask, "In what respect is this evidence unique." Surely

S. P. Thompson, Esq., D.Sc., F.R.S.

23 Feb. 1893.

to be undoctrinal it should be something like this: "What arguments do advocates of Christianity draw "from the moral evidence afforded by Christ's "character; should this evidence be regarded as "unique to the Christian system." There are Jews, Mahommedans, Buddhists, Brahmins, among those who seek degrees at the University of London, and questions of this kind would certainly operate unequally upon those who profess one religion as against those who profess another.

23,006. (*Mr. Anstie.*) You say these questions ought to have been, and might have been put better?—They certainly might have been put better, and some of them ought not to have been put at all.

23,007. (*Lord Reay.*) Is this examination compulsory?—No.

23,008. (*Chairman.*) This you take as an example?—My example is an example of the point that I allege that it is in fact impracticable to maintain the non-dogmatic character of these examinations.

(*Mr. Anstie.*) You have been showing us the practicability by altering the questions.

23,009. (*Chairman.*) You have been showing us that they might have been put in a non-dogmatical manner?—Yes, in these individual cases, but the fact is, that they were not so put, and the fact that they were not so put, shows that the examiners will not and do not follow that. There are other examination papers: for example, in the "first Scriptural examination" 1892, the ninth question is "Distinguish between "moral and positive precepts and duties, when the "two clash, which are we to obey." That is obviously a matter of difference of opinion between different religious bodies.

23,010. But you may answer what you like?—The examiner puts these questions in such a way as to show that he did not intend to take the answers either way.

23,011. That is a much wider question than Christianity. That might have been discussed by a Greek philosopher, and probably was over and over again. I do not think that is very dogmatic?—Then here is another in the "Further Scriptural examination" 1892. The sixth question is, "Show from the New "Testament how Christ may justly be regarded as "the fulfiller of the Law and the Prophets." There are many Jews, for example, who would entirely object to such a question. Then in the "First Scriptural examination" of 1890 the seventh question runs as follows as a proposition: "The whole course of "nature is a present instance of God's exercising "that government over us which implies rewards and "punishments." That, again, is a very speculative point.

23,012. (*Mr. Anstie.*) That is put as a matter of inquiry, I suppose?—As a matter to be proved.

23,013. (*Chairman.*) I suppose it would be open to a man to prove the negative, would it not?—Would he not be plucked if he did prove the negative? On this fourth point also I should like to remark that it was maintained in the debate in Convocation by Professor Cave, who is the head of one of the theological Nonconformist colleges, that for the purposes of the Nonconformist ministers there existed a body which held examinations in undoctrinal theology, and that this body consisted of various learned and eminent men of a number of different sects, who worked together in harmony and examined on Divinity, for various of the colleges. When, however, the printed list of these examiners was produced by Professor Cave, it appeared, that so far from there being, as he maintained, an absolutely representative body from all the different sects, there was not a single Roman Catholic, there was not a single High Churchman, there was not a single Unitarian, there was not a Plymouth Brother, and there was not a single Quaker, so that it really was only a body of the principal and quite closely allied Nonconformist sects, principally Baptists, Congregationalists, Wesleyan, and other Methodists, together with a few members of the Established Church. Further, there are certain Universities in America which grant degrees in Divinity. I have made some inquiry about their operations, and I find that in some Universities these Divinity Faculties are avowedly attached to some one sect, either to the Congregationalists or the Presbyterians, and that at Harvard, where there is supposed to be a non-dogmatic unsectarian Faculty of Divinity, the common reputation is, that though nominally unsectarian it is really a Unitarian Faculty, and as a matter of fact, that it is not very numerously attended, and is not thought much of in America by the various religious bodies. In fact, it is not a flourishing Faculty of what is really a very flourishing University, one of the most flourishing Universities in the States.

23,014. (*Chairman.*) I suppose it would be almost more difficult to examine in any other branch of theology than in the Bible itself—any other book on the subject would lend itself more to sectarian views, or the mere choice of such a book would indicate sectarian views. I suppose the examination in the Bible really is the easiest examination in which to keep clear from dogmatic views—easier than any other examination in theology. Would not that be the case?—I should suppose so.

23,015. You do not put anything forward in that direction?—No. My fourth point was directed not against degrees, but against the Faculty and the examinations. Then the fifth point is:—"That such "Degrees in Divinity, awarded on the basis of "supposed non-dogmatic teaching and of non-dog-"matic examination, would be misleading in their "practical significance to the public at large, since "they would undoubtedly be considered to constitute "marks of belief and opinion." The degrees at present given by every University, B.D. and D.D. are virtually so considered; they are marks of orthodoxy, and therefore for many years to come any degrees given on a supposed non-dogmatical basis would be misunderstood.

23,016. You mean that all those who did go up for it would be considered at any rate to be Christians, but as nobody is obliged to go up for it, does it matter? Nobody would be misrepresented, because I suppose if a Mahommedan or an Infidel or an Agnostic went up and took the degree in Divinity, which would be a very unusual thing, he would be deliberately subjecting himself to whatever imputation might be made. It would not be forced upon him?—Certainly not.

23,017. There would be very few cases I suppose in which a man would take it unless he was going to be a preacher?—Probably not.

23,018. Then it would not be any injustice to anybody. If the teaching itself could be non-dogmatic it would not be an injustice to anybody if those who chose to take advantage of it laid themselves open to being supposed to be Christians?—Perhaps not directly, but I think indirectly it might work very badly.

23,019. Then your sixth point?—That is a more general objection. The University is, whether for good or for evil, of an Imperial character, and the proposal to create a Faculty of Divinity would certainly not be acceptable to a very large number of the subjects of Her Majesty both at home and abroad, especially in India. Not only have we in England many Jews, but abroad in India there are Parsees, Mahommedans, and Brahmins who would all look upon this as giving a one-sided character to the University that hitherto has been open to them equally with numbers of other religions.

23,020. Your objections divide themselves practically into two heads, that it is impracticable, and that even if it could be proved to be practicable it would be undesirable?—Yes.

23,021. Have you anything to add?—Nothing further than that from the absolutely general point of view I think it would be a very great disaster to the University to have, brought into its midst a Faculty of this kind which would give rise not only in Convocation but in every department of the University to unpleasant differences of opinion and discussions.

The present University has from its very beginning been a common meeting ground for persons of very different creeds, views and opinions; and we have agreed to sink any differences of religious belief for the advancement of education in general. If that common ground were cut away we should have a very wide door open for embittered theological discussions. I can only refer to the differences of opinion which would undoubtedly bring forth violent discussions in Convocation. I cannot say of course I do not know whether there would be heated differences of opinion on such questions as the election of examiners, Convocation has nothing to do with the election of examiners: it sometimes criticises their action for example, Convocation has before now had motions before it condemning the action of certain examiners in altering the standard of questions or asking questions outside the curriculum; and if the Senate were to appoint examiners in the Theological Faculty, and those examiners did not meet the views of Convocation, or any important section of Convocation we should have extremely disagreeable debates, and we should have the common basis of agreement that we have met upon before completely broken up. I think it would be nothing short of a disaster to the unity of the University.

23,022. (*Lord Reay.*) Have you studied theology yourself?—Yes, and no. I have studied theology very much as a private student. In Convocation I took the position of opposing this whole thing from the point of view of a man who was, as I trust I am, a sincere Christian and a believer in the Christian religion and a professor of Christianity, but I have never attended any set courses of lectures in theology in any institution whatever. My view is that Christianity is essentially a life, not a creed; and that in all religions just so far as men have formulated beliefs into creeds and dogmas and systems, just so far have they departed from vital religion, and have substituted metaphysical propositions in the place of spiritual activities.

23,023. Then I may ask whether by any chance you have read the report lately issued by the Scotch University Commissioners on the question of abolition of tests for Divinity Professors?—No, I have not read it.

23,024. And you have not read the evidence on that subject?—No, I have not seen the report of the Commission at all.

23,025. The reason I ask is because the result of their deliberations has been that the majority have declared in favour of their abolition; and a great deal of evidence was given in favour of that abolition. I think perhaps you may with advantage refer to that report, as you take an interest in the subject?—I shall do so certainly.

23,026. You have spoken of the American Universities. Have you at all considered how the Faculties of Divinity in Germany, in France, and in Holland are worked?—I cannot say that I have; I know very little about them.

23,027. Would you object to such a subject as the Science of Religion being taught in the Faculty of Arts?—Certainly not, but I am very doubtful whether the time is ripe for the scientific treatment of religion, so to speak, as a basis for a degree.

23,028. You are aware that there is a demand for the degree in Divinity to be given, by a number of persons whose opinions and whose wishes are entitled to our consideration. Is it your opinion that the existence of a separate Faculty of Theology with the autonomy which to a great extent it would enjoy would jeopardise the harmony which might exist between the Faculties?—Yes, I am sure it would.

23,029. You cannot conceive a Faculty of Theology keeping to its own ground and remaining within its own limits and having its own individuality in the University without friction with the other Faculties?—I am not going to say that I could not conceive of a University so constituted that its Faculties were absolutely separated; but assuming that the Faculties will be associated as they have been hitherto in the University, then I say it could not be so done.

23,030. If the Faculty of Divinity had its own Board of Studies, do you think that it would constitute a disturbing factor and be unable to keep its own lines?—It would be very difficult. I think that we should have the members of the Faculty of Divinity interfering in other branches of the University. They would try to dictate for example as to what questions should be asked in the degree for Moral Philosophy and Logic. They would perhaps interfere with the curricula of the Medical or Physiological studies on the ground that evolution or some possible matter like that had a theological bearing.

23,031. Do you really think that the representatives of one Faculty would be so powerful that their influence could, as I now see you fear, be exerted in a direction hostile to scientific progress?—Has not that actually occurred in many of the older Universities? Have not modern studies, because they were supposed to lead in a somewhat unorthodox direction, been opposed by professors who considered themselves orthodox on the ground of their being opposed to orthodoxy?

23,032. But that would rather show that the controversy might arise even among those who were not professors of theology, upon other grounds?—Of course it might, but an individual taking action is a very different thing from a Faculty taking action.

23,033. You do not consider that in the older Universities the Faculty of Theology as such has exercised an illiberal influence, but your contention is that it was due to those whom you have called orthodox professors in other Faculties?—No, but by professors of orthodox Divinity possessed by the recognised Faculty.

23,034. (*Professor Sidgwick.*) I suppose the question is, to use your phrase, whether the time is ripe for the introduction of a non-dogmatic Faculty of Theology into the University. Therefore if the question is put in that way as to whether the time is ripe perhaps the recent history of Oxford and Cambridge is more important than the history of Oxford and Cambridge in earlier times. Are you acquainted at all with the workings of the theological school in my own University of Cambridge?—No. I am not.

23,035. Are you acquainted with the working of the Theological Faculty of Oxford?—No, only in the most outside general way.

23,036. I think the most superficial inquiry would easily convince you that the interference you now sketch by an imaginary Theological Faculty with other Faculties has not occurred in the period in which we now are. But if I understood your general line of argument, what you deprecate is the introduction of a Faculty of Theology in the University of London as now constituted. I mean a part of your argument related to the subjects of the British Crown in India and elsewhere?—Yes.

23,037. And, therefore, if we confine ourselves to the question referred to this Commission, which is the establishment of a teaching University in and for London, that argument would not have much force?—That particular argument certainly would not.

23,038. And your general line of argument relates to the London University as now existing rather than to the University that it was proposed to constitute by the Gresham Charter; or would you have thought it right to come forward and try to prevent a Faculty of Theology being founded in the new University?—I cannot say what I might have thought it well to do.

23,039. Another part of your argument, if I understood it, related to a supposed breaking up of the tranquility and peace that now prevail in the councils of the University of London?—I think I did not put it in that way. It would break up our agreement on fundamental matters.

23,040. An agreement obtained by leaving them alone. What other agreement on fundamental matters is there?—We have agreed, for example, that we will not introduce any theological questions into our

S. P. Thompson, Esq., D.Sc., F.R.S.

23 Feb. 1893.

examination in moral philosophy. We have always had examinations in moral philosophy on a non-theological basis, and I am perfectly certain that if we were once to introduce any theological basis, orthodox or un-orthodox, as it might be considered by any one, we should have very difficult problems raised about the appointment of examiners. That is only one very small point.

23,041. Do you think that in that respect the experience of Oxford and Cambridge may not be taken into account. For instance, during the last 20 years in which I have had a share in the preparation of examination papers in philosophy, there has never been any dream or suggestion of interference such as you now fear. Do not you think that experience of that kind may give some security, that in the age of thought in which we now are the danger is a chimerical one?—I do not think so. I think the experience goes the other way.

23,042. (*Mr. Anstie.*) I do not quite gather that you object to a Mahommedan or Brahmin being examined and taking a degree in the Eastern religions?—I do not.

23,043. Do you admit that that is a right thing?—If you are going to do it at all and if the University is to maintain an Imperial character, I think you ought.

23,044. You have no objection to that, or to a Jew having a similar examination?—I have no objection in the abstract to a Faculty that is fair, so to speak, as to all branches of religion. What I do object to is its being brought into a University that hitherto has had a non-theological basis.

23,045. Is not the whole objection that it should not have a dogmatical character, that is, should not require that the candidate should profess a belief, which is what the theological degrees of the old Universities did?—And do still, so far as the doctors' degree is concerned.

23,046. But that is not the case with the theological examination which takes place in their Arts degree?—No, those examinations are no test.

23,047. Those are open to everbody?—Yes.

23,048. And are in fact taken by those who are not members of the Established Church?—Certainly.

23,049. But whatever the merits and advantages and usefulness, and necessity of private study may be, I suppose you would agree that there is a certain value in having instruction given by competent authorities in properly equipped and organised institutions?—Certainly.

23,050. It has been pointed out to us with very great force by some of the witnesses who came before us, that there are institutions of that kind existing for the purpose of teaching the science of theology and the history of theology; and that it is very much desired by those institutions that there should be that kind of stimulus given which would be given by a degree in the matters of their study. Would you not think that a matter of importance to consider?—I am aware that there is some kind of feeling on the part of those bodies.

23,051. That it would tend to raise the level of the standard of study?—No, I do not think I should agree with that. It might tend to raise the standard of study in one narrow line; but certainly at the expense of breadth and culture. That came out clearly in the debate in Convocation, where Professor Cave who was the leader of that point of view, objected that the young men in the training college under him had to lay aside their theological studies in order to study literary subjects, to pass the Bachelor of Arts degree. Apparently he objected to the breadth of culture and wished that they might confine themselves to theological subjects.

23,052. Of course it would be quite possible for the University to impose any terms of that kind; they would not be bound to accept purely theological learning?—Certainly not.

23,053. And the theological learning, as he understood it, as you referred to him, would not that include the history of philosophy?—The history of philosophy is no part of Divinity in itself.

23,054. Well, opinions might differ upon that of course, but supposing the University thought it was?—Then it would make a new definition.

23,055. Then all your objection is to its making a new definition?—Oh, no.

23,056. To its giving a degree according to what you esteem a wrong definition?—No; surely that is hardly putting it fairly.

23,057. Is this not right. You think the study ought to be confined within certain very narrow limits. I may say that has not been the view that has been placed before us; but if your view is based on the assumption that it is to be confined within those very narrow limits, you are perhaps not addressing yourself to the evidence?—The proposition put to me was that the subject of philosophy was a subject which might be examined in for a degree in Divinity.

23,058. Certainly.—But you do not mean to give a degree simply upon examination in Philosophy.

23,059. I did not say simply, I say including that. Do you not think that it would be properly included?—I do not say it would be improperly included, but I say it is not Divinity.

23,060. That is a question on which opinions might differ, but your objection is to this degree being given within extremely narrow and technical lines, is it not?—No, I think not. My objection is to the creation of a Faculty of Divinity at all.

23,061. But partly on the ground that it would be limited within such narrow and technical lines?—Partly on the ground that those who are asking for it and maintaining that they have a grievance are asking for it in order that they may not have to spend time, as they say, upon purely literary subjects.

23,062. Then would you say that if the Commission were to come to the conclusion that a degree in Theological Science should be established they ought to take some precaution, by recommendation or otherwise, to secure that it shall not be confined to narrow and technical limits?—Certainly that is most desirable; but I did not know that that was the form that the proposition took before this Commission—that it should be a degree of Theological Science.

23,063. Yes, that was the form of the demand, a degree of Theological Science was the form in which it was put to us?—On the part of whom?

23,064. Of all the witnesses who appeared.—On the part of the Chairman of Convocation, for example?

23,065. The Chairman of Convocation had nothing to say about it; I am speaking of those witnesses who came before us to impress upon us the propriety of establishing a degree of Theological Science; that was the term they gave it?—It is a term which never came up in Convocation, and I am much astonished to hear that the party who in the discussion in Convocation were urgent for degrees in "Divinity" should, when appearing before this Commission have represented themselves as merely proposing a degree in "Theological Science."

23,066. (*Lord Reay.*) I should like to ask you whether any natives of India communicated to you their objection to such a Faculty or whether they gave any indications of hostility?—Not since the debate.

23,067. But before?—Not specifically.

23,068. Because I want to ask whether you are aware that in India grants are given to denominational colleges for the purpose of education leading to a University degree; grants are given for that purpose to Roman Catholic colleges and to Presbyterian colleges without any objection from the natives?—That is under the University of Bombay, is it not?

23,069. In all the Universities of India grants are given from the public Treasury which derives its supplies mainly from the natives of India; and I may say I have never heard of any native opposition. You are not aware of that, are you?—I was not aware that there was contribution given—I did not know

exactly from what chest—to the denominational colleges.

23,070. Are you aware that at these strictly denominational colleges founded for missionary purposes the natives attend in such numbers that they certainly form a predominant majority in the St. Xavier and the Wilson College in Bombay?—Yes, I have been told so.

23,071. Does not that show conclusively that the objection is a little far fetched and that our native fellow-subjects are extremely tolerant?—I think they would still have a grievance.

23,072. I am afraid the grievance is rather your hypothesis; it does not come direct from them?—No, it does not come direct from them.

S. P. Thompson, Esq., D.Sc., F.R.S.

23 Feb. 1893.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Fifty-eighth Day.

Friday, February 24th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.S.C.I., LL.D.
The Right Hon. the LORD PLAYFAIR, K.C.B., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
RALPH C. PALMER, Esq., B.A.

HOLMAN HUNT, Esq., examined.

H. Hunt, Esq.

24 Feb. 1893.

23,073. (*Chairman.*) You have been kind enough to come to give us your views with regard to the new University, and chiefly with regard to what relation, if any, it should have to painting and other arts?—I should like to understand exactly. Is it to refer to a revised edition of the University?

23,074. It is not yet settled whether it is to be a new one, or a revised edition of the London University?—It is difficult to know whether one should not go into some generalities. It seems to me that the great need of late years has been that the education at a University should be of such a kind that people who came to it should not be educated to be artists, because I thoroughly agree with what Cennino Cennini, says, that to be an artist you ought to begin your career at the age at the latest of 14. Independently it is very desirable that a knowledge of art should be of such a character that educated persons should be prepared to worthily take a place on a commission to direct art, for instance, in the erection of public architectural or sculptural monuments of such sterling excellence as to be in character with the dignity of the country.

23,075. From a professional point of view, would a man who is going to follow painting and devote his life to it, get much benefit from a University education?—As a rule I should say no. I think he should look to some means of getting it while he is making art his principal study. I feel it is most important that his classical education to a certain degree and his general education should be conducted together with it, but he has to use the knowledge of his silent art, and not for examinations and verbal fluency, for which doubtless class competition is needed, but this could scarcely be thoroughly followed by the art student without much loss to the training of eye and hand.

23,076. Then beyond the general culture, which every gentleman, anybody going to follow any profession, would like to have, there is nothing which he could learn at a University which could be of assistance to him. It would be no use establishing a separate faculty for painting or sculpture or the fine arts?—In the elementary stage it might be very useful. Every child should be taught to draw simple forms, and to repeat these from memory. With this foundation the University might carry on much to create a sound taste. For instance, there are certain sciences connected with art that I think are at the base of all true judgment about it. Perspective is a science which has been reduced to a state of great simplicity. Knowledge of it can be acquired without any great sacrifice of time, and I have often seen that for want of it people have made great errors of judgment as to the merits of work. That I think might be a branch of education which would be of benefit to art.

23,077. Perspective might be grouped under the head of science?—Yes, it might be, but I should be disposed myself to group it with some other branch of education that would have more distinctly a connexion with art; for instance, the proportions of the human figure might be taught in a school, that, I think, would be a great guide to people who had to direct public taste. I think this would be a reason for connecting it with some art department. The history of art might be taught. I do not think myself that theorising is profitable. I think theorising has been indulged in a great deal of late, and without much profit at all. It seems to me that it is rather calculated to make people unduly self-satisfied with their views. They never put them to the test at all, and they go out afterwards and exercise an influence which is very often injurious, particularly in the press. It is so vapoury.

23,078. Do you think that perhaps there might be room for a professor of fine arts who would give lectures?—Not unless it were connected with some practical teaching. That is my feeling about it. Mere lecturing by amateurs to amateurs by itself is of very little value, it is indeed often harmful.

23,079. I suppose there is no subject in which there are more dangers of what you may call fads or crude fancies and ideas?—No subject at all. It is so difficult to bring things to the test that men may indulge in fads and may persuade themselves that they are very clever indeed, without its being discovered that they are pretenders, as they would infallibly be in any other pursuit. Take the case of a builder, for instance; if the building is not sound, it is found out in a very few years; but some phrases in art may be picked up to exhibit profoundity, and with these a perfect charlatan may mislead and confuse an inquirer eager to learn.

H. Hunt, Esq.

24 Feb. 1893.

who may then adopt a somewhat prevailing fashion and say to a sounder teacher, "It is a matter of taste: you like one thing, I like the other." I think the aim should be to establish some sound basis of knowledge, so as to show that it was not merely a matter of caprice.

23,080. Does the Royal Academy at present do all that is necessary, or nearly all that is necessary, in the way of education for painting and sculpture?—It is not so deficient in this point as many noisy and impatient students represent. Comparitively to other schools which are extolled loudly it is indeed superior. In fact, I think, that what is wanted simply for a number of years in a young student's life is the opportunity of attending a place where there is a collection of beautiful casts, and where he may in due time, not at first, draw from the life; and in that way a student who is indefatigable can find his opportunities there. Yet I do not think myself that the Academy is anything but very imperfect in many ways. I do not know whether I shall be called upon to enter into those points, but in many ways the influence is confusing. For instance, one system they have is to change the visitor, that is, the teacher, once every month. In the antique school this is not so. When I was a student in the Academy there was as keeper, Mr. Jones, who was a very kind and well-meaning gentleman, but he really was not profound in his knowledge of the figure. I do not think it was seriously injurious, but one of his crasies will illustrate the inconveniences of his authority. He had been in some way connected with the army, and he cherished a prejudice which he had contracted on the parade ground. He was never satisfied unless you brought the chest out. Whatever position a figure was standing in, it was his invariable custom to say, "Bring out the chest." It was almost impossible to satisfy him; in the case of the Apollo, or whatever the statue was, he always wanted more chest. But he was a kind and in many ways a very useful man. In the other schools (I think it is the same now), the visitors are chosen from the academicians by the month. In my time it occurred, as we found, that those academicians who were most in the fashionable world did not find it to their interest to come and receive a very small honorarium for the service (I think it was only a guinea in the evening, though it might have been more in the daytime), and they always deputed some very dull and not well-qualified member for the post, who was very glad to take it. It was very often found that the men who did take the post were really worse than useless. For instance, it was very often the case that in the life school a man would be appointed who was principally a landscape painter, and who did not know anything of the figure at all; and, just in proportion to his ignorance, he was very touchy upon the point, and although I cannot say that I ever came to quarrel, I remember that several very disagreeable cases of discord occurred there. I remember one case, Soloman Hart was a very frequent visitor, and, although he was professedly a figure painter, he was really very unqualified to teach form. In going round he would insist upon certain changes; when he returned to the student he would remind him of what he had said before, and the third time he would get into a great rage. Once with a student of the name of Rowan it came to a regular quarrel. I am perfectly sure that the student was right in the matter; he might not have been attentive and considerate enough, but he was very intent upon doing his work in the best way he could, and he was right in assuming that Soloman Hart's criticism could not be accepted without injury to his work.

23,081. In the case of a young man coming to London to study art, does he meet with difficulties in doing so? Are there plenty of places where he can learn, or is there a want of something new in that direction?—I think there are too many places. They bid against one another for students with clap trap pretence of having royal roads to success, and keep up the mischievous delusion that the number of artists proves the demand and estimation for their work. It is a great evil to art, for they train youths to the profession who are not artists by nature, so that they as well as real artists must suffer great misery in the end from utter want of employment, for it is erronous to believe in any reasonable demand for art in this country. A really zealous student only needs the chance to draw from beautiful forms. One has to put it to the test in this way. Before the Royal Academy was founded there was Hogarth, who became an admirable draughtsman for his figure pictures, and Sir Joshua Reynolds, Romney, and Gainsborough, had all learnt to draw before him quite as well as their subjects required. I have, in fact, the highest estimate of the aim and power of each of these painters, inasmuch as their drawing was most efficient to express beauty, expression, and grace of movement, and drawing without such power is valueless.

23,082. Where did they get their education?—There was an establishment somewhere in St. Martin's Lane, where all these artists attended in their youth. It was a place where they had to pay a small fee, but they were well looked after, and there was a good collection of casts. Before that, the Duke of Richmond, I think it was, had what was in those days a fine collection of casts in Whitehall Gardens, and he very generously allowed students to go and draw there. I think that was at a rather earlier date, but not too early for Hogarth and Sir Joshua Reynolds even to have attended. I know that there was a very great attendance there. That illustrates what I meant by saying that the student could get a collection of good casts to draw from. I, perhaps, ought to explain that the advantage of drawing from casts is this: if a student draws from the life and he next day finds that one of the limbs or the ton of the body is not the same, then he says the model has moved; but with the cast he has no power of escaping from it; the cast is the same as it was the day before. When he has gone through a course of drawing from fine casts from the antique, he is prepared to draw from the life, because he can tell there is a certain principle in the sway of the body; and if his drawing is not like the model he knows how to judge truly whether it is that the model is not right or that this drawing is not right.

23,083. There is a pretty good collection of casts at the Royal Academy now, is there not, and also the one that Mr. Perry got up?—I do not know where that is. There is a very admirable collection of casts at South Kensington.

23,084. That is the one I mean. Has it not been established during the last 10 years?—I did not know the public collection was attributable to Mr. Perry.

23,085. Is that made much use of?—I do not think it is made much use of for practical drawing. That is, in the lower hall, but above that, in the drawing school, which is what I was thinking of, there is a very excellent collection. I have no doubt that students could make use of the lower one, but I have never seen them there. I drew first at the British Museum; then the statues were crowded together a good deal; there was no instruction; and some of the very best statues were put in very dark places, so that one could not really make use of them. But now that they have brought them out, and have put backgrounds to some of them, and with the direction of paid tutors, I see the students draw with a great deal of advantage, certainly there are some very good statues to draw from. With regard to the Elgin marbles, if I were directing pupils, I should advise them not to draw from them, not because they are not beautiful enough, for they are eminently perfect; but it is useless for students to draw from mutilated figures. Even if it is an inferior work he ought to have a perfect figure to draw from, so that every part of his work should be teaching him something. If he draws from mutilated figures there is so much time to spend on the parts that are abraded; for instance, with the Theseus; you have to draw the

head altho' there are no features and that wastes time a good deal.

23,086. Has the Royal Academy good casts?—Yes.

23,087. What room is there at the Royal Academy for instructing pupils?—I have not been to the schools at Burlington House. When I was a student it was at Trafalgar Square.

23,088. Is there enough room to supply the demand, or is it difficult to gain admittance?—It is not too difficult, I think. I can say so conscientiously, because I had a good deal of difficulty in getting in. I was disappointed twice. A competitor has to send in a drawing, and it is judged by the committee with the other drawings that are sent in. The names of the accepted students are put down in a list. Although I did not succeed readily, I cannot say that the trial was too difficult. I think it did me a great deal of good to be turned back. It made me think seriously in what respect my drawings were defective, and it made me feel that the pursuit was a very serious thing, that it was not a light and easy matter.

23,089. They only take advanced students from other places?—Yes, they are really advanced—not advanced artists, but advanced students. I was drawing with professional intention for a year and a half before I was admitted, and I had drawn much previously, and I think it is the case with most. There are a great many preparatory schools for teaching students; as I think far too many, for generally they do not train students in elementary work as a branch of general education, but aim at effective work, without delicacy and correctness.

23,090. And there is quite space enough in the Royal Academy for all those who can pass the standard?—I think there must be still; because it is useless to train youths not born with the passion, they will not work steadily, and they will turn to clap-trap methods.

23,091. What I want to arrive at is whether there is room for a school of that sort in the New University. It strikes me that the Academy is doing the work?—Yes. That is for artists. Of course, there is one very great exception to the rule with regard to the uselessness of the University for training artists, that is, Burne Jones. He was graduating to go into the Church. I believe I am accurate in what I say, but it is subject to correction. I know Rosetti, who was a man without means, went in the year 1856. I had been abroad, and had just come back. He had gone to visit Oxford with a certain Mr. Woodward, the architect of the museum, and the architect of the union, which was rebuilt then; his attraction was the idea of decorating the museum with pictures; he was eager, and Woodward was very anxious to have it done; when he was at Oxford it turned out that the museum was not ready for such work, but the union was, and, inviting his friends to help, Rossetti volunteered to paint gratuitously the whole of the walls of the union if the council would pay merely the cost of the materials. The offer was accepted. Some young artists went up from London, amongst those who took the greatest interest in it at the University were Morris, and Burne Jones, who was at Oxford. Rosetti, who was a very impulsive man, did not see the need of artistic training so much as most painters would, he seemed to think that things could be done by determination, and persuaded Burne Jones to take to art, and prevailed upon Morris to join his company of Union painters. The consequence was that Morris undertook to cover one of the apartments in the building, and he did it in a very interesting and characteristic way. That was the beginning of his taking to art. It was entirely from the influence of Rosetti, who six years before had been my pupil. When he was working in my studio, we used to talk over what the influence of art should be, and, amongst other things, we said it was most important that it should be exercised, so that true artists should undertake decorative work of all kinds, that this should not be left as it was then to tradesmen, and that the best art should be applied to furniture utensils, and the objects of daily life, and we determined that as we got older we would apply ourselves to this. Rosetti unfolded this view to Morris, and there is no doubt that it has resulted in a very great benefit in he matter of taste.

23,092. That is how Morris first took up the subject?—Yes. You see, Morris was a man of taste. The wall painting, I may be allowed to say, was absurdly grotesque, but very interesting. It was or a knight asleep in a garden, you saw his head on one side of the wall, and the other space was filled up with sun-flowers; no more of the figure of the knight appeared again until you got to his feet. Rosetti never finished his. He was a rash and careless man, who went out on journeys without considering whether he had got food to last him till he had done. He grew tired of this idea, and gave it up. Arthur Hughes helped to paint a panel and Spencer Stanhope, who had been at the University and who had taken to art under Watts, with some others, undertook panels, and they more or less finished their work. But it does not matter now; the whole place is blackened with smoke. On a recent visit to Oxford I went to see these pictures, and the porter at the door did not know there were any pictures at all. It was only after considerable inquiry that I found anyone who knew about them. When I went up into the gallery the walls had got so dark that I could scarcely make out anything at all. The exception of Morris does not quite apply, because, you see, he did not apply himself to figure painting, and for figure painting early education is most important indeed. You have to get the hand and the eye accustomed to recognise form, and the meaning of form. Burne Jones has surmounted the difficulty in a marvellous way, but I do not think this one exception would justify the idea that the University would be a good place for the training of an artist.

23,093. If there was a faculty of painting or fine arts in the University, ought it to be of a practical character like the teaching of the Royal Academy, or ought it to be more a means of teaching the theoretical parts, the history of art, perspective, and other things of that sort?—I should say quite that; theoretical, not in the vague sense, but the theory of art; what it depends upon, and what sciences are necessary in connexion with it.

23,094. Anything that a man might learn who could not paint a picture or design a statue at all?—Yes. I should say let that be taught soundly. Let the students be taught the difference between Greek art and Italian art in sculpture; and let them also enter into disquisitions upon the differences there must have been between Greek painting and Italian painting, and why the differences were. They are subjects for demonstration that need not lead to airy theories, but to the establishment of facts.

23,095. That really is a very useful branch of general history, and it ought not to be neglected. It is neglected very often, but it is as important as a knowledge of the history of battles and things of that sort?—I certainly feel that. I have said that there are too many schools. Some of the new schools that have been established in London, and probably elsewhere, are entirely disregarding the past achievements in art. They come from Paris. One young artist whom I met was talking about his training there, of which he was very proud. I asked him whether he had taken advantage of being in Paris to study in the Louvre; he said no, he had been advised by a French painter of the name of Constans, as indeed by Jerome, that the less he saw of old masters the better. Some artists go further than that; they despise the old masters altogether, and despise Greek art; they advise the students to go at once and draw from the life, and paint at once, and to do it in a very realistic way indeed. It results in this: all the grace, subtlety, elegance, and beauty are altogether missed. I think it is mere barbarism. One might as well begin with medicine without learning what Harvey or any other

H. Hunt, Esq.
24 Feb. 1893.

great doctor had done. In all arts you want first of all to get on to the platform that other people have erected, and understand what the nature of that platform is, and then begin. However, it is decided that this is all wrong, this remarkable idea has grown up in the last 10 years, and it is growing still. There has been an annual collection of pictures by a body called the Fine Arts Club, in Piccadilly; a little while ago I went to see that as an example of what they were doing. There were three or four men who painted portraits (I had not known them before) who had a considerable amount of cleverness of what I should call an egotistical nature. It was of that kind of painting which you see in French canvases, where the largest thing in the pictures is the artist's own name in the corner, and in which you have felt that every touch that was put on was to declare, "What a clever fellow I am." Some of them had a good deal of individuality, but they were not character portraits like those of Rubens or Vandyke. They were likenesses, and the best were trenchantly done likenesses, there was not a beautiful woman in the place; all the women in the place, whether they were done in the most dashing way or not, were vulgar, and, I should say, not over modest.

23,096. Painted exactly from the life?—Yes, but painted exactly from the grosser life, and altogether without invention. I have no doubt that some of the portraits by Gainsborough were of women, as were certainly some by Reynolds, who if they had been painted by anybody else might have looked very vulgar.

23,097. Vandyke's men, in the same way, all looked very grand; he put something into the faces? I would not say that he falsified them at all, but in starting, he would consider what the spirit and the charm of a man was, and he would render that, instead of giving you something which was the mere prosaic aspect of a man to the vulgar eye. All good portraiture up to this time, it seems to me, has been recognised to consist in that. There is this sort of charm in Romney's. English portraiture has been remarkable for this honest spirit; on the Continent there has been either an affected sentiment, or else it has been very bald, without any invention or beautiful devices, such as bringing together mother and children, and making the likeness into a picture.

23,098. Then you think there is room in the University; that there ought to be instruction given in the history of art, perspective, and things of like nature; that somehow or other a man who goes to a University ought to be able to learn that?—That is my opinion. With regard to anatomy perhaps for medical purposes this study might be conducted independently, but still in connexion with any art professorship a certain amount of anatomy might be taught, together with the proportions of the human figure. The proportions of the human figure might be taught in a very brief manner, and very soundly. There are a great many authorities that might be adduced; there are tables by Flaxman, and many of the Germans have also published very elaborate measurements. A few diagrams put up and elucidated would found a great deal of knowledge that would enable people to judge of art questions better than they do.

23,099. Is there any faculty of fine arts connected with any of the German Universities?—I do not think there is any faculty of fine arts in the German Universities. It is all conducted in special schools of art.

23,100. And in Paris, too, I suppose, it is all separate from the University?—Yes, quite separate. The most perfect system of training for art, it seems to me, is undoubtedly that which is now an exploded one, and which could not be revived, I suppose. That is, the system of apprenticeship. The French system is very often spoken of as a continuation of that, but there is a great difference, really. In the case of the old masters, the student was brought very early indeed into the studio; he was first of all put into the hands of workmen; for, as a preparation to the work of design, he was taught first of all the work of preparing canvases, grinding colours, refining oils, and doing all the mechanical and material part of the work; and he learnt that for his lifetime. One of the oldest authorities says that seven years should be devoted to this mechanical work. I think he said that quite genuinely, meaning that towards the end he merely became responsible for the overlooking of this part of the work. Then the student knew exactly what his master worked upon, and if the picture at any time was remarkable, either for its defects (I mean in a mechanical sense) or its great merits, the student being master in his turn, could point out to his pupils why it was; that it had been prepared in a certain way, and so on. Or he might repeat what his own master had told him, so that the whole thing was handed on, and it was perfectly, thoroughly taught. That system, I suppose, could not be re-established?

23,101. You think a young artist would not occupy himself by merely preparing colours, in these days?—It would not mean that he would not be going on with the rest of his training as an artist. When a pupil was prepared in that way, the master generally had the benefit of his services for some years afterwards, and that could not be secured now. And in these days when there is no governmental demand for public buildings or churches, and an artist has not large work going on, he could not have his time taxed for students because of the feeling that he was to get no return of assistance after taking special pains with them. The advantage of the old system was that a master got very much interested in a student who displayed unusual talent, and he watched him, and advised him at particular points. For instance, when the student got to a particular point the master might say: "You "need not trouble about design, for you have already "secured considerable power in that particular, but "you do not draw particular forms well. I am going "to take you away from composition and I will drill "you for a couple of months in drawing heads and "parts of figures." Thus he would put him to the test until he felt he had got over his weakness in each respect. Then, to another boy, who, perhaps, had not the faculty of invention, he would say: "You have "prosaic faculties, which enable you to represent "things correctly, but you have no invention; we "must try and develop that." The student meanwhile had the great advantage of seeing his master's work, and sometimes when the master had got into a mess, he would be called in to set it right. Thus he knew exactly all the expedients that a trained artist of great experience used, in every dilemma that he met with, and for carrying on his work to a perfect conclusion.

23,102. All this was in the great times for artists, in the early part of the sixteenth century?—Vandyke was trained in that way, and Raphael was trained thus. Raphael, himself, there is no doubt, knew how to prepare a canvas and grind colours as well as an artists' colourman does now.

23,103. Vandyke was Rubens' pupil, was he not?—Yes.

23,104. When did that system begin to give way?—It is one of the charges that I should make against the Academy, that the Academy upset it.

23,105. Did it still go on when Sir Joshua Reynolds began?—It still went on with some degree of benefit. Reynolds himself was put to Hudson, who lived in Queen Street, Lincoln's Inn Fields. I think the first artists' colourman in England was an old servant of Sir Godfrey Kneller's. Sir Godfrey Kneller wanted to reward his servant, who had conducted his workshop for many years; he felt there was an opportunity for him, and set him up in business in a shop in Long Acre. That is the reason why Long Acre is now occupied by artists' colourmen. It seems to have given a sort of prestige to Long Acre. From that moment there was an opportunity for artists, if they had not the convenience for preparing materials themselves, to get it done by other people.

23,106. Before that they prepared their own colours, did they?—Yes; the picture which Rubens painted in

England of "Peace driving away the Horrors of War" was painted when he was here in the capacity of ambassador. He was pleading with Charles to prevent a war that was threatening between England and Holland, and very pertinently, finding the King was so fond of art, he painted this picture in England. If you go to the National Gallery, it will be very interesting to see that the canvas has been hurriedly put together. It is composed of about 12 pieces, some long slips and some short; this was to get to work without waiting for a large canvas such as he could have got from Holland. You can see the joins to this day. That illustrates how he did this; he probably brought two or three pupils with him.

23,107. The system of pupilage, or apprenticeship, you say, was put an end to by the Royal Academy?—Yes, that is the case; it still existed from the end of Sir Godfrey Kneller's time to the beginning of the Royal Academy. At first the artist used to say to the colourman: "I want you to prepare me a canvas of a "certain size or of a certain kind, and the ground "is to be of gesso of such a kind," or "to be made "out of ground flake white, with linseed oil," and so on. Now it is unusual for an artist to state more than the size of the canvas wanted, and the kind of strainer it is assumed that the preparation will be of the ordinary kind, an oil ground with ingredients not thoroughly known to the painter. When, rarely, a gesso ground is ordered, the kind of gesso is left to the colourman, who regards this work as his special secret. In general he deserves respect for his honesty, but the system is wrong which trusts the preparation of the cloth to a man who does not see what the artist does on it afterwards, while the latter works in ignorance of the process it went through before it came into his hand. In the Royal Academy, artists look upon their occupation as the occupation of fine gentlemen, and they think that preparing canvases is beneath their dignity; and it is greatly owing to that that the pictures of Sir Joshua Reynolds are in a deplorable condition, and that so many pictures since then show signs of bad management.

23,108. (*Mr. Anstie.*) Sir Joshua did prepare his own colours, did he not?—He did not prepare them. There are two canvasses now at the Royal Academy, with specimen colours. They have the names of the men who did prepare them: "Walker's red," "Thompson's green," and something like that.

23,109. Then the secret that he preserved so carefully was only the secret of mixing colours already got?—Exactly, but what damaged his work most was this. Artists adopted a practice (and he set the example) of beginning their work with a substance called asphaltum, which is really prepared pitch. Paint dries after a time, and becomes solid like stone. Pitch never dries; whatever you call it, asphaltum, bitumen, or whatever it is, it always becomes liquid by heat. The old masters, in some cases, used it. Sir Joshua could see that they had done so, and that tempted him to use it; but they never began their pictures with it. They began their pictures with solid ochre and mineral colours, and they put the pitch on as just the last surface, the last coat, so that when it expanded and contracted by the change of the atmosphere it did not move anything beneath it. It is a most lovely colour; it added a richness and a charm when quite fresh. In many cases it has come off the old master's paintings since by the picture cleaners' operations.

23,110. (*Chairman.*) Is that why Reynold's work faded?—No; that is for another reason. The reason for it, I think, is easy to trace. All portrait painters found that after a time fashionable sitters were very impatient, and in some cases they could not count upon their punctuality, particularly if the work were protracted, and they had to hit upon some way of getting it done rapidly. Sir Joshua Reynolds hit upon the plan of painting pictures in black and white, sometimes with a little blue, and sometimes with a little green; but, roughly speaking, it was black and white, like a print. Then, in the last sittings he merely glazed the colour over, and, amongst other colours, he used carmine. There is a picture now in the National Gallery; I think it is called "The Age of Innocence." When that picture was exhibited, someone said to Sir Joshua that the fingers were so red that they looked like shrimps; he had over-glazed them, or, at least, so it seemed. To conceal that, he painted some flowers in the hands, which you can see now; but the fingers no longer look like shrimps, the colour is faded, and they look dead. There is a little colour, but it is only a very small amount, just a suggestion of flesh colour. I am sure it is simply for that reason; it was painted in black and white; the colour was merely glazed on, and the colour, having no body with it, has flown.

23,111. Do you say that no artists have ever tried to take pupils? I should have thought that an enthusiastic young man wishing to learn art would have been glad to attach himself even now to a great painter?—Mr. Richmond has had pupils at times, and Mr. Watts once or twice has had people that he has called pupils, or who might call themselves pupils, who have undoubtedly gained by the instruction, but they have never been steadily attached; he has never had any domination of them. He has never been able to say, "To-day you will do so and so." They come with particular work; they remain as long as they like, and go away when they like. My own pupils have never been apprenticed for any term. That was not the case with the old masters.

23,112. And it would be impossible to restore the old system?—Yes.

23,113. No artists now make their own colours, do they?—A good many have applied themselves to it to some degree lately. I do not think it is necessary for artists to make them, because some of them have to be made chemically, and they can only be made in large quantities, and with particular machinery. For instance, flake white; you could make that privately, but I do not think the old masters made it: they purchased it from chemists or people who applied themselves to this business. It was the preparing of the materials which was their work, and it was upon that that the excellence of the old masters' work depends now. Once I was lecturing about this subject, and trying to draw the attention of artists to this, and I was hoping not only to found a factory, but a workshop where students might graduate for a month or six weeks, and receive a diploma to the effect that they had passed through this part of the work, and proved themselves capable of preparing canvases, grinding colours, and so on. I think that is a very important thing, but the Academy opposed it, and influenced the Press to cry it down very much indeed.

23,114. What was the objection? Were the tradespeople at the bottom of it?—That was the case to a certain extent. But the Academy thought it was a reflection upon them; they had never done it. I was obliged to attack the Academy upon that, because somebody suggested in the press that it should be left to the Academy, as they had a professor of chemistry. I said this was perfectly futile; they had got the professor of chemistry, because I, and perhaps others examined, had insisted upon it as one of the essentials when giving evidence before the Royal Academy Commission in 1863, and the Royal Academy Commission strongly pressed this upon them as one of the conditions of the fresh grant of the site for Burlington House. They put aside a sum—not a very large sum—as an annuity to secure the services of a chemist. They first of all had Mr. Barff, and he was there for 8 or 10 years. In my letters I said that nothing had come of it; that they had given a few lectures which were not at all understood. It is no use telling students that such and such colours are made from so and so, unless you put it to use, in some way. If you talk about the preparation of canvases, you must show it to the students, and make them go through the process of preparing them. My lecture was reported *in extenso*, and the Society of Arts keep a full copy in their Reports. The matter attracted a great deal of attention on the Continent, particularly at Munich, where a society is formed to carry on the work. The morning

H. Hunt, Esq.
24 Feb. 1893.

after my lecture I received a letter from Professor Barff, who said, "I am rejoiced to find that you are trying to "attract attention to this subject; it is greatly wanted, "and it is very important; but I would advise you, "whatever you do, not to let the Royal Academy have "anything to do with it, because, if they have any- "thing to do with it, they will merely burk it. I was "there for 10 years, and was always urging them to "give me a laboratory in which I could make my office "of real practical value." I am not quite sure whether he put further in the letter itself, or he told me afterwards that the only reply he could ever get from them was, "We have you here merely for show, and "the less we hear of you the better." He said, "At last I threw it up in disgust." Now they have somebody else, an excellent man, Professor Church, and Professor Church labours under the same disadvantage of not being able to reduce his knowledge to practice. Once the Academy considerately sent me an invitation to attend one of their lectures; I assume they thought it probable that I should not attend, but I went there on purpose to see what the teaching was. It was a lecture which, theoretically, was very interesting and good, but which in its main part, I think, was of no value whatever practically. For instance, he said, "I want to "call your attention to the question of canvases. "Here is a canvas which has been prepared by that "very excellent artists' colourman, Mr. Roberson, "Long Acre. Our duty is to give a report of what "the constituent elements are of this canvas in its "present condition, with all its preparation. Well, "24 per cent. would represent the amount of the actual "flax that there is in the canvas; then there is 5 per "cent. of cotton; then in what remains there is "5 per cent. of linseed oil, 3 of size," and so on, making up the 100. Then he continued the preparation on it was white lead and something else, I forget what it was, and that finished the subject of that canvas, except that the residuum of a piece of given size when calcined weighed so much. I came to the conclusion that the student was not a bit further advanced on his way by hearing all that than if he had heard nothing at all. The whole of the lecture was conducted on those lines. I should add, however, that he produced some very good specimens in the shape of prepared glasses with different colours upon them which he had had exposed to the light which had faded to different degrees; and he was able to tell the date when they had been placed in the light, and what the colour had been originally, and which varnish had best secured the hues. The last specimens were valuable, but still not practical enough.

23,115. That, I am afraid, would be the case if there was a professor appointed in the University. He would give lectures of that sort?—That is my fear. They might be merely theoretical lectures. I think a good many of the lectures at Oxford have been of no practical value. I do not think my proposal could be carried out in connexion with University extension at all. I mean with a University scheme of teaching art; but I think it is a very desirable thing, and, if the Academy were reformed, I should require that the Academy should have a laboratory in which this work should be conducted, and in which the students should be graduated, and that they should receive a diploma for their efficiency in it. I think that would make up very much what is lost by doing away with the system of apprenticeship.

23,116. And that system of practical instruction would always be better done in the Academy than in a University?—Yes, very much. Under its present constitution I do not think it is at all likely that the Academy would ever take that up. I was hoping to do it independently, but after a little while I got a lot of people about me who wanted to start a limited liability company with a capital of 100,000*l*. I could see that the money would disappear like vapour, and I would have nothing to do with it. At first it seemed very attractive, and I could not understand what the intense enthusiasm of some of these people came from until I found out that there was a business interest in it. I was always hoping that it would develop itself independently, but I see there are very great difficulties unless the Academy is reconstituted. I am always hoping that after the stir that has been made, people will see their way to insist upon a reform of the Royal Academy.

23,117. (*Sir George Humphry.*) Do you know anything of the work of a Mr. Laurie?—Yes; I think he began through my activity in the matter. He has done a great deal of good.

23,118. Has he attained any good result? He is a Fellow of King's College, Cambridge, and he used to work very hard with his colours in Cambridge in a little laboratory?—I think I can give you one example of a practical achievement of importance of his. I had devoted a good deal of time to it, and had found out many secrets by which the trade used to get undue credit, but there is one thing which he explains, that I had no knowledge of at all, that is the carbonate of lead that all the artists' colourmen supply. Flake white is adulterated with some other preparation of lead white which is not at all so enduring, but which gives it a greater degree of brilliancy than the fundamental colour has. There is good reason for believing that the old masters were satisfied with a little less intensity, and that they used the white which is the fundamental colour; that is one reason why their whites are so pure and untarnished; they have sunk a little, as whites always will. If you look at a Belleni, for instance, or a Titian, it is astonishing how they shine out in a room.

23,119. Has Mr. Laurie discovered that, and found out some other points in connexion with the old masters' works?—Yes, some others, yet lacking the painters' experience is a want to him. I have sometimes had to point out to him that from want of practical artistic experience he is apt to mistake the true solution of a difficulty.

23,120. He is a person of considerable attainments, devoting himself to this simple practical work?—Yes; I think he still entertains the original idea of establishing a workshop in which students should also be graduated, and hopes that that may be connected with his work. I first knew him at Whitechapel in connexion with Toynbee Hall.

23,121. I glean from what you have said, that the two great requisites for an artist are in the first place the training of the eye and hand, and secondly, the culture, however that may be given, of refinement?—Yes.

23,122. And that neither of those two great requisites would be likely to be promoted by University training?—I think there would be a foundation for the refinement established in the teaching of some of these sciences. I do not think it would be attained to the full, but where there is an ignorance of matters like the laws of perspective, and the laws of the proportions of the human figure, there is a great want in the mind towards the power of recognition of elegance and beauty. It would be only the foundation of the elegant taste; it would not be the elegant taste itself that would be implanted by those sciences.

23,123. That refinement of taste which you have alluded to, which would be of prime importance to the artist, would hardly come under the University training?—No, I do not think it would.

23,124. So that really the great point necessary for the artist could scarcely be given in the University?—No, that is my conclusion. I think it would be inevitable that all the students who were interested in the question in going through this simple training of the scientific part of the art, would become very much interested in the elegance of the figure and of art work.

23,125. And what you feel is that the promotion of art would be more effected by the reform of the Academy than by the institution of University teaching?—Yes.

23,126. In fact, that the University teaching under a professoriate might rather be prejudicial to art than

beneficial?—My fundamental idea is that the University may be very useful indeed in training people who will influence the general taste for art throughout the country and who will be able to direct it. The great mischief in the present day is that, with the multiplicity of authorities about art matters, people give up the matter in despair, they feel that it is impossible to talk about it with confidence, and they really put aside their common sense. A man like Tennyson would always speak as if he had no right to judge about art. But that is preposterous; a man like Tennyson ought to know very well how to judge about it. These branches of science that I am speaking of would have made Tennyson eminently qualified to judge of art.

23,127. He had the refinement of taste in himself?—Yes.

23,128. What is your view with regard to the study of anatomy in reference to the human figure?—I feel that superficial anatomy and anatomy as connected with the skeleton might be taught with advantage; not the organic construction.

23,129. You think it would be a real advantage to an artist to have that fundamental knowledge of the human figure?—To an artist it is absolutely essential to know the skeleton. I have known artists, for instance, men like George Morland, who went through life without knowing anything about it. That kind of art may be very good in its nature, but it is not what I was thinking of. One of the services of art, it seems to me, is to show people what a beautiful thing the highest creations of the universe are. You cannot do that without a knowledge of the construction of the figure.

23,130. With regard to the drawing of hands such as yours now appears, it is desirable that a person who delineates those lines at the back should know that they are tendons?—Yes. I have the greatest possible respect for Ruskin's teaching, but he at one time got hold of a fad (he got it from an artist who was a very lazy fellow and did not want the trouble) that anatomy was not only useless, but injurious to an artist, and that it was the cause of Michael Angelo's extravagancies.

23,131. As an anatomist, I have sometimes felt that. For instance, the wrinkles in the forehead, it is true, are caused by the muscles lying underneath, but they are in a transverse direction to the fibres of the muscles?—Yes, and it is most important to know that that is so. An ignorant artist would not be so foolish as not to know that there were muscles, but he might think that such ridges in the face were tendons.

23,132. Would that signify?—If you take an ingenious youth and ask him to copy the letters of an alphabet that he had never seen before, say, Chinese or Arabic, he would do it, perhaps, with great intelligence, but a native would say, "That has not been written by one who understood." There would be something that the youth had not seen the importance of.

23,133. In drawing columns, for instance, it would not be necessary that he should know whether they were made of plaster or stone?—He would know what was really the important fact, that they were made of some solid matter, and that there was no organic life in them. The question of whether it was plaster or stone would not affect the form much, but it is different with regard to the human figure.

23,134. (*Lord Playfair.*) Was not Michael Angelo a thorough anatomist?—Yes, but that never led to the decadence of art. The followers of Michael Angelo caricatured his tendency to strained positions, and this brought about decadence.

23,135. (*Sir George Humphry.*) Was Rubens an anatomist?—Yes, but he also exaggerated the external characteristics, the fat and the skin.

23,136. He seemed to rejoice in painting muscles, features, and so on, to an excess which sometimes rendered them absurd?—Yes.

23,137. In your view that also might form a subject of University teaching of the arts?—I think so. With regard to some of the proportions of the figure, if there were a diagram on slate of the skeleton and of the outer muscles of the body, with an explanation of what their use was and so on, I think that would be of great use, and would be interesting as a branch of general education. Beyond that, of course, the anatomy of the inner parts would be a much more complicated thing, but it would not be at all necessary for this question.

23,138. (*Mr. Anstie.*) Would it not be a fallacy to suppose that the eye and the hand can be trusted to reproduce with accuracy external objects without any guide from knowledge and experience?—Yes, I do think that, but I think it is evident that artists who ultimately become masters, at a very remarkably early age show a wonderful perception and power of controlling the eye and the hand in their artistic work. I do not think there is any case of an artist who rose to the first rank, who did not distinctly assert his genius at a very early age indeed.

23,139. No doubt the natural gift plays an extremely important part in the matter, and you cannot replace it by any amount of teaching?—No.

23,140. Is it not also the case that the gift taken generally cannot be trusted to reproduce accurately even what it sees unless it is guided by knowledge and experience?—That is quite the case.

23,141. So in art, as in other things, there is room for instruction and need for instruction?—Yes, very much.

23,142. Now let me take you for a moment to what you said with regard to the history of art education. Turning to the substitution of the external artist's colourman for the artist's own worshop, the problem with reference to degrees in art seems very akin to the problem of degrees in applied science. It has been pointed out to us by witnesses who have come to speak upon the matter, that it is very important that University degrees should not be given except upon certain conditions of practical efficiency, which should form a necessary part of the education. Would you agree that if the University saw its way to establish a fine arts faculty and give degrees in that subject, although it might not give the instruction itself perhaps, it might require that certificates of practical efficiency in that instruction should be partly a condition of the degree, knowledge, for instance, of the preparation of colours, the preparation of canvases, and the handling of the necessary artistic tools and materials?—Yes, I think so. I think all certificates might contain diplomas of efficiency in those branches of art in which the students had been trained, but I am not contemplating that, that should be taught at the University.

23,143. No, I would not suggest that it might be taught by the University, but might it not conduce to a thorough and honest pursuit of art if a University authority were to give distinctions, one condition of attaining which was that the holder of them should have a practical acquaintance with his subject?—I think certainly so.

23,144. So that the University if it did that might do a great deal of valuable work in the way of supplementing that old apprenticeship training which is now in your profession, as in so many others, replaced by workshop training?—Yes, I quite think that is important.

23,145. It might go someway in the direction of restoring that knowledge the decay of which you regret, and which you think is essential or at any rate very valuable, for sound and honest art?—Yes, I think so; and it would be supporting any efforts made to establish it amongst younger members of the profession, they would see that the world behind was recognising the importance of it.

23,146. Then to come a little more to the purely scientific aspect of the question which relates more immediately to science. I understand you to say that it would be of advantage to art that encouragement should be given, and as far as possible instruction should be given, in the sciences that relate directly to art, such as anatomy, optics, and the like?—I am not

H. Hunt, Esq.
24 Feb. 1893.

quite sure that I understand. Do you mean whether it would be of advantage to art to give instruction in these sciences at the University?

23,147. So far as possible at the University, or if it were not within the power of the University to give that instruction, let them require evidence of that instruction having been adequately obtained elsewhere?—I think certainly in the case of conferring honours upon men who had distinguished themselves in art it would be very desirable (and it would be a great encouragement to the proper training of artists that that should be taken into consideration), that it should be required and certified to as a proof of their efficiency.

23,148. When you spoke of the danger of having too theoretical views as tending to result in vapour, what were the sort of theories which you had in mind?—I think one might illustrate it by the case even of Ruskin. My affection and gratitude for, and to him, should save me from the suspicion of carping at his powers as a teacher. Ruskin essentially is an artist, he is a very admirable one himself practically as a draughtsman of buildings together with mountains, clouds, mist, and light. He has been endowed with an interest in architecture, and he has cultivated it very greatly. On nearly all questions connected with architecture and landscape he is an absolute authority. I do not think anybody finds any fault in his teaching in that respect, but when he comes to the human figure I think he has indulged in a many eccentric fancies. That which I was instancing just now about the uselessness of anatomy is one. He says that an anatomical preparation is a very hideous thing that no artist can look at without having his taste degraded. Well, it seems to me that the artist would be in no danger of having his taste degraded. It might be an object that would degrade the taste of a lady or a child who had not any scientific purpose in investigating it. A skeleton at first sight to an ignorant person is a very hideous thing, but to the artist it is a beautiful thing. When the artist sees an anatomical preparation where the muscles are shown, he does not see the mere superficial repulsiveness of it, he sees the exquisite arrangement of everything. Ruskin, not being artistically a figure student, sees nothing but just the aspect that a lady might see in looking at an anatomical preparation or a skeleton.

23,149. We were told by some of the witnesses who have been before us that one thing that applied science does is to take the data of pure science and consider the mode in which the application of the rules of pure science is varied by the conditions of practice. Would not the same observation be true with respect to art. Take, for instance, the rules of perspective and proportion the way in which the rules of proportion are varied by the curves and straight lines in buildings. Are not those matters which may be the subject of learned and scientific investigation?—Yes, I think so, but I think that might be done without getting into the region of imaginative theory.

23,150. I am endeavouring to see how far it can be really kept in the region of science?—One example of this kind of capricious teaching I could also cite from Ruskin. I remember he took it into his head at one time that lustre was a vulgar quality, that you should never put into a picture anything that shone; that you should leave out the strong lights that were on the features of the face; that you should never paint a metal that shone; and that you should always treat it in some conventional way by which all the sheen of it should disappear. He had evidently got some fancy in his head which recommended this very strongly to him at the time and he got entangled with the idea; but it was a preposterous indulgence of a mere whim. I think theoretical teaching is often based upon mere whims of that kind.

23,151. Might it not be of use in checking whims of that kind to develop as far as possible the true scientific bases of art?—Yes.

23,152. You believe there are such?—Yes.

23,153. Although the moulding and using of them depends upon the genius of the particular individual?—Yes, those that cannot be demonstrated, it seems to me, are very often mischievous.

23,154. When you say demonstrated you mean illustrated?—Yes.

23,155. Might it not be well in order to keep art clear from fanciful whims of that kind to give a scientific training?—Yes, that is my view.

23,156. Then the third branch which I think you referred to is the various periods of art. The history and development of art is also a subject which, I suppose you would admit, is capable of copious illustration?—Yes.

23,157. And valuable analysis?—Yes, the general danger that I recognise in theoretical teaching in a University is this: it is so often in the eyes of scholars made into what I should call a science rather than an art. In all Universities and Academies there has always been a disposition to recognise some past art as very perfect indeed (in which they are quite justified), and then assume that the task of modern art is really to repeat those excellencies. I think on examination of all the art that has preceded us in the world it will be seen that all repeated art has been in the end proved to be worthless, however much it has been admired at the time, and although every art that has got to a great point has been a kind of graft on to an art of another nation at an earlier time it has almost from the beginning exhibited some fresh distinct native light. When the artists of the quallro cento in Italy, came under the influence of the Greek teaching, they went at once to the Greek authorities for their forms. It is most interesting to trace the change in the pictures of Fra Angelico and his contemporaries; they abandoned all their Gothic forms in architecture and adopted a classical form, but within a few years it branched out in such a way that you could have had no hesitation in saying, "That is not classical, that is not Greek, that is Italian;" because it had an individuality and it was appealing to the people of the country where it was produced, who had to be appealed to. It was the work of an Italian mind, there was no mere dilletanti classicalism.

23,158. So you do not apprehend that, although a course of instruction may be based upon what has been, it will necessarily result in mere sterility, but it will develop a life of its own?—That is what I am always afraid of if the teaching is merely Academic. It seems to me that the influence of art schools has brought art to a point where there is either a judicious or an injudicious reaction or absolute death. In France they began their art by the most complete classicalisms. All their sculpture and their art was a mere dead imitation of classical work, when they painted a face they managed to so model it that it looked like a piece of sculpture merely tinted; it did not look like flesh and blood. Contrast Dutch work with this, Rembrandt's example is a most profitable one. The advantage of classical training was not pressed upon him, and he did not acquire it, one may say, to any degree. One perhaps feels a want of power of form in the figures that he introduces into his subject pictures, but he had such a distinct native taste as an artist that I think that whatever the face he had before him he had the power of giving the greatest possible dignity it possessed to it. He was a man who might have been entirely spoilt by a classical training, but I think he was too strong. He certainly grew within an atmosphere of art teaching, purely native, and living where he was saved that danger which has been so often fatal to a school.

23,159. Still your view seems to me to be equally opposed to the modern French system which you have described, which throws away all scientific and historical basis?—Yes.

23,160. You are in favour of the historical and scientific basis, but what you desire is that it should not be allowed to assume too dominant a position?—Yes, exactly.

23,161. That being so, do you think that a University holding high rank and being able to give rewards which were valued, and being able to depend upon the

advise and assistance of men of intellectual culture, might do something towards assisting the progress of art by directing attention to those branches of art which you have referred to?—I do think that very much indeed. The drift of my opinion would be that there should be at the base a solid scientific and practical teaching, and that it should not go far away from that. In connexion with the teaching of the history of art it would be impossible not to point out those qualities on which the beauty of great work like Greek work and Italian work depended. I think that would be as much theoretical influence as could be very well exercised.

23162. (*Lord Reay.*) Do you know Professor Charles Norton, of Harvard University, Cambridge, Massachusetts?—No, I do not know him.

23,163. You are not aware of the work he is doing?—No. *H. Hunt, Esq.* 24 Feb. 1893.

23,164. I ask because it seems to answer to what you have sketched with regard to the lectures on the history of art?—I did not know of it.

23,165. I understand that your view is that a chair of history of art, or if one had sufficient funds more than one chair might be established covering different periods of the history of art; and such a chair or chairs might be made useful in the sense of exercising a sobering and a regulative influence on art criticism?—I think that would be very desirable.

23,166. That is what I gather the drift of your evidence to be?—Yes.

23,167. And that the University shall not diverge into practical work?—That is my view.

The witness withdrew.

Sir JOHN RIGBY, Q.C., M.P., Solicitor-General,[examined. *Sir J. Rigby, Q.C., M.P.*

23,168. (*Chairman.*) You have been good enough to come here to give us the benefit of your advice and information with regard to several points connected with the new teaching University, I think particularly with regard to the law faculty?—Yes.

23,169. In the first place, I think you were counsel for the petitioners for the Gresham Charter?—I was. I should scarcely, of course, like to say anything that affected my position as counsel there. The fact that I was counsel does not in any way prevent me from giving such evidence as I can independently of what took place there, or from expressing such opinions as I have, but I should prefer not to have any questions asked me that touched precisely upon my position with reference to the charter. I ought to apologise perhaps to the Commission for not having prepared carefully any statement as to what I can say, but the fact is that I have been absolutely unable to do so owing to the pressure of public business. I may also say that I have not myself had any personal connexion with the Council of Legal Education, and I have had very little practical experience of the examinations and the result of the examinations. But, of course, during many years I have had pupils in the olden time who have passed through those examinations, and indirectly I have heard a great deal about them, and I have been able to judge as to the effect of the system which has been adopted by the Inns of Court. I will not go into any kind of history of that, but I may say at once that, on the whole, in spite of all efforts which have been made, and which have been made very strenuously so far as the affairs of the Inns of Court have been concerned, I never have been satisfied with the results of our legal teaching. I do not know how far I should agree with other witnesses, but it is mainly, I think, because there is no scientific foundation for building up a consistent knowledge of law in after time. I do not myself attach much importance, or, at any rate, any primary importance, to the strictly professional part of the learning that a student acquires before he gets into practice. Of course, it is very important that he should have that knowledge at one time or another, but, according to my experience there is so much zeal and energy among the members of the Bar, when they are first called, or immediately they are called, that they will provide themselves with that knowledge, and I do not think that the knowledge can very well be obtained in a very effectual form either in the rooms of a lecturer, or even by oral teaching. What you want, to make a man a good legal practitioner, is to put him into practice. Of course, in many cases, they get an insight into the practice by being pupils in the Chambers of Counsel who are themselves practising, and if they do not do that—some, not all, can manage that—as regards their actual reading, as regards the getting up of points which they have to advise upon in practice, we find that there is a great *camaraderie* among the members of the Bar. If a man has a point that he does not understand, he takes it round to a dozen others, probably, and they discuss it, so that it is not absolutely necessary in my view that there should be any greater amount of acquired knowledge before a man is called to the Bar.

23,170. He wants a good deal more general knowledge?—In my opinion it is highly important that he should have a somewhat extended scientific knowledge, as much as is obtainable. I know perfectly well that for the pass man you cannot require a very high standard, but even a little is important. Take the question of Roman law, for instance, to which I attach very considerable importance as a sort of foundation for the acquirement of a solid knowledge of law afterwards. Even a very little knowledge of Roman law is enough, when it is acquired early, to lead a man in that direction. When once he sees how much of our own jurisprudence is founded on the Roman system, and how much can be learnt there in the way of principle, he goes there afterwards. The more he knows the better; and I do not think there is anything better as the equipment of a lawyer when he is entering upon the practice of his profession than a knowledge of Roman law. I do not mean the technicalities of Roman law, but the principles of Roman law, many of which we have adopted into our own system, and which other countries have certainly adopted still more. That leads me then to say that, in my opinion, that never can be given, and never will be given by the Inns of Court, not because they are unwilling, but I do not think the basis is wide enough for their examination. It is the duty of the Inns of Court to see that a certain amount of general knowledge which is provided for by the preliminary examination should be possessed by the students, and there we have English, Latin, and history which are matters of examination. Then, choosing among all the subjects that there are, I do not quite see how we are to improve substantially upon the system that we have introduced. There are five or six readers and assistant readers, and the men are encouraged to go to, say, three or more of the readers, and learn what they can from them. But I do not think we shall ever do what is really wanted according to my mind. I think that Lord Selborne's suggestion of a school of law which would have a wider basis, and which would include more students, was an excellent one; but, for my part, I think the opportunity of joining with a University properly so called is a very happy one, and one that ought to be taken advantage of. I speak only for myself, though I am rather inclined to look more hopefully upon the action, at any rate, of my own Inn than I believe some other members of our Bench do.

23,171. Which Inn is yours?—Lincoln's Inn. I know perfectly well that there is a good deal of conservatism there which keeps people on in the same groove until a good opportunity is open to remove from it, but I am by no means without considerable hope that if the labours of this Commission enable us to see—I am speaking for no one but myself—that

Sir J. Rigby, Q.C., M.P.

24 Feb. 1893.

there is a good opportunity for extending the usefulness of the Inns of Court, that will ultimately be taken advantage of.

23,172. I suppose it is necessary for us to get all the Inns to act; it would be no use getting only one?—Yes; but you must not ask me to express any opinion about what may be expected from any Inn but my own. Of course, I can only express that opinion as a result of conversation from time to time with the masters of our own Bench, but I do think we are coming more nearly to a conclusion that it is not by separating ourselves from the rest of the world that we can best advance the cause of legal education. I think that, and I hope that that will be the feeling of other Inns as well.

23,173. And they would join the University in helping to form a strong legal faculty leading on to a valuable degree?—I have only expressed a hope, but I think that, as regards Lincoln's Inn, certainly the Bench, generally, have taken an attitude the last few years a good deal different from that resistance to all alteration which characterised them years ago, and I should hope that the same feeling is extending itself to the other inns—I mean to the Benches of the other Inns.

23,174. I suppose it would be hopeless for the University to attempt to form a good legal faculty without the assistance and co-operation of the Inns of Court?—Well, I have no doubt that, with the assistance of the Inns of Court and also of the Incorporated Law Society, the faculty would be much better constituted and much more useful than it could expect to be without. I, for my part, should hope, and I feel satisfied that it would be a good thing that the Inns of Court and the Incorporated Law Society should take up the question of becoming an integral and important part of the faculty of law in the University. I do not myself think that the Inns of Court and the Incorporated Law Society would be wise in demanding to have the absolute, or anything like the absolute, control of that faculty. Where we at present are somewhat deficient is that we want outsiders to help us, men of eminence, as professors or others, who are more or less specialists in their own department; and it appears to me that it would be of great advantage that a very substantial number of outsiders should take part in the faculty. I think myself, but of course I make these suggestions with diffidence, that the Inns of Court joining (if they did join) and contributing (as I hope that they would contribute) out of their funds to the support of the faculty of law, ought to have a very considerable weight—I will say nothing more—in that faculty, by their elected nominees, and that they ought also to have a very fair share of influence on the governing body of the University. But I should say that to claim anything like a command or absolute control of the faculty, or to ask for any other than a fair share of influence by their representatives on the governing body would be a mistake altogether.

23,175. According to the Gresham Charter the faculty is to consist of all the teachers of law in the different colleges affiliated to the University. They would form a certain part, and then you think that the representatives of the Inns of Court could be brought in in addition to them?—I should very much like to see it done.

23,176. And have therefore a voice, and a strong voice, in forming the boards of studies which should advise the Senate as to the curriculum of the law degrees?—Yes.

23,177. You also think that on the Senate of the University there ought to be a large representation of the Inns of Court?—A fair representation.

23,178. More than is given in the draft charter?—I am not quite sure that I remember that. That was accepted entirely without communication with the Inns of Court as far as I remember. Unfortunately, I think I may go as far as that, they did not give us any assistance at that time even in the discussion of the matter. I think that was a pity.

23,179. If the Inns of Court and the Incorporated Law Society were each entitled to have one member on the Senate, that would hardly be enough, you think?—I do not know, but I rather understand that it would depend upon the total number of the governing body; it would be in proportion to the size of it. For my part I do think that the faculty would be the better for not being absolutely under the control of the Inns of Court; no doubt to a certain extent they ought to have considerable influence which probably would be to a certain extent governed by the amount of contributions that they brought in—fairly governed, I mean. But all those are matters upon which I should not like to commit myself to any definite scheme as to proportions and so on. I only say this, that I do not think the real advantage of co-operation would be obtained if the Inns of Court and the Incorporated Law Society claim too much. I want to see a clear outside element in the faculty of law which might really place the legal education of London on a much wider basis; that scientific basis which, I think, is so important. Unless a man gets that scientific basis early in life he is apt never to get it at all. To read Roman law or to go into the question even of international law or general jurisprudence is taking a man away from the work of his daily life.

23,180. And I suppose he ought also to have a certain amount of general culture. In order that a man should take a law degree, I suppose he ought to be able to pass a preliminary examination to show that he knows something of languages and literature and other things?—Yes, that is our position at present. We have a preliminary examination, but I cannot say that it is a very searching one or a very extensive one; I do not know that it ought to be either in the interests of the Bar or of the public. I am one of those who take the view, and strongly hold the view, that our present sub-division of the advocate from the solicitor is a very good thing, but I think it can only be maintained if we make access to the Bar comparatively easy; and I am greatly pleased with the recent changes that have taken place whereby the Inns of Court have facilitated the change from one branch of the profession to the other by enabling solicitors of certain standing on giving notice, and in some cases passing an examination, to be called to the Bar at a much earlier period than they used to. Time was when they were obliged to be struck off the rolls as solicitors and then began as though they had no connexion with law at all. I think the policy of the present time ought to be as far as possible to give each branch of the profession what is absolutely essential and necessary as a basis for practitioners in law, and then (though I would keep them separate in this sense that I would not allow the barrister to be at the same time a solicitor, and I should not like to see any system grow up which would make a barrister a partner of a solicitor) I would make the opportunity of passing from the Bar to the solicitors' profession, and *vice versâ* as easy as possible, and in that way, I think, it would be a clear advantage that there should no longer be the distinction taken as regards education between the solicitors and the barristers. I am all for freedom in that respect, but I would say to a solicitor, "You shall not be a barrister whilst you are a solicitor"; to a barrister, "You shall not be a solicitor at the same time that you are practising at the Bar." That, of course, brings us to the question of the University education that we should expect to get for our students, and it must not be made exclusive: the numbers of solicitors are very large; the numbers of men at the Bar or seeking admission to the Bar are considerable, and among them there are some very useful men who could not be expected to pass a very strict examination, either in general subjects or in legal matters only. I doubt very much whether any scheme would work which made it a necessary part of the system of the Inns of Court that persons called by them should have taken a University degree. It is exceedingly desirable that many of them should do so, but I think that what has been suggested would answer, namely, that there

should be a something different from and not of so high a standard, in one sense, as the University degree—a system of certificates that should be given and might fairly be accepted by the Inns of Court as evidence of that minimum amount of proficiency which you might expect the ordinary student to have. Whether the Inns of Court should continue to carry on their own examinations or not, of course, would be a question for them to consider. I should prefer to see a system in which by communication between the University and the Inns of Court (which would naturally take place easily if they had members of the Inns appointed by the Inns on the faculy of law and representatives on the governing body), there would be a joint examination, as it were in some way, or an examination on lines that were agreed to, for the certificate of proficiency. With reference to the University degree I would then leave the University, as far as it appears to me, untrammeled by any consideration beyond what they freely agreed to as to their examination for the certificate, in consideration of merely professional acquirement.

23,181. Do you think the degree would be taken by non-professional men to any extent, by commercial men or men who went into political life, or who intended merely to perform the duties of a magistrate?—If the University education is made attractive to those men, as I think it might very well be, I am inclined to think that a good number of them would not be satisfied unless they went up to take the degree. But of course that is a good deal speculative. I am inclined to think, from what I know, that both at Oxford and Cambridge the number of men that take degrees in law, which I am especially talking of, of course, are a good deal more than they used to be, and that when once you make the study attractive you naturally get a considerable per-centage, who go on to take the degrees. But I do not think, myself, if I am asked for an opinion for what it is worth, that the Inns of Court ought to be asked, or that they would probably agree if they were asked, to make a University degree essential.

23,182. They would always keep the monopoly which they now have of admission to the Bar?—That I think necessary; not for educational purposes, because you will have gathered that I am perfectly willing, so far as I am concerned, to leave that to the teaching faculties in the Universities, with such consultation as the Benchers of the Inns of Court would naturally have with them; but, of course, for purposes of discipline especially, it is desirable that the Benchers of the different Inns should preserve their independence. At present every barrister is called by his own Inn. Fortunately it does not often arise, but when it does arise it is always a very difficult matter to deal with, if there be any matter of complaint. I think it is far better dealt with by the domestic forum, which is responsible from the first for the Call than it would be if that Call were in any way forced upon them originally, and if they were not left perfectly free. Of course, every one will see that the opportunities the Benchers have of doing anything more than testing the actual book knowledge of students are very small, but still I think the theory a good one that the profession through its representatives on the Bench should call the members to the Bar, and should retain that jurisdiction which they have over them now, subject to an appeal to Her Majesty's judges.

23,183. (*Mr. Anstie.*) The Benchers of the Inns you mean?—The Benchers of each Inn. And for that reason I should not like to see the rule at all relaxed that they are the persons entitled to give a license to practise as barristers-at-law.

23,184. (*Chairman.*) Supposing the Inns of Court to form the dominant part of the legal faculty, would there be any danger of the clashing of authority between the governing body of the University and the Inns of Court in any direction. It has been represented to us that the Inns of Court would not allow themselves to be overridden in any way by the Senate or any other authority in the University?—My view being that they ought to be content with a substantial representation, I think it would follow that they ought to submit to what the body would, in its corporate capacity, determine. I want to give them on the faculty a large amount of power; on the governing body a fair amount. Our men are practical men, and if they once enter into the scheme I do not think they will create difficulties which will prevent the working of the scheme. The difficulty, no doubt, is to get them there at first.

23,185. You hope that they may come, and would be willing to give us some of their money?—I hope so.

23,186. Is there any other point you wish to mention?—I do not think there is any point specially.

23,187. With regard to the general question: you are well acquainted with the Gresham Charter, although you do not feel yourself pledged to it in any way merely because you were counsel. With regard to the question whether there ought to be one University in London, or whether there might be two, have you any opinion. Do you think there would be any very great objection to having a second University?—That is rather trenching upon the question that I had to argue, and on which I represented the interests of the applicants for the charter, but I cannot do any harm by saying that if it had been in every way practicable to have a single University that might perhaps have been the best of all solutions. But, so far as I know, there would be very great difficulty in introducing into the University of London all the changes that would be necessary to bring about this teaching University as distinguished from an examining one. And then I cannot think that the existence of two Universities would be a serious difficulty.

23,188. It is a choice of difficulties between having two Universities and making the London University perform the double function of examining board for the whole of the United Kingdom, as it is now, and of a teaching University for London?—You might say for the whole of Her Majesty's dominions. Their functions are not confined to the United Kingdom.

23,189. Would it be well to give those two different duties to a single body?—I think there are practical difficulties which it would be very hard to get over.

23,190. (*Sir George Humphry.*) What would be the practical difficulties?—There is one that has hitherto been fatal. The natural disinclination of the present holders of degrees to have any interference with the system which for them has been very satisfactory, and anything that they suppose might interfere with the prestige of their degrees.

23,191. With regard to the first point, their not being willing to extend the work of the University, it appears that they are not unwilling. Convocation has indicated its willingness to undertake teaching as well as examining. The great fault which is found with the University of London is that its examinations are not in sufficient accord with the teaching?—There is also another point which I think is not without some importance: that is, that it is a world-wide institution and not much associated with London; that it does not appeal to the inhabitants of London more than to the inhabitants of Melbourne, for instance.

23,192. But it might appeal to the inhabitants of London very decidedly (indeed it proposes to do that), and yet at the same time its appealing to a wider range need not diminish its influence on London perhaps?—Perhaps not; but on this point as to the separate existence of a University other than the London University, I do feel myself a little embarrassed by the fact that I have received instructions from the applicants for the charter, that I know perhaps more of their mind on the subject than I ought to disclose, and though I do not object to give a personal opinion I had rather not go into a discussion of the pros and cons of that one question.

23,193. There is that one important point that the University of London is greatly found fault with, because it is not a teaching body?—Yes.

Sir J. Rigby, Q.C., M.P.

24 Feb. 1890.

23,194. And yet if it be left alone the Commission would still be leaving it with that great defect upon it. They are still leaving one of the great Universities in London in that obviously and pronounceably defective condition?—Yes, but I think they have chosen that in times past for themselves.

23,195. But they do not choose it now?—Upon that I am not informed.

23,196. With regard to the Inns of Court we have had a good deal of evidence. The Inns of Court are said to have a good deal of money, which is a very important factor. We do not know exactly what the amount of it is, and we do not find that anybody does know?—I am afraid there are a great many of us that do not know as much as we ought to do about the Inns. You will remember that we are a large body, that we are roughly divided into very busy men, and men with some amount of leisure. The very busy men have no opportunity of making themselves intimately acquainted with the affairs of the Inns, and I must rank myself for a few years past among that section.

23,197. But no account was ever laid before the Benchers?—I would not go so far as to say that. I have no doubt that every account is open to the Benchers.

23,198. It appears that there is a good deal of money there, and that the Inns of Court have already extended the sphere of their education a good deal, and are willing apparently to extend it still more?—I am quite sure they would be willing to extend it more, and that they would find funds if they saw their way to getting an adequate return. I mean getting an adequate return in the promotion of education, not otherwise.

23,199. Promotion of education through, perhaps, the medium of the University?—There I can only give an individual opinion. I have expressed a hope that my brother Benchers may adopt the same views that I expressed myself. If I had the determination, or if those Benchers who think with me had the determination, of the question, we should be very glad to accept, or, indeed, to welcome with delight the co-operation of a University.

23,200. And perhaps the Inns of Court might give the education requisite for a University degree?—I do not think they can do that. Do you mean to provide the funds for it?

23,201. To provide the teaching which may be required for a University degree. That is to say, the teaching in what are called the principles or science of law?—We should never do that, I am satisfied.

23,202. You feel that that must still be done by the University?—Yes, it must be done by the University.

23,203. The practical teaching of law would remain with the Inns of Court?—I think it might easily be left to the University, subject to the representatives of the Inns of Court having their influence, and pointing out what ought to be done in that respect.

23,204. And then the Inns of Court would supplement the University funds for the purpose for carrying on University teaching?—Well, I should hope so.

23,205. Do you think that would be likely to be done by an agreement of the Inns of Court. I believe the Inns of Court are not very easy to bring to definite agreement?—I am afraid not.

23,206. Do you think it probable that they would be brought to agreement?—To tell you the truth, I think if they saw the thing was inevitable they would go into it like wise men and make the best of it.

23,207. And by inevitable you mean———?—That it will come whether they like it or not, and for my part I should not object to put a little pressure.

23,208. You would put pressure on?—A statutory commission has been suggested, and my own opinion is, if we do not do this by our own hand it will be done for us.

23,209. It has not been ascertained that it will be done by their own hand?—If we get anything like a reasonable scheme it will be the duty of those who think with me to endeavour to convince those who are backward. (We cannot convince a man against his will.) We are a democratic body, and if they out-vote us there is nothing to be done.

23,210. You think, in the first instance, agreement should be attempted, and if agreement fails then some other kind of influence should be brought to bear?—Well, I cannot guarantee it; I can only say that I believe there is an increasing desire to extend the sphere of our education with an increasing conviction that we cannot do it very well ourselves, and I hope a good deal from that. But if it comes to a question of what this Commission ought to recommend I cannot tell you with anything like certainty that that method of agreement would be enough.

23,211. You feel that they would be more likely to contribute their funds towards teaching carried on by a University than to teaching carried on by their own body?—I consider that practically impossible. I do not think they can do it effectually. It is my own personal opinion that if they really wish to further the cause of legal education the only thing for them is to join a University.

23,212. Contributing funds and acquiring representation?—Yes, I should go as far as that.

23,213. (*Mr. Anstie.*) I understand you to be of opinion that the Inns of Court, unless in union with a University, will not adequately provide for the scientific teaching of law, but that in union with a University they might do so, and probably would be prepared to do so?—I think that some good might be effected by such a scheme as Lord Selborne's for a School of Law, but that is quite below the requirements of the case, and the University ought to be able to do a vast amount more.

23,214. That scheme laboured under the disadvantage of requiring a degree as a necessary condition for Call to the Bar?—I do not remember that. If that were a detail of it I should object to it.

23,215. You think the proper object to aim at is that the Inns of Court should be united with University organisation, and should in that way provide out of their funds for the scientific teaching of law?—Yes, or assist in providing it.

23,216. Substantially, of course, they would have to provide the great bulk of the money?—I do not either know the requirements of the School of Law in the University or the available funds of the Inns of Court.

23,217. But still you are well aware that outside of the Inns of Court there is only one endowed chair—a not very richly endowed chair—a chair of comparative jurisprudence at University College, and you are also aware that as far as the teaching is concerned the two petitioning Colleges are inadequately equipped?—I find it so stated. I do not know it of my own knowledge.

23,218. It was so stated before the Privy Council in the public printed documents?—I do not remember that. I am quite under the impression that the existing resources are very limited.

23,219. So that really it comes to this, that the Inns of Court will have to provide the funds, perhaps supplemented, as they may be, from the Incorporated Law Society. It was suggested by one of the witnesses, a solicitor, that some of the funds put at their disposal by Parliament might be used for that purpose; so the two legal bodies are really the bodies which must be relied upon to supply the funds?—I should think so to a large extent.

23,220. And that being so, it would lead naturally to what you suggest, that they should have a corresponding representation upon the governing body of the University and the direction of legal teaching?—Yes, I should say that I hope that some means would be found for utilising some of our buildings, and so on, which would be of itself an available contribution. To a great extent our buildings are thrown away at present. There is nothing like the use made of them that there might be, and I should hope that under a reasonable scheme our Halls, instead of being closed during the greater part of the year, might be kept open for the purpose of the University, without any derogation from the dignity of the Inns, and much to their advantage.

23,221. Now one or two questions with respect to the point that has been put to you with regard to the London University. You are aware, I suppose, that in the medical faculty, which is the most important faculty of the London University, six out of seven medical graduates come from the London medical schools?—Yes, I think I have heard statements to that effect.

23,222. With respect to the colonies, you are, perhaps, also aware that the number of graduates they take is something less than one per annum?—I am quite prepared to suppose that they are not numerous.

23,223. Therefore you would not say that the outside support from the Empire is very great?—No; but I should not say it is of London either.

23,224. Six out of seven is a large proportion?—For the medical schools. But these men at the medical schools are not Londoners; very few of them are Londoners.

23,225. Are the people who take degrees at Oxford and Cambridge, Oxford and Cambridge men?—No.

23,226. They are only there by the accident of their attending the colleges?—But we may get a great deal more by the teaching University in London. London, so far as I know, is the only capital in the world without a University; perhaps I cannot put it so high as that, but it is the only one that has no local University; it has no local University for London. That is a very strange state of things.

23,227. But is it not a fact that if a University is established anywhere it draws to that University centre persons from elsewhere?—Possibly that is so.

23,228. As Edinburgh, Cambridge, Glasgow?—Yes.

23,229. It would be a limited and, I will say, parochial view to consider that this should be limited to the metropolis?—There are four millions. I should not say limited; no one intends to limit it, let the people come. But the hope would be that the large proportion would be Londoners.

23,230. You are aware that at this moment a large number of those who attend the existing colleges are not Londoners at all?—I do not know that.

23,231. The senate of the London University and the convocation of the London University have both accepted the position that the London University must become a teaching University?—I was not aware of that until I came into this room and it was suggested by Sir George Humphry.

23,232. That has been communicated officially to this Commission both on the part of the senate and on the part of convocation, so that under those circumstances it would seem inevitable that whatever else is done they will take up the teaching part. Under those circumstances, would not your answer to his Lordship be somewhat strengthened that it is desirable there should be a union of forces for this purpose?—There would be very great advantages in union; I cannot deny it.

23,233. (*Mr. Palmer.*) Assuming that the London University, through its senate and through its convocation, as has been represented, signified its desire to reform, to reconstruct itself in the sense of a teaching University, there is also to be remembered the fact that the London University is already in receipt of a parliamentary grant?—Yes.

23,234. Assuming that there are other faculties which are not so well endowed as the Inns of Court or the Incorporated Law Society, a parliamentary grant for University purposes is a thing which may, perhaps, be more easily increased than a fresh grant for a fresh University could be applied for. Is there not a great advantage in adhering to an institution, I will not say solely for the purpose of its grant, but is not the grant an additional reason why it should not be neglected?—of teaching. If it offered all the advantages that can A great deal depends on the extent to which an existing University might adapt itself to the wider scheme be offered by a new one, then I think it is evident that a new one might be dispensed with. But whether it would or not, is a matter that I have not thoroughly considered.

23,235. If the London University, through its senate and through its convocation, has expressed its willingness to reconstruct itself in the teaching sense, would it be quite wise to go beyond an invitation to them to do so. We know that before the invitation failed?—And, if I remember aright, by a very considerable majority. It would require a great change in the attitude of convocation before they would accept all the reforms that would be pressed upon them, would it not? That is my impression. I cannot really give you any information; I do not know enough about that, it would be only a guess.

23,236. Could you go so far as to give a personal opinion as to the desirability of the recommendation of an Act of Parliament appointing a statutory commission; or do you think that would be very unadvisable?—No, certainly not. I will not say that. In fact, unless things go exactly in the way in which I hope they will go, probably that will become necessary. I mean to say with regard to the Inns of Court and the other things that I came to talk about here, it seems to me that I can say without any disloyalty to my Inn if they will not reform themselves they must be reformed from outside.

23,237. (*Mr. Anstie.*) The same observation might be applied to the London University?—Certainly, I should say so.

23,238. (*Lord Playfair.*) You are aware that in Scotland several statutory commissions have during the last 30 years been appointed to reform the Scotch Universities?—Yes.

23,239. That the details of arrangement between bodies that might be conflicting are more easily managed by a statutory commission than by mere negotiations?—There is no doubt about it.

23,240. I think I understand you that you do not want to multiply examinations between the University on the one side and the Inns of Court on the other, but it would be possible to consolidate examinations so that the Inns of Court might take the preliminary examination of the University, the scientific examination of the University, and probably act jointly for the professional examination of the Inns of Court?—I should rather demur about our taking the preliminary examinations. We are no better than any one else; the University might do that for itself perfectly well.

23,241. That is what I say. You will probably trust the University for the preliminary examinations?—Yes.

23,242. And the future examinations might, if possible, be done by a common system so as to prevent the great evil, at least what I consider the great evil, of multiplying examinations upon students?—Yes; my suggestion only went to the professional part of the business, but you can scarcely separate, and I do not suppose that the University would in any case disregard the suggestions of the Inns of Court, if they were reasonable in themselves.

23,243. And would be extremely glad to co-operate with them?—Yes, I have no doubt about it.

23,244. Would you trust the University, if it is ever endowed, either by Parliament or by private generosity, with sufficient funds, with the scientific subjects, and keep the professional education very much in the hands of the Inns of Court?—That would be my general opinion. You mean the scientific part of law? I cannot travel into other subjects.

23,245. Yes, Roman law, international law, and such questions as those?—Yes, I had rather trust that to the University than to any professional body at all.

23,246. And I think you expressed an opinion also that the scientific part of them might be made so popular as to be open to the education of men who have magisterial duties to perform, and the duties of landlords to perform, by tempting them to go and get some general education in law?—I should think so.

23,247. Do you know that at one time in Scotland, in the reign of one of the early Jameses, I forget

Sir J. Rigby, Q.C., M.P.

24 Feb. 1893.

whether it was James II. or James III., it was made a compulsory law that all the eldest sons of nobles and landowners should go through a legal education in order that they might execute justice with wisdom. It was the first compulsory law in this country?—I have heard that.

23,248. Without compulsion we might perhaps get such knowledge distributed by a system of high legal teaching in the University?—The time was when, as I understand, our Inns of Court and Inns of Chancery were very much more like Universities than they are now, and then they did attract a large body of the country gentlemen's sons and others. I think we have become too professional for that. I believe that in what I say now I am rather going against the pecuniary interests of my Inn, because some do come still who might be taken away by the University, but I am not concerned with the pecuniary interests of one institution rather than another, but with the general interests of education.

23,249. In speaking of the two branches of law which you think should be kept distinct, I suppose the scientific or theoretical subjects would be common to both of them in the University?—You would not expect that those who were going to be solicitors would pay quite as much attention to that. The more both branches of the profession interested themselves in those scientific subjects, I think, the better, within limits.

The witness withdrew.

Adjourned to Thursday, the 2nd March, at 12 o'clock.

Fifty-ninth Day.

Thursday, March 2nd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.	Professor H. SIDGWICK, Litt. D.
LORD PLAYFAIR, K.C.B.	Professor BURDON SANDERSON, M.D., F.R.S.
Sir WILLIAM S. SAVORY, Bart.	JAMES ANSTIE, Q.C., M.A.
Sir GEORGE HUMPHRY, M.D., F.R.S.	RALPH C. PALMER, Esq., M.B.

J. LEYBOURN GODDARD, M.A., LL.B., *Secretary*.

F. BROWN, Esq., examined.

F. Brown, Esq.

2 Mar. 1893.

23,250. (*Chairman.*) You are Professor at the Slade School of Fine Arts at University College?—Yes.

23,251. Will you tell us how that professorship is treated, what kind of lectures you give, how far they are practical, how far they are theoretical, what the students do, and what examinations they have, and give any general information which you think would be useful to us?—I may say that it is entirely a practical school; there is no theory at all necessarily. The only lectures in which theory is introduced at all is when one is criticising compositions. Once a month there is a sketch club, and just a little theory comes in then, but otherwise it is a purely practical school for the teaching of painting, sculpture, and drawing.

23,252. Do they draw from models?—Yes, it is a large academy; there are two or three life models posing in the school.

23,253. Your office is that of instructor; you teach them practically?—Yes, it is purely practical.

23,254. You do not give any lectures?—No; except the criticism of compositions mentioned above.

23,255. As a general question, do you think a teaching University in London could give any instruction in Fine Arts to people who are going to follow painting and sculpture as a profession?—I think that, as far as I can judge, the teaching of Fine Art in London is already provided for.

23,256. By existing institutions?—Yes, it may be good or bad, but there is full accommodation, staff, and so on, for all art students of London.

23,257. And such things as the history of art, or the instruction in perspective, and other matters of that sort?—I should think they could very reasonably come into any practical system. The teaching of history is not necessary, but is advisable. But that is a part of general education, I think, that a University might take up and would do so naturally.

23,258. It is very useful for people who intend to write about it?—Yes, as general knowledge.

23,259. I suppose in any good University the history of art ought not to be neglected any more than the history of constitutions, battles, or dynasties, it is part of general history?—Yes.

23,260. As far as you have thought of the subject, you think that a University would be of no use with regard to Fine Arts?—It seems to me if it established a practical school of Fine Art, it would be only adding one more to an already sufficient number.

23,261. And none of the existing institutions would be benefited by any connection direct or indirect with the University?—Except that in a school of practice the students might have the advantages of lectures on the theory of Art and the history. They might work together in that way from different practical schools meeting in some centre. The theory and history of Art are very necessary, and very useful, but they do not strictly come within the limits of a practical school.

23,262. (*Lord Reay.*) You would say that it was important that an artist should have a good general education?—Yes, I think so, but I think it quite possible for a very uneducated man to become a great artist.

23,263. But even an ignorant man would be all the better if he had the general knowledge of Sir Frederic Leighton and Alma Tadema?—Yes, of course, the range of subjects is increased by general education, but the art faculties remain the same. Those are the things that they are gifted with at the

start. A good education expands their range of subjects.

23,264. Are you acquainted with the manner in which French artists are educated?—Yes, to some extent, but I am not acquainted with their principal system that at the *Ecole des Beaux Arts*. I have been in a private atelier.

23,265. The system of private apprenticeship prevails largely in France?—I think several of the artists have private pupils, but the *Ecole des Beaux Arts* is a school which is rather different. In fact, it is a school which is more like a University; it makes the art student go through a course of sculpture and architecture and theory, and in the same way it makes the sculptor take up painting, whereas in England the sculptor simply goes on with his sculpture, and the painter with his painting (that is as a general rule), and the architect with his art.

23,266. Do you think the influence of the *Ecole des Beaux Arts* in Paris has been satisfactory on French art?—I am afraid it is a very difficult question for me to answer. I do not know quite enough of French art, I am rather opposed to all academical influences myself, I do not much believe in them. I think that personal influence is very much superior.

23,267. Your aim is principally to develop the individual talent of the young artist?—Yes, remove every impediment that is possible to be removed from his path. I mean, the mechanical laborious work, which is not connected with intelligence at all.

23,268. Do you consider that the work done in the Slade School of Art makes it superfluous for a young artist to go to the studio of a great artist afterwards?—It would be an admirable way of finishing up a school education, to go to a really great man with whom the student was in sympathy.

23,269. You think that the old system of apprenticeship or pupilage is a very good system?—Decidedly.

23,270. And that nothing else could take its place?—No, not quite to the same extent I think, but I should not like to commit myself to a very definite opinion upon that point. But it has proved itself to be an admirable system.

23,271. The combination of school and studio is what you think desirable?—Yes, I think that would be a very good thing.

23,272. (*Professor Sidgwick.*) Can you tell me, with regard to your pupils at the Slade School of Art, when they come to you are they attending any other instruction?—Some of them probably are, but I should say, very few.

23,273. They do not belong to the students of University College or other colleges?—No, they give up the whole of their time to their art studies.

23,274. So that the connexion of your work with the work of University College is rather of an external, and it might almost be called an accidental kind: by which I mean that you could carry on the work just as well and just as much to your satisfaction if you were not connected with the college?—Yes, I think so.

23,275. You do not gain anything by the connexion?—We have the buildings, the endowment, and so on.

23,276. But the fact that your work is connected with University College is not, in your view, any gain to your work?—No. If we had the buildings, the endowments, if there were an entire separation the work could be carried on in the same way.

23,277. You are not in any way under control; practically your work is not controlled by any other body?—No, not the practical work. So far as the purely practical management of the school is concerned it is left pretty much in my hands, but, of course, everything I do has to receive the sanction of the Council.

23,278. There is then no particular advantage derived from having this School of Art in connexion with an academical institution so far as you are able to judge?—I think I may say that much.

23,279. And, as far as you know, your pupils are not socially brought into relation with the other students?—No, they are not; but I do not see at all why there should not be classes in the University on the history of art and the theory of art which our students and others could attend.

23,280. You think that if there were other classes on the history of art and the theory of art those classes would be advantageous to your students?—Certainly.

23,281. And you would be glad that they should go to those along with the others?—Yes, it could be made compulsory.

23,282. You would not object to its being made compulsory?—No, not at all.

23,283. Then you think that students who belong to other departments, or taking up the study of history in other ways, might be drawn also, and might combine with students who are learning practically?—Yes.

23,284. And you think that combination might be of advantage to both?—Certainly.

23,285. How far do you think it would be of advantage to those who were preparing for the profession of artists to have inducements and encouragement to go through a University course of any kind? Or would that inevitably involve too great a delay, and take too much time from your practical work?—I am afraid it would.

23,286. I remember that a painter with whom I once talked on this point was this: he said, "Well, "my experience is that I never cared about anything except painting after the age of 12." That is rather early to commence, is it not?—Yes. I am afraid that, except by attendance at lectures, you would not get the art student to go in for a real University education. He would, I think, attend lectures on general subjects which would interest him, but I am quite sure he would neither find time nor inclination to go through any severe course of general study.

23,287. In the case of a man who had a real gift for painting or sculpture, how early in life should he begin to give the main part of his time to the practical work, do you think?—One cannot begin too early, but it would be a mistake to give up one's general education in order to begin a special training.

23,288. How long do you think the education of an artist ought to be carried on?—His ordinary education, I should think, till about 17 would be quite long enough.

23,289. Therefore we may say that, in your view his serious devotion of his time to general education ought to end before the time at which ordinarily a University course begins?—Yes, unless he is a man of means; because there is always the question of getting his living to come in.

23,290. But even if he is a man of means, supposing his gift lies very decidedly and clearly in the direction of art, do you think you could advise him to postpone the concentration of his mind on the practical work of art until after a University course had been gone through?—I should endeavour at an early age to mix them or combine them, but not at the expense of general education, and then let him give himself up entirely to the art education at about 18 or 19.

23,291. 18 or 19 is rather too early if a man is going through a University course. Certainly in the case of the present organisation of Universities they begin usually at 18 or 19, so if the concentration and entire devotion to art is to be delayed till after he has gone through his University course it must be delayed until the age of 21 or 22?—That is putting it off rather late, but providing he had been devoting some of his time to the practice of art I do not see any particular objection.

23,292. And I suppose you think that a man would gain as an artist by the enlargement of his taste and thought by a comprehensive study of literature and history?—In the sense that I have

F. Brown, Esq.

2 Mar. 1893.

already spoken of I think so, but I confess I do not think it would have any effect upon what one may call his peculiarly art qualities, that is to say, sense of form and colour which are purely technical. It would simply extend his range of thought.

23,293. It would be a gain on the whole that the ideal element of his art would be made more rich, more refined?—Yes, I think so.

23,294. (*Mr. Anstie.*) At what age do you say your pupils generally commence?—At very various ages. Some of them begin at 15, and commence at once to devote the whole of their time.

23,295. You have no limit of age?—No, we have no limit of age. I think that some have commenced even earlier.

23,296. And much later?—Some people take it up quite late in life.

23,297. Some among your pupils?—Yes.

23,298. Would 16 be a usual age for them to come to you?—Yes.

23,299. That you are aware is the entrance age of the college to which your school is attached?—was not aware of it; but that is a very usual age for people to begin to study.

23,300. You are aware, I daresay, that one of the principal grounds of the proposal to create a University here was that it might encourage and provide for those who were desirous of having University education at that age—16. Are you aware that that is one of the chief grounds alleged?—No, I was not aware of it.

23,301. So far that would tend to approximate to the age prevailing in your school?—Yes.

23,302. At present I understand you enjoy the most complete freedom of teaching?—Yes, I think I may say so.

23,303. And that you would not desire to have interfered with more than necessary?—Obviously not. I have been many years teaching, and I believe I know thoroughly my business.

23,304. Of course the connecting of you with any system would to some extent impair your perfect freedom?—Yes.

23,305. I should like to know whether you think there are other advantages arising out of that connexion which would counterbalance the degree of restraint to which your freedom of teaching must in that case be subject. In what direction do you think it would assist you?—I hardly see any direction except the one that I have already spoken of: that a general education by attending a course of lectures on the history of art and its theory might be attended by the students in the school.

23,306. You think that would be useful?—Certainly.

23,307. How many students altogether are there in the school?—There are now about 210, I think.

23,308. Can you give me any idea of what the destination of these students is. Are they going to become professional artists?—I think I may say that a large majority of them hope to live by some form or other of art, but there are so many branches of art now-a-days that it does not necessarily mean painting, because that would be quite out of the question; for instance, there is illustration and there are various offshoots of Fine Art.

23,309. Do you mean illustration of books?—Yes; in fact illustrations of every kind. The subjects in which people can make use of art education are innumerable.

23,310. Then yours is a practical school which leads in a great many different directions; it may lead to the profession of painter or to the profession of book illustrator, or to that of decorative artist?—Yes; it is a training which is suitable for all and each of them, only the painter would have to keep on longer at his studies, because he would have to take up a subject which is not requisite for the black and white illustrator to take up. The black and white illustrator only wants to learn to draw, but the painter wants to learn a great deal more, and that is the most important part.

23,311. You say the black and white illustrator only wants to learn to draw. Is that so? To draw in light and shade. He does not deal with colour.

23,312. Is there any truth in what engravers tell us, that the element of colour is important in black and white?—I confess that I do not think it is of any importance. But we were speaking rather of people who wanted to get a living by illustrating in simple black and white, not the translation of pictures.

23,313. But is not that a very important branch of it?—Yes; but I do not think it need imply any knowledge of colour. If you translate a picture you translate it into tones. You know the kind or the extent of black and white which you wish to represent a certain colour.

23,314. Of course your opinion is that of a man experienced in this matter, but is it not a fact that some of the most experienced engravers and etchers have told us that colour is of great importance and that it is quite a different thing to engrave or etch from mere black and white and from coloured pictures?—Some of the best etchers I know are certainly people who have not studied painting. They would do a little, but they would not go through a long and elaborate system of painting if their object was at the earliest possible moment to qualify themselves to get their living as illustrators.

23,315. That is really an important point to consider. Is the object of this school simply to enable people to get their living as soon as possible?—No; its object is simply to train people to become artists. It is open to all the people who can afford to stop there and carry on their studies for five or six years.

23,316. But if it embraces so many different departments and has so many outlets, may I put this to you, is it not a school which might, perhaps, be very properly called a school requiring the employment of a staff of professors rather than of one, however skilful he might be?—We have a staff, certainly.

23,317. Is there anyone but yourself to instruct?—I have two or three minor assistants. I have a master of sculpture, and I shall have an assistant master next term. There are also visitors, *i.e.* artists who visit the school at intervals.

23,318. Then you are creating a staff?—Yes.

23,319. To those, at any rate, who are going into the finer and more accomplished branches of art would it not be of advantage that they should have something rather more than the manual dexterity and correctness of eye which you seem to consider the great objects to be aimed at?—It seems to me that that is simply furnishing a man with a knowledge of his materials and his tools. That is all a practical school can do. You cannot make an artist of anybody.

23,320. You cannot give gifts which belong to nature, but you may cultivate them?—Certainly.

23,321. Do you think there would be advantage in adding a more theoretical side, a more learned side, if I might put it so, to the purely practical one?—Yes. I think I have already stated that there would be an advantage in that.

23,322. Not limiting it merely to such questions as the history of art, but making the art teaching itself, if I may say so, of a more learned and more scientific character. Would there be an advantage in that?—I see no disadvantage, but it can only supplement the real practical training, that is to say, the teaching of the eye. That is simply what a school of art is capable of doing. That is its main object, its main use.

23,323. Is there not something in the imaginative and in the intellectual dealing with the subject which is beyond, and independent of that, and is of value to the artist?—I do not know to what extent you could teach that.

23,324. I would suggest by making the student

familiar with the characteristics of the greatest painters, the greatest artists in various branches and periods of art, and of the characteristics of those periods?—That, of course every artist would perfectly agree with.

23,325. Does not that involve rather a considerable apparatus of teaching?—Yes, it would.

23,326. A great deal more than you have at present?—Certainly. It would involve a special lecturer; I had some intention myself of securing a lecturer, and getting photographs and other things for the purpose of illustrating by lantern slides, and so on.

23,327. You would like to make your existing practical art school the basis of a school which would be fully equipped in all those directions?—Yes.

23,328. And you think it would be of advantage even to that branch which at present exists, if those additions were made?—Quite so.

23,329. And in the interest of that, you would be content to give up some of that freedom of teaching which at present you have, and which you value highly?—I do not quite see why it should involve that.

23,330. Because every combined action involves a sacrifice of some portion of individual freedom?—I think it would hardly involve any practical interference with my methods and ideas.

23,331. You are not afraid of it at any rate?—No, I do not see why it should interfere in any way with my own ideas of what is practical and right.

23,332. It is the fact, is it not, that in order justly to understand the history of art involves an exact and methodical study, which is very different from that (if I may call it) amateurish knowlege of art which one gets as a mere branch of general history?—Yes, I should imagine so.

23,333. The knowledge which a learned painter has of the various periods of art and the characteristics of the great masters is something quite different from that which would be acquired by treating it as a mere branch of general history?—Yes; I doubt whether an art student who had gone through a limited amount of practical work would appreciate the meaning of remarks or lectures upon those things which you have just indicated.

23,334. That would furnish the basis of a course which would be of a distinct character which would properly belong to the realm of art teaching?—Yes.

23,335. (*Sir George Humphry.*) You have spoken of the theory of art, what do you comprise under that title?—I should say everything connected with art that was not absolute practice. It is rather difficult to separate theory from practice. I mean to say every practical advice involves a certain amount of theory, does it not?—There is a reason why you do everything, and that in a sense is a theory. That is what I mean.

23,336. The theory of art could be best taught in connexion with the actual practical work of art?—Yes, certainly.

23,337. So you think it not necessary or desirable that there should be teaching of the theory of art irrespective of the actual practical work?—Do you mean for the art student or for the general student.

23,338. For the art student?—I do not quite follow your question.

23,339. The question is whether there should be teaching and lectures on the theory of art?—For art students.

23,340. Yes, for art students independent of the actual practical work of art; that there should be a separate course?—You mean held at some other place at which these art students could attend?

23,341. Yes, separate?—There is no objection to that at all.

23,342. And what would be the subject of such lectures. What is the idea of the theory of art?—It would go into an analysis of the composition of the great pictures of the past, and so on. I am not prepared to say how far exactly it extends. For instance, Sir Joshua Reynolds, discourses are on the theory of art and on the practice too, but mainly on the theory of art.

23,343. Theory composition and perspective?—Yes, everything in connexion with art which is not actually the practical part of it.

23,344. And such course would be advantageous to art students?—Yes. I think the development of art as exemplified in the works that have been done is a very important matter in art education. I supplement my practical work by simply telling students to go and look at certain pictures in the National Gallery. But that is a spasmodic sort of teaching; it is not systematic. You simply tell them to go and look at certain pictures.

23,345. Do you think it desirable that there should be lectures given in the National Gallery?—That would be highly desirable.

23,346. Supposing the National Gallery could be in any way connected with the University, you think there might be important work done in that way?—Yes, it would be a splendid idea to give up the National Gallery or certain parts of it for lectures.

23,347. Do you think the study of anatomy is desirable for those who are wishing to represent the human figure?—Yes. I think it is more desirable in the interests of the mediocre artist than of the very talented. I see you are rather surprised at that view.

23,348. No, I am not very much surprised at it; but why do you say so?—In teaching the eye, some people are naturally so gifted that they can see and draw correctly without a knowledge of anatomy. I do not say that it is unnecessary for them to learn something about it.

23,349. I was only considering how a knowledge of anatomy would help in dealing with the human figure?—I am not disposed to laud it to the skies as some painters do; because there is a great danger to misuse it. It is palpable in many artists' works that they know too much of anatomy, and they are constantly showing it to one's annoyance. One does not want to see a figure with muscles all over it. One should endeavour to conceal them sometimes.

23,350. The danger of misuse is perhaps equal to that of the want of use?—No, I should not quite go so far as that. I certainly object to lecturers on anatomy going into an elaborate explanation of those parts of the figure which are never shown.

23,351. The great sculptors of antiquity, I suppose, had no very great knowledge of anatomy?—No; they are said not to have had any knowledge of that subject.

23,352. Because they were such observers of the human figure, and they saw so much of naked men?—Yes. There is no evidence that they studied anatomy.

23,353. I am not aware that there is, but for instance, in depicting the human face, I do not see that the knowledge of anatomy would help at all?—I cannot agree with you there quite.

23,354. The various lines are for the most part in opposition to the direction of the muscles?—Yes, but there is one thing that always remains, that is the bony structure.

23,355. You do not see it at all?—You do not see it sometimes certainly, but I think, as a rule, you do see the structure of a face. I think certainly the study of anatomy is very useful if kept within proper limits, and if the lectures are given by a man who is an artist as well as an anatomist. Such men do exist. I had a course of lectures given when I was at Westminster by one of my own students, who was a surgeon and demonstrator of anatomy in one of the hospitals. Of course a man who knows both sides of his subject knows exactly how much anatomy to introduce into his lectures to art students.

23,356. He knows the inside as well as the outside?—Yes. He does not go and devote an hour to explaining the structure of a vertebra.

23,357. (*Chairman.*) Would a student get all the

F. Brown, Esq.

2 Mar. 1893.

anatomy he wanted by attending a medical lecture on anatomy?—He would get far too much. The two subjects must be kept quite distinct, or rather the two views of the subject, the artistic and the surgical, must be kept separate.

23,358. (*Sir George Humphry.*) It has been suggested that the lectures on the theory of art and the history of art might on the whole perhaps be prejudicial to the artist by directing his attention too much in certain ways, and impressing upon him certain ideas and certain theories which would rather cramp and narrow his artistic faculties?—Yes. There is something to be said for that view, I think. I myself am particularly averse to any art which is a sort of weak reminiscence of the old people, purely conventional and academical, built up on lines which have been formed by other people, in which there is no personality. I should suppose that such a course as you suggest would affect a certain kind of mind, but I do not think it would have any effect upon an original student; he would not be led off to do the conventional and academical; his nature would prevent him. But, of course, there are several artists of a certain temperament who would and who do that sort of thing. I am not alluding to any really great artists; I am thinking more of the mediocre kind of artist.

23,359. You take the view that a good general education widens the basis of all men's thought and interest, and so would promote his excellence as an artist, as it promotes excellence in almost every other department in life?—I certainly think so.

The witness withdrew.

The Right Hon. Sir C. S. C. Bowen.

The Right Hon. Sir Charles Synge Christopher Bowen, Lord Justice of Appeal, examined.

23,360. (*Chairman.*) You have been good enough to come to give us your views and advice with regard to the proposed new teaching University, I think chiefly with regard to the legal Faculty?—That really is the only subject that I am at all competent to form any opinion about.

23,361. Do you think that it would be advisable to have a good legal Faculty, and do you think it could be done in conjunction with the Inns of Court?—I am not without hopes that the Inns of Court might be brought to join in the undertaking. I am strongly in favour of every development of University teaching of law, both in the older Universities and in the various University centres that are being established; but concurrently with that, I hope that the Inns of Court might in time be brought to some sort of fellowship with the teaching University in London. Whatever University there is in London, it ought to have a school of law. The Inns of Court could take a prominent part, but, whether they might be influenced to do that or not, I am strongly in favour of the introduction of a scientific study of the law in ordinary University centres.

23,362. For anybody who intends to study the law as a profession, it is of great advantage to have a really good philosophical theoretical foundation before he begins practical work?—I think it is of great value to the law itself, and also of considerable importance to the individual.

23,363. That would be given by a University before a man went into chambers and before he began the practical work?—There is a great deal of difficulty about prolonging the University curriculum to a late age, if a man is afterwards going to join the profession. The attendance in the chambers of a barrister by anybody who wishes to follow the law as a profession, is a matter of great importance. You can hardly dispense with it, I think. You learn there things that no University could teach you, but one of the great advantages it seems to me of a school of law in London, would be that it would enable men who were not prepared to give the time that a University course requires out of their lives, and who were afterwards intending to follow the profession of the law to be brought under the principles of University teaching in the study of law in London.

23,364. They would be able to do the two concurrently?—To a great extent, I think it would shorten the time. When a man comes up from the University, if he has been an active man, taking part in the curriculum of the University, he very often does not begin till the age of 23, or a little later. Then he has to begin in the study of the law, and if he is a man who has taken up mathematics or classics, he generally has not studied law at the University, and for the same reason he generally is a person who has not studied modern history. Then he has to begin a fresh course of study which he cannot complete under two or three years, if it is to be sufficient to render him competent to be called. So that by the time a University man is called, you find he is at the age of 26 or 27, or even older. It is too late—of course, it is not too late to be effective, but it is later than is desirable.

23,365. We have had it given as an opinion before us, that even if a man starts a little later in chambers, in consequence of having to go through a University course, and take a University degree, he gains much more than he loses by actual loss of time. I suppose that is the case, is it not?—I think attendance in chambers is of the greatest importance; I should never advise a man to go to the Bar who really meant to follow the law as a profession without going into chambers.

23,366. With regard to forming a good legal Faculty, I suppose it would be advisable to work, if possible, with the Inns of Court, even if we did not get any money from them, or any advantage of that sort. They would be the strongest body, and the body likely to have most influence, and to give most prestige to the Faculty and to the degree, and it would be a great thing to get them to join us on almost any terms?—I think it would be of great importance to get the Inns of Court to join, but I think the establishment, if I may say so, of the School of Law ought not to fall to the ground because the Inns of Court would not come in. I attach such extreme importance to the cultivation of what I call the School of Law, that I should be glad to see a School of Law in any case, and I believe that in time the Inns of Court would come in. But the much more ideal system would be one in which the Inns of Court would play a more prominent part—a part which would be, I think, worthy of their resources, and worthy of their position with regard to the profession. I should be sorry myself to see the scientific study of law, pass exclusively into the hands of the Inns of Court. I think there ought to be some very strong admixture of an outside element.

23,367. You think it would not be well that they should constitute the Faculty of law?—I would rather not see it.

23,368. You think there ought to be another element?—A strong outside element. If one were forming an ideal board for a new school, I should be quite prepared, if I were the creator of it, to place the Inns of Court in a prominent position on the board. I would even give them a majority, that is, I would give the Council of Legal Education a majority, but I would have a very strong minority. I think the strength of the minority is a very important thing; that is to say, there ought to be people outside who are more accustomed to education than we are in the Inns of Court. We do not know enough about education.

23,369. Do you think the degree ought to be such, or could be such that it would be sought after by others than men who intended to make the law a profession; men who are going into commerce or business, or into Parliament, or diplomacy, or other professions of that sort?—I have hardly formed an opinion about that. I can hardly be sure about it.

Things are changed in this country, especially as regards the profession of law, and you cannot say that the law 30 years hence will be as it is now. There is a movement which tends to break up the present circuit system; to establish local centres, to codify the law, and to increase the number of judges and magistrates who are in the direct service of the State, and although one cannot tell how long the movement will take, or when it will finally culminate, I cannot help feeling sure that there is such a movement, and this inclines one to think that there will be considerable opening for rewards in the public service. It will take some time; it may be a long time or a short time.

23,370. Do you advocate the study of Roman Law; do you think Roman Law is a useful thing for men going into practice?—I do myself. For practice it is rather difficult perhaps to say exactly in what way the study of Roman Law tells. First of all, it is of use in the study of the English Law, and as I believe, in the historical method of the study of the law. It appears to me that a person who says, "I will not "look at Roman Law," says, "I will not look at one "of the sources from which the stream of English "jurisprudence has in part sprung," and also I cannot help entertaining the clearest opinion that every comparative study which bears upon the English Law (every study of every law) is not merely of great value to the individual and to his intellectual power, but it also gives him a clearer and more intelligent perception of the English Law itself. And further I do not believe that any serious literary undertakings in the way of book-writing can succeed unless the persons who are the text-writers of the day have grounded themselves thoroughly in the study of the Roman Law and other systems, and to the education of text-writers I attach great importance.

23,371. And is a knowledge of foreign law useful?—I cannot say that anything is not useful. It is not so immediately connected with the English Law as the Roman Law.

23,372. The education ought to be comprehensive?—There ought to be opportunities for it—opportunities that would enable a man to take an intelligent interest in the study, instead of making it a merely technical affair.

23,373. And, of course, there ought to be a certain amount of general culture. Nobody ought to be able to take a degree in law without having passed a preliminary examination in other things—in Arts, or in Science perhaps. There ought to be a foundation besides actual knowledge of law in order to make the degree valuable?—As regards the profession, of course, everything tells. Culture tells there as it does in everything else; everything helps a man. But it does not do so more than other things. It is impossible to explain to anybody who does not live in the law to what extent every item of knowledge that a man possesses sooner or later helps him; to know commerce, accounts, book-keeping: to understand the way ships are loaded and the way railways are managed; everything is of importance, because the art which you are going to apply is one which you apply to specific subject matter, and the more intelligent you are about the subject matter, the easier it is to apply your principles of law.

23,374. Do you think the teaching University might form a Faculty of law, and give a degree in law which would be superior to any that are now given at other Universities?—I am not quite sure that I know enough about the examinations at Oxford and Cambridge to express an opinion about the amount of knowledge that you have to acquire in order to obtain distinction in those schools; but they have very good men as teachers at the Universities, and I have no doubt that they do teach well.

23,375. Is there any other point on which you think your advice would be useful to us with regard to law questions—anything which I have not asked?—No, the great practical difficulty, it seems to me, is to know exactly to what extent you can rely on the Inns of Court helping you and coming in; and to what extent you should be prepared to make them predominant in the matter of the new school.

23,376. Could anything be done to put pressure upon them, supposing they were unwilling to move—anything in the way of an Act of Parliament?—That is rather a difficult question to answer. You see I am a member of the Inns of Court, and I should not like to say anything that would be disloyal to my own brethren. I think myself, that in time public opinion and the presence at their gates of a Faculty would draw them in. But they are very jealous of power. You see the Inns of Court have a function which they must exercise, and which it is for the interest of the public that they should exercise. They must control the call to the Bar, because otherwise you would have the profession flooded with people who are simply called to the Bar, who are very undesirable persons, coming perhaps from the Colonies, or India, or other places, or from parts of England where they are not known, who would be very undesirable persons to be called, and to go away with the stamp of the Bar upon them. I think the Inns of Court ought to remain in possession of, and to control, the call; but I should be extremely glad to see them, accept the examination of the Universities, reserving to themselves the question of morals and general character.

23,377. They do that now, do they not? Do they not take the degree of Oxford?—No, they are rather sensitive about that. I ought not perhaps to say the Inns of Court, because it is partly the Inns of Court and partly the Legal Council. We are tied down very much by the general regulations of the Inns of Court, as I have no doubt you have heard. They do not take the University degree as a substitution for examination.

23,378. For part?—For Roman Law, but I think only Roman Law. If I am wrong about that it can easily be corrected. I do not think it is for anything but Roman Law.

23,379. Negotiations would have to take place with each separate Inn; they have no common government, no common centre; the Council of Legal Education would not be able to negotiate with the teaching University, would it; it is not in that position?—No, the Board of Legal Education has no authority to do that. You would have to negotiate with the Inns, but I do not know about negotiating with them separately, because I have no doubt they would appoint a joint committee to consider any question. The difficulty with the Inns is not, I think, that you could not negotiate with them separately, but they have separate interests, and each Inn is rather jealous of its own independence, so that what one Inn desires another does not necessarily desire.

23,380. Would they appoint a joint committee do you think to consider the arrangements?—If they consented to join—but I could not answer for that—the Inns of Court are very difficult bodies to answer for.

23,381. (*Sir William Savory.*) You have no doubt that of two men studying for the law the man who had had a previous scientific training to a certain extent on a wide basis, such as the University could give, would have a great advantage over a man who had not?—He has a great advantage, so far as that goes, if at the time he acquires his scientific training he does not also acquire habits of a kind which are unpractical and more fitted for sedentary pursuits than active and practical ones.

23,382. If you were advising a man who was proposing to enter the law as a profession, would you advise him to take such a course?—If he has plenty of time.

23,383. How far should study in the direction of the law go? After the University a student would come to the Inns of Court?—Yes, he would come to the Inns of Court. You enter before you leave the University; you become a member of an Inn; then you come up and eat certain dinners three or four

The Right Hon. Sir C. S. C. Bowen.

2 Mar. 1893.

times a year; and then ultimately come and read in London.

23,384. In this new scheme would you carry the scientific study of the law further than it is carried at present in the old Universities?—My profession has not to complain of any deficiency in the teachers of the Universities; it is rather that there is not enough vitality in the schools of law at the Universities. It seems to me that there is not enough of life in them. They are rather taken up as a parergon.

23,385. What would you suggest with regard to a University in that respect for a student who entered with the view of becoming a lawyer?—Everything that would make the law interesting to him. For instance, the historical study of the law; a man would always find out for himself, especially if he goes to chambers, enough of the technical instruction to utilise his knowledge, at least I think so. Obviously he must end by learning the practice of the courts, how to conduct himself before a jury and judge, and what the practice is in such matters.

23,386. Might the scientific study of the law be carried further at the new University than it is at present at the older ones, or is it carried far enough?—I would carry it as far as it could be carried. I should like to see the law as a study pursued for its own sake.

23,387. Is that at present under the direction of the Inns of Court?—Very little. I will not, however, say positively, because I do not know. The character of the lectures that have been given have not come within my own immediate knowledge, but I should think they would fall far short of what I consider ought to be found in the University school.

23,388. Might not the Inns of Court be contented with a share in the government of the new University under which this system of education would be carried on, seeing that after the student leaves the University they would take sole charge of his studies?—The key to the reform seems to me to be to induce the Inns of Court, if you can, to admit the degrees of the University in place of examining *de novo*. I attach enormous value to the importance of that reform if you could effect it, but it is a very difficult one to effect. The Inns of Court, as I said before, (not speaking in a disrespectful sense of a body to which I am proud to belong,) are jealous of their own power in the matter. They prefer examining themselves. Most of us are people who think we know better than a University could, what is necessary in order to learn law.

23,389. There would still be an examination at the Inns of Court, would there not?—The Inns of Court are bound to examine, because you cannot drive people to a University.

23,390. What part of their examination should be waived in respect of a degree?—As much as possible. There might be things that the Inns of Court might require, such as knowledge of the practice of Courts, but I would waive as much as possible. I would make the degree as attractive as possible to everybody who went to the University.

23,391. And would that shorten the time which a man would have to spend at the Inns of Court?—It would, because of course he would be reading law during the time he is at the University, and I should hope that the same sort of development which you are proposing in London is one which we might look forward to at the older Universities as well. I should be very much disappointed in the future of the law if Oxford and Cambridge were not to develop the present legal schools very largely.

23,392. Do you think the amount of time at present given by the average man to legal education sufficient?—There are too few men trained in a scientific way I think. For practical purposes men know enough to do their own business; they always will, but I do not think that the scientific knowledge of law is in a very satisfactory condition. Of course every now and then you get great lawyers who are trained, or who train themselves rather in the right way. The best hope for the present generation is that the text-writers have improved very much; that is very much due to the academic influence. It is due to men like Leake, Anson, Sir Frederick Pollock, Holland, Digby, and other men who have worked upon the law from the academic point of view, if I may so say.

23,393. But for the average man there might be besides the advantages whatever they were, which he would obtain from the University, some extension of the total time, the first part of which might be passed at the University and the subsequent part at the Inns of Court. Supposing, according to the new scheme, a man passed the first part of his time at the University and studied what I may call the scientific part of law, and then came to the Inns of Court, the total amount of time spent at the two might be rather longer than the time during which he is at the Inns of Court at present?—I do not think I should like to lengthen the period before the call. It drives a man to be called so late in life, and it gives the advantage very much to people who do not go into Universities. I should like to see those who study at the Universities placed, at all events, more or less on a level, as far as advantage goes, with those who do not go to a University, and if you prolong the study of law too much before the call you make it impossible for a man who goes to a University to stand at an equal advantage with those who do not go. It must be remembered that when a man is called to the Bar his education in law ought to be really only half begun. From that time forward he is not engaged in active practice at once, but he is engaged in following other people's practice, and observing others at work; there is plenty of time for learning the practice of the courts. If he is fortunate he goes into the chambers of some big man and continues the study of the law there, perhaps for years.

23,394. All the more reason perhaps why his earlier studies should be rather given to the science of the law, inasmuch as his subsequent time would be given to the practice?—I quite think so, but I do know that a great many men whose opinions I respect might not take the same view. However, that is my view.

23,395. (*Sir George Humphry.*) I think, my Lord, your views are, that the University should start a school of law with its degree appended?—Yes.

23,396. And hope that the Inns of Court would come in to assist in some way or other?—I think that is of the greatest importance, but I did not mean to say that if you could get the Inns of Court to come in at once that it would not be an advantage. I did not mean to say that the two things should not, if possible, be done together, but I attach great importance to the University school of law, whether the Inns of Court come in or not.

23,397. It is most important that the Inns of Court should come in?—Of great importance, because of the money.

23,398. One of the financial difficulties would be the funds which the University, as far as we can tell, would not possess. It seems to be a *sine quâ non* that there should be some funds to start the school of law in the University?—The real difficulty about getting the Inns of Court to join I think is not that they would be unwilling to part with funds, because they are rich and they are very liberal. I do not think there is any reason to suppose that there is any ignoble expenditure of funds at all in the Inns of Court; they are very liberal, and they would give the funds I think if they thought it was their duty to do so. But the difficulty is to persuade them that it would be their duty to do so. They would say, "We are the natural body; we are entrusted with "the task of supervising education; we must do it "ourselves; we cannot part with it to anybody else."

23,399. That is also the view which others have given us; that there is no illiberality, and no closeness at all?—They are a very liberal body.

23,400. They think it important to use their funds to great advantage, and the point is in what way they could use their influence to good advantage by contributing towards starting the University Legal School. That really is the practical point, how the Inns of Court should be brought in at the beginning?—And that is a matter of very great difficulty, because it depends on an accurate knowledge of all the Inns. I can only answer for my own Inn, of which one of your body is a member. We should be as likely to come in as any other of the Inns, but we should have a great deal of difficulty in persuading the Benchers to come in before they saw the new scheme was a success.

23,401. It has been said by some witnesses who have given evidence before us that they do not think anything will ever be attained by agreement?—That there must be some sort of compulsion?

23,402. Yes?—It is difficult to say. I think the Inns are very conservative in the matter of education, partly, as I said before, because they are conscious that they have a function to discharge, and that they ought to retain the power to do it, and partly because in my opinion we are not ourselves sufficiently in touch with the educational world.

23,403. And not being in touch they would be rather unwilling to come in touch with the proposed University?—There would be a certain jealousy in accepting as dominant in the new school professors and academical persons who were not in themselves working barristers.

23,404. Suppose there was a proposal that the Inns of Court should be freely and well represented upon the educational staff of the new University, and in the Council of the University, would it be likely that a little pressure would then be viewed with some favour by many members of the Inns of Court, and possibly go well. Supposing there was a fair representation of them on the University, and a fair amount of influence?—They might give money as a matter of liberality, and in that I think they would be influenced very much by the number of persons whom they believed in, of their own body, who were upon the new board, but I do not think they would throw themselves heartily into the scheme, unless they were more or less dominant in it. I do not believe they would object to an admixture, though in a movement which was an abortive one, to which I was a party, we did fail in establishing a Board of Education in which outsiders were to play a substantial part. Two or three years ago we failed in that; the Inns would not have it, and I have no doubt there would be a difficulty in getting them to come into any scheme at all in which they were not predominant. But I should not at all despair of their coming in if you gave them a distinct majority on the board.

23,405. Your own feeling on the whole is that the Inns of Court should not have a majority?—No, I think it would be fair enough to give the Inns of Court a majority, but I would have a substantial minority. What I regard as important is to bring them into touch with the educational world.

23,406. And if a majority and a dominant power were given them in the councils of the University, it would be a fair thing to expect that the Inns of Court would be willing to contribute from their funds. I will say supposing they were given a dominant power in the Legal Faculty?—I do not think they would desire anything beyond a dominant power in the Legal Faculty.

23,407. You regard the study of law itself *per se* as an attractive study?—I think so. I have the greatest possible belief in its being capable of being made so if it is pursued in a proper way.

23,408. One regretted a little to hear the opposite view stated to us. The study of any science ought to be able to be made attractive. With regard to solicitors, I suppose your views would apply to them as well as to barristers?—I think it is of the greatest importance that the solicitors should join in the movement too. I said a little time ago that there were great changes going on in England with regard to law. One of the changes which I did not mention because it is a burning question, is the possibility of the fusion between the two branches of the profession. I should be very sorry to express an opinion upon that burning question, but I think in the future there is so much chance, at all events of solicitors and barristers, being in close connection, if not in actual fusion, that you ought to look to the education of solicitors quite as much as you look to the education of barristers.

23,409. And the Inns of Court probably would not raise an objection on that ground?—No, they have nothing to do with it.

23,410. But suppose they contributed funds or suppose the teaching to be done in the Inns of Court, one view has been that the Inns of Court have already done a great deal, and might not unlikely do more and supply the place of University education, it might be sufficient. Do you think that they would still continue the objection which they have hitherto had to the solicitors participating in the advantages which they themselves give?—It is a question of speculation in possibilities. If you ask me to prophecy without pledging myself to the realisation of the prophecy, I should be inclined to prophecy that you would find an almost insurmountable difficulty in getting the Inns of Court to start a great school of their own which would teach law to all the world. They would say it is beyond their function. But the more you can unite the Inns of Court with whatever legal teaching there is, the better. If the Inns of Court would do that, I should be too pleased to see it, but I do not think it is within the region of practical politics.

23,411. The fact of solicitors being admitted the education would not render the Inns of Court less willing to join them?—I do not think so if it was a Faculty of the University.

23,412. Speaking of the education in the old Universities, I think you rather indicated that if there were a higher degree of education given in London by a University of London, it would probably stimulate the old Univerities to carry their education to a higher point than it is now carried to; they would throw more life into it so that it would be more beneficial?—I am not quite sure that I could pronounce an opinion that would be of much value about that, but I do not imagine that the difficulty of a Law School at the Universities is due to any want at the Universities of a force necessary to teach, but simply to the fact that it has not yet been brought home to the younger generation that law is a great study in itself; and it has not perhaps been brought home to Universities that law might be made a great study at Universities. Or else I do not see why it should not be a study at a school quite as useful in its way as a school of history, and in fact it would be half a school of history.

23,413. And the fact of its being in the new University might stimulate the old Universities?—I do not despair of seeing it in the old Universities.

23,414. It has grown a great deal?—Yes.

23,415. (*Mr. Palmer.*) The University study of law you would extend not only to the barrister and the solicitor but also to what has been described as the citizen?—Yes.

23,416. And in commercial matters or in business matters of every kind in every country wherever any special interest is involved there is always some special knowledge of the law pertaining to that subject?—Yes.

23,417. Therefore anyone with any special motive might be expected to come and have a University study of law?—Yes.

23,418. I daresay you will remember the position of the governing bodies of the public schools under the Public Schools Act, 1868?—Yes.

23,419. You will remember that the five public schools to which that Act applied were rich and they were liberal, but they were not quite in touch with the reforms suggested by, I think it was, Lord Clarendon's Inquiry Commission. Those reforms

The Right Hon. Sir C. S. C. Bowen.

2 Mar. 1893.

amounted to certain changes in the constitution, management of property and government of each of the schools, which were not great changes, but as a matter of fact, only one of the five schools after a Statutory Commission had been formed elected to reform itself?—I have a general remembrance to that effect certainly.

23,420. Do you think it likely that bodies which are rich and liberal, but jealous of their own position like the Inns of Court, with the prospect of much wider questions than affected those schools, such as the fusion of the two branches of the profession and citizen students coming in, would be willing to join the University upon a mere invitation without a Statutory Commission on the lines and analogy both of the public schools and of Oxford and Cambridge Universities?—I should not like to act upon the assumption, or to make anything depend on the assumption that they were certain to do so, and for this reason. A new educational scheme better in some details than the old, but by no means a revolutionary scheme, was brought into operation about six months ago. We all know how these bodies of gentlemen act under such circumstances. I think the Inns of Court would be very likely to say, "We have tried a new system; let us see how it works." I do not think myself, but I am in a minority upon the point, that the new system is sufficiently effectual, yet it is better than the old. I have no doubt that it will be worked well, because there are good men looking after it, but it does not to my mind secure what I wish to see in this country, the historical study of the law.

23,421. Would there be in your opinion any reflection or anything that one might consider as offensive in the precedent of what has been applied in the case of the public schools and Universities being followed by a Commission like this; who might submit recommendations, and leave it to Parliament to say whether those principles should be carried out?—I am not quite sure whether I could answer that without failing to be perfectly loyal to my own Inn; I might say more than would be quite consistent with one's loyalty to one's fellows about it. You see the reason I suggest for not giving a more definite answer is that I am one of the body myself, and it therefore would not be quite right if I were to attempt to ventilate outside the body the idea of getting extraneous aid to further one's own ideas which one is ventilating inside. I do not know whether I have made my meaning clear.

23,422. Quite. With regard to the teaching of all technical subjects it is always difficult to find a place for the scientific. Where would you place the scientific in the subjects running up to the University degree? Would you place it concurrently with reading in chambers or in any way before it?—There is a great deal of reading in chambers, which I think you would hardly describe as belonging to the purely scientific side of law, but the scientific side of law is mixed with it there. For instance, a case comes into the chambers of a barrister in large practice with whom the student is reading. In order to study the subject upon which the question is asked the student will begin to read, he will go back to the Year Books, to Coke, to the Old Statutes, and he will study it historically from the beginning,—that is the way he ought to do it. In that sense he is continuing the scientific study of the law even while answering the practical question of the person who puts it to his master.

23,423. Still even in primary schools people are told that they must first learn their object lessons, then that they must learn what are called the scientific or theoretical principles and when they get to practice they know that they will never be able to leave practice?—That is true. When a man gets into large practice there is very little opportunity for him to study the law.

23,424. (*Mr. Anstie.*) I understand that your Lordship agrees with Baron Pollock in the opinion that if the Inns of Court were to co-operate with the University in the way you have indicated it would remove the objection which they now feel to admitting strangers to the lectures?—I do not think they would object to admitting them to the lectures of the Faculty of Law of the University, but whether they would admit strangers to the halls in which the lectures are given is another matter. They would not do so at this moment if you were to go to the Inns of Court and ask them, but it is possible that they might be persuaded to do so in time.

23,425. That would depend upon whether they allowed University lectures to be given there?—Entirely.

23,426. If they allowed University lectures to be given there, and if they admitted the public to University lectures, that would conclude the question?—Yes.

23,427. And that would be a mode of solving the difficulty which has been presented on several occasions of allowing the public to attend lectures for which the Inns of Court were alone responsible and which were primarily intended only for their own body?—I think it is possible that they might. There would be objections put forward in the first instance.

23,428. It would facilitate it?—It would be of very great advantage.

23,429. Now with respect to the class of students you referred to before, the non-University and the University students; those who are coming from a University and those who are not coming from a University. With reference to University students, that is to say, those who have come from a University and been through a University course, you would regret that the Bar should lose the advantage it possesses of having in its number men who have gone through a University course in subjects which have no relation to their profession?—Yes, one would regret it very much. I do not know whether your experience would bear out mine. I have seen a great advance in the number of University men at the Bar since I went to it. When I came to the Bar at first the number of University men in the front of the profession was limited, and the number of University men on the Bench was limited, though there were distinguished men there. But now I think the majority of the judges and I think a fair share of the leading practitioners are University men, and there are some of them who have become eminent in University studies.

23,430. To limit onself only to one instance, the late Sir George Jessel, one of the greatest lawyers, if not the greatest lawyer of his time, was a man who had himself pursued other than legal studies up to the period of entering for the Bar, and then devoted himself to the study of the law. You would be extremely unwilling to curtail the opportunities which exist now for the legal profession being recruited from men of that description?—I should be extremely sorry to have it curtailed.

23,431. Allowing for that state of things in the case of men coming at a somewhat late period, it would be necessary that the Inns of Court should provide a system of legal education for such men?—The Inns of Court must provide education, I think. Unless you actually fuse the Faculty in the Inns of Court I doubt whether the Inns of Court would ever feel themselves justified in not providing it.

23,432. What is suggested is that the Inns of Court should provide it, and that the Inns of Court should provide it through the University?—Yes.

23,433. Supposing there were adequate provision made by the Inns of Court with a due representation of the Inns of Court on the governing body, it would not be necessary that they should provide anything more; the work for London would be done?—It is always a question of how one thinks the Inns would act. One is filled with doubt as to how the Inns of Court would act under those circumstances.

23,434. I am rather asking you for your own opinion in the matter?—Of course the old Universities must stand outside.

23,435. I will leave out the old Universities for the present. We will deal with those later?—I am only giving my reasons. The old Universities must stand outside. The most the Inns of Court can do is to accept their degree; they cannot regulate their teaching. You would hardly expect the Inns of Court to interfere with the teaching at Oxford and Cambridge.

23,436. No; I leave Oxford and Cambridge outside for this purpose?—My difficulty is in feeling sure that the Inns of Court would consent to place themselves in such close union with one out of several Universities as to make that University school their own school.

23,437. As you put that I would suggest as a complement, which I see you would consider necessary to the question, that the Inns of Court should, as has been suggested to us by several professors from Oxford, co-operate with the other Universities in the settlement of the curriculum and conduct of the examination; and should on those terms accept the degrees of the other Universities as equivalent to the degrees of the London University?—It would be of very great importance to have that done. I have more than once ventilated that point amongst one's friends who are interested in the legal education and the Bar; but, on the other hand, I ought to add that I do not wish to see legal education at the University placed under the control of the Inns of Court without reserving a sufficient academic independent power outside the Inns of Court.

23,438. That I have assumed. But to get rid of the objection which is naturally raised with respect to other Universities, if the Inns of Court dealt on an equal and fair footing with the other Universities, and accepted their degrees under conditions which guaranteed to the Inns of Court that they were efficient for their purpose, that would get rid, would it not, of the objection raised?—It would; but, having worked on the Board of Education for 12 or 13 years, and therefore knowing the lines the Inns of Court take about these things, I think you will find a considerable initial difficulty in getting the Inns of Court to do, what I think they ought to do, namely to agree to accept the University degrees instead of their own examination. I should wish to see them do it.

23,439. May it not tend to facilitate that if they were brought into that connexion with the London University, which would include the taking of its degrees in satisfaction of their educational requirements under certain reservations which we all make?—I think it would.

23,440. So that if the Inns of Court could be brought into a connexion with the London teaching University, in which they would play the important part which you have indicated, and accepted those degrees as satisfying so far the requirements of the call to the Bar, you would think that a desirable thing, and you think it desirable and right that there should be coupled with that a similar acceptance of the degrees of the other Universities?—I do. I should wish to see the University degrees accepted much more largely than is even dreamt of by the present Inns of Court.

23,441. Now, if I may go back to the nature of the provision that would really require to be made by the Inns of Court if a true system of University legal education is to be carried out in London, may I recur to my instance of the men who come from the University after having devoted themselves to other than legal studies? There would be needed for them a system of University training in the legal branch?—I think it would be of very great use to them.

23,442. And it would be equally of use, and to some extent of still further use, to those who have not had the advantage of so long an education in the more general branches of culture?—Certainly, I quite agree. I hope you will not think I am wrong in saying that the study of law itself may be made the means of obtaining very considerable intellectual culture.

23,443. Then you would agree with the opinion that there ought to be established in London a University school of law, and that such school of law would be useful both to those who have studied at the University and to those who have not had the advantage of a previous University education?—I do. I should be sorry if all the heads of legal study were to end in what I may call the technical and practical instruction of how to carry on business in court.

23,444. And you would not be disposed to limit the directions in which such a school of law shall act to the exigencies of practical lawyers, but you would extend it to the more remote branches of law which would demand more purely scientific and literary development?—I think I should regard it as of great advantage, if you could bring to bear upon the law the institution of professorships and Chairs, the occupants of which would be able not merely to teach, but also to study themselves.

23,445. The late Sir Henry Maine is a familiar instance?—He is an instance of course. When I was mentioning the modern lawyers to whose books we are indebted, I might have mentioned Sir Henry Maine. His name did not occur to me at the moment.

23,446. As he was a professor at the Inns of Court, one might suggest that their aims and views have not by any means been limited to the merely practical view of the subject?—The professors do not live enough of a life with their pupils at the Inns of Court it seems to me. It is not enough of a University system; the professor comes down, perhaps he is a member of the Bar; perhaps he is a member of the House of Commons; perhaps he is a student; perhaps he is a working barrister; he comes down, gives his lecture and goes away, and the pupils go away, and unless they are people who have sufficient force in themselves to make them students of law, they very often simply regard the lecture as the means of passing an examination, and although it is necessary to keep the examination up, and not to make it too severe; necessary to keep it up in order to prevent people getting the name of barrister without any qualification at all, and not to make it too severe, because you ought not to keep a man from earning his livelihood by his profession more than you can help,—nevertheless the examinations of the Inns of Court are not much. They do not teach the law much.

23,447. The age at which men are brought into contact with the professors of the law school, would, speaking generally, be rather more advanced than that of men at the University?—I should think it of great advantage that the students of the law should be brought more into personal contact with the professors.

23,448. It is a little more difficult considering that the age is a less plastic age?—Much more difficult.

23,449. I do not know what your experience would be with respect to the old private classes?—I never attended any.

23,450. Those are not, I think, equally successful as a rule with the public lectures?—There are plenty of gentlemen who can answer that, but I do not think I could answer it.

23,451. Perhaps one may say that with respect to some men, their greater power is in the lecture room, and with respect to other men their greater power is in the class room?—Yes.

23,452. That is one of the details which would have to be considered in the construction of the system?—Yes.

23,453. One point with respect to the *modus operandi* is this. Your Lordship referred to the constitution of a law school independently of the Inns of Court, but would it not be a great misfortune if an attempt were made to found a school of law which resulted only in failure?—I am not sure that it would fail.

23,454. Your Lordship knows that there was a promising law school established over 50 years ago at University College; where men like Austin, Amos, and other men of note were professors, and at one

The Right Hon. Sir C. S. C. Bowen.

2 Mar. 1893.

time it had considerable vogue, but it collapsed?—Times are changed, and there is a great deal more of the study of the law in the air than there was in those days.

23,455. Then might I suggest this as a possibility; supposing the law school to be established outside the Inns of Court and without the concurrence of the Inns of Court it might stimulate the Inns of Court to create a more perfect law school of their own. Then what about the law school outside. You would have perhaps one failure, perhaps two?—If the new University starts a school of law, if I were directing the movement I should endeavour to get the Inns of Court to come in unquestionably. I have not the least doubt that I should try it. But what I wish to make a point of is that I should not be discouraged in my pursuit of a Faculty of Law because they declined to come in at first.

23,456. Does your Lordship really see any other centre in which the school of law could be established except the Inns of Court?—I think the Inns of Court are the natural centre, and all my difficulty arises with regard to the question of whether they would join at first. I think in the end they would join, I would certainly endeavour to get the Inns of Court to come in.

23,457. The constitution of the school of law should rest upon its natural foundation in the Inns of Court, and should, as a condition of its existence require the Inns of Court to do their duty to the public?—I should be quite ready to see the Inns of Court at the head of the whole legal education of London, if they would remodel their system by the admission of outsiders, and the creation of what I may call an academic and scientific life in the study of law; but I do not myself see immediate prospect of your persuading them to do that by simply bringing the matter before the various Inns.

23,458. Then, in short, the result of your Lordship's opinion would be, that we ought not to proceed so much by way of bringing the matter before the Inns, as by way of making such recommendation as on the evidence which has been given to us, and the circumstances as they present themselves to our minds may appear to us to be a true, just, and right conclusion, and recommend that that conclusion should be carried out by whatever means are necessary for the purpose?—Might I, instead of answering yes or no, state exactly what my ideal would be. My ideal would be a Board of Studies in connexion with a University if it could be arranged, but at all events a Board of Studies instituted at the Inns of Court which would consist, say of 12 members, seven to be constituted from the Inns of Court, or from the same Board of Education which they would themselves form, and the other five to be persons of distinction in the educational, scientific, or legal world; not necessarily the legal world—the educational world would satisfy me. A Board of that sort you might almost trust to go right, they would go right about the election of professors or readers, where the Inns of Court constantly to my mind are in danger of going wrong, and I think they would go right in forming a general curriculum, because they would be not led away as we all are in danger of being led away by attending too much to what is practically necessary to earn one's bread as a barrister in court.

23,459. And that Board you would consider should be a Board of the University?—Yes, I should be quite content with that. Then, if you cannot get the Inns of Court to do that, I should be glad to see the University starting a Faculty itself, and in order to get funds from the Inns of Court giving the Inns of Court the lion's share in the Faculty. That, I should conceive, to be the second best thing.

23,460. It would be much the same, would it not?—It comes to very much the same. If I were starting a new University, I would no more start it without a Faculty of Law than I would start it without a Faculty of Medicine.

23,461. When you mentioned the constituent elements of your Board of Studies, you perhaps did not intend to omit any reference to the Incorporated Law Society?—No. All I said about the Inns of Court applies equally *mutatis mutandis* to the Incorporated Law Society, except that I have no reason to form any opinion whatever as to what their probable action would be. But I believe they are, as I think the Inns of Court are, a body that wishes to do what is right.

23,462. Then, in order to free the matter from all misconception, I understand that you desire that the Inns of Court, and the Incorporated Law Society should respectively retain their disciplinary powers and the determination of any condition they might see fit to impose of practical efficiency for their call to the Bar, and the entrance to the profession of solicitor?—That, I think, is a necessity.

23,463. (*Professor Sidgwick.*) You are, no doubt, aware with regard to both Oxford and Cambridge that of late years law has become decidedly a more favourite avenue to the Degree in Arts; and the study of law may now occupy the greater part of a student's time while preparing for the Degree in Arts?—I have understood that was so. I have made inquiries to my own University with regard to the extent to which men, so to speak, have created a University ripe within the ambit of a school of law, and it certainly has not developed very much at Oxford. There are a certain number of men.

23,464. The numbers are more satisfactory than the quality. The abler men mostly adhere to the older system?—Yes.

23,465. Is it, in your view, desirable in organising the University that law should be, at any rate, a main part of the course preparing for the degree in Arts?—I should wish to see law taught scientifically as an educated man at the University would teach it. That is the whole of what my view is. I should like to see law taught as an educated man at the University teaches history.

23,466. But if so taught would you think it desirable that an undergraduate should take it up as the main part of his preparation for the degree in Arts, or would you think it more desirable that he should defer his scientific and academic study of the law until after he had taken a degree in Arts by classics, or mathematics, or some other subject?—I am afraid my judgment about that would be worthless. I do not think my opinion on that point would be worth very much. What I do feel is that you might make the study of law expand in almost every direction. If you had a real school and real studies it would be quite as interesting to younger men as the history school. It is a history school, only it is a different branch of history. It would be as interesting to them as metaphysics. There is a good deal of metaphysics in law, and it has other advantages in other respects which metaphysics you may say has not. It is true that you may so pursue the study of law as to make it somewhat of an ignoble pursuit, but not if you study it in the method in which you study anything else.

23,467. This would rather lead to the conclusion that a large part of the study of law, one way or the other might be made the main avenue to the degree in Arts; it would be a valuable intellectual training for a man who was going into anything else?—Yes.

23,468. He would be glad afterwards to have read law as a man is glad to have read philosophy without being a philosopher?—Certainly. Will you excuse an illustration: if a man studied thoroughly the law of an early reign, or the law of a particular country, by the light of the historical knowledge he would acquire from other sources it would be a most cultivating study.

23,469. Suppose we succeeded in effecting the combination with the Inns of Court which you have suggested, and persuaded them to take a predominant, but not the sole place in the Faculty and on the Board of Studies—in fact to provide academic teaching in law—do you think it would be desirable that they should outside that academic teaching, which, as

you have said, would be open naturally to others besides those who were preparing for the Bar, keep up a system of more purely professional instruction than might be taken by students afterwards?—Yes, I would; and I would carry a school of law even further than would at first sight appear quite reasonable. I would have lectures on banking in the school of law; I would have lectures on railways; I would have lectures upon ships; I would teach people what a ship is. University men in particular are in great want of lectures of that kind. A man comes up to the Bar from a University, and he does not know what a ship is like, except that he has a sort of notion that it is a thing you cross from Dover to Calais in. He wants to know what insurance is; what underwriters are; what are the conditions of a voyage. Then if you pass from ships to other things, like commerce, a man comes up to the Bar from the University, and does not know anything about bills of exchange except that perhaps he has put his name to one to pay a horse-dealer. A University man comes into contact on arriving at the Inns of Court with a number of men who are, perhaps, drawn from humbler walks of life, who know all that sort of thing by instinct, who have been brought up on the quays, or brought up in the docks, or whose fathers have been clerks in a bank. The University man is at a disadvantage in that respect. For the purpose of the academic student you want to give that kind of technical instruction just as you want to leaven the technical instruction with the intellectual study of the law.

23,470. Then from that point of view what would be desirable is that we should persuade the Inns of Court that, while no doubt their duty is to provide the teaching of law that is required, they might divide it into two parts. There is one part of their function which they might with great advantage exercise in the University, and in conjunction, as you suggest, with a moderate professorial element, and there is another part of their function which they might still keep in their own hands and confine, if they think fit, to the barrister. They might divide it into two parts?—Yes.

23,471. And you think that if they agreed to work at all through the University, in the way you have suggested as desirable, probably the objection to open their lectures to others, besides those who are preparing for the Bar, would be waived?—I think it would be too unreasonable to be maintained. I think it would strike the Inns of Court as not being a position which they could reasonably occupy.

23,472. It occurred to me as you said—a transitory objection to the combination might lie in the fact that the Inns of Court had recently adopted an approved system—that perhaps one course we might adopt would be to constitute, if we can, a teaching University without settling the question of the Law Faculty: adjourn it for one or two years and recommend the University to approach the Inns of Court with its system in full working?—I would make the best scheme I could for the Faculty, and I would tender it to the Inns of Courts, and ask them to assist you. There would be great opposition to it. I do not know whether it would pass or not, but if the scheme were a good and reasonable one, I hope and believe the Inns of Court would do what is right.

23,473. If they decline it, do you not think it might be well to wait a certain time, and then try them again without trying to constitute what might after all be a rival system of teaching law?—I do not consider it a rival system. I do not consider that the education which the Inns of Court give, is at all a rival system to the education which a University ought to give. It is quite too narrow. What we want is to be in touch with the educational world. I have said that before, and that expresses almost all I think about it.

23,474. (*Lord Reay.*) I understand that you do not wish to limit the selection of the professors in the Legal Faculty of the University to men who either have been practising barristers or who are practising barristers?—Certainly not. I had rather not limit it. I think it is always a mistake to limit choice in the first place, and secondly I think the practising barrister has too much of his own way in the education of the law as it is. I do not feel that I or anybody like me is sufficiently alive to the great importance of the literary and intellectual side of the law.

23,475. At the same time I suppose you would admit that in certain branches which would be taught in the Faculty of Law some experience of practice would be of very great use?—Yes.

23,476. In some subjects more than in others. For instance, in international law it would not be required?—No.

25,477. But it would be required in what is called jurisprudence?—It would. All that I meant was that I would not necessarily introduce a qualification or restriction which might perhaps in a particular instance work badly. For instance, take Sir Frederick Pollock. I do not know whether you consider him a practising barrister or not, he is so distinguished in many ways; but anything which would exclude him or men like him, or Sir Wm. Anson, the Warden of All Souls, from being professors at such a University would be of the greatest detriment to the law. The law owes a great deal to men who are not practising barristers, and would owe more if we had more of them.

23,478. With regard to the technical part, using the word "technical" in its essential and narrow meaning, that of course the University could not undertake?—I do not know that it could not undertake it, but it would have to be assisted by the advice and experience of those who knew about it. For instance, if you were to lecture upon the practice of the court as it is—very likely there would be such a course of lectures from time to time—you would have to take a man who was conversant with it.

23,479. But the University could never supply what a man would obtain in chambers?—No.

23,480. And that you look upon as essential?—Yes.

23,481. Subsequent to a University course?—I think it is essential. I do not think a man could go through and become a very eminent lawyer unless he had been in some one's chambers, the advantages he gets there being so very great.

23,482. Do you think it is desirable for lawyers if they have time to attend the offices of solicitors?—I have once or twice recommended some of my friends to do so on the ground that they would learn what assists technically in the matter very much.

23,483. Now with regard to the three classes of students; first of all we have the class of Wranglers, Senior Classics, or men who have had a full course in another Faculty and who would come to the Faculty of Law in London afterwards. Then, secondly, you would not hesitate to give the Degree in Law if there was a matriculation examination of a high standard, to a student who had passed that matriculation examination, and then joined the Faculty of Law at once. But there is a third class, namely, those who, as you have described them, would look to the profession as a means of earning their bread at the earliest opportunity. Would you allow those to attend the law classes at the University without matriculating and obtaining a degree?—I should be in favour of allowing any class to attend. As for taking degrees, that is different, of course.

23,484. Then what might be done in that case would be to give them certificates after they had attended the lectures, a special examination for that class of students. Without anticipating the action of the Inns of Court I gather that you would desire that the Inns of Court should take those certificates as in some respects equivalent to their own examinations?—I think the Inns of Court are bound to take the certificates of learned bodies, and it is a great misfortune that we do not do so. It is due to the inertia partly caused by our being four independent bodies and

The Right Hon. Sir C. S. C. Bowen.

2 Mar. 1893.

partly to the inertia which belongs to all long-established institutions.

23,485. The solution of the difficulty of the University coming to terms with the Inns of Court might, perhaps, be attained if the University, instead of asking the Inns of Court to transfer their lecturer to the University, were to agree to incorporate as much as it could of the existing system of the Inns of Court?—Instead of saying yes or no, perhaps this will answer the question; if you could get the Inns of Court to take the degree of a University such as you desire to found, and, on the condition of having a substantial power on the board, to give you money, —would not that be practically all you wish;—that the Inns of Court might give you pecuniary assistance, and also their rooms and their halls to lecture in. That might possibly be arranged, but I do not think the Inns of Court would ever consent to insist upon sending students for the Bar to a particular University. They would always say, "Our duty is to give "education to those who cannot get it at a University."

23,486. But would the Inns of Court, when the question was considered, require the University to accept and to recognise as University professors, their lecturers?—They are only appointed for three years at a time.

23,487. So that there would be no difficulty?—There would be no difficulty about it.

23,488. And you would undoubtedly contemplate that the University should appoint its own teachers?—Certainly.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Sixtieth Day.

Friday, March 3rd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C. S.I., LL.D.	Professor BURDON SANDERSON, M.D., F.R.S.
The LORD PLAYFAIR, K.C.B., LL.D.	JAMES ANSTIE, Esq., Q.C., B.A.
Sir WILLIAM S. SAVORY, Bart., M.B.	RALPH C. PALMER, Esq., B.A.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

The Lord Moreton.

3 Mar. 1893.

The LORD MORETON examined.

23,489. (*Chairman.*) You are Chairman of the Education Committee of the Royal Agricultural Society?—Yes.

23,490. And you are intimately acquainted with the work of that society in relation to agricultural education?—I think I may say so, as I have been Chairman of its Education Committee since 1881.

23,491. Your Society holds examinations of different descriptions for agricultural students?—Yes. Two examinations annually (1) an advanced examination for senior students, in which are awarded money prizes, the life membership of the Society, and first and second class certificates; and (2) a more elementary examination for boys at school between the ages of 14 and 18.

23,492. How long has this system been in operation?—First, in regard to the senior examination. The Education Committee was originally appointed in 1864, with the object of giving a more practical effect to the 7th chartered object of the Society which is "to "take measures for the improvement of the education of "those who depend upon the cultivation of the soil for "their support." Several schemes were drawn up and tried with indifferent success; but eventually in 1868 the regulations for the senior examination were framed very much upon their present basis.

23,493. What are the subjects of this examination?—The subjects are, practical agriculture, book-keeping, general and agricultural chemistry, land surveying and agricultural engineering, which are compulsory subjects; and geology, botany, anatomy, and agricultural entomology, which are optional subjects; that is, the marks gained in these subjects by the candidates who pass are placed to their credit in the general classification, and therefore, influence the position taken upon the whole examination, but they do not otherwise affect the award of the certificates.

23,494. Can you give us any general idea as to the manner in which the bearing of these subjects upon practical agriculture is provided for in the examination?—A syllabus of the subjects for examination is issued by the Society, and this is purposely made of as practical a nature as possible. Thus the paper in agriculture is set each year by a practical agriculturist, and the answers to the questions in this subject can only be satisfactorily answered by those with practical experience of the work of a farm. In this subject a different examiner is selected every year. In like manner, the subject of book-keeping deals with actual farming transactions; agricultural chemistry with the composition and value of manures and feeding-stuffs, and with the properties and composition of farm produce; agricultural engineering with the scientific principles of farm implements and their practical application; botany with the plants useful or injurious to agriculture; and agricultural entomology with the insect pests of the farm.

23,495. Is the examination conducted by means of written papers?—Yes. Those are the examination papers, and other papers referring to the examinations (*handing same to the Chairman*).

23,496. You also examine *vivâ voce*?—Yes; the value of the candidate's knowledge is also tested *vivâ voce*. The *vivâ voce* examination is particularly essential to the subject of agriculture, and the examiner is required to inspect beforehand the answers of the candidates to the written papers, with the object of testing still further the practical nature of the knowledge displayed.

23,497. And that leads up to a certificate?—Yes.

First class certificates are granted to all who satisfy the examiners in the practice of agriculture, book-keeping, chemistry, land surveying, and agricultural engineering; and second class certificates to those who pass in the practice of agriculture, and also in three of the four following subjects, all of which must be *bonâ fide* attempted: book-keeping, chemistry, land surveying, and agricultural engineering. The certificates are signed by the President and the Secretary, and state the subjects in which the candidate has satisfied the examiners (that is, obtained half marks). Four prizes of the value of 25*l.*, 15*l.*, 10*l.*, and 5*l.* are awarded to the first four candidates gaining the highest aggregate number of marks in each year's examination.

23,498. What are the general results of the senior examination?—In regard to the statistics of the examination, I may state that out of the total of 286 candidates who have been examined since the institution of the examination in 1868, 121 have been successful; 83 in gaining first class, and 38 in gaining second class certificates. At the beginning of the examinations, there was considerable fluctuation in the numbers who presented themselves year by year. The number of competitors during the last ten years or so has, however, been steadily maintained at an average of 15·2. The highest number of candidates was in 1889, when 24 presented themselves. For the examination this year (1893) 30 candidates actually competed of whom 22 passed Of late years, owing doubtless to the increased importance attaching to technical instruction, the proportion of successful candidates has considerably improved. The average number of successful candidates during the past five years has been 10·8, the average number of first class passes being 7, and of second class passes 3·8. Generally, it may be said that the examination has a distinct value as being a thoroughly independent test of the teaching of agricultural colleges and other institutions affording agricultural instruction. And I may add that the Society's first class certificate is the nearest approach to a diploma in agriculture which at present exists in England The examination being of a very searching character, the holders of first class certificates are comparatively few; on the other hand, the possession of a first class certificate is greatly prized as being the highest agricultural honour open to an Englishman in his own country. Moreover, candidates who possess this distinction are often selected in preference to others for land agencies, or for colonial, Indian, and foreign appointments.

23,499. Then with regard to the elementary examination?—The Society's junior examination was instituted in 1874, since which time ten scholarships of the value of 20*l.* each have been annually competed for. They are in effect a sort of bonus to boys who devote themselves to agricultural studies during their school life, and the scholarship of 20*l.* is intended to assist their studies in this direction. The subjects of the examination comprise agriculture, chemistry, mechanics, and land surveying. The examination is held simultaneously at the schools of the candidates.

23,500. Perhaps you could tell me what kind of men go up for these certificates?—For the senior examination, does your Lordship mean?

23,501. Yes. What is their view with regard to a profession later in life. Are they land agents?—I do not know that we have any table showing what professions they follow afterwards. Certainly a good many of them are land agents, and some of them belong to other professions connected with the land.

23,502. Do many of them become practical farmers afterwards?—That I really could hardly answer, because I do not know that we have ever made any attempt to follow out their career. We did, as far as regards the boys, once.

23,503. Do you think there is a demand for a degree in agriculture to be given by the London University?—The view of the Education Committee, as expressed in their resolution already submitted to the Commission is "that it is desirable that "provision should be made in all Universities for the "granting of a degree in science for students of agriculture"; and they would like to see facilities for this provided in any scheme for the new University of London.

23,504. Is there any degree now given anywhere for agriculture?—Not in England, that I am aware of.

23,505. But abroad?—Foreign agriculture I have not had anything to do with.

23,506. Supposing the degree were granted, do you think it would in any way affect the diploma of the Royal Agricultural Society, which you say is so highly prized?—No, I think not to any large extent, because the examination of our Society is principally practical in its character, and does not demand such general scientific and literary attainments as would, of course, be required for candidates for a University degree.

23,507. You seem to give a good deal of scientific instruction, judging by the syllabus of the subjects of examination?—We endeavour to.

23,508. But you think that on the whole it might be divided, and the degree might be given by the University for the more scientific part, and that you might still continue to examine in the more practical part; and therefore the two different authorities would not go over exactly the same ground?—That point I do not think has been under our consideration, but I do not see any reason why, because a man can take a scientific degree, we should not continue our efforts.

23,509. For what class of students do you think such a degree is required?—For the class of teachers of agriculture under the technical education movement, and also for the sons of landowners.

23,510. To enable them to perform their duties?—Yes, to enable them to perform their duties in after-life.

23,511. And I suppose still more for land agents?—Yes, if land agents would go in for it.

23,512. Of course your wish for a degree in agriculture would apply to all Universities. You would be very glad if Oxford and Cambridge gave it?—Certainly.

23,513. You ask for it to be given in the London teaching University on the ground that there are many students who cannot afford to give three years' residence at a University. That seems to imply that with regard to residence and constant attendance at lectures the new University would be less particular than the old ones?—It might possibly be cheaper.

23,514. Have you gone into the details as to the granting of the degree?—No, we have not, beyond the fact that the Society desires to give all students in agriculture the opportunity of taking some such degree.

23,515. You really think there is a demand for it. As far as I can gather you do not think the ordinary tenant farmer would avail himself of it; it would be more the sons of landowners, and perhaps land agents?—There might be instances, of course, where a tenant farmer, or the son of a tenant farmer, might avail himself of it; but there it is a question of pounds, shillings, and pence nowadays.

23,516. Do you think London would be a good centre for a Faculty of Agriculture. Would there be the same facilities, for instance, that there would be at Edinburgh and other places where there are farms in the neighbourhood which they are constantly in the habit of visiting, highly cultivated farms, where they can get practical instruction at the same time that they get the theoretical?—London would not be an ideal place in which to teach practical agriculture, but it might be an ideal place in which to acquire the knowledge that ought to be examined in.

23,517. I gather that it is the view of those whom you represent that there should be a degree given in agriculture in this proposed London University?—Yes, and all other Universities.

The Lord Moreton.

3 Mar. 1893.

23,518. Is there anything you wish to add?—I do not think so.

23,519. (*Mr. Palmer.*) Mr. Jenkins in his report speaks of the effect of the senior and junior scholarships as being directed to the larger middle class of tenant farmers only, and the lower examinations perhaps to the small ones. He says "Still, in all the "existing schemes," that is, speaking of the schemes of the Royal Agricultural Society, "the education of the "middle class is alone sought to be stimulated. The "senior examination aims at the large tenant farmer "and the land agent; the junior scholarships are "offered to the small tenant farmer of the future; "but the landowner and the labourer are alike un-"provided for." Do you think there is room, through any examination or any degree, for a further increase in the opportunities for the upper classes learning agriculture? Do you agree with Mr. Jenkins that the scholarships at present given by the Royal only aim at certain classes in the agricultural world?—I do not remember a case of the actual landowner class coming, but there is no reason why they should not; we should be very glad if they would.

23,520. We have had some witnesses before us who have been very anxious to obtain some kind of recognition on behalf of Applied Science, and they have all felt that Applied Science must be taught in their especial way. Any degree in science, for the purpose of agriculture, would have to be taught, and to be examined in especially with regard to agriculture. You would require chemistry and physics in the teaching and in the examination to be taught and examined in with a view to agriculture alone?—Those sciences which affect agriculture would of course be the ones that it would be necessary to teach.

32,521. You would be willing to have a degree in the general sciences of the University, provided there was sufficient provision for agriculture?—I think I may say yes to that. I do not know that in our Society we have exactly gone into the question as to the precise form of the degree. I do not think the Society prefers to do that quite.

23,522. Is a degree of the University in science in your view preferable to the diploma of a central institute for the purpose of teaching agriculture alone. Agriculturists in some foreign countries have preferred an institution of their own for agriculture, and a diploma of that institute. Do you think that would be less desirable than a degree in science at the University, which, of course, would be open to a great deal of other teaching and other testing than that of the methods of agriculture alone?—The resolution that was passed by our committee was that we should like to see such a scientific degree for agriculture in all Universities.

23,523. Edinburgh alone gives a degree?—I believe at present Edinburgh is the only University doing so.

23,524. You are, of course, familiar with the French system, by which they have a central institute somewhat corresponding to the central institute of the City and Guilds?—I cannot say that I am familiar with it. I read a great deal about it some years ago, but I am afraid I have forgotten it.

23,525. The only difference between the degree of the University and the diploma of the Society would be that the former one would connote general intelligence, and rather a wider range of knowledge, than the special teaching of agriculture alone, and you would prefer that?—Yes.

23,526. (*Mr. Anstie.*) I understand your Lordship to say that the diploma at present given by the Royal Agricultural Society is practical in its nature?—It is as practical as we can make it.

23,527. What you are asking at present is that there should be University recognition, which, as Mr. Palmer has pointed out would deal with the higher scientific branches of the subject. The question I want to put to you upon that is this: With respect to this professional degree, it has been suggested upon more than one occasion that a degree which savours of a professional character gives to the public the impression that the man who has it is a competent person in his profession, and that objection has been raised in some quarters to giving degrees in subjects that have a large practical element in them. Would you desire that the possession of a diploma from your Society or from a society issuing similar diplomas of a practical kind should or should not be made a condition for the obtaining of the degree?—Personally the more people who come up for our diploma the better I should be pleased. Am I to understand by that that a man should not take the degree without holding our diploma?

23,528. Yes, or a similar practical diploma. It is urged that a man who is educated merely from the scientific point of view in general subjects, is deficient often in that knowledge which gives them their true practical application, and really cannot deal with the subject matter in an effective way. The suggestion that I make is directed to that point; whether you think it is desirable that those who have this degree in the science of agriculture should be compelled to have that practical handling of the subject matter which your diploma would authenticate?—That is a question which we have not considered, and, therefore, of course, I can only answer it for myself and not for my Society. Of course it is needless to say that I should like to see anybody who holds any diploma or any degree in agriculture thoroughly competent in the practical part of the question. We endeavour to get that. We endeavour by our *vivâ voce* examination in agriculture to find out whether the candidate really knows or does not know.

23,529. You have not formed any opinion upon that point?—Our Committee has not formed any opinion upon that point.

23,530. Nor yourself personally?—Personally I should like to see everybody thoroughly trained in agriculture, and thoroughly practical.

23,531. Would it be your view that anybody who takes a degree in agricultural science, should as far as can be secured, be also a man who is practically conversant with the subject?—It would add to the value of the degree in my opinion, very considerably.

23,532. Of course you will agree that high education of the description which has been referred to just now, on high scientific lines, must be centralised; it is too expensive to be scattered in many centres, and could only be taken in some University centre?—In University centres.

23,533. (*Professor Sanderson.*) You think that the Agricultural Society should take part in the examination of candidates in case a degree were given?—That I must give the same answer to that I have given to other questions. This is rather a question of detail, and I should not like to express an opinion, as I am here on behalf of other people.

23,534. I suppose the Agricultural Society could provide the means of examination on practical subjects better than any other existing body?—We ought to be able to do so, I think. I may say that it is an exceedingly difficult thing to get good examiners in agriculture. Thoroughly practical men are not always the best men to set papers.

23,535. But the Agricultural Society no doubt would possess, perhaps, better resources than any other body existing in England for obtaining the best examiners that can be got?—I am not aware of any other body that is doing quite the same work.

23,536. Or that could undertake it?—Well, I am not going to say that.

The witness withdrew.

ALBERT PELL, Esq., examined. *A. Pell, Esq.*

3 Mar. 1893.

23,537. (*Chairman.*) Will you tell us the different offices you fill or have filled?—In connexion with agriculture I am one of the oldest members of the Royal Agricultural Society; I am now a member of the Education Committee of that Council, and of the Chemical Committee; and I am also Chairman of the Association, if I may so call it, of the Cambridge and Counties Agricultural Education Association at the University of Cambridge, which is quite a recently formed and established enterprise.

23,538. Is this a convenient time for me to ask you what this Cambridge Association is? How far does the University take part in it?—Perhaps your Lordship would allow me just to give you the history of the formation of this Association?

23,539. Yes?—Some two or three years ago the President of the Board of Agriculture communicated with the Chancellor of the University of Cambridge on the question of initiating some distinct agricultural education in the University, especially with reference to the training of teachers. Thereupon the Council of the Senate formed a syndicate consisting of resident members of the Senate, and four non-resident, the four non-resident being the present Duke of Devonshire, Lord Walsingham, Mr. John Dent, and myself. We met for some time and considered the question of the University, and prepared a scheme which was submitted to the Senate. That scheme was not accepted. It was rejected by a vote of the Senate in a very large House, but it was rejected by a comparatively small majority; I have heard by something like 11 or 13; and so for a time the question dropped. I was not there to vote myself. Not very long after that some of the county councils in England were invited to London by the Essex County Council, acting with the Cambridge County Council, to see whether agricultural education could not be promoted in Cambridge, and in the University of Cambridge especially. When we met it became very apparent that what lay behind the whole of this scheme was the purchase of Cavendish College, which was then to be purchased, I believe, by anybody who chose to take the matter up. Those who were present at this meeting in London thought that that would not be a wise step to take; it involved the expenditure of a somewhat large amount of capital, and it was thought that it would be proceeding rather too rapidly. Thereupon the meeting, which was really held for that purpose, was about to be dissolved, but before we left I suggested that we should not part without seeing whether, although we had abandoned the idea of purchasing Cavendish College, steps should not be taken for securing at the University of Cambridge scientific instruction in subjects bearing upon agriculture. The idea took, and an executive committee was appointed, of which I have the honour of being chairman. We have had many meetings since, and I think we have succeeded in the object which we had in view, and we have, in concert with the University of Cambridge, succeeded in establishing a course of scientific instruction which will take three years from its commencement to its completion, which will be carried on during term time, that is to say, for 24 weeks annually. In addition to that we have made some provision for the domestic care of such students as come up. There will not be the eye of the proctors upon them, because they are not members of the University, but arrangements are made for some care as to their general conduct, so that the counties who send them up would be informed if the lads were not making the best use they could of their time. Perhaps I may say now that we have at present 19 students only, but we really only got our scheme to work after the commencement of the last Michaelmas Term. Would your Lordship like me to say what the University is doing now with reference to the University proper, as apart from us?

23,540. Yes. What part is it taking?—Only as late as Tuesday last the University had a meeting with the Agricultural Education Department which consists entirely of the teaching authorities of the University, and it was agreed that the time was now come when we might ask the University to sanction an examination and to grant a certificate or diploma in agriculture. Mr. Robinson, our secretary, writes to me that Professor Liveing, Professor Hughes, and myself are to draft a report for the consideration of the Committee. The Committee are many of them men of distinction.

23,541. Is it a county matter?—No, this is really a University matter in connexion with our counties scheme. Only certain counties have come in. I can give you the names of them.

23,542. How many counties have come in?—Essex, Norfolk, Cambridgeshire, the Isle of Ely, which is the wealthiest part of the county of Cambridge agriculturally, Huntingdonshire, one division of Suffolk, Northamptonshire, and Leicestershire, all of which counties are contributing money for the carrying out of this scheme.

23,543. Is it confined to students sent from those counties, or is it open to all England?—It is not confined to those counties. The teachers would take students from other counties not contributing, not associated with us, but the terms for education would be very much higher, probably double what we think we could do it at. If your Lordship wishes I could state what the cost of the education would be there now. I may hand in these papers (*handing same*).

23,544. Are the instructors University men?—The lecturers will be professors of the University. For instance, Professor Liveing, Professor Hughes, Professor Michael Foster, the Professor of Botany. I do not know who is to teach the Agricultural Engineering. I do not know who the professor of Applied Mechanics is now.

23,545. But they are all University men?—Yes, they are all University men, and the county students, if I may so term them, will sit in the University with the men in *statu pupillari* whether they are collegiate or non-collegiate students.

23,546. This seems to show that the University, even though it has no Faculty of Agriculture, can provide professors capable of teaching every branch of science which you require for agriculture, does it not?—I had a great deal to do with regulating the course at the inception of it, and I do not say I have had much difficulty in persuading those who worked with me; but at all events, we have come to this decision, that the University is not going to attempt to teach practical agriculture, but will confine itself entirely to the scientific instruction in the subjects bearing upon agriculture, while at the same time, we have thrown over any idea of having an experimental farm. We have availed ourselves of the permission of the Royal Agricultural Society to allow our students to make periodical visits, regular visits, and at the same time inquiries, at the experimental farm of the Royal Agricultural Society at Woburn. In addition to that, there are certain occupiers of land in the county of Cambridge, of whom I am one, who, if it is desired, will be willing to let the students go over the farms and see the present methods of cultivating the land.

23,547. And for the scientific training there are plenty of professors at Cambridge perfectly able to give everything you want?—Everything.

23,548. Although there is no Faculty of Agriculture at Cambridge and no degree?—No. There is some idea, and it may be carried out in the future, though it is not agreed to yet, that there should be a teacher in agriculture, some gentleman who would act in concert with the present teachers, and if he did not teach agriculture he would be able to direct them as to the line they would take for their studies. At present no officer of that kind has been appointed.

23,549. But if there was a degree given at Cambridge University for scientific agriculture, there is quite enough staff already to work it without any new professors being appointed?—Quite. I do not think

A. Pell, Esq.
3 Mar. 1893.

I read this part of Mr. Robinson's letter, "It was "agreed last Tuesday that the time has now come "when we may ask the University to sanction an "examination, and to grant a certificate or diploma "in agriculture, and Professors Liveing and Hughes "were to draft a report." The University has not gone so far as to propose at present to grant any degree in agriculture, though probably, I may say, if our scheme is a success, which I hope it will be, the University will take it up as it has done other subjects (commenced exactly in this way), and then it falls entirely into the hands of the University.

23,550. They are willing to give a diploma though there is no question yet of the degree?—I think I may say that they have not agreed to the conferring of a degree at present.

23,551. You make a great distinction between the two branches of farming, the methods and the sciences?—Yes, a very great distinction. I had just come of age when Liebig came over to England and when his writings began to attract much attention, and since then there has been an enormous advance in scientific knowledge touching agriculture, but there has been no advance really in the art or the business of farming. I question whether it has not been retrograde, but there certainly has been no advance.

23,552. The two do not go together?—No, I may say that really scientific education more concerns to my mind those who have the largest interest in the land, namely, the landowners, and the methods of farming concern the men who if land owners are going to depute the cultivation of the land to others would have to carry on the cultivation for them.

23,553. But a good farmer would not like to be dictated to by his landlord how he was to farm his land, would he?—No, but a good farmer would be very ready to avail himself of any information that his landlord could give him, provided that he saw that financial success would follow the adoption of it.

23,554. And it would be a good thing that the landlord should possess knowledge of it in order to advise his tenants, and to help them in that way. I think you say that the two different branches of agricultural knowledge could not be pursued at the same time, the practical and the scientific?—Might I read just a very short passage of Sir Humphrey Davy's on that point. He says this: "It is from the higher classes of the com- "munity, from the proprietors of the land—those who "are fitted by their education to form enlightened "plans, and by their fortunes to carry such plans into "execution, it is from these that the principles of "improvement must flow to the labouring classes of "the community; and in all classes the benefit is "mutual; for the interest of the tenantry must be "always likewise the interest of the proprietors of the "soil."

23,555. Then for an ordinary farmer of 300 or 400 acres, you do not think a very technical education is at all necessary?—I do not. For one reason that it could not be pursued: the very cost of the laboratory is beyond the means of most farmers, and I think his time would be better spent in studying human nature than in studying chemical research after he had once got to his business, and had to grow his crops and sell them.

23,556. I suppose that at any rate any instruction that such a man would require would be of a much lower kind than would be given in the University. It would be merely school education?—I was not thinking of a lower kind so much as of a very different kind.

23,557. Any little amount of scientific education which would be taught at a school would be merely the lower branches?—It might be.

23,558. He would have just a little knowledge of what insects would injure his farm, the elements of agricultural geology or entomology, and that sort of thing. It would be the simpler parts of the sciences that would be taught at a school?—I should say it would be worse than useless to give it to them; it would be mischievous; I think anything short of a scientific education would be mischievous when you come to deal with anything so extremely obscure and intricate as agriculture; you are in partnership with nature, and she keeps her secrets very closely.

23,559. You think a little knowledge would be worse than none?—I think nowhere would it be so mischievous as in agriculture. Would your Lordship allow me to illustrate that by an instance among great men? I will take Professor Liebig. I went I do not know how many miles, to hear him address 300 schoolmasters at Glasgow, with Allison in the chair. He laid down to us, in a language which I could not understand, but which was afterwards translated to me, the theory with regard to the necessity of applying mineral manures only to the land and leaving ammonia to be derived from other sources, probably atmospheric. Upon the approval of a great man like that practice followed on the advice with disastrous results, not only bad for the farmers but bad for, I believe, connexions of Liebig's own, who embarked in the manufacture of manures. Now it is all buried in oblivion. That was an imperfect knowledge, even on the part of so great a man of agriculture. And there I should say that our English chemists, men like Lawes and Gilbert, have taken much wiser courses. As far as I can see they have always endeavoured to check the results of their research by reference to practical farming; and if they have found that the results which they expected from their teaching have not been such as they looked for, they have gone over the ground again and frequently discovered that there has been a slip in their inquiries, and that the practice of the farmer, although contrary to their teaching, was the right one, and they have corrected their theories in the light of practical experience.

23,560. May I ask you at this point whether men going round under the auspices of the County Councils and giving lectures on agriculture in the different villages is of any use?—No. I have heard that the English are the only people who will ever listen to a lecture at all. I have attended the lectures myself, and I think they are a most hideous waste of time and money.

23,561. To return to the question of what a University can do Do you think that the two things, the scientific education and the practical, ought to be kept entirely distinct, and cannot be learnt at the same time; and that it is a different kind of people, people with different views before them, who would learn some one and some the other?—I do, and that is why I think our Cambridge scheme, if I may call it so, is a good one. The proposal is to take nobody under 17 years of age. A young man has 24 weeks in the year of University training, and then he has 28 weeks left to continue his business with his father and learn what can be learnt of farming in the field and in the markets.

23,562. This would be a man who would be intended for what profession hereafter?—It is very difficult to say. I believe now at Cambridge among the 19 young men who are up some are not going into farming, but the instruction they will get there will fit them for another business, I believe for brewing. The chemical instruction will be so good that they will be able to turn what they learn there to advantage in other businesses.

23,563. Do land agents for properties go through that course. It would be very useful to them, I should think?—Book-keeping and mensuration would be very useful to them. I do not know that the agents would require a knowledge of chemistry or physiology.

23,564. I need not ask you about how to teach the methods of farming, because I think you admit that that is a thing that no teaching University of London would have anything to do with?—No, I think not.

23,565. If agriculture were made a Faculty, or made a branch of a Faculty, by the teaching University of London it ought to be entirely confined to the scientific side?—I think so entirely.

23,566. Do you think it would be an advantage

that the teaching University of London should have an agricultural Faculty leading to a degree?—Is it contemplated that the students should be under control, or would they have to find their own homes in the town?

23,567. I fancy they would have to find their own homes in the town. There is no question of residence, but they would have to attend regular courses of lectures?—It is a dangerous town, or else I suppose in London there are, perhaps, better means than anywhere else in the world for teaching and illustrating the teaching in the museums.

23,568. Would it be necessary to combine the teaching under one Faculty, or could a man gain his information from different professors?—He would have to gain it from different professors, or at least I think he would.

23,569. And any University like Cambridge which you have already alluded to would have at present a sufficient staff of professors who would be able to teach the different things, the entomology, geology, chemistry, or anything else?—Just so.

23,570. In fact all a student would have to do if he wanted to learn the different sciences, would be to come and live in London and attend the different lectures which he would find useful. There would be no necessity for a regular teacher in agriculture?—I think not.

23,571. Then what do you think about an agricultural degree. Do you think that would be of advantage?—I think it would be of advantage if to obtain it implied a high standard of education. These diplomas and certificates are very numerous. They are all over the country now. But after all the men who hold them are not those that are sought after for the management of businesses. Occasionally you have an able man, but you find as good a man without the diploma as with it.

23,572. Supposing it was decided to have an agricultural school or Faculty as a branch of the University, would it be advisable to have a model farm attached to it?—Certainly not. My mind is quite made up about that. There ought not to be one. So much of the business of farming is outside the farm in the disposal of the products of the farm, and soils vary so, climates vary so, and the demands of the particular populations which surround the farms, and the means of locomotion all make it impossible for any model farm to be of service in teaching agriculture. I may say that I have been in America and seen what is done there. Model farms there seem to me to have just the same failing that they have in England.

23,573. Of course the advantage of London for teaching would be the laboratories, the museums, and things of that sort?—Yes, and the opportunity of meeting the ablest men, or as able men as any in the kingdom; and there would be great opportunities for social intercourse among those who wish to push their studies forward. The readiness of access and cheapness of living again would be in favour of London.

23,574. You have given us a history of what has been done at Cambridge, and your views (which seem to be very proper views) as to the necessity of a landowner knowing something about farming?—Yes, that is more important than all just now.

23,575. A degree in scientific agriculture you have told us would be an advantage?—I think it would.

23,576. You think no degree ought to be taken without the examiners satisfying themselves that the man has some practical knowledge too?—I think that might be added, but I do not think that that should be essential at all. I am almost sorry I referred to it after what I said, but of course *cæteris paribus*, a man who knows something about farming would be a little more forward in the opportunities for applying his scientific knowledge. But I still think that it is to the owners of the land in England that the scientific knowledge is of the utmost importance just now. They have really been the class which have derived most benefit from scientific discoveries in agriculture, that is speaking of the last 50 years, and now I think we are just upon the field of further discoveries of very great importance to the land in connexion with the waste from manufactures. You cannot expect a tenant farmer, or a man whose time is taken up with the cultivation of the land, to give his mind to such subjects. He will have an open mind and perceive the value of what is going on, but he will do better to stick to his sheepfold, his cattle, his ploughing, and workmen than by going about and getting the knowledge which after all will not serve him in good stead if acquired by the landowner.

23,577. I think I have gathered your views with regard to a degree. You think it would be advisable, but it would be advisable not for the sake of the tenant farmer, but for other people?—And I think it would be of such enormous advantage to the young men who will be the future possessors of the land. I look back upon my life when I was at college, and those who were my companions there. I find their names scored up at the doors of the Inns of Court; not one in forty expected to do anything in law or to have any further connexion with it than to have their names stuck up there; but had they given their minds to agriculture they might have been stimulated to see whether there was not something to be done in the direction of the more careful cultivation of the sciences bearing upon the cultivation of the land.

23,578. Have the depressed times of the last 10 years and particularly at this moment, led people at all to try and farm in a more scientific way, and to spend more money in the hopes of a larger outcome, or have they rather tended to drive people back to the old system of merely going from hand to mouth?—I think we are falling back into the old system. It is obvious that we are doing so. The rent of land is becoming less every day. Take the question of fertilising the soil; you may fertilise the soil by artificial manures, or you may fertilise the soil by giving it one year's rest. If you have the land at one year's rent for two years, rest is a cheap mode of fertilising the land. That is the old course of fertilising.

23,579. Is there anything more you would like to tell us, which you think would be interesting or useful?—No. I hope I have said enough with regard to what I think is the absolute necessity of the sons of the higher orders, and those who will be the possessors of the land, really grinding at some scientific instruction, especially in chemistry.

23,580. But I suppose you also think that in managing an estate, if you get a good farmer, you cannot do better than let him have his own way, instead of constantly bothering him with restrictions?—I think so.

23,581. You do not approve of too great restrictions being drawn up in a lease as to the way in which he is to manage his land?—No. I should look to results, and if I found that the fencing of the rick yard as it was would not hold his ricks now, and there were 40 or 50 per cent. more sheep kept on the land than before, and more cattle going to market, I should say that is a proof of success, not valuations. We can measure the extent of good cultivation in that way by visible results.

23,582. (*Lord Reay.*) What education do you consider the best for a tenant farmer. The primary school in the village?—I think so.

23,583. Nothing beyond?—For a farmer; for his farming business.

23,584. Do you think that it is of greater importance that his wife should know how to make butter and cheese than that he should have further education?—Not than further knowledge of English history or the history of her country.

23,585. But scientific knowledge?—Yes. The application of scientific instruction as it is called in dairying is very simple now and it is very quickly mastered, and a good many of the farmers' wives are accepting it and adopting it.

23,586. (*Professor Sanderson.*) You spoke of the misapplication of chemical science 40 years ago,

A. Pell, Esq.
8 Mar. 1893.

as a great evil. I suppose you think that the education you propose would be the best way of preventing that sort of misapplication taking place now?—I think so. I suppose the professors themselves would admit that they might still make blunders.

23,587. But their influence would be diminished by a more general scientific knowledge possessed by agriculturists?—I think so.

23,588. The Committee which exists at Cambridge I suppose is a University Committee now, it is not?—A University Committee has only just been formed, last Tuesday. The Committee up to that time consisted of representatives from the different counties of England associated with two professors from the University, Professor Hughes and Professor Liveing, and I might say that the whole of the financial business of the undertaking is carried on by that Committee, and the arrangements for teaching made up to the present time. But last week the University or the teachers formed a Committee themselves, which I think they call the Agricultural Education Committee. I shall not be on that Committee; I shall have nothing to do with that except furnishing the money for the teaching staff.

23,589. How long is it proposed that the scientific or preparatory part of the education should last?—Three years—three terms in each year for the complete course.

23,590. How long ought the practical part to last?—They will not trouble themselves about the practical part any further than making the visits to Woburn and certain large farms in the counties of Cambridge and Huntingdon.

23,591. Do you think a diploma ought to be given at the end of three years?—I think so.

23,592. Before a man begins his practical studies?—His practical studies will be going on the whole of the time at home during twenty eight weeks with the boy's father or his guardian.

23,593. You mean during a year?—Yes, during a year. And during the important time of the year for agriculture, because, as you are aware, the terms take up the dull time.

23,594. So that in point of fact he will pursue his scientific studies and his practical studies during the same period?—During the same year, not during the same weeks or months.

23,595. If I understand aright the whole course is to extend over three years?—Three University terms in each year during three years.

23,596. Then during the first year I presume he would not study practically?—I take it that when he goes back to his home his father will make use of him in farming operations.

23,597. But at any rate his whole education both theoretical and practical would be included in the three years?—Not the whole of his practical education, because by the time a lad has reached the age of 17 he knows a great deal about farming; he will be a master of dealing with horses; he will have considerable experience in the management of horses and in the management of cattle; and he will never learn milking so well as when he is young.

23,598. Who would examine in practical subjects?—Our idea at Cambridge was that if it was desired to examine in practical agriculture we should take some practical farmer who was known to be a successful man whose bankers' book had the figures on the right side, and we should let him examine; and we should give him a very free hand. If I had anything to do with it that would be my desire.

23,599. And that would be accepted as qualifying for the diploma of the University?—I do not think myself it should form part of the diploma. I think it should be a feature in a young fellow's education that in addition to getting a diploma he should have proved himself to be in the field a practical man. We would make him a sort of Napoleon.

23,600. On the whole you think it better to separate the scientific subjects altogether from the practical, and to include also the scientific subjects in the qualifications for the diploma?—I am very strong upon that myself. I may be wrong, but I have given a great deal of thought to it, and observed what the effects of the agricultural teaching upon men in England has been, and I more than ever feel that it is most desirable that the University should deal only with the scientific instruction for which they are fully prepared with their teachers and their laboratories.

23,601. (*Mr. Anstie.*) I am not quite sure that I reconcile the whole of your late replies. These Cambridge students I understand you to say attend the University for scientific instruction, but also conduct practical work outside the University on their own farms?—They probably do. I do not know that all do. I believe there are two who are up now who are not sons of farmers.

23,602. Do you desire that they should?—No.

23,603. You think that is immaterial?—I think so. If they do not master the practical part of agriculture they will not be farmers.

23,604. But you do not think it important to take any security that they are concurrently with their scientific studies making themselves practically conversant?—I do not think that it is the business of the University to see to that.

23,605. Do you yourself think that they ought to?—Undoubtedly. If they are going to be farmers they should begin learning their business at 12 years of age.

23,606. But you do not desire that the University should require any evidence of that?—No; speaking for this association—we have hardly given ourselves a name—all that we require is that no pupil should come up under 17 years of age, and that he should satisfy the association that he is sufficiently educated to receive full advantage from the course of instruction that is to be given at the University; that nobody should come up so imperfectly educated that when he went into the lecture room he could not avail himself of the lectures given there.

23,607. In one of our most scientific and at the same time most practical schools, medicine, you are aware that for the purpose of obtaining a degree it is required that the students should be engaged in practically handling the subject matter. You do not think that is material in agriculture?—If he is going to be a farmer he should, but that would not be taught by the professors who are teaching him agriculture at the University. The teaching to which I think you refer would be learnt on the farm, and learnt there better than anywhere if his father was a capable man.

23,608. (*Mr. Palmer.*) I think that in every foreign country they agree with you, that the scientific teaching must be treated quite separately from the farm practice?—I think they have done so. I think, especially in Germany, they have. I cannot speak of France.

(*Lord Playfair.*) It is not so in the United States.

(*Mr. Palmer.*) But on the Continent.

23,609. Then with regard to the effect of connexion with the University, whether through a degree in science or by a diploma, you would expect that the results of science, in the first place, would be placed at the disposal of agriculturists generally?—Yes.

23,610. The connexion with the University would enable the results of investigation and original research to be for the benefit of agriculturists generally?—Yes.

23,611. That would be one reason?—Yes. For my own part, I must say that I have never been able to define exactly what is meant by agricultural chemistry apart from other chemistry; but I see that the teachers at the University do make a distinction. In this course of instruction there is elementary and agricultural chemistry put down.

23,612. Chemistry applied to the particular subjects required in agriculture seems to be a specific name, and a specific branch everywhere?—As far as I understand it, the chemistry of metallurgy is, perhaps, as important to those who own land, the chemistry by

which we have already got so much advantage in getting hold of the waste from gas manufacture and other manufactures, and by which we are probably on the point of getting phosphates from the iron furnaces. It was always a difficulty with me to know whether that would be called agricultural chemistry or not. I was against putting in the words "agricultural chemistry," but there it is. I suppose the professors knew better than I did.

23,613. With regard to the University teaching, it would not only teach those who have to be taught, but it would also train the teachers themselves?—Yes.

23,614. The connexion of Universities abroad with the Central Institute has invariably been to produce normal schools in which teachers especially would be trained, as well as those to whom you have referred as the landowners, who have the highest interest in agriculture?—Yes.

23,615. And it is not going too far to say that in France, where there is a specific direction to agricultural teaching at every communal school, the staffs of teachers are, all of them, either people who hold the diploma of the Central Institute, or people who have been trained in schools of the kind; so that the connexion with the University would not only give you a satisfactory class of teachers, but would promote the existence of normal schools of agriculture in which teachers especially would be trained?—At the beginning of their instruction would that be?

23,616. Where a man goes for a degree in a University in this country, he frequently goes to a school more or less public first?—Yes.

23,617. In the same way, if he were to go for a diploma in agriculture in a University, would it not imply the starting of schools where the teaching would be with reference to the degree in the University?—Yes, I think normal schools would be very likely to follow, and for very good reason. If it were found that the education given at the Universities was of such a character that it really did help on the business of farming, and the circumstances and prospects of the men who had been trained at the Universities, then I can fancy that normal schools would spring up with a view to sliding the youths forward into the Universities; they would go there fitted at once to receive the University instruction.

23,618. The effect in France appears to have been the starting of three normal schools?—But is not their character very different from ours. Are they not much more thoughtful men, and would not normal schools have a better chance in France than England? Perhaps I have no right to ask the question.

23,619. I was going to ask you the question, because I think, a few years ago, the normal schools were a subject of discussion, if not in the Royal Agricultural Society in other agricultural circles. Have you any opinion as to whether normal schools would be a desirable thing?—I think normal schools would be desirable if they were to lead up to a University, but not normal schools accompanied by a farm, which is a subject very often mooted.

23,620. Then with regard to the lowest education of all. You would not be averse to some elements of purely agricultural instruction being given in the elementary schools of England, as they are given by the National Boards of Education in Ireland?—Glasnevin?

23,621. Glasnevin and the Munster school, I take it, are normal schools; but there is a particular syllabus of teaching agriculture, which is part of the elementary school system?—Judging from results, I should not follow what has been done in Ireland, farming in Ireland being so very far behind that of almost any European country.

23,622. It is an optional subject now in this country?—Yes, but I am not clear that it is going to be of very great advantage to the pupils.

23,623. The result of normal schools, in my view, would be simply to improve the class of teachers?—It would do that probably.

23,624. Therefore it would not be a bad thing to have a good set of teachers rather than an indifferent set?—Undoubtedly that is so.

23,625. To have a good set of teachers, men must necessarily go to some scientific teachers, in order to have the knowledge and be able to impart it to their pupils, at any rate?—Certainly.

23,626. The Royal Agricultural Society, of course, under its charter, takes notice of education, and I think the scholarships that are given, senior and junior, are all that it does in a direct way for education at this moment?—Yes.

23,627. Do you think there would be any hope of the Royal Agricultural Society if it were properly invited, as some other societies seem likely to be invited to contribute to a large system of education, being willing to consider the matter favourably?—I cannot speak for the society on that subject. I am not fitted to give an answer as to what they really would do, or what would be their intention.

23,628. We see in the newspapers that they have lately acquired a large house, of which part is to be disposed of?—Yes, owing to the generosity of two very wealthy men; and if the idea of those who purchased that estate is carried out by the Council of the Royal, it is obvious that it will be a very good situation in London for such concerted action as you appear to have in view.

23,629. With regard to the question of the centre of an institution of that kind being in London, of course not only is your Society itself situated in London and the Board of Agriculture situated in London, but there is the reason that in all countries it has been found necessary to make the centres in the capital, because men of science are not to be found far from great town, and thus people must go to great towns in order to carry the results back to their farms or business?—I do not want to speak in any disparaging way, but it must be seen that the Royal Agricultural Society adopts the position of showmen. The great feature of our existence is that display which is made in the summer of agricultural products and apparatus. The scientific side of agriculture is very much, if not entirely, lost sight of when the Royal Agricultural Society comes out into the open for its annual display.

23,630. Would it be impertinent to ask what the show costs?—It varies very much; sometimes it is a loss, and not very often a gain. Our secretary, who will be able to answer that question accurately, is here The nearer we get to London the more we lose, I believe.

23,631. There would be a very considerable contrast between the expenditure for the show, and the money which is already given for the purposes of education in the Senior and Junior Scholarships?—Yes.

23,632. The Senior and Junior Scholarships would not be a large items in comparison with the cost of the show?—The item of finance connected with education is a very insignificant matter compared with that connected with the show.

23,633. The connection with the University must necessarily imply a considerable impetus to education in connexion with agriculture throughout the country?—Certainly.

23,634. And any such impetus can hardly take place without the countenance, support, and assistance of a society so uniquely placed as the Royal Agricultural Society?—I quite understand you, and I quite agree with you now. You might remark that the scientific instruction and the results of scientific instruction in connexion with the Royal Agricultural Society are to be found chiefly outside its direct operations, namely, at Rothamsted, Sir John Lawes' place. The great discoveries in agricultural science, and to some extent the discoveries in practice, have not been made by the Royal Agricultural Society proper, but by their most distinguished members, Dr. Gilbert and Sir John Lawes, and, I believe, have been carried out at the latter's expense. Mr. Clarke may correct my evidence afterwards if it is wrong, but I do not think the Royal Agricultural Society contributed anything towards

A. Fell, Esq.

3 Mar. 1893.

those remarkable experiments which have been carried on for years at Rothamsted.

23,635. The clause in the charter is that you are to take measures for the improvement of those who depend upon the soil for their support?—Yes. I think more might be done by the Royal Agricultural Society on that head.

23,636. (*Sir George Humphry.*) You have 19 students, I think you said, at Cambridge?—I believe only 19.

23,637. From what classes do they come?—I can speak for some. Some are farmers' sons, and I believe that two or three are not farmers' sons. Two have come from Oxford to Cambridge; I cannot tell you what their parents are. But the distressing feature, and the depressing one, about the whole thing is that we have not got the son of a single landowner of any mark in the United Kingdom.

23,638. Is there any provision for their maintenance at Cambridge?—Yes, the cost is very trifling indeed. Arrangements are made by which the cost of living out is very trifling. The pupils live at houses that are pointed out for them in the town. The counties that are acting in concert have founded scholarships of 25*l.* or 20*l.*, or something of that sort, and they have sent their pupils up under the scholarships. That money really meets the greater part of the expense. The whole of the expense for what we call a county student at Cambridge now, including the fees, which come to 19 guineas in the first year for all the branches, and 18 guineas in the second year, does not amount to more than 44*l.* for the whole of the three terms, which would include the living of the pupil, the washing, and the fees; 50*l.* would do it splendidly, but anybody with 44*l.* a year can get a first-rate education in the sciences bearing upon agriculture.

23,639. So that the Association pays the expenses in Cambridge, and also contributes to the University certain fees for the teaching given?—It is not quite so. The Association pays the teaching staff 550*l.* a year. The pupils are left to pay the fees to the professors, the 19 guineas, and the cost of their living. All that the Association is responsible for is the handing over of the sum of 550*l.* a year.

23,640. 550*l.* in certain scholarships?—The money value of the scholarships is put into the hands of the pupils, who go up to the University, and who pay the charges there. It is estimated that any student for the whole course will have to pay 19 guineas the first year, and 18 guineas the second in fees, and that for board and lodging the cost will be from 6*l.* to 8*l.* a term, so that the necessary expense will be from 38*l.* to 44*l.* per annum for the whole course. I should also add that the Board of Agriculture is assisting now, but without the Board of Agriculture we did what we wanted here for the present. From outside sources, that is to say, from the counties, we get an annual contribution of 550*l.*, which is to be provided for two years at least, towards the stipends of the teachers, as follows:—Of agriculture and chemistry, 300*l.*; botany, 100*l.*; economic entomology, 50*l.*; physiology, 50*l.*; agricultural engineering, 50*l.*

23,641. Are there to be separate courses of teaching for them? For instance, the course in chemistry will not be precisely the same that is given now, I suppose?—Yes, it will be the same course as is given to the University students, and they will sit in the same lecture room.

23,642. There will be no separate course?—There will be no separate course, with this exception. We were very much pressed for time; the idea of starting this scheme came upon us very suddenly; we had not enough time to make arrangements for the University, or indeed to let the public know that this education was about to be given at the University, and therefore we began last Michaelmas with only three or four pupils. Now the numbers have come up to 19; but during this summer we shall take care to let the world know of the educational opportunities at Cambridge, and some arrangement will have to be made and will be made with the teaching authorities begin the course again next Michaelmas term. How the Professors intend to deal with the 19 they have in hand now, I do not know, but Professor Liveing told me he saw his way to it, and I trusted to his statement.

23,643. Then the Association pays 500*l.* to the University, and the students pay in addition to that certain fees to the lecturers?—Yes.

23,644. But there are no additional lectures given?—No, and they pay nothing for re-agents and nothing for stationery. The whole of that is given by the professors. The young fellows going through the chemical lectures will have nothing to pay beyond fees.

23,645. The 550*l.* goes to the professors?—Yes.

23,646. But the professors give no extra lectures at all?—No. I do not know where the agricultural engineering lecturer is to be got from—whether it is to be the Professor of Applied Mechanics or not.

23,647. (*Professor Sanderson.*) You mentioned Entomology?—Yes. I do not know who is to be the teacher.

23,648. (*Sir George Humphry.*) But if there is to be no especial or extra teaching for the students beyond the ordinary or usual teaching for the other students, one does not see why the extra fee is paid?—They have no extra fees. They only pay the fees the University students would pay.

23,649. The professors get an extra salary?—Yes, but they have all the trouble of making arrangements for the reception of these students. In the chemical laboratory all the apparatus is furnished by the professor. It does not belong to the University. The only thing that belongs to the University is the building.

23,650. But the courses of lectures will be precisely the same as for the other students?—Yes.

23,651. The students in agriculture will be taught the general principles of chemistry, which is taught to the other students?—Yes. There will be something extra in agricultural chemistry. Then agricultural botany; that may deal with the hybridising of plants. I should think that that would be made a feature of instruction.

23,652. And geology?—There we had a little discussion. I was against the teaching of block geology, and I recommended the teaching of surface geology, as being more important to farmers.

23,653. So that on the whole there will be certain teaching in the University which will have especial relation to agriculture?—Yes; the very fact of "agricultural chemistry" being inserted there, I think, shows that.

23,654. So that this sum which is paid by the Association will probably go towards that additional teaching to a certain extent?—I should think part will be applied to that.

23,655. And although you have not at present a single landowner, the hope is, I suppose, that as time goes on and as this sort of teaching becomes more and more pronounced, landowners, of whom there are a considerable number at the University, will devote time and attention to it?—I hope with all my heart that they will.

23,656. That was one of your great objects in connecting it with the University?—It was my great object. I have connexions at the University now, but they do not appear to entertain the same idea that I do, I am sorry to say.

23,657. You hope that there will be a teacher of agriculture, an especial separate teacher of agriculture?—I should like to see how the thing goes on before I encouraged them in having a teacher of agriculture.

23,658. I thought you hoped for it?—We think there must be one man who is recognised as the figure-head, at all events, of this course.

23,659. What would be his especial function?—He would take these lads out on excursions to Woburn and the large farms, and I do not see why we should not from the botanical staff get a man to fill that position. That will all have to be discussed at the University.

23,660. He would to a certain extent take the direction of the study?—He would, and undoubtedly he would do that until the University takes the matter up and absorbs all this work, which I hope it will do in a few years.

23,661. Would horticulture be included in any way in the scheme?—Yes; it is not mentioned here.

23,662. Under what head precisely would that come?—I should think botany. I did not go into these details, but it is an extraordinary fruit country round Cambridge. I have some of the finest fruit land in England, and I know how essential it is to know more than we do know now about the cultivation of fruit, and the selection.

23,663. And is it sometimes difficult to dispose of it well?—No, we have no difficulty on that head.

28,664. On a former occasion there was a proposal that agriculture should be a Faculty in the University, and it was rejected by the Senate. Do you know what the objection was?—I did not hear it; but I have heard that one of the most distinguished opponents we had has since very much regretted that he gave the adverse vote.

23,665. I believe it was to some extent a misunderstanding?—I think it was. On the whole I do not very much regret it. We have approached the subject in a better way now. We have brought the counties in.

23,666. It was thought that there were certain defects in the plan?—Yes, I was told so.

23,667. It was not an indisposition on the part of University to undertake something of the kind?—I believe the fault lay as much with the syndicate. I am quite willing to admit that.

23,668. You have shown very great perseverance in urging this matter before the University, and also very considerable liberality?—I have shown liberality in time. I have not sacrificed any money.

23,669. You are contributing 550*l.* towards it?—I do not mean individually. That did not come out of my pocket. The whole thing arose from catching people in London while they were leaving the room, after the Cavendish College scheme was abandoned, not allowing them to leave the room until we considered whether something could not be done at Cambridge.

23,670. And you have found in the University some of the professors very anxious that something of the sort should be done?—Yes, very much so.

23,671. So that there has been a combination of willingness on the part of certain of the professors and at the same time great energy and determination among yourselves?—I was no ornament to the University as a young man, and I have tried to be useful as an old one.

23,672. (*Lord Playfair.*) I see you have large ideas with regard to the importance of teaching agricultural science to landowners?—Yes, I have.

23,673. Would you not throw the ladder from the high position of landowners downwards into the schools, so as to enable the lower classes to mount up into the University?—I should be very willing to do that. That is taking another view of the question. That is enabling some to rise, whereas my view was to save a great many from falling.

23,674. That was as regards land owners?—Yes, as regards land owners.

23,675. As I understood your evidence, you do not much care for the teaching of science in the schools where mere labourers or mere farmers are?—No, I do not myself.

23,676. Do you not think it is desirable to raise the agricultural labourer a little higher than he was 3,000 years ago, when Ecclesiasticus wrote that he could talk of nothing but cattle and muck, and that he could tell us something of the nature and the growth of the plants which he saw around him, and the soil which he saw beneath him, how they co-operated in the growth of a plant, how the cattle grew, how the fruit nourished the cattle, and what were the conditions of physiology in relation to it. Why should he not know all those things, or be taught those things in a primary school?—I think the agricultural labourer knows a great deal more than the world imagines he does about matters of natural history, the growth of plants as far as they come under his eye; the destruction of weeds; what will promote the growth of one weed, and what will keep it back; what time of the year the animals in one district should breed in, and what at another. I think he is full of knowledge, though he cannot express it very well.

23,677. That is practical knowledge?—Yes, that is practical knowledge.

23,678. But do you think that in the ordinary schools up to this date, the ordinary agricultural labourer knows the composition of the air, which goes so much to the growth of the plant; that the instruction depends upon the small constituents, such as carbonic acid, water, and ammonia?—Would it not be wise to teach the agricultural labourer, when he sees the branches of a tree stretching towards heaven to pray for food, how that food is given?—If he had time to spare, I should not give him exactly that sort of teaching myself. I had rather teach him a little political economy if I might, and a little more not of the common history of the kings of England, but a little more of the history of his people.

23,679. And you would leave him in the condition of Topsy, who, when she was asked how she was created, said "I 'spect I growed"?—I think those who wished to get their knowledge would get it. There is a child of only 11 years of age who has just come into my service now—a girl—who does some particular work on the farm; I was talking about the blood going through the veins; I said "You can feel "how the heart is pumping if you put your hand on "here." The child put her hand on my wrist and said, "How many times should it pump for the fever?" That shows considerable reflection and thought.

23,680. Why should you not direct that thought and intelligence, which I believe with you is much greater than is generally supposed, to the actual occupations and dignify the labourer by teaching him to understand all the operations that are around him, which is the principle upon which modern schools are now constructed?—In the case of this child she is engaged in the poultry work of the farm; she tells me there is nothing she likes so much as reading history and gathering eggs. I do not mean such a child to remain with me many months, but I have yet to learn where to send her. I shall put her forward, and I hope she will get a scholarship and higher education.

23,681. You are kind enough to cultivate her intelligence. Why should not the intelligence of the ordinary agticultural labourer be educated. Would he not stimulate the farmer above him, and would not an educated farmer stimulate the landowner above him, and in that way improve very much the character of the country?—I hardly think it would, but I may be a very backward man upon that subject.

23,682. You are not very keen about that?—No; I think we should be dreadfully disappointed (talking as a farmer myself), if we found that after the money had been spent, when the boy came back he had a greater difficulty in getting a collar on a horse's head than a boy who had not had the education, and that he had a greater difficulty in guiding an animal.

23,683. Do you think there would be a greater difficulty than is found in manufacturing districts where increased intelligence is very much in favour of production and improvement in the economy of the manufactures?—When I am in a large town I go to the free library and ask what books are being read, and I do not find that the information I imagine you have in your mind now are very much taken up by the artisan.

23,684. You said it was no use lecturers going into districts of that kind and lecturing, and that it was a rotten and stupid system?—Yes.

23,685. I was late in arriving here to-day, because I was attending a meeting of the Trustees of the Gilchrist Trust, the object of which is to send lecturers to all parts of the country. What we find is

A. Pell, Esq.

3 Mar. 1893.

that if we send lecturers twice it is immediately followed by a great improvement in the district, for instance, that the free library movement is almost always taken up in the district to which we have sent lecturers; that where they have opposed it before they have then taken it up; that our lectures, which are elementary and intended to create a feeling and a wish for education in science, are generally followed by the creation of secondary schools of science in the district for the working classes, which schools become permanent. Do you not think that in that way lectures might promote very much the growth of intelligence in agricultural districts?—If it would promote the development of intelligence in an agricultural district among the trustees of endowed schools, I could see some hope in it, but those are not the persons who attend the lectures. I think one of the most lamentable features in rural life now is that the immense endowments which we have, which might be applied to giving the sort of education which you have in your mind, are not applied to that purpose.

23,686. I should be very glad if the trustees would attend. Now I must say one word, as you are a very old friend of mine, in protection of a very great name, that of Liebig. Do you find phosphates of any use in farming?—Yes.

23,687. Both ordinary mineral phosphates and acid phosphates?—Yes.

23,688. Whom do you owe that to?—I always understood we owed it most to Professor Henslow, the Professor of Botany at Cambridge.

23,689. No, you owe it to Liebig?—The dissolving of phosphatic nodules?

23,690. Yes. He was the man who found that the phosphatic nodules consisted of phosphates?—I thought it was Henslow.

23,691. No, it was Liebig. I was with him when he did it?—I never intended to say a word to disparage Liebig, I was only pointing out what was a notorious mistake which he made, which I suppose would be admitted.

23,692. Undoubtedly he made a mistake when he gave up being a professor and tried to become a manufacturer and a trader, and made a mess of it. I quite admit that, but you in your agricultural experiments, as well as we in our laboratories, often make mistakes?—Yes.

23,693. And one mistake would not destroy the reputation of a man who has laid the whole foundation almost of scientific agriculture?—I have heard that many a man has lost his Senior Wranglership by not being able to add up correctly.

23,694. I do not know what your opinion may be as to the immense progress that has been lately made in the United States not with model farms, for they have not model farms, but a very large amount of money is now given annually in every State throughout America for experimental stations?—Yes, I am aware of that. I think it is State money, not Federal money.

23,695. No, it is Federal money, and the State contributes also; the State adds to it. They have laboratories with large numbers of pupils there, and they make experiments upon various things practically; for example, in one that I visited there were about 40 cattle under experiment as to milk, with different kinds of food. With science connected with practice in that way you would not see any objection to experimental stations of that kind being appointed in this country?—I should myself, because I think we are far far ahead of the Americans. We have got to a point where we can do without our instruction. I have to sell milk to London, and I am constantly applied to to make, I think, this very sort of experiment to see how we can best satisfy the brokers in London who buy the milk.

23,696. But you are not ahead of the science of the time. They are improving the science by those experiments, and by research are advancing science, and advancing, therefore, the great art which depends upon that science?—I can quite understand that.

23,697. And as laboratories of research they are likely to do, and I hope will, very great good to agriculture?—Yes. And I have understood that they are making inquiries into the waste from their iron furnaces.

The witness withdrew.

E. Clarke, Esq.

ERNEST CLARKE, Esq., Secretary of the Royal Agricultural Society of England, examined.

23,698. (*Lord Reay.*) You are very intimately acquainted with what is being done abroad with reference to agricultural education. Is it not a fact that in Germany, France, Belgium, and Holland, the object of the various Governments is to give as much scientific instruction as can be got within the time at the disposal of the farmer, in order to allow of the farmer obtaining a scientific education?—Yes, that is undoubtedly true. Every foreign country has much more scientific instruction for agriculturists than we have in this country, and when one goes abroad one is amazed to find farmers so much more intelligent men than the average English farmer, as regards general culture and knowledge. As an instance of that, I might mention that I went from Berlin into the wilds of Prussian Saxony, and I found a farmer there, to whom I had an introduction, a highly cultivated man. I found that he had in his library the whole of Darwin's books, and he was able to talk to me (fortunately in English) on the Darwinian theory and the relations of plant life in a way which I should never have expected from an ordinary English farmer. That was a man who was in one sense selected, but he was selected because he was a good practical farmer. I think anything that could be done in the way of extending agricultural education, and in making it more widely distributed not only in the case of land owners but of tenant farmers and labourers, would be a distinct advantage to the State.

23,699. You would not discourage but encourage the tenant farming class to attend the scientific lectures?—Yes.

23,700. It is our duty to take care that they should get that education on as cheap conditions and as near their own homes as possible?—That is my opinion, but I suffer from the disadvantage that I do not see the farmer in his daily life, as Mr. Pell does.

23,701. Is it not a fact that in Germany they have oscillated, and are oscillating even now with regard to the question whether to the scientific instruction which they give there should be added an experimental farm?—Yes.

23,702. Is it not a fact that in Germany there are schools with experimental farms, and schools without?—Yes; but the tendency now is to have not experimental farms, but merely experimental plots attached to these teaching institutions. For all their practical instruction on a larger scale they go to well-known farms in the vicinity. They do not necessarily want a model farm in immediate proximity to the teaching institution.

23,703. That is the course followed at Edinburgh, where the professor takes the students to the best farms in the neighbourhood, and that solves the problem?—Yes. The experience of Cirencester tells us that.

23,704. (*Chairman.*) With regard to the subject of foreign countries, you told Lord Reay that there is much more instruction of a higher nature given to farmers in Holland, Germany, Austria and other countries that you mentioned than there is in England?—Quite so.

23,705. Is the result of that that they farm the land better and show more intelligence in that way than

the ordinary English farmer?—I think so. That was my impression certainly.

23,706. Perhaps you will tell us how that instruction is given?—All foreign countries they are very much more under the control of the Central Government than we are in England, and there is, in every foreign country that I know, an Agricultural Department, which controls from the capital the whole of the agricultural teaching. There is first of all a series of high schools; then beyond that there is agricultural teaching in the ordinary schools; and then there is an elaborate system of lecturers who go round the country explaining to the country people what they should do, in fact, acting advisers on various subjects to the farmers. That I found to be the case in Austria, where there are what are called *Wanderlehrer* whose services are highly spoken of.

23,707. Does this instruction go on concurrently with practical instruction?—Yes; of course there is a great deal of difference between the education which is given at a high school like that of Berlin and the educational information with regard to agriculture which is given in the schools. There are all sorts and conditions of schools, and different ways of teaching, but the theory seems to be that agriculture should be taught from the beginning to the end of things, that in fact there should be as it were an infusion of agriculture in all the teaching, from the highest to the lowest.

23,708. What is the ordinary course? A young man who is going to be a farmer gets his school education to begin with. Does he then proceed to his University education upon that, or where does he go?—There is no special continuity between the ordinary primary schools and the higher schools, but there are facilities for going on from one to the other, and the highest kind of teaching at Berlin is of a kind that we have no conception of in this country. If I had been aware that I should have been called upon to give evidence I should like to have prepared a statement with regard to the High School at Berlin, which seems to me to be the most efficient of institutions of that kind that there is anywhere. It is a magnificent school, with appliances of every kind, and the pupils that it turns out are of the very best type of scientific agriculturists that one can find.

23,709. At what age do they leave generally?—I am afraid I do not know about the particular age, but the Agricultural High School at Berlin has cost an enormous sum of money, and it has in its different departments laboratories, geological collections, mineralogical collections, and the best type of agricultural museum I have ever seen.

23,710. What does a man do after passing through that school?—After passing through the school a man goes to be the agent, manager, or director of one of those institutions which we do not see in England, but which largely exist abroad, viz., farms on commercial principles. In Germany the beet-sugar industry is a very large one; it has complete development there, just as as an ordinary manufacturing business has in this country. A great part of this work consists in bringing the sugar beets to the manufactory. For that purpose they have large farms, which are exploited by managers who have come from these schools. They are clever cultivated men, and practical farmers at the same time. Then there are schools for brewing, which is an industry that Mr. Pell referred to, and there are other schools. Altogether scientific teaching with regard to agricultural questions is far higher in foreign countries than it is in England.

23,711. You think we might with advantage copy some of the things that they do?—Yes.

23,712. Do you think a farmer should receive the practical part of his education first, or the scientific part, or might both go on together?—I do not know much about rural life in practice, but my personal idea is that the two things might go on concurrently. A certain amount of the curriculum might consist in the director of studies going with the students on to the farms, and explaining on the farms the practical application of what he had been teaching them in the laboratory or in the class-rooms in the larger towns. Of course, with the railway facilities that there are now-a-days, that would not be difficult.

23,713. You have a higher opinion of the system of lecturers going about the country than Mr. Pell has?—Yes. I speak, of course, not in the name of the Society, but in my own name. But I think that a very large proportion of the money which was given by the Government for technical education is wasted, because there is no co-ordination in the matter. Every county council is left to devise its own plan of spending the money, and there is a natural temptation on the part of every county council to spend money which it receives, and therefore institutions have been set up which are not wanted.

23,714. Do you think it desirable that a teaching University for London should give a degree in agriculture?—Yes, not of course a degree in agriculture, but an avenue to a degree in science through agricultural knowledge.

23,715. A degree of science in agriculture?—Yes, as it were an agricultural tripos. It is a great mistake to have too many kinds of degrees, but a man who had applied his mind to agriculture might get a hall mark, so to say, of his knowledge, through a degree in science which he might get by study of agriculture. That, as Lord Moreton said, is chiefly wanted for the large class of teachers who are now growing up under this technical education movement, and we may hope also for the class of land agents, and landowners.

23,716. Not tenant farmers?—You could not expect tenant farmers to go in for a University degree.

23,717. You heard the evidence of Lord Moreton and Mr. Pell, the last two witnesses; is there anything they have not touched upon which you would like to add?—No, I think not. Perhaps I might mention a point with regard to our own examination. There seemed to be some little confusion or ambiguity in the minds of some of the Commissioners with regard to our examination. Of course the senior examination of our Society is a practical examination, and would not conflict at all with the degree which we are asking the University to give. We should expect our candidates to go up for this degree, after passing, or at the same time as they were passing, our practical examination.

23,718. At what age do they generally pass your examination?—We have them at all ages, between 20 and 30 as a rule. A good many of come up at the completion of the curriculum at Cirencester, Downton, or Aspatria, and get our diploma as the finishing touch to their education.

23,719. And then they would go on still further to the University degree?—Yes.

23,720. It would be a very long course of education?—The great point is that there should be some hall-mark to the agricultural teaching which is going on, and I think the Royal Agricultural Society would not object if students went in for your examination instead of ours.

23,721. (*Mr. Palmer.*) The hall-mark might be obtained by a diploma in a central institution if you looked only to a hall-mark of proficiency in agriculture. Is there any really great reason why you would prefer the degree of a University in science generally to a certificate of proficiency in agriculture from an institute?—A University degree, as you have said, connotes general culture. Our diploma might conceivably be held by a man who had no considerable knowledge of classics and other subjects, whereas the possession of a University degree does presuppose a considerable knowledge of classics, natural philosophy, and so on. One would like to have a higher type than our examination; and in every University we think there should be an avenue to this degree in science through a knowledge of the sciences that bear upon agriculture.

23,722. I quite understood what Lord Moreton said, and I quite understand that answer. The reason I put the question to you again is that those who have

E. Clarke, Esq.

3 Mar. 1893.

appeared before us on the part of engineers, architects, and surveyors, have all insisted upon a very close avenue in the teaching, and in the testing by what you have expressed as a hall-mark of applied science, and have said that if they get a degree they must have a degree which must be confined to the avenue of their special profession. Do you wish to have agriculture stamped by a special hall-mark, or would you prefer the wider range which you mentioned just now?—So far as I understand the question, we do not want a degree in agriculture, say "Bachelor of Agriculture" or "Doctor of Agriculture," but a degree of "Bachelor of Science" or "Doctor of Science," which a man could take who knew agriculture; and we wish that in some way or other it should be indicated to those about him that he had got that degree through a knowledge of agricultural subjects.

23,723. And also that he was a man of general culture?—Yes.

23,724. With regard to the Royal Agricultural Society, could you tell us at all what the cost of the annual show is?—The actual outlay on the annual show last year from first to last was 16,000*l*. As a matter of fact we generally recoup our expenses to a very great extent. Notwithstanding that Mr. Pell said it was a raree show, or a circus, it has for farmers a considerable interest because they there see the best type of beasts, and so on. Therefore it is not to be regarded as the mere throwing down of several thousands of pounds for, as was once said, certain distinguished breeders to scramble for.

23,725. It was a kind of education in the year 1839 when it was first started?—Yes.

23,726. For some classes of animals there are very few exhibits?—That is so, certainly.

23,727. And there is rather a larger proportion of money than the money's worth in some cases?—Of course we began more than 50 years ago, with the primary object of having an agricultural show, and with other avenues of utility added. The tendency of late has been to broaden those other avenues of utility, and although we have this large show, which is the outward and visible sign of our existence, we do a great deal of educational work. For instance, we have our Journal, which, I think I may say contains the best type of agricultural knowledge one can get within two covers, and that Journal costs us from first to last something like 2,500*l*. a year. Another department that is exceedingly valuable is our Chemical Laboratory, where we analyse feeding stuffs, manures, and so on, for the benefit of members, and generally help farmers, as far as chemistry can do so, in their work. Then we have a consulting botanist and consulting zoologist, and give 500*l*. a year to the Royal Veterinary College. With regard to the particular matters Mr. Palmer speaks of, it is true that we only spend about 500*l*. a year in actual prizes and education, but we claim that the chief part of our work is educational. Although, no doubt, Mr. Palmer is correct in saying that a considerable part of our work is not primarily educational, yet I think it all has an educational influence.

23,728. Still you would agree with Mr. Pell that the sympathy, and possibly the assistance of the Society, might not improperly be invoked in the cause of education?—Yes; and I think you would find the Society only too anxious to do anything it could. We have always had before our minds the desirability (if we could see our way to it) of emphasizing the necessity for the education of agriculturists, but it has heretofore been exceedingly difficult to find any practical way within reasonable limits of getting the knowledge of agriculture down to the stratum of the farm labourer. We have not had the opportunity which your Commission has, and which the Senates of other Universities have, of giving this technical instruction to landowners at the beginning of their careers, and as now the county councils have got the opportunity of giving technical instruction to labourers at the other end of the social scale.

23,729. As you are well acquainted with the agricultural schools in foreign countries, you are no doubt quite aware that the completion of the French system in the ordinary primary schools of France is only so recent as 1879?—Yes. There has been a great deal of change in that connection in consequence of the different troubles that France has gone through lately.

23,730. But the present system only dates from 1879?—Yes.

23,731. And the teachers of those schools are found in what I may call the technical schools,—the *Fermes École*, and the *École Pratiques*, and the three great regional normal schools, as well as the Central Institute?—Yes.

23,732. Therefore, the connexion with the Central Institute necessitated the establishment of normal schools, which practically supplied the teachers for the whole of the agricultural teaching of France?—Yes.

23,733. (*Mr. Anstie.*) You referred to the agricultural instruction given at Berlin. Is that connected with the University?—Not in any definite way. There are many Universities in Germany, but there is really no connexion between them and the Berlin High School, which is a Prussian institution. There are other Universities, such as Halle, which is the place to which many agricultural students go for a degree in agriculture.

23,734. More than to Berlin?—Yes, at Berlin it is merely a normal school, as Mr. Palmer calls it, for the purpose of sending out teachers, which are greatly wanted.

23,735. At Halle is it connected with the University?—Yes, at Halle a complete Agricultural Institute has, since 1863, formed one of the Faculties of the University.

23,736. Can you tell us a little about that?—I have never been to Halle, unfortunately.

23,737. Does it give degrees in that subject?—I believe it does not absolutely give degrees in agriculture. Of course, as you know, foreign degrees are not so specialised. They generally give the degree of Doctor of Philosophy, but it is quite possible for a man to get the degree of Doctor of Philosophy with nine months' residence. I should not propose that for the Gresham University.

23,738. With respect to Halle you say you do not know?—No, I do not know the details about Halle.

23,739. And as far as the Berlin High School is concerned it is not a University course?—No, it is not a University course.

23,740. You are in favour of its being a University course here?—Yes, I think the central idea of the Royal Agricultural Society was, as has been expressed before, that those who are going to bend their energies to agriculture, and who, therefore, for that purpose are studying the subjects allied to agriculture, should have the opportunity of getting a degree in science, the "hall-mark," from some well-known and established institution.

23,741. What would be your view with respect to the question I put to Lord Moreton whether the practical diploma given by your Society or some similar society (and which everyone seems to agree could not be properly supervised by a University, or issued by a University authority), should or should not be made a condition for the giving of a degree in agricultural science?—Speaking my own personal view, I do not think that it is at all necessary for a man to have previously got our diploma to go up for your degree. Our diploma might go by the board if there were another hall-mark, but in the absence of that we should like to go on testing the respective merits of the candidates who come up from the various colleges.

23,742. You suggest that the degree should be a hall-mark to the teachers; therefore the question arises whether it ought to be a hall mark to the teachers without some evidence given by a competent authority of practical efficiency?—I think you would have to have

an examiner, as we have, in practical agriculture. There would have to be a paper set for this degree in practical agriculture in the same way as in scientific agriculture.

23,743. Would a paper satisfactorily indicate and demonstrate it?—As Lord Moreton put it in his evidence (and perhaps I may repeat it), the way we do it is this: we have a paper in agriculture, which is purposely made as wide as possible, because it is quite obvious that a man who comes from the west country may have ideas about cultivation in his part of the world which are absolutely opposed to the ideas held in the east country. We ask the examiner to read carefully through the answers that are given and to spend the next afternoon in examining the men *vivâ voce*; and in that way he is able to find out whether a man has any practical knowledge or not.

23,744. You attach great weight to the *vivâ voce* examination?—Yes, we attach great weight to the *vivâ voce* examination, certainly.

23,745. Would you have it in the nature of a clinical examination?—We have not had it in the nature of a clinical examination, but it might easily be done; and it is has often been suggested that instead of coming to Hanover Square the examiner might meet the pupils on a farm and tramp over the fields with them, and test their knowledge on the way. The difficulty we are in is that it is necessary to compress a good deal into a week. Our time table contemplates a week. There would be no harm in all the candidates making a tour one afternoon on a neighbouring farm.

23,746. Do you contemplate it as a thing that might be reasonably done that the University might itself hold an examination of that kind which would enable it to certify to what may be called the practical efficiency of the candidate?—I think so, in the same way that they test the men by their laboratory work. They give you a certain lump of stuff, and tell you that you have to find out what is in it. It would be of the same nature, a test of the practical knowledge of agricultural phenomena.

23,747. And for that purpose it would be important that the University for conducting examinations of that kind should be immediately in connexion with those who are conversant with the subject?—Yes.

23,748. Who could form a sound judgment as to whether the conditions of practical efficiency existed?—Yes.

23,749. And you would think it desirable that if degrees were to be granted at all in agricultural science, it should be subject to that condition of a man passing a practical examination?—Certainly, I think so.

23,750. You think that would be a better course than accepting a diploma from a body like your own, which concerns itself with practical matters?—Yes. I think I may say that the only object of the society in starting the examination was that there was nothing like it existing; and although after 30 years we should not wish to give up our examination lightly, there is no essential reason for its existence if something that was better and nobler were available.

23,751. It would be, of course, possible for a University making itself chiefly responsible for the higher subjects, and conducting, as you suggest, a practical examination, to accept in lieu of that practical examination the diploma of a body like yours?—Yes. That, of course, is done in other walks of life.

23,752. Would you see any objection to that?—Not the least; on the contrary.

23,753. The University, of course, requiring to be satisfied that the conditions existed which made the diploma a truthful representation?—Yes.

23,754. Now with regard to county councils. You have referred to the frequent errors they have committed through want of organisation. Would it be for the advantage of agricultural science and efficiency if some union or delegacy were created among the various county councils which have been trying experiments?—Undeniably it would. The difficulty has always been that there are two departments to consider. The department which has the real control of the money is the Local Government Board, which, of course, knows nothing about agriculture. It is true that a good deal of money is applied to subjects other than agriculture, but in rural districts a very large proportion of the technical grant does go to agriculture and kindred subjects.

23,755. You are not under the Local Government Board with regard to the administration of the money?—The county gets money from the Local Government Board.

23,756. The county administers it?—Yes, the counties administer it, but they get the money from the Local Government Board. The Local Government Board have no knowledge of the particular kind of teaching wanted, the Board of Agriculture have nothing whatever to do with the control of the grant. Everyone must have personal knowledge of the hideous waste of money which has gone on. There must be mistakes, of course, but there has been no one to co-ordinate what has been done in the different counties. The lectures that have been given have done a certain amount of good, no doubt, but they have done nothing like the amount of good that they would do if the money were properly administered.

23,757. Do you think it would be of advantage if the county councils were to have some kind of conference?—Yes, undeniably. They are creating now what are very important vested interests of different kinds, and really and truly which are not necessary.

23,758. I do not know whether you know anything about the proposals to establish an agricultural college in the home counties, Kent, Surrey, and Sussex?—I merely know the fact, no more.

23,759. Is that a proposal which appears to you to be a desirable one to entertain?—Yes, any proposal which is upon a firm basis, and which is not run merely because there are a few young men who want to meet together with facilities for hunting, fishing, and so on. If there were really serious teaching going on, that might be a thing which it would be quite proper for the county councils to assist.

23,760. Supposing there were such establishments created throughout the country, would it not be an advantage to them if there were scholarships created leading from those colleges to the Universities, where the highest kind of teaching might be given?—Yes, a very important thing would be to link them together, so that a clever son of the soil might get a degree eventually. That would be a consummation devoutly to be wished.

23,761. Requiring a high level above would tend to improve all the levels leading up to it?—Yes, it would leaven the whole lump eventually.

23,762. In that way University recognition of a subject might have, besides its own immediate influence, indirect influence throughout the country?—Yes, we want University recognition of agriculture as a subject in the same way as University recognition is given to it by other European countries than our own.

The witness withdrew.

J. Hill, Esq., B.A.

3 Mar. 1893.

JOHN HILL, Esq., B.A., examined.

23,763. (*Chairman.*) You were educated at Rugby and University College, Oxford, and you took a B.A. degree in 1864?—Yes.

23,764. For two years you went as agricultural pupil in Yorkshire, and you had been previously accustomed to the practice on your father's farm?—Yes.

23,765. You commenced farming on your own account in Cheshire in 1865 on 250 acres; then you removed to Felhampton Court (500 acres) in 1867, taking more land, and you commenced taking agricultural pupils?—Yes.

23,766. Will you first of all give us some information with regard to your own practice as a farm pupil?—I try to follow out as nearly as possible the way I was educated on the Yorkshire farm. The Yorkshire farm was about 4,000 acres in extent, chiefly arable. There was steam cultivation and high farming. The principles of teaching were the keeping of a diary of all that took place on the farm, and a book with headings for each subject, with practical attention to all details, so as to learn the necessity of knowing the value of labour. In the second year I had the charge of a yard of cattle and acted as foreman on one farm. That was the way in which I was taught. My own system of teaching is the following, and it is on the practical lines on which I was taught myself. I endeavour to inculcate business habits and early rising, and always consider that practical farming must be learnt more on the farm and among the stock than from books and lectures, but that the practical work is much helped by them. I have carried out experiments for the Bath and West of England Society, and with the help of Professor Tanner, of the South Kensington Institute, have, during a series of experiments, successfully carried out the trials of various manures for the root crop. My pupils had the advantage of these, and also of veterinary lectures, and of land surveying, together with carpenter and blacksmith work. The principles of breeding high class pedigree stock, and the general management of all kinds of farm live stock are taught, as also dairy work and poultry farming. I give papers of questions on subjects which I always tell my pupils to find out when they go on the farms themselves, and then they are able to answer the questions I put to them from time to time. I never consider that anything can be taught to a pupil indoors without practical attention to details outside. Of course, they have the advantage of listening to the general conversations at night with regard to the organisation of the farm work, and the details of carrying on the farm.

23,767. You have carried out experiments, have you not?—Yes, in the cultivation of roots and also in the cultivation of barley afterwards. My pupils have had the advantage of carrying out these experiments, and have seen a report drawn up and sent to the Society afterwards.

23,768. What do your pupils generally do after they leave you. Do they take to farming themselves, or become land agents?—Both; some go to land agents and some to practical farming.

23,769. Your views about the scientific teaching are that it should follow the practical farm work?—Most undoubtedly it should follow the practical farm work. I have had pupils from certain scientific colleges, and I have sent pupils to such places, and in my experience I have invariably found that much time has been wasted by the scientific teaching coming first.

23,770. At what sort of age would you get a pupil?—Generally from 18 upwards I think.

23,771-4. How long would he stay with you?—I like them to stay three years. It takes an agricultural pupil nearly the first year to see his way to what is worth learning; in the second year the details of the first year are carried out; then there is the third year to make himself thoroughly perfect.

23,775. Supposing the University to have a Faculty of Agriculture, or to have a branch of the Faculty of Science devoted to agriculture, and leading to a degree at what age do you think the degree would be taken?—Not before 23 or 24 at the earliest.

23,776. His practical education would have to come before the University training?—Yes, the practical teaching ought to come before the scientific teaching begins; then he would be able to go from the practical work and understand the lectures that are given in the scientific.

23,777. You say in your notes that you have invariably found by experience that much time has been wasted by the scientific teaching coming first. Much time would be saved and great advantage gained if at all schools agricultural subjects could be taught on the modern side of the school. Then by the time the scientific teaching has been concluded at the age of 23 or 24 the man would be ready to enter life?—Yes.

23,778. Have you anything more to say with regard to the necessity of agriculturists having ready for application the results of scientific investigation and research?—I say it is impossible for farmers to carry out individually with any certainty of success any experiments which may be of any practical value without the knowledge gained in the laboratory. But with that knowledge, the only real agricultural value of it, is the practical test in the field, or in the stock yards and stables, of those manures and foods which theoretically are considered of importance. I think certainly there should be endowed Chairs of such subjects in connection with a University as there are for the other Departments of Applied Sciences. I have a scheme of education which I have written out, which I should like to put in (*for this document see Appendix No.* 55).

23,779. Will you give us the heads of it?—I think the only way for practical agricultural education is to begin at the bottom and so to let those who like to rise do so, and hold out a University degree as the ultimate goal to be aimed at. I will read the latter part of the scheme:—"All public schools, in fact all "schools, down to the National village schools, should "have an agricultural side, or rather agricultural text-"books should be used, and the subjects should be "taught which lead up to the University examina-"tions; and if scholarships could be established it "would be an additional encouragement in assisting "the holders to reside in London during the time of "the examinations. The difficulty now experienced "in inducing good men to remain on the farm "and learn to become skilled farm labourers, is a "great one. As soon as the boys leave the village "school all touch is lost with them, and it is almost "impossible to get them to attend the lectures pro-"vided by the County Council. The following is "a scheme which I think, if well carried out, might "be of some practical value in remedying the evil, "and it would even be possible to hold out to the "labourers or small farmers' sons in the village school "the ultimate reward of a University degree:—The "chief difficulty in making the best use of the money "devoted by the County Council to the technical "education of young farm labourers is that of getting "them to attend the lectures provided. Unless more "time can be given to agricultural subjects at the "village schools before the boys leave, they have just "enough smattering of education to entirely unsettle "them and unfit them for the routine of farm life. If "they only knew more they might be more interested, "perhaps learn the advantage of the value of tech-"nical agricultural knowledge. When they leave "school, like most other boys, they vote all further "education as a thing to be avoided, and they will "shirk it if possible. Besides this, even if they had "the wish, they have no time to afford to give to it. "They have already been prevented, too long, from "being able to help their parents by earning some-"thing by their labour, and it is not likely that they

" will be induced to attend lectures without some " pecuniary inducement. It is with a view to over- " come the fatal objection to the way money is being " spent by the County Council on technical education, " that I venture to propose the following rough " sketch of a plan from which it might, perhaps, " be possible for those who have the direction of this " expenditure, to frame some practical scheme which " would be of some benefit to the class which it is " so important should be educated in those subjects " which are of most value to those who have an " interest in the cultivation of the soil. I believe " that the prosperity of the nation centres in agri- " culture, and that as agriculture cannot prosper with- " out good and efficient labourers, it is the interest of " the nation as a whole to find the means of en- " couraging them to fit themselves in the best manner " possible for the duties they have to perform, and to " give them an interest in their work. On leaving " school those boys, whose parents were willing, might, " under the direction of the council, be placed for " a term of years at certain approved farmhouses, " appointed to meet the requirements of each district, " to learn their business, not merely as in old days to " be the farmhouse drudge, and to be at everybody's " beck and call, but to be a kind of farm pupil, earn- " ing their living by their work and paying for their " technical education by their increased knowledge. " A yearly examination might be held under the " supervision of the County Council, and money " premiums be awarded to those who pass in pro- " portion to their merit; and also for good conduct, " his money to be deposited in the Savings Bank as a " reserve fund for the boy on his leaving service with " as much of the balance of his yearly wages which " can be spared after buying his clothes, &c. The " examination should consist chiefly in practical out- " side work conducted *vivâ voce*. Each farmer who " took these boys should have a yearly bonus allowed " to remunerate him for the trouble entailed, and for " the loss of the boy's time while attending lectures " and examinations, with an extra grant for those who " pass. Each boy should be helped on in the line he " fancies most, either as waggoner, cowman, or " shepherd, but it should be compulsory that he " be taught the elementary rules for the management " of farm machinery, thatching, stacking, hedging, " broad-cast sowing, &c.; and that they be sent to " help the carpenter or blacksmith, when they are " working on the farm. Any complaints which may " arise as to food or treatment should be sent to " the County Councillor residing in the district, so " that inquiries may be made by the Educational " Committee at the earliest opportunity. If such a " plan were to be organized and supported in the way " of prizes for good conduct and work by the Royal " and local agricultural societies, it is possible that " labourers and small farmers would see the many " advantages to be obtained, and would encourage " their boys to apply for such situations instead of " pushing them off to the towns, before they have had " time to consider what is really best for themselves; " and I feel sure that much of the money, now being " practically thrown away, may in some measure " be spent to the benefit of labourers and their " employers. It would give the labourers the best " opportunity of rising in their profession and becom- " ing managers or farmers; and would improve those " who have only the ability for manual labour, and " enable them to get higher wages. If, therefore, a " Chair of agriculture be established, it would be " putting Agriculture in the high position it should " hold among the other national industries; and " do away with the present feeling of it not receiving " the attention which is due to it."

23,780. Is there any further evidence you wish to give?—No, my Lord. But I say most distinctly that the practical work should be learnt first, followed by the scientific work, and that if a University degree were established there would be great impetus to men in such positions as myself to hold out something for the boys to work up for, and if a man gains a University degree it would always help him and stamp him as a man thoroughly acquainted with the profession.

23,781. If the practical work is to come first, and the scientific after, ought not the practical work to begin a little before 18?—As soon as the boy leaves school. If there was an agricultural side on the modern side of each school, and the agricultural text-books were taught both at the public schools, and in all schools, in fact, it would give them a chance of becoming better acquainted with the subject before they started on the farm.

23,782. They would begin by having a little instruction in rudimentary things; then they would have a practical course, and then a scientific?—Yes, that is exactly my meaning. "Fream's Elementary Agriculture" that the Royal Agricultural Society have just published, also Professor Tanner's well-known elementary books on the subject, should be used at school.

23,783. 21, which is the age at which they leave you, is rather late to begin a University course; it would take them on to 24 or 25?—I should suggest that they should be reading for the examination all the time, and only come up to take the degree, without long residence.

23,784. Could they attend the University at the same time that they were doing the practical work?—No, hardly; but they could do so while residing at scientific places of instruction, going up for the University examination without residence, except at that time, in London.

23,785. Then the University course would have to begin after the other was done, and they would be 24 or 25 before they were ready to begin life. That would be rather late, would it not?—It would be late.

23,786. Still I quite see the order in which you think it should be; and you are decidedly of opinion that it would be useful to have an agricultural degree in the new University?—Yes: and the practical work should come before the scientific.

23,787. (*Mr. Anstie.*) When you speak of the practical work, you mean the practical agricultural work, the handling of plants, cattle, and so forth?—Yes.

23,788. A knowledge of how to deal with the ground in a practical manual way?—Yes.

24,789. You do not mean more than that?—Practical work in all the detail of farm management, both relating to stock, crops, and labour.

23,790. That Mr. Pell told us would be acquired in a very competent way by a boy of 17. He said that a boy of about 17 would know all about the management of horses and cattle and would not get any further forward?—I am afraid I have not found it so in my experience.

23,791. You do not agree with that view?—Not amongst the class of people that Mr. Pell spoke of. Pupils coming from among the sons of landowners would not begin until after they have left public schools.

23,792. Mr. Pell spoke of the labouring class chiefly, I think?—The practical knowledge of the farm can only be acquired by putting your hand to farm work as the farm work goes on day after day.

23,793. When would it be your idea the University course should commence?—On leaving the farm where the student has been learning the practical work.

23,794. You put that at what age?—Of course they may be at any age. If they begin at 17 on the farm, it takes about three years to go through the practical course to be of any value.

23,795. Is your scheme thought out with reference to the sons of landowners and persons of independent means, or with reference to tenant farmers, or again, with reference to labourers?—My scheme under the County Councils Technical Education movement is more for tenant farmers and labourers.

23,796. Has that any relation to the proposals you are making with reference to the University?—It gives an opportunity for any of these men to go up for a University degree.

J. Hill, Esq., B.A.

3 Mar. 1893.

23,797. Then the scheme you refer to would deal with the lowest stages of education?—Yes.

23,798. And the evidence which you are giving at present has reference to the University level?—Yes.

23,799. Do you see any way of connecting the two ends of the scale?—I think it can be done through other schools. If an agricultural side were given to other schools, they might pass on from me or through agricultural colleges.

23,800. You look at a system of intermediate education to realise your idea?—At Cirencester, Downton, or Aspatria. They could go from me to those colleges to learn the scientific part, and then go on to the degree.

23,801. (*Mr. Palmer.*) Your idea with regard to the time for scientific teaching agrees with that of all the foreign authorities, who say that before a man commences his professional career and takes a farm, he should have his scientific teaching, and before the scientific teaching he should have that practical manual knowledge of men and things which he will know by farm work?—Yes.

23,802. Your view as expressed to the Chairman is that expressed in all the reports of the Agricultural Departments of other European countries, as being advisable?—I have had experience of young men coming from scientific places, and I have found a great deal of time thrown away, simply because they did not understand what the lectures are given upon. But if they see the practical part first, they understand what the scientific part of the business is.

23,803. That is very strongly indeed dwelt upon in the report of Denmark, where there is probably the highest education given. In Denmark there is a State method of apprenticeship, which appears to be somewhat similar to that which you have propounded in your suggestion to the County Council. Boys on leaving the village schools are apprenticed by the State to approved farmers, who are paid by the State premiums, some part of which reaches the boys, and the boys' part is paid into the Post Office Savings Bank for them to begin with. It seems to be a popular thing in Denmark, and the demand exceeds the supply?—If that system were carried out, it would be beneficial, I am quite sure.

23,804. And a similar system is carried out with regard to the school of engineering at Cooper's Hill, where, after the boys have obtained their awards under examination, they are placed out with engineers, and they have a practical examination afterwards?—Yes.

The witness withdrew.

Adjourned to Friday the 10th March 1893, at 12 o'clock.

Sixty-first Day.

Friday, March 10, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

The RIGHT HON. LORD PLAYFAIR, K.C.B., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir WILLIAM S. SAVORY, Bart., M.B.	Professor BURDON SANDERSON, M.D., F.R.S.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	JAMES ANSTIE, Esq., Q.C., B.A.
	RALPH C. PALMER, Esq., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Dr. C. Hofstede de Groot.

10 Mar. 1893.

Dr. C. HOFSTEDE DE GROOT examined.

23,805. (*Lord Reay.*) You are sub-director of the Royal Picture Gallery at the Hague?—I am.

23,806. And you have taken your degree at the University of Leipsic?—Yes.

23,807. Perhaps you would tell the Commission exactly what lectures at the German Universities, but more particularly at the University of Leipsic, with which you are acquainted, are given on the history of Art, Archæology, and connected subjects?—I have heard the lectures of Professor Springer, who is now dead, on the Mediæval and Recent History of Art, and those of Professor Overbeck on Archæology. Then there were at Leipsic what they call in Germany *Privat docenten.* Dr. Brockhaus for the history of modern art and the Extraordinary Professor Schreiber for Archæology. I heard the lectures that Professor Springer gave; generally he gave, I think, three lectures a week, one more especially on Durer, or Raphael, or Michael Angelo, &c. Then he gave another more general lecture—four hours a week—on the History of the Renaissance of Art in Italy, or the History of Dutch Art of the seventeenth century, &c. The third lecture he gave was more practical. It was called Kunstgeschichtliche Uebungen für Fortgeschrittenere. That were lessons on modern art. Then Professor Overbeck gave two lessons, one for students of all Faculties, and one more especially for students of Archæology.

23,808. He took his students through the museum?—Yes, during the former lessson, called "Fuehrung durch das academische Gypsmuseum für Zuhörer aller Facultäten, through the museum of casts of ancient plastic. The other lesson was more especially for students of Archæology; at one time it was on Greek Art, at another on Roman Art, and so on. Then we had an archæological seminary, where the professor dealt with special subjects, such as inscriptions, vases, reliefs, &c. There were ordinarily two classes of students, of Ancient Art and Modern Art, but for the examination several students took one as the principal branch and the other as their accessory subject, "Nebenfach" as it is called in Germany, for the examination.

23,809. The examination in the principal branch being more searching than the examination in the accessory branch?—Yes, at the examination there was

one principal branch and two accessory branches. The candidates could choose what they liked to take, but the Faculty must approve it.

23,810. There was a great deal of option left to the students who were examined?—Yes. They could take philosophy as an additional branch, or they could take Political History, &c. if they liked.

23,811. The degree was that of doctor of philosophy?—Yes.

23,812. And the students who took this degree could afterwards be appointed as assistants and directors of museums?—Yes; for instance, at the Berlin Museum they take only doctors of philosophy; they do not take any other persons, artists or anyone of that kind. Then usually they begin as volunteers ("wissenchaftliche Hilfsarbeiter") assistants, afterwards they become assistant directors.

23,813. And get no pay?—No.

23,814. Are the students who go in for it numerous?—Not very numerous. When I was at Leipsic in 1889 and 1890 there were about 15 students for Modern or Ancient Art.

23,815. Were they all members of the seminaries?—Most of them. The assistants did not become members; they were extraordinary members. Before becoming members they had to write an essay on a subject chosen by themselves which had to be approved by the director. Then if it was approved, and if there were places in the seminary, they were elected members.

23,816. They were elected after having written that essay?—Yes.

23,817. And the essay decided whether they should be admitted?—Yes.

23,818. Were they admitted in most cases?—Yes, in most cases they were admitted, because there were more places than students. But in the Modern Art Branch at Professor Springer's seminary they were only admitted by the professor. If the professor decided that they should be admittted they were admitted.

23,819. Then there are two seminaries, one for modern art and one for ancient art?—Yes.

23,820. Have all the students taken the degree of candidate in the Faculty of Philosophy? What are the preliminary studies?—In Germany there are no preliminary studies. The young people begin to study art, and they attend lessons on Languages, Literature, Philosophy or History, and what is called the History of Civilization.

23,821. Immediately on entering the University?—Yes.

23,822. And all the students have got the leaving certificate of the gymnasium?—Yes.

23,823. Therefore they have all classical secondary education?—Yes.

23,824. You have had the classical secondary education of the German gymnasium, and in addition you were candidate of classical literature in a Dutch University?—Yes. I spent several years in Germany for my health.

23,825. You have had the leaving certificate of a German gymnasium?—Yes. Then I spent several years in Holland, and afterwards returned to Leipsic.

23,826. At Leipsic the students who are prepared for the museums do not attend classical lectures?—Some of them, those who wish to take a place, do so, as an additional branch of the examination.

23,827. They take classical philology as an additional examination?—Yes, they can do so. Those who have not money to live on must take a situation at a gymnasium. They have to pass the examination in classical philology and study Art.

23,828. At the Universities there is no drawing taught; nothing practical; it is all purely scientific?—Yes. There is a drawing master.

23,829. But he is not a *Privat docent;* he has not a recognised position in the University?—No; there is a drawing master, as there is a music master, and a fencing master.

23,830. But they never become professors?—Extraordinary professors. The teacher of music at Leipsic was an extraordinary professor.

23,831. Are they members of the Faculty?—No, only the ordinary professors are members of the Faculty.

23,832. Are the lectures on the History of Roman Art, Modern Art, Greek Art, and Archæology attended by artists?—Yes, there were some lessons given by Professor Overbeck and Professor Springer that were attended by pupils of the Kunst-Schule.

23,833. Who only got the certificates of the School of Art, and could not take a degree?—Yes.

23,834. Was there a large number of such students attending these lectures?—Yes, perhaps 30 or 40 future artists. At Berlin also I think they attend the lessons of a professor of History of Art, but I am not quite sure.

23,835. On the other hand, do any of the students who attend the University, attend the lectures at the Art School?—Some of them attend the lessons on anatomy and such branches of science. I never heard of them attending the lessons of the Art School. One of the chief things in Germany is that they make tours in the holidays. We often went to Berlin or to Dresden, which is not far from Leipsic, or to Munich, to study in the galleries and public and private collections.

23,836. Were you accompanied then by a professor at Munich or Dresden? Does the professor give you a letter of introduction to a colleague at the other Universities?—To the director of the galleries.

23,837. He gives you assistance?—Yes, and other professors go with the scholars. Professor Springer was an old man and in bad health, and was not able to undergo much exertion.

23,838. Who accompanied the students at Leipsic? Was it a *Privat docent*?—No, we went by ourselves, but at Heidelberg and at Munich there are some young *Docenten* who go with their pupils in the holidays.

23,839. How many professors do you say there were at Leipsic for art education?—There was one professor for Modern and Mediæval Art, and one professor for Archæology—ordinary professors. Then there was an extraordinary professor for Ancient Art and a *Privat docent*, who became, not long ago, an extraordinary professor too, for Modern and Mediæval Art—Dr. Brockhaus.

23,840. And some of the students who attend this University for the purposes you have described naturally look forward to becoming in their turn *Privat docenten*, extraordinary professors and ordinary professors?—Yes. The purpose of that education in Germany is either to become directors of museums, professors or *Privat docenten* at the academy, Kunstschule, art school, polytechnic, or some school of that sort.

23,841. And the students all write essays before they attain the degree of Doctor of Philosophy?—Yes, they must write an essay and submit it to the Faculty, and after it has been approved by the Faculty they are admitted to the oral examination.

23,842. Is that oral examination conducted by the professors who give the lectures?—Yes. The student may choose three professors, and the Faculty must approve, and if there are no reasons why they should disapprove it is always approved. It is the rule that it is approved.

23,843. Are the other members of the Faculty present at the examination or only the professors of the special branch?—Only the professors of the special branch.

23,844. Are the extraordinary professors present?—No, I think they have not the right to be present.

23,845. Only the ordinary professors. The examination is conducted by the ordinary professors?—Yes.

23,846. And then the degree is granted?—Yes. The examination lasts three hours—one hour for each branch.

23,847. On the same day?—Yes, on the same day, but it is the German academical hour, which consists

Dr. C. Hofstede de Groot.

10 Mar. 1893.

only of three quarters of an hour. The essay decides practically whether they are to be admitted as doctors.

23,848. Even if the oral examination is not quite satisfactory, if the essay is very good the candidate would be admitted?—Yes.

23,849. What they attach weight to is the special knowledge of the special subject?—Yes.

23,850. The candidates must show that they have original power of criticism?—Yes, and they must sign a paper certifying that they have written their essay themselves.

23,851. And the students who have pursued these studies take the degree of doctor?—Yes.

23,852. There is not for these offices what they call in Germany a Staats examen?—No.

23,853. The degree given by the University absolutely decides the future career and employment by the State at a museum?—Yes.

23,854. And it is given by the authorities of the University without the presence of extraneous examiners appointed by the State?—Yes.

23,855. The State relies on the certificate given by the University?—Yes.

23,856. Is there anything you would like to add?—You asked me with regard to the academical museums. There is a collection of reproductions and photographs after sculpture, building, pictures, and etchings (Kunstwissenschaftlicher Apparat).

23,857. Which the professors use at their lectures?—Yes, and which the students may use also in the seminary.

23,858. That belongs to the University. It has nothing to do with the museum?—No, it is only for that purpose.

23,859. Those reproductions are constantly being added to by the professor?—Yes.

23,860. The State pays for those?—Yes.

23,861. On what subject did you write an essay?—I wrote my essay on Houbracken, who compiled the biographies of our Dutch painters of the 17th century. I gave a critical review of his book, and of his style of writing. In the introduction I critised him as a painter.

23,862. In addition to the essay have you any thesis to submit to the Faculty?—No.

23,863. Is the essay discussed by the Faculty with the writer?—In my case it was not.

23,864. You got the highest degree?—Yes.

23,865. Perhaps you would allow the Commission to see this essay?—Yes, I have a copy of it which I shall be glad to forward to the Commission.

23,866. (*Professor Sidgwick.*) I am not sure that I quite understand the various classes of students who attend the lectures. If I understood you aright there are four classes if we divide them by their future careers in life. There are those who desire to obtain positions in Museums of Art. With regard to that I think you said that in the Berlin Museum these appointments, even in the first grade, are only given to those who have obtained the degree of Doctor?—Yes.

23,867. Is that generally true of the museums in Germany?—Yes. It is becoming more and more the rule.

23,868. The desire of the Government is to keep the museums for those who obtain the doctor's degree?—Yes.

23,869. Then, secondly, there are those who aim at being *Privat docenten*, and then extraordinary professors at the University. How far are those two functions combined? Is it thought desirable in Germany that anyone employed in the Museum should also hold a post in the University?—Yes, but that point is a subject of great dispute in Germany.

23,870. It is a point that has come before us here how far it would be desirable in our museums in London that the appointment of director in any department should be combined with the University You say that that is a question of controversy?—Yes.

23,871. On which side does the balance of opinion incline, as far as you know?—I think it is thought desirable that professors and *Privat docenten* should be also directors or sub-directors of museums, especially of the print-room, because there is such great material in the print-room for study. In Munich there is a *Privat docent* who is at the same time occupied in the print-room.

23,872. Then I think you mentioned a third class who attend these lectures, namely, those who also take up Classical Philology, and become schoolmasters. Are there many of those?—No; that is not the rule.

23,873. It is a kind of *pis aller*, if I may say so?—Yes.

23,874. I suppose that a student who had in view the profession of schoolmaster would attend these lectures outside the work he had to do to prepare for the Staats Examen?—Yes.

23,875. And a student would have longer to wait if he tried to get the position of director of a museum to earn his bread?—Yes.

23,876. He might take up the position of schoolmaster?—Yes.

23,877. Only he would have to pass the "Staats Examen" entirely outside the history of art?—Yes.

23,878. It would require hard work to do the two? In Ancient Art it is necessary to do it, because there are stipends from the Government to help them to go to Greece and Italy, and those who wish to get such stipend must have passed their State examination in Classical Philology.

23,879. For how many years are those stipends given?—They are for one year, and they can be renewed for the same course for the second year.

23,880. So a man would have to combine the study of Ancient Art with the study of Classical Philology, and I suppose it would be a student of that class who had gone through a course in Classical Philology who would be usually selected as a director or assistant in a Museum of Ancient Art?—Yes.

23,881. Then I think you mentioned that a certain number of students preparing to be artists came to attend the lectures on the History of Art?—Yes, young artists of from between 15 and 20 years of age.

23,882. Meanwhile they are attending a school of practical art?—Yes.

23,883. What inducement is there? Do they come to hear the lectures purely from the attraction of them, or is there any inducement of an artificial kind? Have they to pass an examination?—That I do not know, because it belongs more to the School of Art.

23,884. The students who are preparing either to be University teachers of the History of Art, or to be engaged in museums, are not called upon, if I understand you aright, to go through any practical training in Art?—No.

23,885. They have not got to handle the pencil or the brush at all?—No.

23,886. Is there any division of opinion upon that point. That is a point upon which there is a division of opinion in England, as to how far it is desirable that a student of the History of Art, who does not intend to be an artist should go through a certain amount of practical training in order to enable him to understand the points in History?—I think it is very useful for a student of History of Art and a future director of a museum to know how artists paint.

23,887. But it is not at all enforced in any regulations?—No.

23,888. With regard to the examination, if I understood you, the student who is candidate for the degree of doctor, besides his main subject, has to have two subordinate subjects?—Yes.

23,889. But he only writes an essay on the main subject?—Yes.

23,890. But he has this German hour of examination in the three subjects?—Yes.

23,891. Then you say the examination is conducted by the professor whom he selects?—Yes, he selects the professors of the three branches.

23,892. He will usually select the professor under whom he has worked?—Yes.

23,893. And as a rule that is regarded as a normal thing?—Yes.

The witness withdrew.

23,894. (*Lord Reay.*) You are Principal of the Agricultural College of Aspatria, in the North of England?—Yes, in Cumberland.

23,895. Perhaps I may ask you whether you think that in a University a degree should be given in agriculture?—I think it would be very advisable for many reasons. First of all, I think an agricultural degree granted by the University would raise the standard of agricultural education throughout the country. There is no class of people so badly educated as those connected with agriculture in its different branches, and I think there are no people so much in want of education, both scientific and technical. Secondly (and this I should consider one of the most important reasons) it would be beneficial especially for those who are teaching agriculture. Since the great outcry about agricultural education has come up, a very large number of teachers have flooded the country, chiefly through the County Councils, and I am sorry to say that in many cases they are very inadequately fitted for the posts that they have obtained. Some men with simply a knowledge of pure science, perhaps a knowledge of chemistry or botany, have been engaged to teach agriculture, and do teach agriculture, to farmers. Of course that in many cases has done more harm than good towards agricultural education. As one who has lectured for County Councils in Cumberland and Lancashire to farmers, I say I have found from experience that they are not sufficiently educated to understand the scientific principles which underlie their calling. In fact, you might divide them into two classes, first, those who really scoff at the advantage of science at all in connection with agriculture, and who will not listen to anything you have to say; and secondly there is a class, and a very large class too, of farmers who are very anxious to learn, and who want to know as much as they can about the subject, but their education has been so very much neglected that they cannot understand even the simplest truths that one put to them. That shows, I think, that agricultural education should be applied to the coming generation rather than that we should attempt to teach farmers who already know their business as well as they are likely to know it. Therefore teachers should be trained and taught agriculture properly, and to make sure that they are thoroughly acquainted both with the agricultural science and the practice of agriculture. For this reason I think a University degree would be very beneficial. Then besides I think there are many others who would like to obtain a degree in agriculture, for instance, those who wish to be specialists in agricultural chemistry and large land agents; people who are going in the agricultural manure trade, or the seed trade. There are many businesses connected with agriculture in which an advanced knowledge of agricultural science would be beneficial to those engaged in them.

23,896. And your view is that it is useless to approach the subject of agriculture in any way unless and until the students have had a sufficient preliminary scientific education?—Yes.

23,897. At the root of the matter lies the question whether the preparatory education received by farmers and by those who are interested in agriculture, land owners and land agents, and so on, is sufficient; whether they have been sufficiently well educated in the scientific branches without any special reference to agriculture?—I think the proper course in the way of education would be to obtain a general education first of all, which may be obtained by students of the age of, say, 14 to 16, and then they should go straight to a College of Agriculture, where they will learn all the pure science connected with the subject, and at the same time have elementary lessons in agriculture, which will show where the science explains the different points of agricultural practice; and they should have work on the farms at the same time. I entirely believe in combining practice with science in the first, or I might say the second stage of education. Of course, there are a large number of farmers' sons who would not require that work on the farm, because, as I think Mr. Pell said, the sons of farmers are fairly well acquainted with the routine work on the farm at a very early age, or they will have acquired it during their holidays; so that I have found among those who are best able to follow out the course of instruction that we give those who have already obtained a fair general education equal to, say, the sixth or the seventh standard, and have at the same time a good idea of general farm work, and start with chemistry, botany, geology, land-surveying, and the various other sciences that bear upon agriculture. But those who have not had the advantage of being on a farm in the early part of their lives I find it would be useless to give agricultural science to without being able to illustrate it by reference to farm work. That is an advantage we have in Aspatria; we have the advantage of having six farms surrounding the college on which the students work. The general arrangement is that they shall work during the morning at agricultural science indoors, and then in the afternoon they will be working on the farms.

23,898. (*Mr. Anstie.*) Farms independent of the college?—Yes.

23,899. (*Lord Reay.*) We might call them affiliated farms?—Yes, that would be a very good definition.

23,900. And those farms are farmed by farmers?—Yes.

23,901. Are those farmers gentlemen whom you consider educated, or are they practical men?—Mostly practical men.

23,902. And it would be, of course, an advantage if at the head of those affiliated farms you could have farmers who had themselves had the instruction which you are giving?—Most decidedly; it would be a great advantage. We should not have so much prejudice to contend against then.

23,903. Do you consider the education you give at your college is education of University rank, and of the stamp which you would propose for our University, or do you think the University ought to aim higher?—No, I should consider it a preparatory education for the University degree, although we certainly have a few students who are fit to take a University degree. I know we could supply a large number of students who would go in for a University degree after they leave us.

23,904. How long do they stay with you?—Two, three, or four years, according to circumstances.

23,905. And they come to you at the age of 16?—We take them at any age, but I should prefer to have them at 15 or 16.

23,906. You prefer that they should come to you at 16, stay till 19, and then go to a University?—Stay with us till they can pass an examination like the diploma of the Senior Royal, and then finish up at a University, one or two years at a University.

23,907. You consider that it would be useless to send them to a University unless they had had the preliminary training which you give?—I think it would be a great mistake. The proper course, and the best course, is to obtain the general education first, then to take the science and practice together, and finish up with a University degree.

23,908. Perhaps now you will tell us what you consider the University ought to undertake in connection with the students prepared in the way you have described?—They should be able to attend the lectures on pure science, chemistry, botany, geology, &c., if they wish to further their knowledge in the direction of pure science.

23,909. With the other students attending those lectures?—Yes.

23,910. No special lectures for agriculture?—Yes, there should be a Professor of Agriculture.

H. J. Webb, Esq., Ph.D., B.Sc.

10 Mar. 1893.

23,911. But I am asking you now about these branches you have mentioned, chemistry, botany, geology. Your students would be mixed with the other students?—Yes, except that I say there should be a special class in agricultural chemistry.

23,912. They ought also to attend the general chemistry class with the other students?—Yes, they should keep up their general chemistry.

23,913. There should be a chair of agricultural chemistry, and in addition a chair of agriculture?—Yes, I think it is necessary, because it is no use learning pure science without as far as agriculture is concerned, poing out its application to practical agriculture.

23,914. But at the University there should be no practical instruction?—No practical instruction so far as regards working on the farm. Of course they would do that afterwards or would have done it before, either in their holidays or when they have had the opportunity of going on the farms; but they certainly should have had a good practical knowledge first before going to the University. As far as regards the business of farming that should be learnt afterwards; that is a separate thing.

23,915. You think the practical training which is given at these affiliated farms should precede the University course?—Yes.

23,916. Perhaps you would give us some examples of particular cases in which an agricultural degree would have been beneficial and desirable?—We have had several students, but there is one especial case which came on last year. We had a student who entered by means of an agricultural scholarship given by the Board of Agriculture; he is the son of a coal-miner; he came to us between the ages of 13 and 14. He got the first scholarship of the Junior Examination when he was 14, about a year after he came; a year after that he had passed the Senior Royal before he was 16. I hardly expected him to pass that examination. He was a very clever boy, and I wanted him to go up the year after and perhaps take the first place, but I thought "I will send you up this year; "you will see what the examination is like, and then "next year you may take the first scholarship." But he got fourth and took the fourth scholarship. I wanted the Royal Agricultural Society to let him go up again and see what he could do. I think he would have taken first place. But they would not let him. I said, "What! has agriculture nothing else to offer? Has "he finished his education before he is 16?" He was too young to obtain any appointment or do anything else, and he was too young to teach, so I thought the only thing for him to do was to prepare for the London University, which he is doing.

23,917. For the degree in science?—Yes.

23,918. Do you contemplate a special degree of agricultural science or would you be satisfied with the general degree of Science, with the special option of certain agricultural branches. It would meet your object if the degree in science was given through as pecial avenue to agricultural students—the same degree which is given to other students?—Yes, that would meet the case.

23,919. You are acquainted with the Cambridge scheme?—Yes.

23,920. Perhaps you will also give us your opinion upon that?—I went down to Cambridge to see Cavendish College, to see whether it was capable of being transformed into an agricultural college for the County Council of Cambridge and the other counties connected with it. I approved of it. I thought it would be a very good scheme indeed. They were afraid of the outlay. I told them they would have to expend about 3,000*l.* a year. And, although I have no doubt that in a few years time they would be getting 6,000*l.*, they had not the courage to attempt it, and they gave it up. Now they have framed this scheme, which is neither one thing nor the other; they teach simply pure science without any professor of Agriculture, and they even seem to entertain the idea now of giving diplomas in Agriculture to those boys who are attending these lectures in pure science at the University. There is no lecture on Agriculture to show where Chemistry bears upon Agriculture or lectures in botany or geology to show where the assistance of agricultural chemistry or agricultural botany comes in. Therefore it seems an absurd thing to give people a diploma in Agriculture simply because they have attended lectures, or have a knowledge of pure science.

23,921. (*Professor Sidgwick.*) When you say "they," who are they?—They are not actually in the University itself, but they are in connection with the University.

23,922. You know that it is a private scheme as yet?—It is a private scheme, but the professors of the University are connected with it.

23,923. As individuals?—Yes.

23,924. (*Lord Reay.*) I understand that one of the main objects why you wish these lectures to be organised at the University is that the teachers at agricultural schools throughout the country should be thoroughly well educated?—Yes.

23,925. And you would prefer that the teachers should go to a University and not be educated at a special normal school. Do you advocate a special normal school for agricultural teachers?—I think they would be better qualified by learning first at some large college where they have the advantage of gaining practical knowledge on the farms, and then they should finish it at a large central institute in a city like London—a large central place where they have first-rate opportunities of studying science. You get the best men in science in large towns.

23,926. And that is what you wish the University should undertake?—Yes.

23,927. When you speak of a central Institute, you mean the Faculty of Science at the University?—Yes.

23,928. And I suppose you agree with Mr. Pell in the evidence which you have heard and which he gave to us, that at present there is a considerable waste in the educational work which is being attempted under the County Councils?—Yes.

23,929. On account of the persons who give that education not being sufficiently qualified?—Quite so. I believe they would spend the money with much better results if they applied it to the rising generation as far as education is concerned.

23,930. And you consider that the great need of the hour is well qualified teachers?—Yes. That is a very important thing.

23,931. Is there anything you would like to add?—I may say that I yesterday had a notice from the County Council of Berkshire. They are giving six scholarships, for which students are obliged to come to the Agricultural College at Aspatria for the first year, and they may remain for the second and for the third year to go on to a practical farm, with a practical farmer. If there was an institution like the Gresham University worthy to grant a University degree in agricultural science no doubt the County Councils would prefer to send them to the University to finish off, or they might make the course a little longer to the most deserving ones. I think that system is better than the Cambridge system of sending students straight away to a University, taking them straight away from a board school or elementary village school to lead a University life. It is much better for them to go to an intermediate institution while they are young.

23,932. You want to see an efficient system of secondary education interposed between the primary school and the University?—Yes.

23,933. (*Sir George Humphry.*) I think you feel that for the perfect thing there should be four stages: first, a good general education; secondly, teaching in a college associated with farming; thirdly, teaching in a University; and fourthly, teaching the business of farming?—Quite so, if that could be done.

23,934. They require to go somewhere to learn the business of farming afterwards?—Yes, those who mean to be farmers in England.

23,935. So there are those four stages for the perfect thing. With regard to the general education by that you mean the school education?—Yes.

23,936. And you would like, probably, to modify the school education a little from that which it at present is?—Yes.

23,937. What would you desire?—If more elementary science were taught——

23,938. You mean less Latin and Greek, and more of the elements of science?—Yes.

23,939. That would be the foundation?—Yes. In the case of nearly all the students we have, we have had to teach them the elements of science.

23,940. Those they ought to have acquired at school before they go to this college?—Yes, it would be better.

23,941. At a college they would be pursuing still further certain branches of science in connexion with practical work in farms?—Yes, agricultural chemistry, botany, and geology, &c.

23,942. Then there would be the first stages of science at a University, where there would be higher teaching in the general subjects of science, and also special teaching in those branches of science with reference to agriculture?—Yes.

23,943. With regard to the Cambridge plan I do not know whether you quite know what it is, and I do not think Mr. Pell did quite the other day. He remarked that the students would sit with the ordinary students who were studying chemistry, geology, botany, and so on. But I do not think he was quite aware that there would be special instruction with reference to agriculture given in all those several subjects at Cambridge, and that the sum which the County Council has given will be mainly directed to the teaching of those subjects in connexion with agriculture?—That should be given by a Professor of Agriculture.

23,944. The Professor of Agriculture could not give special teaching in all those subjects. The Professor of Agriculture might give general teaching in reference to agriculture, but you want the work to be done, and the work will be done in the University laboratories. There will be in the University laboratory, we will say, teaching given of chemistry with special relation to agriculture, so in botany, so in geology, though perhaps it goes in that respect a little further than you quite supposed?—Yes, it may be so.

23,945. That seems to be the teaching which you think a University should give?—Except that they should be all connected together by a Professor of Agriculture, because as a rule you find Professors of Botany, Geology, and Chemistry are not selected for their knowledge of agriculture; generally they are specialists in botany, or specialists in chemistry.

23,946. But there will be a specialist in each of those subjects to teach them at Cambridge?—Yes, but my contention is that it is far better to have a person who has studied the application of chemistry, botany, and geology and all those different sciences to agriculture, and in taking the soil of the farm or the live stock of the farm, or the plants of the farm, he can point out the different bearings of the different sciences upon practical agriculture. In all the agricultural colleges or Universities in the world where agriculture is taught, the Professor of Agriculture is the most important Professor, and his lectures are the most important. The other subjects are simply subsidiary

23,947. That really is a science which it would be well to develop?—It is developed to a very great extent already, quite sufficient to enable a great deal of benefit to be derived from it. You can only show the advantage of these pure sciences to students by being able to refer them to the practical advantages of that knowledge.

23,948. And I think perhaps one wants a little to know what the actual real bearing of these sciences upon agriculture will be. In what way will they really tell so as to promote the better culture of the land, better crops, and so on. We do not quite see that at present?—Of course there is a great deal to be learnt in every branch.

23,949. What really and practically will tell in improving he produce of the land? That is the point?—Yes.

23,950. That is not perhaps quite a clear thing yet?—Only to some extent of course; in many instances it can be shown.

23,951. In fact, one knows that it is a difficult thing to apply science to practical work in many directions. In what way would the scientific knowledge really promote the better cultivation of the land?—It can be shown very easily by a knowledge of the crops and their various habits; the theory of rotation is based upon that, and the person who thoroughly understands the theory of rotation would know which crops ought to succeed each other upon certain soils.

23,952. Would that be the result of practical knowledge or scientific instruction?—If you understand the principle of the thing you would be able to tell what should be done without having even the practical experience.

23,953. How would the principle derived from scientific education assist you in the matter of rotation of crops?—To a great extent. People would not make the great mistakes that they do now. Even practical farmers will for years and years put one crop after another, both of which are searching in the same layer of the soil, or taking the same kind of food. Of course we know that many of these points coincide with what farmers have discovered from long practical experience. But why should they have to go through that experience of 10 or 15 years, when they could learn the principles in a short time? It shortens the time.

23,954. Has the knowledge of the principles made more clear what the rotation of crops should be?—Yes, in the same way that a knowledge of the principles of draining have made more clear how that operation should be done in other branches of science.

23,955. In what way has it made it more clear, for instance?—It shows, for instance, why cereal crops benefit by coming after the leguminosa crops, say beans or clover. Nitrogen being the great dominant manure that cereals require, a crop like beans or clover which store up nitrogen in the upper layers of the soil is the right crop to precede cereals.

23,956. That ought to follow the crop which does not consume so much nitrogen?—It takes the nitrogen from the atmosphere and renders it available. You will find more nitrogen in the upper layer of the soil after a clover crop than there was before, although you may have taken a great deal of nitrogen away in the cut clover.

23,957. And that you find by botanical and chemical examination?—Botanical and chemical both. Science explains the reason to be on account of these small nodules on the roots of the clover, which have the power of taking the nitrogen from the atmosphere and storing it up.

23,958. And science comes in in the feeding of beasts, too?—Yes. In the feeding of beasts you see again the great advantage of the knowledge of physiology and the chemistry of foods; the knowledge of the albuminoid ratio by means of which certain mixtures of foods are made for feeding different animals at different ages and different conditions.

23,959. You fatten the animals more?—You fatten them at less expense by being able to select. Knowing the relation between nitrogenous foods and carbonaceous foods, you can select those foods which will make up the required albuminoid ratio.

23,960. In the business of farming there will be, I suppose, a great deal in men combining together and bringing their produce into market together?—The business of farming can only be learnt outside like any other business.

23,961. For instance, butter making abroad is carried on much more advantageously than in England?—Yes, and that is due to scientific knowledge. Denmark is one of the finest examples of what scientific

H. J. Webb, Esq., Ph.D., B.Sc.

10 Mar. 1893.

knowledge has done in that direction. Some years ago Danish butter was the worst in the market; some people said it was only fit for cartgrease or putting on the backs of sheep, but now it fetches the highest price. That is the result of scientific knowledge.

23,962. In what way has scientific knowledge improved the butter?—In the method of making. They have been taught that it is necessary to prevent bacteria being in the butter, which will decompose it and give it a bad flavour. In order to get rid of these bacteria and the material upon which they feed the butter should be washed when in a granular condition, so that the butter milk can be washed out before working it up into a lump. Then, of course, in cheese making and all those different things there is a great deal to be learnt. The various bacteria succeed one another. I believe in some cheese about 14 different bacteria succeed one another before the cheeses are ripe. Those bacteria exist only under certain temperatures and certain conditions. A knowledge of the reason why, I think, is of great advantage in everything. If persons know why a thing takes place, they will know how to go on without making mistakes; they will be able to reason a bit for themselves.

23,963. So scientific knowledge has improved very much the butter industry of Denmark?—Yes, and other countries as well.

23,964. Then you think the application of scientific knowledge to agriculture is so important that it would be a worthy subject for the nation to take up and promote in connexion, we will say, with the University, a National Institution of Agriculture?—Yes.

23,965. Perhaps one of the most important things in connexion with our country is the improvement of agriculture?—Yes, I should say so.

23,966. And do you think there would be a fair claim upon the nation to institute some scientific laboratories which should have for their purpose the improvement of agriculture?—Yes. I believe that England spends less than any other country upon scientific agriculture.

23,967. The application of science to agriculture would be well worth a national effort and national expense?—I do not think there is anything in which greater discoveries are likely to be made, or discoveries which will be of greater assistance to the whole world than the application of science to agriculture in its different branches.

23,968. (*Mr. Palmer.*) It is said that 20,000,000 out of the 36,000,000 inhabitants of the United Kingdom are engaged in agricultural pursuits. At any rate, it is the largest industry in the kingdom?—Yes, there is no doubt of that.

23,969. With regard especially to what you want from a University, I think in following his Lordship you used the words "Degree in Agriculture." I understand afterwards that you agreed with the previous witnesses, that what you ask for is not a diploma or a degree in Agriculture, but a degree in Agricultural Science. Assuming there were a Faculty of Science, you would come in for a degree in Science?—Yes.

23,970. And the reason for that degree in Science is that Chemistry and Physics are common to agriculturists, to physicians, to iron smelters, and to members of other trades and professions?—Yes.

23,971. That is the reason for the Faculty of Science, but at the same time I understand from your evidence that you hold very strongly that there is such a thing as Agricultural Chemistry?—There is no doubt.

23,972. I was going to say Agricultural Mathematics, but at any rate there are forms of mathematics which must be taught in an agricultural sense, such as mensuration and mechanics, and also Agricultural Physics?—Yes, and agricultural engineering.

23,973. Therefore, whilst you have a degree in Science in the University on account of its common ground with other scientific pursuits you would at the same time want a strict teaching in Agricultural Chemistry, in Agricultural Physics, in Agricultural Mathematics, and in Agricultural Mechanics, so far as they are necessary and are not supplied in common?—Yes.

23,974. I will not specify the branches of that teaching, but my meaning is that there might be certain Chairs—you indicated several—which it would be advisable for any University, if they had the funds, to set up in order to teach the special branches of agriculture separately?—Yes.

23,975. You remember the definition in the Technical Instruction Act: That technical instruction means not only instruction in the principles of Science and Art applicable to industries, but branches of Science and Art applicable to particular industries?—Yes.

23,976. So you would wish in the University teaching applications of branches of Science and Art applicable to the particular industry?—Quite so.

23,977. Therefore whether in the University or leading up to the University degree, you think provision must be made in any systematised education for the teaching of the branches of Science and Art applicable to the particular industry?—Yes, that is exactly my argument.

23,978. You took your degree with Honours at the London University?—Yes.

23,979. You took the certificates of the City and Guilds Institute, and I think of the Science and Art Department at South Kensington?—Yes.

23,980. If you had been a professional agriculturist or professional engineer which should you have thought the most valuable of those? Should you have been able to institute a comparison as to which would have been the most valuable to you professionally?—In the case of a surveyor or engineer, do you mean?

23,981. I should like to ask you as to agriculture. Supposing you had been a professional agriculturist?—You see the London University does not grant degrees at present in science applied to agriculture, and therefore of course a degree in science would not be so valuable as a special diploma given by a special institute; but if the University granted a degree in that way in agriculture only, a degree in agriculture, would be more preferable, because it would be sure to carry more weight if you went in for teaching. At the present time the diploma of the Royal is no doubt the best certificate we have that a person possesses good agricultural knowledge, both scientific and practical; it is far better than the degree of the University of Edinburgh. But from the mere fact of a person having a University degree, he has a better chance of obtaining employment as a teacher or lectures than if he has het diploma of the Senior Royal. Several who have passed the Edinburgh degree have not been able to pass the diploma of the Senior Royal.

23,982. Let me illustrate it. In the case of the boy you mentioned just now, if he had been able to pass a London degree in science, it would have been of very great value to him?—It would, especially in taking an appointment as teacher.

23,983. In the process of education, without thinking at this moment of the method if I may follow Sir George Humphry, you would want, first, the boys to be taught as students; secondly, the teaching of teachers themselves, which is the most important; and, thirdly, apart from both teachers and students, there would be, it is to be hoped, original research and investigations for placing the results of applied science before the world?—Yes, it is a great advantage to have in connexion with teaching, for instance, experimental plots in which original investigation is carried on. Teaching can only be carried on by such means.

23,984. With regard to a University again, for such teaching as would be given by a University apart from the degree, you would require technical teaching, such as could only be given by professors who looked at the agricultural side of the science which they taught?—Quite so.

23,985. Looking at agricultural education as a whole, there is your school which may be a technical school in agriculture, and there are some others; but

there is no systematised education from the elementary schools of the country to the highest diploma which is given, which is perhaps the certificate which is given by the Science and Art Department in England, I think?—There is the certificate of the Science and Art Department at different stages.

23,986. Do you think that if a University degree were given, it would probably give rise to the existence of a system of agricultural education throughout the country?—The first condition that I gave, I think, was that it would cause a proper system of agricultural education to be arranged all through the country.

23,987. It is tentative now in the elementary schools. It is an optional subject?—Yes.

23,988. And again these efforts of the county councils throughout the country have been tentative?—Yes.

23,989. Two years ago there were proposals for a normal school, but they failed because people were not certain of their ground?—Yes.

23,990. Do you not expect that in this country as in foreign countries the institution of an agricultural degree might co-ordinate and set up a system of agricultural education throughout the country?—Yes, I do.

23,991. His Lordship used the word "affiliated" with regard to the farms at Aspatria. I should rather like to have from you what I think is a little correction of the word "affiliated." The farms are in no way attached to the institution at all, but they are merely places over which you go, by the most private arrangement, as you might go anywhere else?—Yes, it is a private arrangement, but we should hardly expect to be allowed on other farms in the same way.

23,992. They are not attached to the institution?—No, they are not attached to the institution.

23,993. It is a private arrangement personally arranged by yourself?—Yes, through the farmers.

23,994. And you would of course agree with what the other witnesses have said about the inadvisability of anything in the nature of model farms attached to a teaching University?—Yes, my idea is that you would have to sacrifice the farm to the students, or the students to the farm.

23,995. The farm that pays is the model farm, and the model farm never does pay?—Yes; and it would be a bad example to the students if the college could not make the farm pay.

23,996. Perhaps I may read this quotation from America, from Professor Fream's lecture: "The "example of the Michigan Agricultural College, "which is the oldest in America, and the chief ex- "ponent of the so-called manual labour system, is the "best proof of the proposition that as facilities for "instruction grow, the mere manual training decreases "in extent. That institution will hold to its tradi- "tional purpose, and most of its Faculties would no "doubt disclaim any falling off in the manual labour. "Yet such labour has fallen off. It was once thought "that every student should labour four hours every "day. In my own day labour was required for three "and a half hours until about the middle or near the "end of my course, when it was dropped to three "hours. Later it has been dropped to two and a half "hours, but many or most of the students are not "compelled to work every day now. For these "labour hours, certain kinds of laboratory practice "are substituted, the manipulation in Chemistry, "Veterinary Surgery, Microscopy, and the like, and "the Faculty will tell you that this is manual labour. "It simply shows that new methods are creeping in, "and the old are disappearing, even when the new "are struggling as you may say under repression, and "as fast as the new ones creep in, just in that pro- "portion does the college increase in usefulness." You would not disagree with that?—No. In the same way we substitute for practical work both work in the laboratory and different work outdoors.

23,997. In connexion with the central establishment in London, whatever might be the relations of agricultural education with other Universities, there has been in every other country a strong reason for holding, I was going to say, its central institution, if possible, in the metropolis of the country?—Yes.

23,998. For the simple reason that there alone you can get at the greatest men in science?—You can get the best scientific teachers and also have the greatest advantages for visiting museums and botanical gardens.

23,999. And for the best science it is not an insuperable disadvantage not to have farm demonstration to go to?—No, because that would either have been done before or would have come afterwards.

24,000. The School of Mines in Jermyn Street produced some of the most eminent mining engineers in the world, but they had no mines in Jermyn Street?—Quite so. I think that is one of the best examples that could be given. There was one point in connexion with agricultural education which I omitted to refer, and upon which I should like to lay very great stress. It has reference to a mistaken idea which many people have with regard to agricultural education. They think that after their sons have been to a school and obtained a general education they should be sent on to a farm for a year or two to prepare for an agricultural college. That is a very bad plan indeed. I have been at an agricultural college for seven years, and I have had a large number of pupils who have come under these conditions, and I have found that as a general rule they forget what knowledge they have gained at the general school, and have learnt but little agriculture. These farm pupils are generally gentlemen's sons. Farmers are not generally good teachers, and the boys have to pick up what little knowledge they can, which is not much; the pupils come to the agricultural college with the idea that they are almost farmers, and that therefore they ought to go into farming and have nothing to do with the elementary principles or science. They do not like to go back to mensuration and arithmetic, which they have to learn even in order to measure a haystack. They learn the prejudices of the farmer without gaining his practical knowledge.

24,001. You agree with a good many of the witnesses who have been before us, and whose writings we may read, that the difficulty in agriculture is how to give scientific instruction without detriment to practice?—Yes.

24,002. And it is found necessary that the object lessons of the pupil should be learnt early; that he should have his manual and practical instruction early, and after that, we will say at the age of 15 to 17, or at such age as is most convenient, he should have his scientific instruction, and then he should learn the business of his profession?—Yes. My idea is that the book work should not be dropped. If they drop it for a year or two they go back, so that they cannot catch up again. They have not got the means to carry on the study of the science, because they have not the groundwork.

24,003. You are anxious for a degree in Science in a University in London, and at the same time you wish for provision to be made for teaching the branches of science with a view to the special business of agriculture?—Yes.

24,004. (*Mr. Anstie.*) I should like to know in what way you think the Agricultural Departments in a University ought to be organised. You desire a Professor of Agriculture?—Yes, I do not think it would be any use without.

24,005. You would not expect him to teach all the subjects pointed out by Sir George Humphry?—No.

24,006. Would you desire that he should have the power of directing what should be taught in the various departments under his control?—Yes, I should certainly think so.

24,007. Take the scientific subjects with which he would have to deal, say Chemistry, Botany, Geology, Physics. Would you desire that the pupils who are under his direction should attend the ordinary lectures of the chemical or other professors, or would you

H. J. Webb, Esq., Ph.D., B.Sc.

10 Mar. 1893.

desire that under the agricultural professors there should be a special professor or lecturer, taking to some extent his directions from the chief professor?—I think so far there would be no occasion to have a special Professor of Agricultural Chemistry, or Agricultural Botany, or Agricultural Geology, and all these different subjects, apart from the other professors. I think they should attend the general sciences that are required to still further their general knowledge of chemistry, botany, and so on. They could be determined or advised upon by the professor by his examination of the students, and then whilst attending the general courses and the various sciences the Professor of Agriculture would take those points where the sciences can be shown to be applied to the practical part of agriculture.

24,008. Then would your view be that the professor of Agriculture should be a man so far conversant with these various scientific branches as to be able to deal with them himself in their immediate relation to agriculture?—Yes. The same system is pursued at Edinburgh with the exception of veterinary science, as far as chemistry is concerned I think there should be a special class in agricultural chemistry which might be taken by the professor of chemistry or his assistant.

24,009. You say by the professor or his assistant. That points to the distinction which I have in my mind. Would you desire that the professor of Agriculture should have the power of directing what courses should be given so far as was necessary for his department. Suppose, for instance, you were a Professor of Agriculture, and you found your students attended the lectures of the Professor of Chemistry and did not get what you wanted. In that case what would you desire that you should be able to do, teach it yourself or employ somebody else to teach it?—There would be a definite course of Agricultural Chemistry. The professor would have to teach it, or someone else. You could not do without it.

24,010. Is the matter of so much importance and sufficiently distinct from the other subjects that the agricultural professor should have the power of requiring a distinct course of that kind to be given?—It would be well for the professor to draw up a syllabus of the subjects.

24,011. He would have to prescribe the syllabus governing the lectures by which his students were especially to profit?—I should say it would be advantageous.

24,012. And it would be a desirable thing for that purpose that the head professor should have at his hand persons perhaps of less rank than himself in the University whose courses he might direct?—Yes.

24,013. Would you think that important or not?—Do you mean that the Professor of Agriculture should be able to direct?

24,014. That the Professor of Agriculture should be able to direct certain courses to be given, laying them out and determining them himself, and giving his instructions to those who were to deliver them, which would imply of course that he directed persons of rather subordinate rank to himself?—Not necessarily subordinate, I think.

24,015. But if he gives directions that is what subordinate means?—So in the case of Chemistry, Agricultural Chemistry might be taken possibly by the Professor of Chemistry.

24,016. It might be, but I do not think you quite see the point I make. The Professor of Agriculture cannot direct colleagues or men of the same rank as himself, but I am putting this case to you; that the Professor of Agriculture might find his men were not given the instruction which he thought necessary for the object in view. I want to know how you would meet that difficulty?—He would have to give the course himself or have an assistant to do so.

24,017. You desire that he should have an assistant professor to give that kind of instruction which is necessary for the particular department?—Yes.

24,018. Assuming of course a school attended by an adequate number of students and intended to do the complete work which a University school ought to be expected to do, would you desire the professor who was at the head of that school to have at his hand assistants and subordinate officers in the various departments?—One would be sufficient to begin with.

24,019. You would not extend that to agricultural botany, for instance?—I do not think there would be a necessity to have a special professor for agricultural botany, because there is so little really known at present that that could be easily taken by the professor of agriculture, but as the scheme for agricultural education developed no doubt it would be found necessary to have courses of lectures in special subjects by specialists.

24,020. In other things you would allow the matter to develop itself according to need?—Yes. The only subject which has developed itself to any great extent is agricultural chemistry, which would require a special department. As you say, the Professor of Agriculture might have an assistant who was an agricultural chemist, who would take that special department.

24,021. So far as was necessary, so far as required by circumstances, you would desire that the Professor of Agriculture should have at his hand the assistance in the special branches that he desires?—Yes.

24,022. I am not quite sure whether I understand the position which your teaching at Aspatria occupies. You get your boys who have gone through an education up to the age of 16 or 17?—We take them at all ages, but we prefer them at 15 or 16.

24,023. Then you have your adjacent farms to which you send them. Do they get practical teaching there?—Yes, they get work and practical demonstration on the farm.

24,024. By your own teachers?—Yes.

24,025. Your own teachers accompany them on the field expeditions?—Yes.

24,026. And you have also in the college laboratories, where you follow the more strictly scientific branches?—Yes, chemistry, botany, &c.

24,027. And beyond that you desire that they should go to the highest University level?—Yes.

24,028. When you speak of the University level, do you think it would be desirable or not that before accepting a student at the University in the agricultural school they should require anything like a certificate of practical efficiency such as would be given by your college or by the Royal Agricultural Society?—I think it would be advisable for them to pass an examination like the Senior Royal.

24,029. I think you said that at Edinburgh some men succeeded in getting the degree of Bachelor of Science, who afterwards could not pass the Senior Royal. That is very intelligible when one bears in mind a distinction that was given us the other day between the one as a scientific and the other as a practical examination. You would desire that the two things should be combined?—Of course the examination at Edinburgh is supposed to be practical as well as theoretical.

24,030. Is it?—It is supposed to be.

24,031. Would you think it the place of a University to give that practical education, or would it be better obtained elsewhere?—They do not give the practical education, but the examination is practical in the same way as the Senior Royal—the examination at the Royal Agricultural Society.

24,032. Is that branch of the examination one which you desire to see conducted by the University, or would you rather leave it in other hands?—I think certainly they should not give a degree unless they are sure that they have a good practical knowledge.

24,033. But that would be met in one of two ways, either by requiring a certificate of practical efficiency from some practical body, or by conducting an examination themselves, which would you prefer?—I think they should conduct it themselves.

24,034. You would not be content to allow that certificate to be accepted ?—I should rather doubt the advisability of accepting any other certificate.

24,035. I do not quite know what the level of preliminary education is which you desire to be ascertained. In one place you refer to the 6th or 7th standard as being the level. Would that content you as a standard ?—That would be quite sufficient to begin with.

24,036. That of course children are expected to attain at a much earlier age than that at which they come to you, 13 or so, at the outside 14, and often much earlier ?—Yes, that is so.

24,037. But from your practical experience you think that educational outfit would be enough to qualify a boy to receive your instruction ?—Yes. It would be as well for the boys if they had had some scientific education as well in addition to that chemistry, or animal physiology, or general elements of natural science.

24,038. Then you would desire that, if possible, the elementary education should include some specific knowledge of the subject which you have to develop ? —Pure science or perhaps the elements of agriculture taught in the elementary schools would be an advantage if they are taught properly.

24,039. (*Professor Sidgwick.*) I was going to ask a question with regard to preliminary study, on the same lines as Mr. Anstie. Do you think that practically a knowledge of French and German is of use to those who are going to study agriculture ?—To those going in for the higher branches, modern languages are an advantage certainly.

24,040. And if the training in languages was thought desirable, that, of course would come before the pupils enter your institution ?—Yes, I think so.

24,041. So that that might be combined with elementary science ?—Yes.

24,042. And I suppose some mathematics and geometry ?—Yes. It is necessary.

24,043. And trigonometry ?—A very slight knowledge of trigonometry is sufficient.

24,044. But some study of all those subjects would be desirable enough for surveying before the pupils entered your institution ?—Yes.

24,045. I suppose in a good school it would be capable of being taught to them before the age of 16 ? —Yes. We teach mathematics because a good many who come are not sufficiently advanced.

25,046. Algebra and trigonometry ?—Yes.

24,047. The course which you would desire would be a three years' course ?—Yes.

24,048. The mornings would be spent in the study of chemistry, botany, and geology ?—Agriculture, land surveying, special book-keeping for farmers, and so on.

24,049. How many hours do you give to chemistry ? —They have general chemistry two hours a week, and practical general chemistry three hours, and agricultural chemistry two hours. The first year they only take general chemistry, and they take agricultural chemistry the second and third years.

24,050. Do you carry on the general chemistry through the three years ?—Yes, they may do.

24,051. They keep up general chemistry five hours a week, including the practical ?—Yes, in many cases.

24,052. After that you think it would be desirable that they should go through a further course of general chemistry at the University ?—Yes, I think some of them would require it.

24,053. Then, if I understood you, you think that at the University for the better students there should be a course of advanced agricultural chemistry along with the course of general chemistry. You think the two things should still go on together ?—Yes, in many cases but not in all.

24,054. But as regards botany and geology, if I understand you, at the University they would fall into rather a subordinate place ?—Yes, if the professor of agriculture could take those subjects.

25,055. You do not so much want the general botany and general geology to go on at a University ?— They should have obtained sufficient knowledge of those subjects, but it should be so arranged that students could attend the general course if necessary.

24,056. Your idea of the staff that would be required at the University would be that there should be a teacher of agricultural chemistry besides the teacher of general chemistry—we might say a reader in agricultural chemistry—and the professor of agriculture, while directing the course of the reader in agricultural chemistry, would himself naturally take agricultural botany and geology ?—Yes.

24,057. So that one professor of agriculture, and one reader in agricultural chemistry, would do the work that was required ?—My idea is this, that those students who have not advanced sufficiently in general science should have an opportunity of attending the classes in those sciences, but for the special department of agriculture, one professor of agriculture and an assistant professor would be enough to begin with. Afterwards the professor might be assisted by special courses of lectures on special branches, and lecturers on veterinary science, agricultural engineering, entomology, and forestry might be appointed, but as the courses of lectures would be short, I do see any reason to appoint separate professorships or Chairs for these special subjects.

24,058. If I understood your answers to Mr. Palmer, you think that that work could be quite as well carried on in the middle of London as in any part of the country that was in closer relation to agriculture ? —I think it would be carried on better because there would be so many advantages in it, the Botanical Gardens at Kew, the Natural History Museums, and so on.

24,059. If the students have gone through the training you have described and spent the afternoons on the farm, you think that is enough ?—They have gained a sufficient knowledge of agriculture to see the force of the application of science.

24,060. I do not quite understand what their relation is to the farmer during their practical training. Do they do any work under the orders of the farmers ?— They are very useful indeed to farmers at certain times, though perhaps at certain other times they are rather in the way.

24,061. How is the arrangement made ?—It is an arrangement that has rather grown up gradually. I do not know whether it could be created suddenly. We began with one farmer, and now we have all the surrounding farmers.

24,062. They like it ?—Yes. They rather bother us sometimes by wanting the students when we are preparing for examinations.

24,063. They do not pay the students anything ?— No.

24,064. The students do not pay any fees to the farmers either ?—No.

24,065. The farmers consider that any trouble they give is repaid by the work they do ?—Yes.

24,066. And they allow your teachers to take the students about the farm and show them things ?— Yes, and work on the farm with the farmers.

24,067. And it is considered that in that way each side gains ?—Yes, it is a mutual benefit.

24,068. Therefore, you think that system is one that could be easily brought into operation anywhere ; that it would be an advantage to the farmer to have the students, and that the mutual interest is strong enough to bring the arrangement about ?—Yes ; if it is arranged properly, I think it is a very good arrangement, but I doubt whether it could be arranged everywhere.

24,069. Why do you think 3,000*l.* a year would be required at Cambridge ?—We calculated 50 students to be in residence. That was to pay the rent of Cavendish College, which was offered at a very low rent, 600*l.* a year, and to pay the professor's fees, and students' board.

H. J. Webb, Esq., Ph.D., B.Sc.

10 Mar. 1893.

24,070. As regards the teachers required, if an agricultural school were started at Cambridge I understand that one professor of agriculture and one reader would be all that was required?—Yes, to begin with.

24,071. (*Lord Reay.*) With regard to the work done on the farm, an arrangement is made between you and the farmer. You do not give your pupils to the farmer to be at his disposal; but you arrange with the farmer what work they are to do?—Yes.

24,072. And your teachers occasionally go and inspect the work?—Well, I have one practical demonstrator, and that is the chief thing he does, besides giving occasional lectures on practical agriculture. His chief duty is to see to the work on the farms. When we divide the work up into batches, we have a monitor to each batch who is responsible for the behaviour.

24,073. That is what I meant by affiliated. The farmer accepts certain conditions, which are made by you?—Yes; of course, any special damage the students do would have to be paid for.

24,074. You do not lose your control over the students when they are on the farm?—No.

24,075. With regard to the agricultural course in the University, I take it that your evidence comes to this: that only two special chairs would have to be established, one a chair of agriculture, and the other a chair of agricultural chemistry?—That would be all that is necessary.

24,076. And a board of studies, of course, would be organised for agricultural students, on which the professor of agriculture, the professor of agricultural chemistry, the professor of botany and of physics would have seats?—Yes.

24,077. In discussing the requirements of agricultural students the professor of agriculture knowing their especial wants, would make his influence felt with regard to the arrangements for those students?—No doubt.

24,078. That would be all that you would require?—Yes.

24,079. (*Professor Sidgwick.*) In answering my question I thought the result you arrived at was rather that you wanted a subordinate in agricultural chemistry who would be not exactly a colleague on equal terms with the professor of agriculture, but rather what I call a reader under his control?—An assistant professor.

24,080. (*Lord Reay.*) If I may intervene, my impression is that it would be difficult enough to find a professor of agricultural chemistry. I know that in India, where it was contemplated to have a professor of agricultural chemistry, it was extremely difficult to find a competent professor. Therefore, if you got him he might very well be called an ordinary professor, and be considered of equal status with the other professors. Is it not your opinion that the importance and complexity of the study is so great that you might confer on him the full dignity of professor?—I do not know that it would make much difference.

24,081. But at all events the subject is of very great importance?—Yes.

24,082. Of very great scientific value and scientific importance?—Yes. The assistant of the professor of agriculture would have to be an agricultural chemist, because agricultural chemistry is so much more important at present than the other sciences connected with agriculture.

24,083. The development of agricultural chemistry fully entitles it to a full time professor?—Yes, it may be so, but I think if the assistant professor of agriculture were an agricultural chemist it would meet the case. If you gave a separate chair to agricultural chemistry the lecturers on the other subjects of agricultural engineering, veterinary science, &c. might feel some jealousy. In Edinburgh they have only one professor of agriculture, who is assisted by lecturers on agricultural chemistry, agricultural botany, veterinary science, book-keeping, forestry, and entomology.

24,084. That depends upon his scientific merits?—No doubt some years ago or even now it would have been difficult to get an agricultural chemist, but they are rising up very rapidly, I may say. There will be a very large number of agricultural chemists in a short time.

24,085. (*Mr. Palmer.*) You are aware that under the Act establishing the Board of Agriculture the words are:—"The Board of Agriculture shall also "undertake the collection and preparation of statistics "relating to agriculture and forestry; and may also "undertake the inspection and reporting upon any "schools which are not elementary schools, and in "which technical instruction, practical or scientific, "is given in any matters connected with agriculture "or forestry; and the aiding of any school which "admits such inspection, and in the judgment of the "Board is qualified to receive such aid; and the "aiding of any system of lectures or instruction con-"nected with agriculture or forestry; and the inspec-"tion of and reporting upon any examination in "agriculture or forestry." This aiding is already carried out to the extent of 5,000*l.* a year from the Government, so that any system of agricultural education would have a special claim on the Board of Agriculture?—I think there is no doubt that they would make a large grant. The University colleges of Wales gets 1,000*l.* a year from them.

The witness withdrew.

J. C. Rogers, Esq.

JULIAN C. ROGERS, Esq., examined.

24,086. (*Lord Reay.*) You represent the Institution of Surveyors?—Yes.

24,087. Might I ask what the constitution of your Society is?—The Surveyors' Institution is a Society consisting of about 2,500 members of all classes. It was founded about 25 or 26 years ago, and was incorporated by Royal Charter in 1881.

24,088. Of what classes of members does the institution consist?—Entirely of professional surveyors, except a small class of non-professional Associates. The non-professional Associates number among them perhaps about 20 Queen's Counsel, some dozen or so of engineers, and a few solicitors and landowners. With the exception of that small class the institution consists entirely of professional surveyors. I think, perhaps, I ought to explain that the word "surveyor" is a word of rather obscure signification; it does not convey perhaps much meaning to most people's ears. Our members are really of three classes. Primarily, the land agents who manage the large estates all over England. I believe we represent the management of more than four-fifths of the whole of the large estates in England; that is, almost every estate under management is represented in the institution. We have perhaps 1,400 or 1,500 of the leading land agents. That is the largest class. Then we have a large number of the class of valuing surveyors who sit as umpires in compensation cases. Our third sub-division consists of building surveyors who are concerned in dilapidation cases, the laying out of large building estates and their management, and in the taking out of quantities, and the estimation of materials, and labour, under the modern contract system. But practically they are all included under the term "surveyors," and are more identified with landed property in England than the members of any other institution.

24,089. Will you now explain to the Commission what relations you contemplate between your institution and a teaching University?—I have explained that the Surveyors' Institution is incorporated by a

Royal Charter, and it was one of the conditions of our Charter, that after a certain date (which expired some years since), we should admit no member to our institution without his passing a very stringent examination. Professional examinations are held yearly. We have first of all a preliminary examination which students are required to pass, and which is entirely scholastic. They have to pass in Euclid, Algebra, one of the modern languages, some Trigonometry, History, and so forth.

24,090. (*Mr. Anstie.*) How far in Euclid?—Three books of Euclid, and Algebra including quadratic equations. That is for young men just entering on their pupilage and about 18 years of age. Three years later, about the age of 21 or 21½, these students come up for the first professional examination of the institution. The first professional examination they pass is for the diploma of professional Associate of the Institution. That is an examination which occupies five days, and extends on an average to about 50 hours; it is one of the most drastic examinations. They are graded into the three classes of land agents, valuers, and building surveyors. Those who pass the examination are qualified to be professional Associates of the Institution, and are subsequently elected professional Associates by ballot. There is also another class of men examined at the same time; those who have previously passed the professional Associates' Examination and who wish to obtain the diploma of Fellowship. They are examined simultaneously, but, of course, with different papers. We have about 40 of the latter this year and above 150 candidates in all.

24,091. What do you mean precisely by land agents?—A surveyor who has the management of a large estate, who collects the rents, negotiates the terms of letting, and is the general agent of the landowner. Perhaps half of them are resident agents. The remainder are consulting agents who manage a large number of properties.

24,092. Resident under one owner on one estate?—Either resident under one owner on one estate, or resident on the estate under the control of an over agent, who manages a number of estates; or they are over agents only with no resident agents.

24,093. (*Lord Reay.*) Where are they trained—at what institution?—A great many of the land agents are trained at Cirencester and Downton. After taking the diploma of the Royal Agricultural College or the diploma at Downton, they come to us and obtain our diploma. That puts the professional stamp upon them. The other they consider the educational stamp. We used to exempt land agent candidates from Cirencester and Downton from certain subjects of examination by virtue of the fact that they were connected with those colleges, and presumably had an acquaintance with those subjects, but we have given that up now, and examine them ourselves in all the subjects. The examination of the land agent class is an exceedingly severe one. For instance, for the Associateship Examination this is the range of subjects: land surveying and levelling, and elements of trigonometry; book-keeping, with special reference to estate and rental accounts; the law of landlord and tenant; agriculture in all its branches; the construction of farm buildings, comprising drawing work and estimating; forestry or timber-measuring at the option of the candidate; land drainage; geology and the composition of soils; and agricultural chemistry up to a certain point in the syllabus. The Fellowship Examination for land agents comprises: nature and incidence of local taxation; botany (of grasses); agricultural chemistry; principles and practice of valuation; law of arbitration; law of vendors and purchasers; and agricultural law, besides two scientific subjects, a list of which is given in the syllabus. They may take any two of the following subjects:—Algebra; animal physiology; development of building estates; enfranchisement of copyholds; hydrostatics; Metropolitan Buildings Acts; principles of parochial assessment; road-making and sanitary science. There are 16 subjects of examination in order to reach the diploma of fellowship. The valuing section of the members also take about 16 subjects: land surveying and levelling and elements of trigonometry; book-keeping; law of landlord and tenant; enfranchisement of copyholds; mensuration; law of fixtures; law of dilapidations; law of easements and riparian rights; application and use of valuation tables; algebra, including quadratic equations; timber valuing and measuring; nature and incidence of local and other taxation; sanitary science as applied to buildings; law of arbitration; Lands Clauses Act, and law of vendors and purchasers. The building candidates take for the essentials of examination: land surveying and levelling, and elements of trigonometry; book-keeping; practical measuring; bills of quantities; mensuration; law of fixtures; law of dilapidations; law of easements; constructive and working drawings; and composition and properties of stones and cements. And for their final examination for the Fellowship they take:—Quantities; sanitary science as applied to buildings; the Building and Sanitary Acts; application and use of valuation tables; law of arbitration; mechanics; construction of iron and timber roofs. They also have to take two scientific subjects. Each candidate has on an average for the Associateship about 50 hours examination, and it extends over five days; perhaps taking the average about 48 hours, some a little longer and some shorter. For the Fellowship, the examination extends over three days or about 30 hours. This year we have about 150 candidates, and out of those I think we have about 55 or 56 land agents. The land agents have a most exhaustive examination in agriculture and the related sciences, and I think the Commission will see that there is no other body in England conducting examinations in agriculture on anything like so large a scale. In fact, we are the only professional body in England conducting examination in Scientific Agriculture.

24,094. May I ask whether the Surveyors' Institution would be in favour of a degree in agriculture and the allied sciences?—I should like to answer that question with some reservation, because I doubt very much whether it would be desirable to have a degree specifically in agriculture. I venture to think that it would be a much better plan to have a degree in Rural Economy, which is a term very much more comprehensive, and which includes agriculture. It would also embrace a good many subjects which do not fall strictly within the meaning of the word "Agriculture." For instance, forestry and land drainage. It is a term of very much wider range, and I think a degree under such a designation would be very much more appropriate and useful than under the term agriculture.

24,095. Do you think that a large number of persons would go in for this degree?—I do not think a very large number would go for the degree, but I think if the curriculum at the various colleges and institutions which would make up the proposed University were adjusted, so as to converge upon an Agricultural Degree for those who chose to go for it, it would be a very valuable thing for our purposes, and, I think, for the general advancement of agriculture. I am not prepared to say that I think very many of our candidates would proceed so far as the actual degree, but some would do so. We have suffered very much from the want of proper teaching centres. I should be very sorry to say anything at all hostile to the agricultural colleges. I think some of them are doing very useful work indeed, but they do not meet our wants exactly.

24,096. If the University meets your wants, your institute would be prepared to recognise the degree of the teaching University?—The institution would be only too glad to see it. At present we have candidates from Cirencester, and we have candidates from Downton. They send the best of their men up for our examination after they have finished their course there, but unless a man has been a student at Downton or Cirencester, he has very great difficulty in

J. C. Rogers, Esq.

10 Mar. 1893.

acquiring the agricultural knowledge necessary for passing our examination—that is, in the wider sense of Rural Economy. A good many men have come to the front in connection with our examination system, and they make it a very profitable business to coach candidates in the subjects. We would very much rather see organised teaching centres in which a legitimate and thorough training was given in the subjects. At present the son of wealthy parents who can go to Cirencester and Downton will get a good deal of what he wants there. But there are many of our candidates who have not sufficient means to go to an agricultural college, nor have they the time to spare, and if there were teaching centres in London, King's College, and University College, where they could attend lectures, I think it would be of very great advantage, and give them very valuable assistance.

24,097. And it would also lead to lectures being conducted at the University in the subjects on which you lay most stress in your course?—No doubt it would do that. I heard Dr. Webb's evidence. He made some remarks about the lecturers who, under the Technical Education Act, have been sent out by the county councils recently. I agree with what he said, that a great many of them are men imperfectly instructed: with some scientific knowledge, but without the practical knowlege that comes with mature years. I think I may go the length of saying that some of the best of them are connected with our institution, and many of them would avail themselves very gladly of the opportunity of obtaining a University degree in Rural Economy.

24,098. You do not advocate a degree in surveying?—I think a degree in surveying would be unmeaning. "Surveying" is an unfortunate word: we have always had difficulties with the word: it means nothing. We want something with a definite meaning. "Rural Economy" does mean something. I should like to see a degree in Rural Economy, also a degree in Geodetical Surveying allied with Mensuration, and a degree in Public Hygiene would also be be a most valuable thing. At present the subject of Public Hygiene is largely in the hands of quacks and empirical bodies. I cannot imagine a better function than to put the science of Public Hygiene on a satisfactory basis. There are a large number of our men who come for special examination in Sanitary Science who would be only too glad of an opportunity of obtaining a degree in it.

24,099. There is a Chair of Rural Economy at Oxford, I believe?—There is a Chair of Rural Economy at Oxford, but I believe it is vacant. I think it has been vacant for two or three years.

24,100. On account of the difficulty of finding a suitable professor?—I am not sure. I think the difficulties were financial.

24,101. But you would prefer the establishment of a course of lectures in London to having it in Oxford?—Yes; I think it would be very much better. I am not in favour of appointing a professor of Agriculture specificially. Agriculture is a collective term; it embraces so much; there would be a great difficulty in deciding exactly what the professorial range in agriculture should be. I doubt very much whether it would be possible to get a sufficiently all-round man to teach it in the modern methods. It would be very much better I think to have a Faculty of Rural Economy, which would include agriculture, and to appoint professors of Farming and Agricultural Chemistry. Then I think there should be a lecturer in Forestry, and in one or two other of the allied subjects particularly identified with land and landed properties, and that those professors should constitute a board of some kind in whose hands the teaching should be, and who, by mutual concert, should arrange exactly what the lectures should be in the various subjects with which they were dealing. But I very much question whether in view of the specialisation of agriculture in so many directions and in view of the fact that so much science has become allied with it in recent years it is practicable, or if it is practicable whether it would be well to appoint a professor of agriculture. I think the results would be disappointing. It should be a collective effort on the part of a number of teachers and lecturers and not an endeavour to concentrate it all into one office.

24,102. You contemplate the students attending a certain number of lectures in the pure Science Faculty?—I think those students who do not possess a knowledge of elementary science, should acquire it in some way before they go, but the lectures in this faculty of Rural Economy which I am suggesting should be all lectures in the applied sciences bearing upon agriculture, and not in the abstract sciences.

24,103. Therefore you contemplate that the elementary science course would be a secondary education course, and that the student should at once enter a Faculty which you have called the Faculty of Rural Economy?—Exactly; and that I think would go nearer to answer the expectations of those who advocate the systematic teaching of agriculture in a central University. It would go much nearer, I think, than anything else which has been suggested.

24,104. Have you anything to add?—I am not sure whether I apprehend quite clearly what the constitution of the proposed council is to be, but if it were possible I would have the various examining bodies or others who were sending the candidates to a University course represented either directly or indirectly upon the Council. I think it would be a very good arrangement if a member of the Council could be nominated by ourselves, and a member of the Council by the Royal Agricultural Society. Such anarrangement would tend to keep the teaching in touch with the bodies whose requirements it was proposed to meet. Bodies conferring degrees very easily get out of touch with practical requirements, and it would be rather essential to the success of any scheme that provision should be made for the direct representation of the bodies immediately interested and furnishing the candidates upon the governing body of the University.

24,105. You do not wish the University itself to deal with any practical education?—In connexion with Rural Economy I would have professors or lecturers in the various subjects which would go to make up the subject as a whole. We should not desire to interfere in any way.

24,106. The technical details you leave untouched?—The technical details I leave entirely untouched. Our candidates would very soon discover how far the curriculum answered their purposes, and they would either avail themselves of it or not, according to its character. There would be no doubt an inducement in that fact alone to keep the curriculum in touch with the requirements of the candidates, but it would be also a very useful thing to have an immediate link between the bodies furnishing the candidates and the body conducting the examination.

24,107. Would you be prepared to do that, even after the degree had been instituted?—Yes, I think our system of examination would feed the University system. One may always trust to human ambition to endeavour to attain to the highest possible eminence, and they would simply pass from our examination to the University examination in the hope of obtaining a degree. I do not think it would in the slightest degree conflict with us, but would help us very much indeed.

24,108. You look to the University to assist you in the theoretical and scientific side of your teaching?—I think it would assist the candidates in the higher examination. The candidates now find an extreme difficulty in obtaining the requisite knowledge if they are not at one of the agricultural colleges. It would assist them for the purpose of our examination, and it would assist them further by offering the more ambitious and the more capable of them an opportunity of distinguishing themselves by obtaining a degree. I do not think a general scientific degree would attract them. They want something which is

earmarked as indicative of a degree connected immediately with their professional needs.

24,109. (*Professor Sidgwick.*) As I understand you, the kind of course that the student, whose interests you are urging, would take at the University would be, not a course of a number of subjects from a theoretical or scientific point of view connected with and throwing light upon each other, but rather fragments of different studies, only connected from a practical point of view, with Rural Economy?—I hardly mean that. I mean that if there were a lecturer in Agricultural Chemistry our land agent candidates would attend that lecturer's classes. If there were a lecturer in Forestry and the management of timber they would attend that class; and if there were a lecturer in Agriculture and in Agricultural Chemistry they would attend those classes, and, finally, those things would all converge upon a degree. The obtaining of a certificate in a certain number of those subjects should qualify them for a degree in Rural Economy If they failed in any one there would be an end of it. Some of our men would go in for that, and very many more who failed in some of the subjects would not proceed to a degree.

24,110. Those who proceed to a degree would take their examination before the others; is that your idea?—Those who proceeded to a degree would do so after passing our examination. They would take the degree as late in their professional career as they possibly could; it would be the crown and summit of their academic achievements. In the nature of things our candidates come up for the Associateship examination when they are about 21. In all probability that would be too early to proceed to a degree, but they would be on the road to a degree by having passed our examination, and by having studied in those subjects leading up to a degree—I may say the kindred subjects. After they had passed our examinations they would complete their studies and take their degrees. The studies would go on together to a considerable extent. The more ambitious of the students would go on and take the degree.

24,111. The more normal relation between the kind of studies pursued in the University and the studies required on entering any practical profession, would seem to be that the more scientific and theoretical study should come first, and the more practical study should come afterwards. Do you think that in the case of the students in whom you are interested the relation between the two should be reversed and that the preparation for the more practical examination should come first, and then the more scientific study be pursued afterwards?—I am inclined to think it should. I think that in the case of the University degree you would be dealing with an academical distinction, and in the case of our examination it would be a mere interlude, as it were, in the general course of instruction.

24,112. How long should there be school training in the general subjects of education?—We do not allow students to come up for our preliminary examination, which is a purely academic and scholastic examination, until they are about 18 years of age. We consider that they have acquired sufficient school knowledge by that time. Great pressure is put upon us from time to time to admit them earlier. It is said that a great many of them leave school at 17, and that in the interval that elapses between leaving school and coming up for our examination they lose a great deal of their school knowledge. Our answer is invariably that no doubt that is so, and we are sorry for it; but we nevertheless require them to come up and pass in school knowledge. It is a great advantage; it keeps the school knowledge alive; they are obliged to keep it alive for the sake of our examination. Similarly, we have had pressure put upon us to accept the examination of the College of Preceptors in lieu of our examination; but we think we know better what our educational needs are than anybody to whom these examinations can be deputed; so we conduct them ourselves.

24,113. Then your preliminary examination represents the amount of study that you think the youths who go through it are expected to have done before they reach the age of 18?—Yes.

24,114. That only includes some acquaintance with one language other than English?—Some acquaintance with Latin, French, or German.

24,115. That is the ordinary school training carried on up to 18. That is a rather small amount, is it not?—Yes, but our standard has been steadily rising for the last 12 years. At the beginning we wanted to encourage them to come up for the students examination, so we did not impose any difficult test, but the written examination is very thorough, and there is also a considerable *vivâ voce* examination.

24,116. Does "some acquaintance with French" mean any power of writing in French?—It means translating from the French and translating into French.

24,117. And you think the University ought to admit students and give them the stamp of academic attainments when their knowledge of languages other than their own is not more extensive than that which your preliminary examination requires?—If the object of the formation of the University which is proposed is to encourage scholarship (I use the word in the technical sense which one is familiar with in the case of the older Universities), then I apprehend it will be insufficient. But if the object is to give the studies a more practical cast and a wider range, and to make them more useful to the community at large, then I think the objection to the narrowness of our curriculum will not hold good.

24,118. You do not think more languages could be required without excluding what you regard as desirable?—I do not think it would affect our candidates at all. They are generally extremely well educated. They would just as readily come up in two languages; in fact, a very large number ask if they can not be examined in a second language.

24,119. Why have you not insisted upon it?—Because we want to get as many of our candidates as possible through the student course. We now require articles of pupilage throughout the profession to be registered, and we want to make that particular avenue as little forbidding as possible. But we are steadily increasing the difficulties of our examination. As a matter of fact, we reject a little over one-fourth of the candidates every year.

24,120. Would you think it a barrier if the University imposed a somewhat higher requirement before admitting students; if before admitting students they should require them to show that at some time or other they had acquired a somewhat more extensive knowledge of what are generally regarded as the elements of general culture?—For myself I am in favour, and always have been, of extended culture; and I think it would be of advantage rather if the University did require it. Our system would shape itself quite easily to any change of the kind. I have the slightest hesitation in saying yes to the question.

24,121. (*Mr. Anstie.*) You think there is sufficient in common between your profession and the profession of practical agriculture to make a common degree answer the purposes of both?—Yes. I do not quite understand what a degree in agriculture is apart from all the various sciences with which agriculture is connected.

24,122. I am not putting it as a degree in agriculture, but you think a common degree would answer the purpose of both?—I think rural economy would answer the purpose of both.

24,123. You are not a close profession, are you?—We are not a close profession actually, but we are virtually. About seven years ago, under our charter, the Associateship examination became compulsory. No one could join except by examination. About three years ago the clause of the charter with regard to our compulsory examination for the Fellowship became operative, and there was a great rush of surveyors to join the institution before the advent of that

J. C. Rogers, Esq.

10 Mar. 1893.

period. Perhaps about half of those who applied to join the institution were allowed to do so; the rest were rejected.

24,124. You are not closed by law? Anyone can be a land agent if he likes, and if he can get people to employ him?—Yes, but it has become now to be so generally understood that a man must have the F.S.I. diploma, that a man who starts on his own account has a very poor chance if he is not connected with the institution.

24,125. It is essentially practical?—Yes, I think I may say its objects are entirely practical.

24,126. I could not quite reconcile the answer you gave to his Lordship with what you said subsequently. One answer seemed to suppose that you would be prepared to recognise as covering your courses the certificate of the University, and the other answer seemed to suppose that men would pass on from and over your examinations to the University examinations. Which of those two is your view?—I did not at all intend to convey the meaning that a University course would cover our course. What I intended to convey was that a large number of men would use the University teaching for the purpose of preparing for our examination, and having passed our examination would subsequently complete their University course and obtain the degree.

24,127. What you meant was that they would use the teaching, pass your examination, and then proceed to the higher levels of what would be University teaching?—Yes, that is what I meant to convey.

24,128. You would not be prepared to accept the certificate of any other body, even a practical body handling practical matters and authenticating men as competent for practical life?—Not at all, in many cases we have refused to do so. We refused to accept the certificates of the Agricultural Colleges which are distinctly practical.

24,129. What you claim to do is to certify men as efficient for practical life?—Yes.

24,130. And you think there are a sufficient number of men engaged in the profession who would be glad to go to the higher scientific levels of University teaching and so get their acquirements in that region authenticated by a degree?—I feel perfectly confident of it; there has been an extraordinary improvement in the last 20 years in the social status of men joining our profession. Now it is quite a common thing to have the sons of large landowners who become land agents and manage properties. I might mention a good many; it would be invidious to mention names, but there are many sons of peers who have become land agents. We have two or three in for our examinations now. The education of the candidates has enormously improved of recent years, and if we take our examinees as a class they are as cultivated as any class you can find in the country; they are men of very large scientific acquirements. The best proof of that is the papers we have at the institution meetings. Many of them are in the highest way scientific.

24,131. Do you provide any education yourself?—No, we are a purely examining body.

24,132. Have you any funds which you could contribute to the University for this purpose?—I do not know whether I ought to say it, but I believe that as a matter of fact we are in the happy position, which is almost unique, of having a large surplus income; and I have no doubt whatever that we have funds that we could contribute to the purpose, and which we could consider within our objects in doing so. The institution is rather a wealthy body.

24,133. And you think contributions might be expected from it?—I think it is exceedingly likely. I am not at all prepared to say that the institution would not contribute towards the endowment of a Chair of Rural Economy.

24,134. You seem to consider that it would be better to have that kind of provision made in London, than at Oxford, Cambridge, or elsewhere. Why so?—I think London is the natural centre for extensive teaching in subjects of this kind of general interest all over the country. Educational facilities are greater here than elsewhere, and I think we may expect that students would come to London in preference to going to Oxford or Cambridge.

24,135. Is it your view that a large educational apparatus would be provided for the purpose of taking your students through these various courses?—By the colleges associated, do you mean.

14,136. By the University?—For instance, if we take the case of King's College, certain of our men obtain a portion of their knowledge there; there is a Mr. Lloyd there who lectures in agricultural chemistry; a Mr. Robinson who lectures in surveying and levelling, the use of the theodolite and so forth, and there are also classes there in building construction; similarly, at the Birkbeck Institution I believe there are classes in quantities, and one or two classes in law with reference especially to the wants of our examination candidates; then there are very large classes at the City of London College, where the less wealthy class of candidates who come for our examinations are drawn from. I should think they send up in all probability 10 per cent. of the men from the City of London College. But it all wants organising; it all wants putting on a basis that can only be secured by the action of a central University. For instance, the teaching at King's College is satisfactory in some respects but unsatisfactory in others; the teaching at the City of London College may be satisfactory in one respect and unsatisfactory in other respects; whereas if they were under one central University, in which the teaching was systematised, we should get very much better results.

24,137. Then the reason for your observation was that you desire to have the teaching power of London better systematised, and brought under a more common control. Is that it?—Yes, and that it should be done in London, because London is the natural centre, and because so many of these educational facilities exist in London and simply want systematising.

24,138. What you desire is that there should be common control over these various institutions?—Common understanding.

24,139. How can you get common understanding without common control. Does not "common understanding" import "control" if it is to be efficient?—I should like to see something more than the co-operation that there is, say, between the colleges of Oxford or Cambridge and the University as a whole. I believe the University exercises no control whatever over the teaching of the colleges; they stand or fall on their own merits. I should like to see something more than that.

24,140. What more?—We will say a Faculty of Rural Economy which should be a University Faculty of Rural Economy, and in which the teaching should be conducted on a basis to be determined by agreement between the representatives of the various colleges and made uniform and systematic.

24,141. You would desire to see the teaching united under one body, and controlled?—Yes.

24,142. (*Lord Playfair.*) I see your subjects after the preliminary are to a very large extent practical?—To a very large extent.

24,143. A few of the things are more general, such as algebra, agricultural chemistry, the botany of grasses, and such subjects as those?—Algebra is additional, it is not part of the curriculum. If you refer to Table A. you will see that algebra is not in the corresponding place. I will explain the reason of that. Looking at page 5, you will find that algebra does not appear in the middle section. If you turn to page 10, you will find the algebra appears as the tenth subject. That tenth subject is put in in order to discourage the evasion of the student course. The corresponding subject in the third sub-division is the composition and properties of stones and cements, and in the first sub-division "agricultural chemistry." Otherwise it comes as part of the later examination for the Fellowship.

24,144. If you look at page 12 there are certain scientific and special subjects, such as algebra, animal physiology, hydrostatics, sanitary science, and so on. I was wanting to ask you whether you could see your way to encourage persons to come forward to a degree by taking certain portions of the more scientific subjects and the least practical, and acknowledging them as a part of your system without further examination, for I think you will agree with me that multiplication of examinations is very much to be avoided if it is possible to do so?—It is a growing evil, there is no doubt. I apprehend that your point is that the University examination should be limited to the more advanced subjects, and that students should be excused from the examination in the practical subjects until we examine them.

24,145. I am supposing you to continue your practical subjects altogether in your examination, but that you could take the examination for a degree of the University if it covered the scientific subjects which you have hitherto required in order to encourage your students to go on and take a degree, and not feel that they are going to have two examinations instead of one in the same subject?—You mean that we should drop the strictly scientific subjects, and confine ourselves to the practical ones?

24,146. I do not say drop if persons have not passed them in the University course; but drop them if they have passed examinations in the University course higher than you require?—I think we should certainly agree to that. There is no objection whatever to it.

24,147. And with a view to prevent duplicating the examinations?—It would be mere pedantry to duplicate the examination. I think I have made it quite clear that we should like to see degrees granted in rural economy and in public hygiene; but we do not lay very much stress on the one in geodetic surveying and measuration. The other two subjects we do attach great importance to.

The witness withdrew.

HENRY E. ARMSTRONG, ESQ., PH.D., F.R.S., Pres. C.S., examined.

24,148. (*Lord Reay.*) You are professor of chemistry at the City and Guilds Institute?—Yes.

24,149. You have been connected with the initial movement and establishment of technical education?—I was one with Professor Ayrton of the two first appointed professors. We commenced work, as I dare say you are aware, in temporary quarters in the first instance, and during this time we had very much indeed to do with the planning of the Finsbury Technical College, the arrangement of the fittings and the equipment of the laboratories. Subsequently an engineering professor was appointed, and we three, with Sir Philip Magnus, were mainly concerned in drafting the programme of that institution. Subsequently, after I had been there a year or two, Professor Ayrton and I were appointed to the South Kensington Institution. There the building was already completed, but we had the whole of the planning of the fitting of our departments to attend to, and in addition, in conjunction with our two colleagues, to arrange the programme of instruction. So that I have been very largely concerned in the arrangement of the programmes of these two colleges.

24,150. Now you wish to give evidence on the status which applied science or certain branches of applied science should have in the Faculty of Science of a new University?—With your permission, I should like to give my evidence from a point of view entirely distinct from that. I have been a student of the subject of education for many years past, and I have paid special attention to the question generally; perhaps I may be allowed to hand in these various documents in proof of this [*handing in same*]. I should like to speak in an entirely private capacity with reference to the teaching of chemistry in a future University, both as concerning those who wish to learn chemistry on account of chemistry, and as concerning medical students also.

24,151. Perhaps you will tell us what are the difficulties under which chemistry labours at the present time?—In the first place, I should say that our position is a peculiarly unfortunate one, owing to the fact that, adopting an expression made use of by Mr. Thisleton Dyer in the course of his evidence, we chemists are at the present moment mainly engaged in breaking in the educational colt, and in consequence we have very little opportunity of doing higher work. I may illustrate that best by reference to my own case. My college is in the main an engineering college. We give our students diplomas in the departments of electrical engineering, civil engineering, or chemical engineering. The majority of our students are students of the two first-mentioned branches, and I have to give a course of instruction which in the main is suitable to them. It is no good treating students of that class as though they were going to be chemists, so that the course of lectures in the first year has to be of a special character, suitable for engineers. Then there is a second year course also for engineers. In addition I have a more limited number of students who desire to take chemistry as a special subject, to make that their special study, so that they may become qualified to take the highest posts in chemistry in the future, and it is necessary to arrange for their instruction also. On that account one is called upon to do work of every grade. That is practically the position of every other teacher in London. If I take the case of University College, the medical student there takes the same position as the engineering student takes with us, and it is very much the same with King's College. The Royal College of Science is the only school which has narrower interests so to speak, to consult. In consequence of that, as I say, our difficulty is a very serious one. We are called upon to teach students of various years and various kinds all at once, and it is exceedingly difficult to give special attention to any one particular branch of the subject.

24,152. How do you propose to remedy this?—It appears to me that the only possible way in the future in which any remedy could be introduced in London, would be by the concentration of the teaching of the subject, in so far as it is possible to concentrate it for teaching the higher branches: that is to say, to concentrate the teaching in the sense of bringing the students as far as possible to one place, and then dividing up the subject between the various teachers in such a way that they do not all cover each other's fields.

24,153. More specialisation?—Much more specialisation with regard to the teaching of the subject, so that we are not all doing each other's work, and all doing work of an inferior character, so to speak, and very little of a superior character.

24,154. Would you differentiate the work which might be called post-graduate work from the elementary teaching?—Yes. What I have been referring to is mainly what may be called non-post-graduate work. There is very little post-graduate work in London, or, indeed, in the country in chemistry.

24,155. You want post-graduate work to be given to special individuals?—I want the whole teaching of chemistry, in so far as it concerns chemists, given to certain individuals in order that they may each contribute to post-graduate instruction.

24,156. And where chemistry is not the principal subject you contemplate that the work should be given to gentlemen who do not exclusively devote their talents to chemistry?—No; I do not mean that. They might and should be specifically chemists, but my ideal course contemplates a localisation of teaching of

H. E. Armstrong, Esq., Ph.D., F.R.S., Pres. C.S.

10 Mar. 1893.

subjects. If it were agreed that engineers were not to be taught in the same place as the chemists or in the neighbourhood of the chemists, necessarily there must be special teachers for the engineers just as at present there are, and must always be, special teachers for the medical students. I do not mean to propose an inferior grade of teacher, or anything of that kind.

24,157. Therefore what you propose is that there should be chemical teachers for medical students and engineers and chemical teachers for students who devote themselves particularly to chemistry?—Yes; but more particularly what I desire to see is the localisation of students; teachers will necessarily follow, but that is the main point.

24,158. Then the engineering students and the medical students should not be taught in the same place; is that what you mean?—I should not object to their being taught in the same place if there were room for them, but I think of necessity they cannot be taught in the same place.

24,159. By localisation you mean that the students should be distributed over London in various places in accordance with the object of their studies?—Yes; in accordance with the objects of their studies.

24,160. For instance, that King's College shall teach chemistry for one object, and University College shall teach chemistry for another object?—Yes.

24,161. And that there should be less duplication?—Yes, that is the important point. But I should like also further to say that it is not merely with reference to mere lecturing that it is important to bring students together. There are many other reasons than that. It is, of course, essential that there should not only be good teachers, but that the provision of laboratories, of apparatus, and of appliances generally should be thoroughly satisfactory. Well, that is not the condition of affairs at present. Then what is most important of all, I think, is, that it is essential to collect the students together in greater numbers than they are at present. I made a very strong point of that in my address to the chemical section at the meeting of the British Association at Aberdeen in 1885, which is amongst the papers I have handed in. There is no *atmosphere of research* in our schools; at the most we have one or two men working. There is not the least question, in my mind, that the main effect is produced by the students upon each other; the teacher, after all, can do very little; it is the talk which takes place between the students and the influence they have over each other, which is of very great importance, and it is on that account particularly that we want more concentration of post-graduate teaching in London. That is one of the main reasons why we have done so little in this respect in this country, and it is the main reason why the Germans are successful. I spent three years in Germany; I have been there frequently since, and I know the conditions pretty intimately. I have no hesitation in saying that there is very much less teaching by the professors in Germany than there is here by the professor; they do far more, however, by way of example. In all the large institutions there, a considerable number of men are doing research work, and it is their influence upon one another which is of such extreme importance. I can say myself that practically all I learnt I learnt in this way.

24,162. The influence is directed towards individual exertions?—Yes.

24,163. Which is the University in Germany that you allude to?—I was at Leipsic under Kolbe.

24,164. And to stimulate that *esprit de corps* in research here what you propose is to concentrate these post-graduate students in a laboratory or in a central institution?—I do not think anything which has been proposed hitherto with reference to University teaching in London would help us in the slightest degree unless that were done.

24,165. Do you contemplate that being done at any of the existing institutions, or do you contemplate the foundation of a new institution?—That is a mere matter of detail. At the present time, for instance, the Government are supposed to be contemplating the erection of a new school at South Kensington. There was a question asked in the House about it last night, I think. Of course, it is conceivable that such an opportunity as I have suggested should be given, might be given there. At present the buildings in London are, for the most part, absolutely inadequate for anything of the kind.

24,166. The Royal College also?—The Royal College is a disgrace to London, and not only to London, but to the country. There can be no question about that. You have been told so by Professor Huxley already. He quoted a statement made by Professor Thorpe when he was appointed there.

24,167. (*Lord Playfair.*) You mean a disgrace as regards the building not as regards the professors?—Most assuredly the professors are an example. I mean as regards the provision which is made in the way of laboratories more particularly.

24,168. (*Lord Reay.*) Would you inform us of the influence of this instruction, as shown by the results obtained abroad?—I do not think I can do better with reference to that than to put in this paper, the "Chemiker Zeitung," dated 11th February last, which contains a long account, under the title "Typical Examples of Seats of Chemical Activity," of the scientific chemical laboratory of Messrs. Friedr. Bayer & Company, of Elberfeld, who are manufacturers of coal-tar colours, &c. In this article is described the scientific laboratory of that firm. I may say that this is only one of many such laboratories in Germany. I happen to have seen this particular laboratory, and I have seen the stillmore, as one may call it, palatial laboratory of the Badische Anilin Company's works at Mannheim. The description given here is of the laboratory which is entirely devoted to chemical research for the works' purposes. At the commencement of the article there is a paragraph which is very significant. It says, "Although "in the case of any industry the condition of stand "ing still means retrogression, this is particularly "the case in the colour industry, which has risen "to such importance in our country during the last "decade or two in consequence of the development "which chemical science has received in Germany "at the Universities and Technical Schools." I have no hesitation in saying that this is about the most complete laboratory for chemical research in the world. There are two floors, on each of which there are places for twelve men—twelve independent workers. The size of each working bench is about three times the size of the bench allotted to the advanced students in my research laboratory, where I believe a larger space is given than in any other in the country to the advanced students. Then also it is fitted up in a most remarkable way; there is everything to hand. If, at the present time, it were desired to fit up a research laboratory in London for chemical purposes we could not do better than take these plans and reproduce them in their entirety; and if we did so we should, I believe, have reason to congratulate ourselves on possessing the best appointed public research laboratory in the world.

24,169. And this is done entirely at the cost of that firm?—Yes, it is done entirely at the cost of the firm; and there are two dozen chemists, all of University rank, probably many of whom have spent at least five years at the University, all engaged in pure research work. I happen to know that, because during several years past I have been working at the very subjects which interest these people. I am in communication at the present moment with half-a-dozen of the German works; that is to say, they are glad to hear from me at any time and to aid my research work by giving me material; and I am not connected in any way with any English works, and cannot enter into communication in any way with any English works.

24,170. And no English works ask you your opinion?—No, no English works ask my opinion. These people are only too glad to hear from me at any time

if any observation of interest be made in my laboratory; and I have only to write to them for material, and I get it almost by return of post.

24,171. Is the head of that firm a scientific man?—The head of the firm is not, but they have at the head of the laboratory a member of the firm who is a scientific chemist.

24,172. How is it that the want of scientific laboratories of that kind is not felt in this country?—Because the English manufacturer does not understand the meaning of *one word* which the Germans have learned to understand. That one word is "*research*."

24,173. And the result of that, I suppose, is found in the dividends paid by the works?—Yes. And also I should like to show you the sort of thing it results in. This is the sort of packet I get two or three times a month probably. [*Exhibiting same.*] These are all German patents. These patents are all pure science, and they might as well be published in any one of the scientific journals, but they are necessarily held back; and by having this literature in one's hands one is usually at least a year in advance of the public scientific literature. That is the kind of work which is going on in these laboratories. In the case of this firm, in addition to the two dozen men occupied in the research department, there are quite as many chemists engaged in the works. I believe the firm has over 60 trained skilled chemists. I do not think any English works has six; at all events six is the maximum number.

24,174. And you look upon the work performed at these laboratories as science?—It might just as well be done in my laboratory. In fact, such work as the work I am doing at the present moment is absolutely the kind of work that they are doing. I have been doing a large part of their work. There is practically no distinction between us, except that they are always aiming at applying their results.

24,175. So you may say that the industrial development of Germany at the same time promotes its scientific development?—Undoubtedly. It has made an enormous difference in the rate of scientific development directly and indirectly. A great deal of money has been made out of these matters of late years. The result is that young German chemists are working their hardest, and trying to make money by finding out something which will be of value. As soon as a paper is published which indicates that its author is a man of promise, such firms write a note to the man and retain him. They say, "Let us see your results "before you publish them and see if they are worth "our having." In many cases these firms assist men to carry on researches in the public laboratories. You have all heard of anti-pyrine: that is the result of work done in a laboratory—an accidental discovery—and that has not only made the discoverer a rich man, but it has been a source of very large income to the firm who work the patent. That is one of the most successful cases, but it is one that has had an enormous influence on German scientific teaching, because it has led to men going into laboratories and studying chemistry; here we have no such incentive. That is what we particularly want here; there is no incentive for a young man to go into chemistry; we want a few good sinecures, an Attorney-Generalship, so to say, or something of that kind, to attract people, and especially to attract genius.

24,176. The technical teaching in chemistry must be post-graduate?—Yes, it must be post-graduate; there is no question of that; it must be post-graduate, and for a great many reasons.

24,177. (*Professor Sidgwick.*) Is it post-graduate in Germany?—No, not absolutely, but in a measure. Fortunately, in Germany, in this subject there are no examinations; that is one of the great advantages under which they labour. A man comes up to the University and is admitted, not, I think, after a matriculation examination, but after what amounts to the same thing, and which is really a greater test—a leaving examination at school. I think that earlier in the evidence given before this Commission there was a mistake made with regard to that.

24,178. (*Lord Reay.*) Is a doctor's degree of value?—I was coming to that. I say a man is admitted to the University, and he then works as long he likes.

24,179. (*Mr. Anstie.*) You were going to say something about this leaving examination?—I think that is a higher test than any matriculation examination we have as admitting a man to a University. A man comes, attends what lectures he pleases, works as long as he chooses, until he is prepared to submit a thesis. If that thesis is adjudged to be sufficiently good, and to afford proof that he has learnt how to work, he is admitted to an examination. He undergoes an examination—usually oral—in three subjects, one primary and two subsidiary subjects, and that examination varies in character with the University.

24,180. (*Lord Playfair.*) When you say one primary subject, you mean one special subject?—Yes, one principal subject and two subsidiary subjects.

24,181. (*Professor Sidgwick.*) May the three subjects all be taken within the range of chemistry?—I do not think there is any very rigid rule in regard to that. I think any subject may be taken. The severity of the examination varies with the University, and it also varies according to whether the man has worked at the University, or comes from a distance. If he has worked at the University, they know all about him, and do not examine him much; but if he has not worked at the University they do not know all about him, and the examination is often very severe.

24,182. (*Lord Reay.*) Is the technical work conducted at the German Universities or is the technical work conducted at the several technical schools?—Perhaps before answering that I should refer to a question which was asked, and which I have only partly answered; that is with regard to the post-graduate teaching. What we call post-graduate work is partly done by a man in order to gain his degree, but that amount of work is, as a rule, not considered by these works sufficient to qualify a man for their service. A man nearly always goes on after that and studies for a longer time. Then coming to your question, my Lord, I think with regard to chemistry you cannot draw any distinction between technical chemistry and what we call chemistry. Chemistry is one of those subjects in which what is to-day pure science may to-morrow be applied science.

24,183. But the line of demarcation is not drawn so strictly as it would be in engineering?—Yes, you cannot draw the line of demarcation as strictly as you would in electrical engineering or engineering, because practically no machinery is necessary. All we do, as a rule, is to mix our materials and apply heat, sometimes, perhaps, under pressure, but in the main our machinery is of the simplest kind.

24,184. Therefore the technical training is given at the German Universities?—Yes. Between the so-called technical schools and the German University. The polytechnic differs from the University in so far as it teaches subjects which the University does not. In so far as the subjects are taught at the two places they are taught alike.

24,185. At Berlin the student at the University might go to the polytechnic supposing the professor there was better, or if the student thought he was better?—Yes, only if he is going to devote himself to what is called technical chemistry, he might study at the same time in other branches. For instance, we will say dyeing, but to a man who is a trained chemist that is bye-play. The first requirement in Germany is that the man shall be a trained chemist—a fairly competent independent worker.

24,186. And that he would do at the polytechnic?—Yes.

24,187. There are certain trades in this country which might profit by additional chemistry; for instance, I suppose the brewing trade would be all the better for more education in chemistry?—In regard to that of course the colour industry, it should not be

H. E. Armstrong, Esq., Ph.D., F.R.S., Pres. C.S.

10 Mar. 1893.

forgotten, started in this country. The aniline colour industry was started by Dr. Perkin, and the alizarin colour industry was also started by Dr. Perkin, and we have practically lost both. Knowing a good deal of the circumstances I can say that there is no doubt that that is owing to our neglect of research.

24,188. (*Lord Playfair.*) And it is an enormous industry now, is it not?—In Germany it is an enormous industry. The firm I have mentioned is only one of many. The scale on which these people are working is the scale on which half-a-dozen other firms are working. With regard to brewing, that is an exception which proves the rule. Messrs. Allsopp had a chemist of very great eminence, a Dr. Griess; whether he directly influenced their business or not is not very well known, but he was a chemist of the very highest scientific reputation. Although attached to a brewery he was always carrying on work not connected with brewing; and he introduced a scientific atmosphere into Burton-on-Trent. There were two or three men who came directly under his influence, and when Pasteur's work was first made public, it was studied by them, more particularly by Mr. Horace Brown, who was a fellow student with me in days gone by, and who is now managing director to Messrs. Worthington, and he made use of Pasteur's suggestions. That work has been of enormous importance to them in Burton, and the influence has spread from there. I think there is very little doubt, when the history of the matter is gone into, that the application of Pasteur's method by brewers is very largely due to the fact that the Burton brewers saw the advantage of his work and applied it. Then in the case of the iron and steel trade, it is also becoming clear that chemistry is going to produce its effect, more especially of late years, now that it has been realised that everything depends on small amounts of impurities. We are beginning to recognise that pure iron is a material which can be changed in an extraordinary way, and that this is true also of other metals. Through the work of men like Sir Lothian Bell very marked attention is being paid from the scientific point of view to the iron industry; moreover, the engineers are applying scientific tests to the iron they use: and consequently the industry is developing very fast, and we retain our hold over it practically. Very great attention has been called within recent years to the same sort of fact in connexion with gold, and through the attention which has been directed to the subject by the chemist of the Mint, and by Mr. Anderson of Woolwich and others, there is no doubt that very great attention is now being paid to the composition of alloys generally. It so happens that some of the men who have been connected with these trades have been men who have been able to appreciate the value of science.

24,189. (*Lord Playfair.*) And they have obtained chemists to aid them?—Yes, but with regard to that I should like to say that there is no clear conception in this country at the present moment, for the reasons I have mentioned, of what the word "chemist" means. They have employed men who have been known as chemists, but those men have been for the most part men who have had no post-graduate instruction; they have been analysts; there have been very few chemists employed. The man who, in a case like that referred to, has been the chemist has been Sir Lothian Bell. He is a man who without having received much post-graduate instruction has had the genius to act as though he had received it. There is one point to which I should like to direct special attention when speaking of this matter, that is, the absence on the part of the British public generally of any clear understanding of what constitutes a chemist. At the present time it is thought that if a young fellow goes through a course of training at a school lasting about three years, of which, at most, about a year and a half is devoted to the special study of the subject, he is a chemist. As a matter of fact he has not risen to that. He has not learned to do more than use the more ordinary tools and get general ideas. He has not become an independent worker and thinker. That is largely the reason why we have advanced so little. The majority of the men who have gone out have not been chemists in any true sense of the term; chemists, therefore, have not acquired the reputation that they should have acquired, and have not done the work that they should have done.

24,190. (*Lord Reay*). The deficiency you think is the result of inadequate educational institutions?—Very largely. In Germany they understand these matters, and they will not take men who are not entirely qualified.

24,191. What are the requisites for successful post-graduate teaching?—I have answered that already in a measure by saying that I consider that what is essential is that the students should be collected together, so that they may influence each other, in laboratories, which are thoroughly well equipped and in other respects good, and that there should be a sufficient number of teachers sufficiently understanding the subject to cover the whole of it.

24,192. That they should stay longer at the University?—Undoubtedly; that they should devote a much longer time than at present. There ought to be on the average two years post-graduate study.

24,193. Then with regard to the position of medical students in chemistry?—That is a subject which is a very important one to refer to for a variety of reasons. We have to bear in mind, in the first place, that the medical man perhaps exercises more influence in leading the community than any other man does, and it is of extreme importance therefore that he should be well trained in order that he may act as adviser. At the same time, I am afraid, judging from my experience, that instead of being one of the men who is educated on the best principles, he is one of the men who is educated on the worst possible principles. I should state that for nearly twelve years I was connected with St. Bartholomew's hospital as teacher of medical students. I had charge of the class for the London University students, and I have examined, I suppose, a couple of thousands of medical students during the last four years as an examiner for the London University. The whole of my experience would tend to lead me to say absolutely what Professor Huxley said in an essay which he brought under your notice in his evidence, and which was written in 1870. I think if one could put one's name at the head of that essay, and alter a few words, writing "Chemistry" for "Physiology," it might be put forward as representing the true state of things at the present day. I may be allowed to quote a few words from that essay. Professor Huxley said: "What has struck me then "in this long experience of the men best instructed "in physiology from the medical schools of London "is (with many and brilliant exceptions to which I "have referred), taking it as a whole, and broadly, "the singular unreality of their knowledge of phy-"siology." If you substitute "chemistry" for "physiology" that is absolutely the experience I have gained. The knowledge of chemistry of medical students is, for the most part, absolutely unreal, although it is not so bad as it was. A few years ago the medical student who was a candidate for the University degree did not attend the ordinary course of lectures; he attended a special class: but he was *coached*. There was no time to teach him or even show him experiments. That is what I had to do. He never did any practical work beyond that which the London University requires, which is not to be regarded as practical chemistry at all. The testing of a few salts to find out what they are is not chemistry. Now, I am glad to say (and I am rather proud to think that I have assisted in bringing it on) that at several of the London schools very considerable time is being devoted to the teaching of students who are going in for the London University degrees, and they are being put through a good satisfactory course. A few of the schools have proved that to be possible which a few years ago was said to be impossible: we were told that medical students could not devote sufficient

time to the study of the subject. They have done it. I think you will find on inquiry that a very considerable time is now devoted to the subject at some of the London schools; so that in that respect a change is gradually being made. Then there is another passage in Professor Huxley's essay, where he refers to the question of whether he was severe as an examiner. He says, "Nothing of the kind, I "assure you. The defects I have noticed, and the "faults I have to find, arise entirely from the cir- "cumstance that my standard is pitched too low." That, again, is perfectly true at the present day. The men are given the latest tips, so to speak, with regard to what is being done, and they do not gain any real knowledge of first principles. Then there is another passage which is significant; in fact the whole essay is significant with regard to this question. Professor Huxley says, "You may depend upon this, "that the only physiology which is to be of any good "whatever in medical practice or in its application to "the study of medicine, is that physiology which a "man knows of his own knowledge." That again applies absolutely to chemistry. That is what I have to say with regard to the position of the medical students, and I think it sufficiently indicates what I should be prepared to advocate in regard to them.

24,194. As you have been examiner in the London University I will ask you what is your opinion of the examinations?—With regard to the London University system, as applied to medical students, I certainly think that too much is demanded of them in the way of number of subjects, but so far as failure in my own subject goes I am convinced that it arises almost entirely from the inefficiency of the teaching: from the teaching being carried on either by inefficient teachers, or continued for too short a time, or under improper conditions: that is to say, it is not carried on in a practical way. A certain number of men who are not mentally fit for the examination come up, but not many; the greater number who fail, fail through inattention or faulty teaching. So far as my experience goes I certainly do not think that the complaint which has been made against many of the medical examination is justified in any way.

24,195. I suppose, comparing German Universities with English Universities, one ought not to lose sight of the fact that the secondary education of Germany is organised while in England it is not organised at all?—I think that has very much to do with it. There is no doubt that the quality of the material that we get is, in one sense, very inferior to that which the German schools get. It is not mentally inferior: on the contrary; but the German in some way or other is taught to work at school. It seems to me that that is the last thing that the average Englishman is taught to do, judging from my experience during many years of students. He is taught to play but not to work. Very few English students, without being driven, will work spontaneously in the way that German students will work. Of course the Germans possess a lever which we do not possess, which no doubt is the explanation to a large extent, that is, that the fear of the army is before them. It is a very great thing for a German who can afford it to pass such an examination that he will be able to serve as an Einjähriger, that is, for one year instead of three; and that leads both parents and schoolmasters to drive lads in a way that no schoolmaster in England would consent to, and which it is very undesirable to introduce.

24,196. The opportunities for acquiring knowledge of elementary science are much more numerous in Germany than here, are they not?—I do not think so. I am inclined to think that so far as regards rational teaching in schools we are ahead. I think it is entirely a question of habit of mind. The German has learned how to learn; he sets to work to learn and when he comes up to the college he avails himself of his opportunities, and the English student does not. I have been very much interested in the matter and have made a good deal of inquiry and I do not think that on the whole the Germans are ahead of us in point of method, even in their schools, in many ways. I think they have a much more perfect drill, but I do not think they have a much more perfect method of education.

24,197. Is there in most towns in England the equivalent of the German Real Schule?—There is no doubt that the courses are more complete (I am speaking of the method of instruction), but I do not think the men who go up to study chemistry there, as a rule, know more than the men who come up to us to study chemistry. They naturally learn more, but I do not think they know more on the subject of chemistry. I do not think science teaching in schools has advanced much abroad.

24,198. You mean they have made more use of their opportunities in Germany, and if the same use were made of the opportunities which are given here they would be exactly on a par?—Yes.

24,199. (*Professor Sidgwick.*) Do these University students of chemistry to whom you refer come from the Gymnasien or from the Real Schulen?—I do not think there is any rule with regard to that. I believe that recently there have been some new regulations introduced in Germany. Formerly the Universities would admit almost any one, but now there is a change. I do not know what it is exactly, but there is a change, because at the present moment a large number of ill-educated men, comparatively speaking, who formerly would have gone to a German University are now studying in Zurich or Bale; that is to say, they are going to Switzerland for a degree.

24,200. (*Lord Reay.*) But for the Faculty of Science the leaving certificate of a Real Schule Aster Ordnung would qualify?—I think so, but I am not sure.

24,201. (*Lord Playfair.*) Was there not one instance of an institution in London where the atmosphere was purely chemical, and where a large amount of research took place. I mean Hoffmann's Laboratory?—Yes; but unfortunately the atmosphere ceased to be purely chemical just at the time I commenced my studies.

24,202. But you know its reputation for research?—Yes; there is no doubt that the great success which it met with in those days was due to the fact that Hoffmann was a man with marvellous power of exciting enthusiasm; he collected a body of workers around him who propagated that spirit.

24,203. But was it not also a fact that although his laboratory might be considered inefficient in our days, it was a very good teaching laboratory, and gave that speciality which you would desire to see in the study of chemistry for the sake of chemistry, and not as part of other professions?—Yes; there is no doubt of that.

24,204. And is it not a fact that a splendid series of researches came from that laboratory?—Yes.

24,205. And also that it laid the foundation of that great colour industry which we have lost?—Yes.

24,206. Out of pure scientific research, and not researches for the purpose of making money?—Of course; you know it arose from researches made in that laboratory with purely scientific objects in view.

24,207. It arose out of experiments made for the substitution of aniline for the purpose of scientific research?—It arose out of the desire to make quinine, I think; they were making synthetic experiments in the hope of producing quinine artificially.

24,208. Do you think that if a laboratory of that kind for post-graduate research, not in chemistry alone, but in which physics, physiology, and biology were connected in London with a great University, it would promote very much the advancement of science and the advancement of practice?—I think it would have the effect not only of raising competent chemists, but also at the same time of influencing public opinion. We are depending upon that at the present time. So long as there is difficulty in finding posts for competent chemists, we shall not get a sufficient amount of genius into the profession, and we shall be affected in many ways, of course. But I think that, assuming public opinion advances: as it must, because the lessons

H. E. Armstrong, Esq., Ph.D., F.R.S., Pres. C.S.

10 Mar. 1893.

that are being given at the present time are very severe ones—it would have that effect.

24,209. Do you think our industries in this country can go on with increasing prosperity, because their standing still means ruin, unless public opinion is educated to use much higher science than it has been using in this country for some time?—The decay of the colour industry, of course, practically answers that question, and I think there can be no doubt that that will be universally true.

24,210. Not only of colour industries, but of other industries?—Not only of colour industries, but of other industries in which chemistry plays an important part in enabling the manufacturer to understand his business; and that is true of a good many businesses; it is true of brewing and a great many other industries.

24,211. Is it not true of dyeing, tanning, and many other industries of that kind?—Undoubtedly. Dyeing has, to a very large extent, left us; silk dyeing especially, practically entirely.

24,212. That has emigrated very much to Switzerland, where they have given great attention to scientific education?—Yes, Switzerland and France.

24,213. You spoke of Bale. Has not Bale absorbed very much the Coventry industry of dyeing, which has deserted Coventry, and gone to Bale?—I believe it has, but I cannot speak with any very great certainty on that matter.

24,214. And at Zurich there is a very large institution, is there not?—The laboratories in Zurich are only to be described as palaces. The physical laboratory and the chemical laboratory there are marvellous places.

24,215. The school at Zurich is as big as Buckingham Palace, is it not?—If you take them altogether it is larger, but the physics school makes almost as great an impression.

24,216. What I want to come to is this. If we are to get a great University of London in the position which foreign institutions have, do you see your way to provide us with funds for the purpose?—Of course I do not see my way, but it seems to me that the argument that Professor Huxley used is a practically sound and good one: that if, as the outcome of the labours of this Commission, a scheme can be put forward which really commends itself to the general public and by which they are led to appreciate the extreme importance of the work that a London University might perform, there will be funds forthcoming.

24,217. You think the funds will be forthcoming in time?—I think at no very distant time if anything like a good scheme is put forward.

24,218. You are aware that City Companies have been very generous to provincial institutions?—Most certainly in the case of the Clothworkers' Company at Leeds, and the Drapers' Company at Nottingham.

24,219. They have done that employing their money on private schemes, therefore it is probable they would be willing to aid a great educational institution with money?—The City and Guilds Institute are the only people who have shown that kind of spirit within recent years.

24,220. The County Council has very large sums of money at its disposal. Might we not look there?—We ought to be able to look there.

24,221. It might be asked to apply some part of its large funds to this purpose?—Most certainly.

24,222. (*Mr. Anstie.*) Some of the witnesses who have given evidence have said that they think it very important that teaching and research should be closely united, and that, as a necessary consequence, the laboratory means should be proportionately dispersed. What would be your opinion on that subject?—I think that nobody ought to be allowed to teach in the future University of London who is not a researcher and who does not carry on a research, because no one who is not versed in the methods of research will study the wants of his students and will endeavour to improve his methods of teaching. With regard to the latter part of your question I think the answer would be this: it is one thing for a man to do research, and it is another thing for him to conduct a school of research—to educate a set of men in a school of research. There is no reason whatever why individual teachers should not do what individual teachers are doing in Germany, namely carry on research with the aid or assistance of one or two pupils or assistants, or as a number of amateur workers are doing in this country at the present time. So it appears to me that the two are perfectly compatible.

24,223. Then your view is that there should be, independently of the requirements of instruction, a separate and distinct school of research maintained by the University?—Yes.

24,224. It must be part of the school of higher instruction; not independent of it?—There could be no post-graduate instruction without research.

24,225. The point is very much the unity of it. Is there to be one or are there to be several. Do you desire that there shall be one such school completely fitted with a set of apparatus?—Supposing we had one medical school in London the subject of physiology would probably go with the medical school, and physiological chemistry would go into that school; that would require a distinct school of research, I take it. Of course, the field is a very wide one. Then we will assume, for instance, that agriculture were connected perhaps with that school or with another school in which zoology was taken; there might be research work done in that school. But what one would be inclined to call pure chemistry should be kept to itself, I think.

24,226. You mean there should be one school of pure chemical research connected with the University which would be open to the various professors attached to the University?—Yes.

24,227. You desire that something should be called into existenee which is not in existence now?—I think some means of centralising the chemical talent both in teachers and taught is required. For instance, supposing I have command of two or three students; that King's College has command of two or three; that University College has command of the same number; and that the Royal College of Science has as many: these men do not come together at present. Even if they were working under different professors, I should want to see such men as I have referred to associated in one building so that they might be thrown into contact and observe each other at work.

24,228. Would a central institution of that kind re-act beneficially upon the various local schools?—I have no doubt it would.

24,229. In addition to doing its own special work of research it would have a stimulating influence upon the various centres?—Do you mean out of London?

24,230. No, in London?—Yes, undoubtedly, both in and also out of London. At the present time the provincial teachers are worse off than we are, because most of them have so much evening work to do.

24,231. Probably if you could improve London the influence would spread?—Necessarily.

24,232. In Germany which came first, these elaborate provisions made by manufacturing industries or the State provisions made for the Universities?—Of course it was all originally the work of one man: it is all Leibig's doing, he set the ball rolling.

24,233. Where did he start from?—From the University of Giessen. But the remarkable thing is that it did not develop until just after the period Lord Playfair referred to when Hoffmann left England and went to Germany. It is a very striking fact that this man who had such marvellous power of kindling enthusiasm amongst us here, went to Germany and did the same thing. He organised the Berlin Chemical Society which has had a great influence throughout Germany and which has had a great influence throughout the world in organising chemical research.

24,234. Is that a University Society?—No, it is an cosmopolitan society. It is a publishing society. It has exercised a very great influence on chemistry.

24,235. The great provision that was made for Hoffmann started with the Universities ?—Yes.

24,236. You would apprehend that if it started with the Universities here it might similarly spread to the industrial undertakings of the country ?—I think it would have a great influence, but that, as everything else, will depend probably upon the right men coming forward to make use of it.

24,237. Your view of the organ through which the development should take place and through which the impulse should be received is that it should be a State-aided University ?—Yes.

24,238. (*Professor Sanderson.*) You have already told us that it is the business of the University to provide such special instruction not only in chemistry but also in the sciences belonging to medicine as would fit men for research. I should like to ask you whether you are acquainted with the later scheme of the London University, and whether you think that the London University scheme amended as they propose, could be incorporated into a real teaching University such as would do the work which you have been describing to us ?—Broadly, yes; I think so. I have a note of the resolution with reference to this matter, and it appears to me that the resolution to establish and incorporate with the University Faculties in Arts, Science, Laws, and Medicine does go a very long way towards giving us what we want. The fact that the London University is prepared to call to its aid the advice of those who are engaged in carrying out the teaching work is certainly a very great step in advance.

24,239. Have you thought of their proposal as to representation of science on the governing body ?—I am acquainted with it, but I should like to say with regard to this matter that the summons to attend here came upon me somewhat unexpectedly. I had not gone into the matter previously at all, and I do not feel very competent to speak upon these matters with certainty. The only thing that strikes me is that when the Faculty of Science is accredited with three representatives on the Senate, which I think is the number, if each branch of science is to be represented that is a small number.

24,240. (*Mr. Anstie.*) That is not in the recent proposals. No numbers are given in the proposals you were referring to ?—No, but in the revised scheme three was the number mentioned.

24,241. (*Professor Sanderson.*) Have you thought of the best way of representing science on the governing body of the University ?—I cannot say that I have in detail. It is one of the difficult questions: very much depends upon the preliminary discussion which has taken place and the way in which the representative has been instructed, I imagine. It depends a great deal upon the construction of the Boards of Faculties. I can imagine that although three would not give representation to each branch of science, three men who had been in efficient consultation with their colleagues in science generally would be capable of representing science well if not liable to be outvoted.

24,242. In case it were possible to modify the present existing University so as to make it really a teaching University, you do not see any difficulty in bringing it into relation with the existing teaching bodies ?—None whatever. I will go further than that; I will say that no body which does not enter into relation with the London University can hope to succeed.

24,243. You have not thought about the best way of realising that object ?—No.

24,244. With regard to what you said about the defective knowledge of the medical student, you do not think it is from any defect in the system of examinations that the failure in chemical knowledge arises ?—Of course, being an examiner, it is difficult to say that; but I do not.

24,245. What do you think is the principal cause of it ?—As I have said, I think it is insufficient preparation in the majority of cases; insufficient time given to the subject, and the subject having been studied from the wrong point of view. I am afraid there is no doubt that the profession generally do not in any sense advocate the study of chemistry. The attitude of the profession towards the subject is not even one of benevolent neutrality. I am afraid too many regard it as a subject which is of very little importance, and, I think, there is no difficulty in understanding that they should do so because the teaching has been so unsatisfactory for a long time that medical men have not learnt enough in the majority of cases to realise the importance of the knowledge to them.

24,246. Will you explain why it is that chemistry is so specially important as a preparation for the profession of medicine ?—I have stated that in my address to the chemical section of the British Association from one point of view. I said :—"Seeing that the practice "of medical men largely consists in pouring chemicals "into that delicately-organised vessel, the human body, "and that the chemical changes which thereupon take "place, or which normally and abnormally occur in it, "are certainly not more simple than those which take "place in ordinary inert vessels in our laboratories, "the necessity for the medical man to have a know-"ledge of chemistry—and that no slight one—would "appear to ordinary minds to stand to reason." I should like to go further than that. I think that chemistry is not only of technical value to a medical man, but that *proper* chemical training would do more towards giving a medical man knowledge of scientific methods than any other preliminary subject. Of all the preliminary subjects no other offers the same training in the use of the eye, so to speak, and in teaching men not only to experiment with a purpose and to observe but to reason from observation and to be exact, as chemistry does when properly taught; and from that point of view I think it is all important that the teaching of chemistry to medical men should be put on a very much higher footing than it has been hitherto.

24,247. I suppose you mean all-important to those who wish to carry out the study of medicine fully ?—No, I mean to all medical men. I am inclined to think that at the present time there is far too much exacted as regard the number of subjects; that what we are really aiming at in the main is to teach method, and that we might with very great advantage take off some of the other subjects and endeavour to teach method with the aid of fewer subjects.

24,248. (*Mr. Anstie.*) What are the subjects you refer to ?—I am not quite prepared to answer that. It is very difficult to say unless one has had opportunity to think out the matter in detail. I believe there is little chance of our educational system being materially improved unless the paramount importance of teaching *scientific method* from the earliest school period upward be realised; the scheme of measurement lessons, &c. put forward by the British Association Committee in 1889 and 1890 is drawn up entirely from this point of view, and I have specially called attention to this subject in a lecture printed in "the Educational Times" of May 1891.

24,249. (*Professor Sidgwick.*) Perhaps you might name one subject that ought to be cut off. Of course every teacher wants his own subject included ?—It appears to me that that is one matter that has to be taken into account. I referred to that in my British Association address, and I pointed out that probably the undue multiplication of subjects has arisen very largely from the fact that we are most of us dependent upon fees, and therefore we each naturally recommend our particular subject as one to be taught. That is one of the matters to be guarded against in a future University and one to which Professor Huxley made reference. He pointed out that it was very important the professors should be paid very largely without reference to the number of students that they taught. I think that few of us have looked at the matter sufficiently from the point of view of what is best for the student, and that the specialist has been allowed to have far too much weight.

H. E. Armstrong, Esq., Ph.D., F.R.S., Pres. C.S.

10 Mar. 1893.

24,250. (*Professor Sanderson.*) You would have no difficulty in naming a few subjects which takes up the time of the medical student which might be omitted, such as say, forensic medicine?—Yes, *materia medica* in its present form, and probably by having a special course for medical students in which physics was more combined with chemistry a great simplification might be introduced. You cannot teach chemistry without physics and *vice versâ*. The system which formerly prevailed of making one man lecture on the two subjects was a very much better one in many respects.

24,251. No improvement in the examinations in chemistry would have the slightest effect in remedying the evil you complain of?—The two must come together. There must be a change in the teaching and a change in the examining. The present method of examination is fully up to the system of teaching. I always feel that it is not fair to examine from the point of view that one wishes to examine from, but that it is necessary to look at the matter also from the point of view of the student, and to consider what he has been taught and might have been taught under existing conditions.

24,252. But although the system of examination is such that we are not able to find any fault, it does not bring about a good result?—I think the examination can only be justified as being on a line with the teaching.

24,253. (*Mr. Anstie.*) Then your view is that the teaching depresses the examination?—The two are reciprocal. I do not think one can separate them.

24,254. (*Professor Sidgwick*). I do not think you mention how much chemistry is learnt at school in Germany by the students who ultimately develope into professional chemists?—I think I have said already that, so far as I am aware, they do not on the average learn much.

24,255. So that they have to do elementary work in chemistry at the University?—Yes.

24,256. According to my information the elementary teaching in chemistry, and in other subjects at the University, is done by the same professor who does the advanced work and is organised along with it. That is so in the main, is it not?—In Germany the teaching as a rule is more divided; the professor, as a rule, gives a course of lectures which becomes more and more difficult as it proceeds. The course of lectures is much more difficult and more complete than it can be, as a rule, here, because the students are able to grasp the subject better. I think, they apply themselves more. The junior laboratory teaching is mainly in the hands of the assistants, indeed, practically entirely; that is to say, the junior teaching.

24,257. It is not thought desirable in Germany, as far as I know, in any University town to organise post-graduate research in an institution apart from that in which the elementary teaching is carried on?—No.

24,258. It is thought desirable that the two classes of students should be as much as possible together?—Yes.

24,259. And in your view that would be desirable also here?—Yes. I do not think you want to separate the junior from the senior. I do not think any division of that kind is required.

24,260. The examinations in Germany seem to be well adapted for training scientific students?—The German student is not in perpetual fear of an examiner. Here in London a man has to pass a matriculation examination and then an intermediate examination before the examination for the Bachelors Degree.

24,261. They are examined by their own teachers?—As a rule.

24,262. And that seems to be a good thing in view of training for research?—On the whole I think it has been shown by results to operate well.

24,263. Therefore it would be desirable in our metropolis to imitate the German methods in that way?—Yes, I think the internal examiner must play a very large part. I am not clear that the external examiner in this country would not exercise a very good influence up to a certain point, because we have a very great difficulty here except at Oxford and Cambridge in getting men to read. I suppose it is because classical studies were so long in possession of the field that the method of learning a subject by reading prevails very largely even in regard to science at Oxford and Cambridge. Our London students have a tendency to think that if they attend the lectures and work in the laboratories they have done sufficient, and they do not read. We have nothing in London which corresponds to the influence of the University tutor.

24,264. Do the German students read so much more? The impression produced upon my mind when I was inquiring into the matter was that in a country where the printing press had been so long known, it was extraordinary to see the extent to which men preferred to take in instruction through the ear?—You mean by getting it from lectures?

24,265. Yes. I heard in Leipsic a story of one man who had made himself the subject of oral instruction for 12 hours a day. The figures may have been exaggerated, but the moral was that the men were too much inclined to attend lectures?—I think that although they do go to lectures a great deal, and attach great value to lectures, yet the majority of the men who are really studying at all read up a great deal on the lectures, and the lectures really enable them to read with advantage.

24,266. Further, the method by which in Germany a man is taught by his own professor who knows the work he has done beforehand, brings the examination more into harmony with the teaching?—Yes.

24,267. And it would be a gain to have that in England?—I think it would on the whole, provided always that the examiner does his duty and does not simply try to force the men through. It is the most healthy system. I should like to add with reference to your remark that what we have to do in these days after all is not to turn out men who know a great deal of a subject (this is certainly so in my subject), but that we want to turn out men who really are capable of doing independent work and from a proper point of view, looking at it from the point of view of doing their work carefully, exactly, and thoroughly. That is the kind of thing that no examination or external examiner can test. I think that a radical mistake is made by very many in talking about examinations in disregarding this primary object of examinations.

24,268. In order to get the kind of teaching you want it is very important that the examination should be subordinated to the teaching?—It should be subordinated to the teaching and there should be less of it. A man should not be under the perpetual strain that he is under in the present London system; he is never free to devote himself really to his proper work.

24,269. Now, one word with regard to chemistry in the medical course. I do not think you said anything about the place which it occupies in the German course. Have you given any attention to that?—I think it has about the same place that it has here, only on the average I think perhaps it is taught a little better. I should think if the question were dealt with from a purely statistical point of view there would not be much difference. The men all attend a course of lectures as they do here. As I have said already I do not think the Germans are ahead of us in many ways; I think they are in some respects behind us with regard to their method of teaching juniors.

24,270. Is their medical course organised on what seems a more reasonable plan?—No, I do not think it is. They have a greater number of subjects and I think the course is a much longer one.

24,271. (*Professor Sanderson.*) Do you mean the medical course?—Yes.

24,272. No, it is not so long as our Oxford and Cambridge course?—I thought it was a very long one.

24,273. (*Professor Sidgwick.*) One of our witnesses laid considerable stress on the importance of having chemistry taught in London in connexion with each of the London medical schools, which

would involve, of course, a multiplication of teachers and laboratories?—With regard to that, I think there is no hope of improvement in London unless we can do as has been suggested, namely, centralise the medical schools for teaching in preliminary subjects so that there are two or three schools at the most. There is a large amount of teaching at the present time, and the only way of improving it will be by centralising it.

24,274. I think it was admitted that in some of the medical schools, if chemical teaching were found, the University must exercise wholesome pressure by refusing to recognise teaching from schools which had not a proper teacher, and a proper laboratory. The witness to whom I refer laid great stress on the value to a great hospital of having its chemical laboratory to which questions arising from time to time in the course of the hospital work might be referred?—I should like to have evidence of that ever having been done before I accepted that point of view. I do not think that argument would be found to have much value if it were tested from that standpoint. It sounds very well in theory, but I do not think it often comes into practice. As an examiner I am often very much struck with the extraordinary difference in the quality of the knowledge displayed by men coming from different schools. Some of the men have been taught from a proper point of view and others from a merely formal point of view. I am sure that great injustice is often done at the medical schools in that kind of way at the present time.

24,275. (*Professor Sanderson.*) So that what you said as to the quality of teaching just now, really applies to the unfavourable cases, and not to the favourable ones?—Yes. If I may be allowed to add this I should like to say, that it seems to me that there will be very little chance of our making any progress in this great question in London, unless we can treat the subject from the point of view which I have indicated of taking the various schools and redistributing those schools, so to speak, so that certain subjects may be assigned to certain buildings; and redistributing of their staff, so that a teacher from one place may go to another place following his subject. I do not think that anything that could be done in the way of conferring University rank upon any one or more colleges will help us. It seems to me that the present absurd competition which is going on between us for students, and the system of doing each other's work over and over again cannot possibly be put an end to in that way.

24,276. (*Professor Sidgwick.*) Do you not think that a certain amount of competition may be desirable?—I think that if we are brought together we shall always be rubbing each other up. I do not think any other competition than that is necessary in this country. We English people are such restless beings, and so many of us have ideas of our own that I do not think we shall allow each other to stagnate.

24,277. Do you not think there would be some advantage in a competition between two or three schools?—Supposing you had three medical schools there would be sufficient competition. I think that instead of having 11 medical schools or more you ought to centralise, and have at most, say, three schools. With regard to a subject like chemistry, it possesses so many different branches that if a teacher in one branch were not doing well, a teacher in another branch would be; the different branches would exercise competition between themselves, and would serve to regulate matters in the way you suggest.

24,278. (*Lord Reay.*) You would have a redistribution of subjects?—Yes.

24,279. (*Professor Sanderson.*) You have no doubt that if we could bring into existence an efficient University, that University would be able by negotiation to bring about the changes which are required?—If you had a scheme which would appeal generally, with a sufficiently powerful authority to make the negotiations compulsory, so to speak, then I imagine it would.

23,280. That is to say, to make it advantageous to comply. Is that the only sense in which you have used the word "compulsory"?—I think that if a good scheme could only be put forward, people are so very much interested in this subject, that they will see that it is to the general advantage to co-operate; that any attempt merely to partly solve the question will not help us forward much, and will necessitate a reconsideration of the whole question so soon as we can agree to something more rational. I think people are waiting for a really good scheme.

24,281. (*Mr. Anstie.*) Supposing a statutory commission were authorised to set afloat a new University they would recognise certain Chairs, and would refuse to recognise certain others?—I think such a scheme would stand criticism if it were on the face of it a fair and good scheme.

24,282. An impartial and powerful body constituted for that very purpose?—Yes; but anything short of that, I think, would not answer.

The witness withdrew.

Adjourned to Thursday the 16th March 1893, at 12 o'clock.

Sixty-second Day.

Thursday, March 16, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
The Right Hon. The LORD PLAYFAIR, K.C.B., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
PROFESSOR H. SIDGWICK, Litt.D.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

E. C. Clark, Esq., LL.D.

16 Mar. 1893.

E. C. CLARK, Esq., LL.D., examined.

24,283. (*Chairman.*) Perhaps you would begin by telling us your position and the offices you hold?—I am professor of Roman Law at Cambridge, Civil Law it is called, and I have practically acted a good deal as the head of the Faculty there. I have examined there. I have also examined on the University of London; and I have acted as professor for the Inns of Court in Roman Law and examined for them.

24,284. Do you lecture at Cambridge?—Yes.

24,285. Are your lectures largely attended? Is the Faculty made much use of? Is the degree much sought after at Cambridge?—My lectures are not very largely attended. The degree is fairly sought after, it is not one of the largest tripos examinations but a large one.

24,286. Is it taken exclusively by men who intend to make law their profession?—No, I do not think so; it is taken by others too.

24,287. What do the others take it for, merely as a part of general culture, or to assist them in whatever professions they are about to engage in?—As part of general culture I think, and partly as an avenue to a degree.

24,288. It is one of the roads to a degree?—Yes.

24,289. It is thought to be easier than any of the other roads. Is that the reason?—I do not think it is now. It used to be. That impression prevailed for a long time, but I do not think it prevails much now.

24,290. Do you think that in establishing a new teaching University it would be a very good thing to have a Faculty of law?—I think it depends a good deal upon what chance you have of connection with existing bodies such as the Inns of Court and the Incorporated Law Society.

24,291. In London it would be almost essential to have the co-operation of those bodies?—I myself think it would.

24,292. And from what you know of the Inns of Court do you think they would be inclined to co-operate?—That I cannot say. They have just now inaugurated a new scheme of education and examination, and they might be disposed to keep it entirely in their own hands. I have brought a report of their first year's experience which I will lay before you. It might perhaps be of some interest.

24,293. Does this at all allude to the subject of a University degree?—No, that refers to the course of education now afforded by the Inns of Court, and the result of the first year's experience in their new system of teaching and examination.

24,294. We have already had evidence as to that. Have you looked over the evidence that has been given?—No, I have not.

24,295. Perhaps you will take your own course with regard to the information which you are prepared to give us?—I must apoligise if I take the part of questioner rather. I am obliged to do that, because I am rather in the dark as to what is intended. I suppose it is intended that a regular Faculty should be established with a staff of teachers, and examinations and degrees?

24,296. Yes. Is that the thing that you are in favour of? Do you think that that is a necessary thing for a new teaching University?—I think if you start a teaching body at all you must have all those things, but the expediency of starting a new teaching body seems to me to depend upon the co-operation of the existing bodies in London.

24,297. And the teaching should lead up to the examination. That is important?—Yes, I think so.

24,298. But, as you said before, you think that the recognition of the bodies you have mentioned is essential?—I think it will be very important indeed.

24,299. What are you prepared to say with regard to such recognition?—The course of education given up the Inns of Court is rather in what I should call the practical branches of law. They examine in them. If they would admit the examination of your body in the same subjects, I think you might with advantage be able to lecture in those subjects too. If they would not, I think you would be obliged to confine yourselves to what I will call the non-practical or the scientific subjects of law, such as Roman Law, jurisprudence, and comparative English and foreign law; the history of English law, and English constitutional law; in those subjects you would not come so much into competition with the educational body of the Inns of Court.

24,300. And, even if a thoroughly good understanding was arrived at with the Inns of Court, the instruction given in the University and that given by the Inns of Court themselves would naturally fall into that division; the theoretical instruction being given by the University and the practical by the Inns of Court?—I think it must rather. There scarcely seems to me to be room for two practical schools of teaching, and the present practical school of teaching set up by the Inns of Court is a thoroughly organised one.

24,301. The Inns of Court might be willing to accept the degree of the University as a proof that the student had received a theoretical instruction?—Yes, but the part which they require in their scheme is very small. It is a very small part of the scheme which is devoted to that.

24,302. I suppose theoretical instruction is all the better if it is given by a practical man, a man who has been himself in practice?—I think it ought to be under the control of the practical man.

24,303. If this degree was established with the co-operation of these bodies it would be a valuable thing, and the degree would be sought after by people entering the profession of the law. Do you think it might

also like your degree be sought by other people who are going into other professions, or merely as a part of general culture?—Only I think as a part of general culture. I confess that my experience is not very favourable to the attractiveness of this kind of subject to any large number of students. The candidates whom I have found attracted to the higher kind of teaching in London have generally been really, it seems to me, prize hunters, that is, persons who have been attracted by the scholarships and the prizes, and, to a considerable extent, Orientals.

24,304. What do you think of it really as a useful branch of education? Do you think the study of it strengthens and enlarges the mind in the same way that classics, mathematics, and science teaching or other things that are taught in a University do? Is it useful in that way?—Yes, I think it is; and I think it would have an extremely beneficial effect on the legal profession if the members of it could be induced to go through an education of this kind before they take up the practical part of their study.

24,305. You would confine it to the non-practical subjects?—Yes, because otherwise I think you would be in competition with a strong body which has in its own hands the power of call to the Bar and admission to the profession of solicitor.

24,306. Then with regard to the means?—The means are teachers and examinations. I suppose examinations are indispensable. It appears to me that the examination is the point to which the greatest attention of all is required at the present time. The examination is really the principal teaching agent it seems to me in modern times. Unless an examination is extremely well conducted almost all teaching tends to dwindle into cram.

24,307. What is the best safeguard against that?—I think very high class and well-paid examiners with not too much work, and diminishing, as far as possible, the number of examinations. It is the too great number of examinations which makes it extremely difficult to examine in subjects which are at all of a permanent or standing character. I have found that very much in the case of Roman Law, where a considerable part of the subject is necessarily of a standing character; I mean the Institutes of Gaius and Justinian. Those subjects are extremely difficult to examine in from the great number of examinations that have taken place and are continually taking place in them. The multiplication of examinations is one of the principal objections that I have found to the London University examination system as far as I know it; that is, in law. There are too many examinations, and there are far too many examinations in the present Inns of Court system.

24,308. Do you think that to require a man who goes up for a degree to produce a certificate that he has attended a regular course of lectures in the subject in some recognised college would be a guarantee against cram to a certain extent?—I am afraid not. I think you must find your guarantee in the nature of the examination more than anything else; that is, confining your examination as much as possible to problems, unseen passages, and essays; giving much less weight to what is called book work than is generally given in what are called pass examinations, and in some honours examinations also. That cannot be crammed; at least if a man can answer a good paper of problems and essays the crammer has taught him well, and there is no objection to the crammer.

24,309. Then having a course of lectures leading up directly to the examination, and the examination being on the same lines as the lectures—— ?—That is a very good thing. It would be necessary to have it, I think.

24,310. That would prevent cramming to a certain degree, because the outside crammers would be at a disadvantage with regard to the lecturers?—They would soon find out what the pupils would be examined in. I am afraid that one of the greatest safeguards is to make a certain proportion of the teaching staff examiners; not half, but about a third, as the Inns of Court propose to do. That seems to me to be a very good plan. In the present scheme of the Inns of Court, one of their readers examines together with two outsiders, and that I think is a good arrangement. That would ensure the attendance of the students at the lectures.

24,311. You have been an examiner?—Yes.

24,312. Can you at once tell in examining a man whether he has a fundamental knowledge of the subject, or whether he has only learned the questions likely to be asked?—Yes, I think I can.

24,313. And you could to a certain degree, I suppose, make use of the knowledge which you would acquire in that way, in the number of marks you would give?—Certainly.

24,314. So it depends a good deal, not only upon the nature of the examination, but upon the examiner himself?—A very great deal; upon the experience and the leisure of the examiner. He must not be overworked.

24,315. Have you anything more to say about the degrees that are implied in the idea of a Faculty?—This is a little on the same subject that I mentioned before with regard to the evil of the multiplication of examinations. I think the weak point in the system of examinations of the University of London is the fact of requiring separate examinations for the different grades of degrees. They require the examination for the degree of doctor from comparatively older men who have passed through several examinations already. That I think is a mistake. It is an instance of the bad effects of the multiplication of examinations. I think our Cambridge course of requiring what we call an Act for such a degree is a better plan, that meaning now an original essay written by the candidate upon which he is orally examined. That I think is a good substitute for an examination when you come to the higher class of degree, if the doctor's degree is to be conferred.

24,316. (*Lord Playfair.*) Like the thesis of the Germans?—Yes, a thesis which is absolutely original. The object of the oral examination is mainly to discover whether it is absolutely original or not, and whether it is the result of personal experience or not.

24,317. Do you make him write the essay in the room?—No, I am speaking of a prepared essay.

24,318. You examine him to bring out his knowledge?—Yes. It is on a subject approved of by the person who conducts the Act.

24,319. You would not be certain whether it had been done for him?—It is easy to find out. I have had the misfortune to find it out myself more than once.

24,320. (*Chairman.*) In the teaching for a degree could anything like a disquisition or an argument be introduced with good effect. I believe that in some of the American colleges, they have been introducing that—a disputation in the presence of a teacher?—I have seen so little practical work of that kind, that I can scarcely say. We have a few moots as we call them, in Cambridge; they work fairly well in the way of interesting men, but I do not think they could safely be relied upon as tests of the learning of a man.

24,321. They should be more part of the education than part of the test?—Not part of the test, I think.

24,322. You deprecate the multiplication of examination?—Yes.

24,323. You think that the written thesis sent in would do instead of part of them?—For the higher degree, certainly, if the degree of doctor is to be given.

24,324. You are going away from the Faculty of Law into the general question?—I think the production of a good essay applies very much to the Faculty of Law.

24,325. You have told us about the examinations?—I have. I should like to make the point more strongly than I have made it. I deprecate the multiplication of examinations almost more in the interest of the examiners and in the goodness of the teachers

E. C. Clark, Esq., LL.D.

16 Mar. 1893.

than in the interests of the examinees. If a subject is too much examined upon by the same men, the tendency is to get into grooves which are soon recognised by an artificial class of teachers.

24,326. By the crammers in fact?—Yes.

24,327. You think there ought to be a change of examiners?—Yes, with a certain degree of continuity preserved to keep up a uniform standard. We endeavour at Cambridge to re-appoint about a third of the examiners for the next year, (in fact we generally appoint an examiner for three years if we can) out of a body of five or six.

24,328. There is a certain amount of continuity maintained; one wonders sometimes how it should be so?—In my own experience, I think we have succeeded in keeping that up. Numerical marks do not always mean the same thing. You want the personal experience of an examiner who has examined the year before.

24,329. Is there anything else you wish to say under the head of examinations?—Not very much, except that I think what are called pass examinations are rather to be deprecated on the whole. It seems to me that every good examination ought to contain a great deal of unseen work and problem work, and that the only difference between what is called a pass examination and an honour's examination ought to be that slightly harder problems and essays are required in the one than in the other, and probably a slightly higher standard. An ordinary pass paper is taken to mean a paper set almost exclusively in bookwork. A paper set almost exclusively in bookwork is, I think, a matter of almost unmixed prejudice and harm; it must, in a very short time, turn the best-intentioned teacher into a crammer.

24,330. You prefer papers more on general subjects in answering which a man would be able to show a certain power of grasping his knowledge and arranging and making use of it?—I mean, especially, problems set upon the principles which he is supposed to have acquired.

24,331. But you would have separate papers for those who were going in for honours, and those who were going in for pass, would you not?—I am not at all sure that that is absolutely necessary. The existence of two sets of papers for what is called the preliminary examination and the honours examination in the University of London, I always found a great addition to the labour of the examiners from the great difficulty of setting two different sets of questions on the same subject, which was not, I think, compensated for by any particular advantage in the results of the examinations.

24,332. They always have the same examiners for honours as they do for pass, do they not?—Yes, because they have to pass the men first of all, and then they have to take the honours examination.

24,333. The candidates all have to go through the pass examination?—Yes.

24,334. And then they have the honours examination. That is not always the case, is it?—No, I am speaking now of the University of London.

24,335. You would wish to make as little difference as possible, or no difference between the papers set for pass and class?—That is rather my view; I do not hold it very strongly. I do not know whether you would like me to say anything about the kind of rewards and inducements you propose to hold out to the students if you do propose to hold out inducements in the way of prizes or scholarships.

24,336. Would those be given as the result of the examinations in the regular papers, or would they have separate examinations for those?—I think they should be given in the regular papers. I only question the value of them altogether. They are very likely to attract some prize hunters—if I may use our Cambridge expression, "pot-hunters"—and the class of men they attract does not seem to me to be the class of men we really want to get hold of. We want the persons who wish to study for the sake of the study itself, or persons who will be professional men. I cannot help thinking that scholarships are gone in for a great deal merely for the sake of the money. If money is to be given I have sometimes thought it might be better given by way of paying for a candidate's entrance into a barrister's chambers or a solicitor's office, which is a practice that the Inns of Court recommend by the side of their course of training. That is a very expensive preparation; is costs 100 guineas to go into a barrister's chambers. I do not know what the solicitor's charges are, but I suppose they would be about the same. If you had that it would show that the candidate did not go in merely for the sake of getting a certain amount addition to his income.

24,337. With regard to law at Cambridge, have you got money prizes?—No, we have not very many; it is mostly honour. We have a medal which is given for English law—the Chancellor's medal, and a prize arising from money subscribed by friends of Mr. George Long for the best man in Roman Law and Jurisprudence.

24,338. Are those examined for at separate examinations?—No, they are given by the same examination as that which our honour candidates go in for; they are different parts of the same examination, but it is the same examination.

24,339. Do you think that if there are to be prizes they ought to be given in that way, or as the result of separate examinations?—I think they are better given in that way. If they are given separately I think they should be for essays in which subjects are given rather than by examination.

24,340. You do not wish to have money prizes, but you would have no objection to there being a certain number in which the money should be given to enable a man to be articled?—To pay a barrister for entrance to his chambers or to pay a solicitor for going into his office. That, it seems to me, would be the best way of using the money.

24,341. Is there anything more you can tell us which you think would be useful?—The only other suggestion I have to make is that this system of the Inns of Court has just begun, it is a very elaborate system of education, I do not know what your intentions are, but it might perhaps be a slight advantage to wait a year and see what the result is of another year's experience of the working of this system of the Inns of Court. This is the first serious attempt that has been made to provide an efficient teaching system of law, and there has been as yet only one year's experience, so it is not fairly understood. The report is a very valuable one, but by it you will see that the system has only just come into operation.

24,342. You think it would be advisable to wait for a year to see how that system works, and how far it should be supplemented by a University course?—Yes.

24,343. But if there were a large representation of the Inns of Court on the Legal Faculty, they would be always able to take care that the two did not clash but worked harmoniously together?—Yes, if they are at all willing to admit the degrees or examinations of other bodies, which it is not certain they will be.

24,344. Do they do that to any extent now?—They used formerly to admit our certificates from Cambridge to excuse candidates from examinations in Roman Law, and in the English law of real and personal property. They have now struck off that allowance in the case of the English law of real and personal property. In that they insist upon an examination by themselves, they still admit our examination in Roman Law to exempt from theirs.

24,345. For them to take the degrees of the London teaching University as part of their course, and to excuse certain things in consequence of men having taken a degree, would be on their part to take a backward step, going back to a system which they have already abandoned with regard to the older Universities?—That is perfectly true.

24,346. You do not know whether they would have any objection to do that?—I do not know, I am afraid they might.

24,347. It might make a difference if they themselves had a voice in fixing the course of instruction under the examinations?—Undoubtedly, a certain community of examiners between the two bodies would possibly meet the difficulties of common examinations for this body, and for the Inns of Court.

24,348. (*Lord Playfair.*) I understand your plan to be that the University should give the theoretical part of the education, and that then the men should go down to the Inns of Court, and take the practical subjects, and pass the practical examination there?—Yes, unless the Inns of Court will accept the results of your teaching in the practical part. If they will do that as equivalent to their own, I do not see why you should not do that as well. You would get equally good men here.

24,349. Would not the effect rather be to make the course in the University practically an undergraduate course, and that you could not teach the subjects in a high condition as the post-graduate course if you desired it?—I do not quite follow the question.

24,350. Evidence has been given to us on almost every subjects in arts and sciences that it is very desirable to form a high post-graduate course after men have taken their degrees which enable them to go into professions, to induce them to study higher subjects. As I understand your plan, your teaching would be preliminary to the practical teaching, and to the degree giving power of the Inns of Court, and your courses in the University would be limited rather to undergraduates, and then the post-graduates ought to get a much higher knowledge than they would be likely to derive from the Inns of Court?—Knowledge in different subjects. It would be a better degree of course, but it would be a relation between the subjects which ought to come first, and those which ought to come second rather than a relation between a higher and a lower degree in education. The difference is rather in the nature of subjects than in the degree of requirements.

24,351. You give International Law?—Yes, I put a slight query to that subject because it will also come into their course. It is very closely connected with Jurisprudence, and with the subject, (if it should ever be introduced) of the comparative laws of different countries.

24,352. International law would be a subject in which very high education might be given, education higher than you would expect from undergraduates?—My course would be rather an honour one. I should require about as high attainments as you would be likely to get anywhere.

24,353. Do you think it might go as high as you could go when they are taking the knowledge preliminary to a degree or a license obtained from a lower educating institution?—I should have thought it could in entirely different subjects, except such, for instance, as International Law, which overlaps into two branches. The others are entirely different; there is the practical law of contract, of equity, and so on, which would be taught at the Inns of Court. That is quite of a different character from Roman Law, Jurisprudence, Constitutional Law, and Legal History which they ought to read in the first instance.

24,354. Do you think many would go to the University if they were obliged to pass at all events similar examinations again at the Inns of Court?—I am afraid they would not unless the Inns of Court were ready to give them some considerable advantage in acknowledging their teaching and examinations up to a certain extent.

24,355. I think you used (probably incidentally merely) the phrase that examinations were the chief teaching agents?—I am afraid they are now.

24,356. Would you not rather call them the chief branding agents, like branding herrings, merely to estimate their quality, but having nothing to do with the growth of the herring or the catching of it?—No, because they have to do with the formation of the herring and the kind of backbone which he sets up. They practically prescribe to the student, the course of study which he is to follow.

24,357. Then would you class them as directing agents?—Yes, I would class them as directing agents much more than as teaching agents.

24,358. Of course the evils of the examinations might be a good deal obviated if as you said (but only to a limited degree) the teachers should be examiners?—Yes.

24,359. You are inclined only to allow one third of the teachers to be examiners?—I think there ought to be only a small amount, otherwise the examination will get into a grove, and you cannot change your teachers so often as you change your examiners.

24,360. Out of three, two are not to be teachers. In what sense do you say that? They might be teachers?—But not in that institution.

24,361. They would still be teachers?—Yes. I am referring, in fact, to the report of the Council of Education of the Inns of Court:—"A general board "of examiners, consisting of all the readers and four "other examiners, from whom one reader and two "examiners should be selected to examine on each "subject." The "other examiners" merely mean other than the readers.

24,362. Other than the readers in that particular subject?—I think other than class readers generally.

24,363. I do not know whether you would go so far as to say that you do not think a man can be a good examiner unless he is also a teacher?—Yes, I think I should go as far as that. I do not think a man can be a good examiner unless he has had some experience of teaching.

24,364. And is a good deal in touch with the subjects of the day?—Yes, either in the way of practical teaching or otherwise. Some of our best examiners, in my experience at Cambridge, have been men in practice at the Bar, but not in too much practice.

24,365. (*Sir George Humphry.*) I think your feeling about examinations is (speaking in reference to the remarks made by Lord Playfair), that examinations are essential. They must exist?—I am afraid so. I do not think you can possibly do without them.

24,366. And, existing, they must be very important agents in directing education?—Yes.

24,367. And your feeling is that examinations should be so modified that they should not simply test book-learning, but they should also test by problems and essays—the faculty which a man has of utilising his learning?—Certainly, and his command of principles really in an applicable form, not as a mere formula.

24,368. The real point in education is to establish if possible a better knowledge of principles?—Yes.

24,369. And the power of applying those principles as illustrated by problems?—Certainly.

24,370. For that, of course, it requires more time?—Yes.

24,371. It is easy in an examination to ascertain the facts which a man may have attained, but it requires more time, and it is more difficult to ascertain his power of utilising those facts?—I think time is rather required in the preparation of the papers than elsewhere. I do not think it is difficult to find out from the answers whether a man has the power of utilising those facts. In oral examination it would be difficult. My experience is not in favour of oral examination as a rule except in the particular instance I have mentioned of written theses, where it is necessary to find out whether they are the man's own work or not.

24,372. Still even on paper where a man has to elaborate his views as well as his actual knowledge it takes only more time?—That is met to a certain extent by alternative questions, so as not to overload the man too much by making him answer a great number of questions and do them badly.

E. C. Clark, Esq., LL.D.

16 Mar. 1893.

24,373. Still, I quite think with you that the important work of examinations is to elicit good knowledge of principles, and the effect of examinations hitherto has been very much that they have not done that?—Yes.

24,374. And your wish is that a University should contribute to that great work?—Certainly.

24,375. You believe that if it did so it would be an enormous advantage to legal education?—I think it would. I think it would be an advantage to the character of the law altogether and to the practitioners of the country at large.

24,376. Do you find practically that the passing of an examination at a University, and the obtaining of a degree being added to the study there, gives a practical advantage to a man at the Bar?—At present I doubt very much whether it does.

24,377. That, of course, would be the real inducement to men to resort to a University, and if they felt that their prospect of success at the Bar was not increased by the greater general education, and the time spent at the University to attain that general education, they would be unwilling to resort to a University?—Yes. I think they would get an immediate advantage in the prospect of their call, and I think that gradually they would get an advantage in their practice at the Bar, but I think that would have to come really through a slight alteration in the character of the Bar generally. There is an alteration already perceptible in the scientific direction.

24,378. If the Inns of Court do not excuse any part of the examination or any part of the time, and if, in addition, the extra period of study at the University does not assist, the inducement to go to a University would be extremely small?—Yes, I think you will see that already in our own case, now that the Inns of Court have already taken off part of the time.

24,379. Have the students of the University who go in for any Honour Tripos considerably increased in the last 20 years at Cambridge?—Yes, they are about stationary now, but they have increased.

24,380. To about 40 or 50 in a year?—50 is our average number.

24,381. Is that the average number who go in, or the average number who pass?—I think it is the average number who go in, but they have a little diminished the last year or two. I am speaking rather off the book now, but I think they have a little diminished the last year or so.

24,382. What do you think is their idea and object in going in for the honour examination, we will say, at Cambridge?—I think some 10 or a dozen of them really look forward to the honour of this degree, and feel an interest in the subject.

24,383. The honour of the degree as assisting them in their future work in life?—No, I think they think that the degree itself is of use to them.

24,384. They desire to go out with honours?—Yes, and they prefer law.

24,385. There is another avenue in what you call the ordinary or poll examination, that is to say, the special examination in law?—That gives no advantage for the Inns of Court career at all. Nothing is excused on account of that.

24,386. That is merely a way through to a degree?—Yes, it is merely a way through to a degree. At the same time it is attempted to make that the medium of conveying a certain amount of English law.

24,387. Which might be useful to magistrates and so on?—Yes.

24,388. (*Professor Sidgwick.*) What is about the average attendance?—The attendance varies very much indeed according to the view that is held with regard to the comparative hardness in particular years. I think, at present, we take a medium number of men as compared with other specials. I should say that 40 or 50 men go in for the Law special.

24,389. We may then take the whole number who go in for Law to be nearly 100 men each year?—Yes, I think so, but the number of those who go in for the particular special varies very much indeed. At one time botany was the favourite special, at another time theology, but now theology is not in favour, because I think it is supposed to be hard.

24,390. (*Sir George Humphry.*) Another important point that you have mentioned with regard to the examinations is that you feel that the honour knowledge and the pass knowledge may be tested by one and the same examination?—I think it can.

24,391. That is an important point as diminishing the number of examinations?—I think it is an important point.

24,392. You would give honours to those who showed the greatest amount of knowledge on the same subject as that on which the knowledge has been shown by those who pass the pass degree?—Yes. I think the essays might be given to the honour men, because they are the only number of men likely to do that sort of thing well.

24,393. This is rather dealing with the subject of medicine; it has been proposed that the University should combine with the Royal Colleges of Physicians and Surgeons in giving the pass examination of the college and also the degree of the University, and that that might all be done very well at one examination, the University and the colleges combining to conduct that examination; and that the degree might be given to those who attained a somewhat higher standard?—I thought you would give a degree to those who attained the ordinary standard, and a higher honour to those who attained the honours standard.

24,394. The degree probably would rank somewhat higher. Supposing there were three grades, the pass examination, the degree, and the honours, might they not all be estimated by one examination?—Judging from my own subject I should think they might. That would be the result of my experience in the University of London. I think it would have saved us labour if we had examined in the preliminary examination and for honours at the same time, then we should not have been obliged to set an immense numbers of questions varying very little one from the other.

24,395. You have been examiner at the Inns of Court as well as professor at Cambridge?—Yes, and I have also examined at the Inns of Court under the new system.

24,396. (*Professor Sidgwick.*) Are you acquainted with the German Universities?—No, I am not at all.

24,397. It has been suggested that the success of the German Universities in stimulating the advancement of research may be connected with the fact that the examination is the servant and not the master of the teaching; it follows the lines of the teaching, being controlled by the professors, and it does not control them. Have you any view upon that point?—I think the examination could be used as a strong inducement to attend lectures in this way, but I rather deprecate its being entirely controlled by the teachers. I think you ought to let in a little external feeling besides the feeling of that comparatively permanent body of men.

24,398. In a subject where the knowledge is growing the difficulty of adapting an external examination to the teaching is that the teacher, if he is a first-rate teacher, is ahead of the books, and where you have external examinations the examiner has to go by the books. It is said that one of the reasons why in Germany the professorial teaching is so much sought after in view of the examination, because the examinations are more elastic. Does that seem to you a probable result?—It would make rather a difficulty in the results of the examination if the professor who is ahead of the subject was able to examine in the information which he may be supposed exclusively to possess. I think it rather an unsafe method of examination because his questions cannot well be tested even by his brother examiners or by anyone but himself.

24,399. On the other hand is there not a difficulty in inducing the students to attend lectures when they know that whatever is not in the books will not be

set in the examination?—I think what is in the books can be arranged by a good lecturer in such a manner that the men may get it in a more palatable and a more digestive form, than by the books. Moreover, the professor can answer the questions of the men who attend his lectures.

24,400. I think you said you regarded the study of what you called the non-practical subjects as a good training for the mind?—Yes, I did.

24,401. And therefore you are in favour of its being one of the avenues to the Degree in Arts, as it is in Cambridge and Oxford?—May I ask if you are referring to the special examination?

24,402. No, I was rather referring to the honour course?—Yes, I certainly am in favour of it, but it is also, as you are aware, an avenue to the degree in law especially, which is thought more of than the degree in Arts.

24,403. I suppose that a student who has gone through a course in law at Cambridge, may be taken to have spent three years more or less?—On this particular study only two years.

24,404. Then will he normally require to spend the two years more which the Inns of Court now regard as the term of their course?—I am afraid he will, to be entitled to a call.

24,405. Then do you consider that the period of four years is what is desirable, I mean in view of the student's training. Is it desirable in your view that two years should be spent in the study of what you have defined as the non-practical subjects, and two more years in the study of the practical? or do you think that if we were able to arrange the matter at our discretion it would be better to have more time or less time on the whole for the man who is making a complete study of law with a view to the profession?—The two years at Cambridge are not devoted exclusively to the non-practical subjects. The second year is devoted to the beginning of the practical subjects. I think it a great misfortune that in the new scheme of the Inns of Court they do not recognise that part of our study at all. I think it is rather a pity that the men should have to go in for two additional years in London after our two years at Cambridge, particularly if we, as I hope we may, gradually raise the standard of our examination at Cambridge, so as to induce the men to take something more like three years than two to study there.

24,406. That would give about the same length of time on the whole—about four years?—Yes, it would.

24,407. In arranging a new University—if we are able to achieve this result in London—your idea is that about two years might be spent in non-practical subjects which the Inns of Court would leave to the University, and two years more in practical subjects?—I had very much rather the Inns of Court would allow the beginning of the practical to be the second year, and that is why I think their co-operation is so extremely important.

24,408. Then you would like to have three years' University course and one year afterwards?—Yes.

24,409. Speaking of what would be the ideal view, would you think it desirable that, even if the Inns of Court entered into a complete and cordial co-operation with the University, they should have a scheme of their own outside the University organisation, or do you think that would not be required?—I think, if they would accept your results, you would be able to give as good a course of education as they can give.

24,410. And that would be the best thing if they could be persuaded to do it?—Yes, I think that would be the best thing, always understanding that men are still recommended to spend some time in Chambers, as the Inns of Court now recommend them to do under their own system.

24,411. Do you think that there is any way of providing by any form of class teaching for a substitute for the work in Chambers?—I think the new system of the Inns of Court to a certain extent makes it unnecessary, but there I rather rely upon the experience of those who drew up the scheme, in which they say they still recommend it. Perhaps I may refer to what they say there:—"The Council, while thus providing "instruction both in practice and theory, desire in no "way to discourage students from complying with the "recommendation contained in Consolidated Regula- "tion 36, and attending, at some period before en- "tering on the active duties of the profession, in the "Chambers of a barrister, conveyancer or pleader, for "the purpose of obtaining a more exact and intimate "knowledge of the details of practical work than can "be obtained in lectures and classes." The same always applies to the admission to the profession of barrister and solicitor.

24,412. I suppose we may say that the students at Cambridge are induced to go to the University by social advantages, which would hardly be inducements in the same degree in London, and having in view the profession of law, they think that at any rate it would be the most advantageous expenditure of their time to read law, even if they have to read it afterwards?—Yes, I think that accounts for a considerable number of men. I do not think many men now take up the honours course of law, thinking it the easiest avenue to a degree. It has ceased to be so.

24,413. The University in London would not be able to compete as Oxford and Cambridge compete?—The teaching given by the official teachers of the Inns of Court would be considered better whether it was so or not. There would not be the social attraction.

24,414. It would be thought to prepare better for their examination?—Yes, it would be thought to be better from its being carried on by men directly connected with the legal profession.

24,415. So your idea is that the University in London, if it cannot combine with the Inns of Court, should confine itself to what you call the non-practical side?—I think if it cannot effect any arrangement with the Inns of Court it ought to do so.

24,416. And you think it might effectively teach those subjects?—Certainly I think it might.

24,417. Would you in that case have a Faculty of Law in the University for the teaching of those non-practical subjects, or would you regard that as part of the general Faculty of Arts? Of course if we combine with the Inns of Court there is no doubt that we should have a Faculty of Law, but if it is determined that the school of law in the Inns of Court shall go on outside, would you still have a Faculty of Law in the University with a view of teaching the law?—I almost think it would be better not, because if you left out the more practical branches you would leave out the most important part of law. I think it would be almost better if your teaching work were confined practically to the first parts of our Cambridge Tripos—to make it a part of the course of Arts.

24,418. (*Lord Reay.*) Do almost all your students who go in for honours intend to join the profession?—I think almost all; one or the other branch, either solicitors or barristers.

24,419. In the specific law degree examination cannot one get honours?—Perhaps you mean the Law Special?

24,420. Yes?—No, that is not an honour examination. That is only what we call a poll examination, leading to a degree in Arts alone. It does not lead to honours at all, and it does not lead to a degree in Law.

24,421. The honours are given only when you take the degree in Law?—Yes; we differ in that respect, I believe, from Oxford. Our examination which confers degrees in Law is an honour examination and an honour examination only. If we do give it to a man who does not quite well enough for honours it is given in Arts, not in Law; he is only allowed the ordinary degree—the B.A.

24,422. That is to say, the degree in Law is itself an honour degree?—Yes.

24,423. Are the courses of lectures for both classes of students the same?—No, they are quite different.

E. C. Clark, Esq., LL.D.

16 Mar. 1893.

24,424. The students who make Law the avenue to get the ordinary degree attend different lectures from those who attend specific Law lectures?—Yes.

24,425. Are you in favour of keeping up that dual system?—I should not, I think, in a new University, but I dislike the ordinary degree altogether myself, because I think all men ought to go in for the honour standard. I should not be inclined to keep up that distinction in starting a new University.

24,426. In a new University the course you would favour would be that those who went into the Law Faculty should go in and obtain a Law degree with honours?—Yes, I think so, if you could make the new grade in your system correspond with ours.

The witness withdrew.

E. Jenks, Esq., M.A.

EDWARD JENKS, Esq., M.A., examined.

24,427. (*Chairman.*) Will you tell us your experience and the different positions you have held, first as a public teacher of law?—I am at present professor of law in University College, Liverpool, and therefore *ex officio* in Victoria University. I have been professor of law in Melbourne University, and I have been a lecturer at two Cambridge colleges, Pembroke and Jesus.

24,428. And as a private teacher of law?—I was for several years at Cambridge a member of the despised profession of coaches, or crammers, and had a great many pupils, and I also had a few pupils in chambers in London in the same capacity.

24,429. And as an administrator?—As an administrator I was Dean of the Faculty of Law at Melbourne—chairman; I am a member of the Board of Legal Studies at Liverpool; and (perhaps this is not specially connected with law) I was Organizing Secretary of the University Extension Board of Victoria.

24,430. As a student?—As a student I have been through the whole mill of law, in every possible phase. I began as an articled clerk and served my full time in a solicitor's office. Then I went to Cambridge and took two Triposes, one of which was law. I practised as a solicitor for a short time and also as a barrister.

24,431. I understand that you will give some evidence before us with regard to the constitutional question and the general principles on which the University should be conducted with regard to each of its Faculties?—With a special regard to the Faculty of Law, I have had unfortunately some little experience of the difficulties of University management and constitution, and I have come to one or two very definite conclusions as the result of experience. One is that University machinery as a whole is very much too complicated, and that applies especially to modern Universities. Another is that one or two elementary principles must be observed if harmony is to be expected. I think that the study of law (as well as other studies), whether it is to be made the avenue to a degree or to a profession or both, should be primarily under a special or departmental board, composed principally of teachers in various branches of the subjects, though also containing a non-teaching or lay element, but I am of opinion that upon that body the teaching element should greatly preponderate.

24,432. Is this body to have the chief management of all ordinary matters?—That body would conduct the ordinary routine business of the law school, such as the settling of the hours and times of lectures, the division of subjects amongst the various teachers, and the daily questions that come up with regard to the administration of any school. Then it should also have a very large recommending power in regard to the more important matters which it should not finally conclude, such as the choice of teachers and the fixing of subjects for teaching and examination, in fact every subject that could concern the study of law in the University.

24,433. Then above this body you would have the General Board?—Then there ought to be, I think, a General Body for the University as a whole which would look at matters from the University standpoint, rather than from the standpoint of the special study; and that body should have upon it a majority of laymen in the very restricted sense in which I use the term, that is to say, men who are not teachers of the University; that the teachers should be directly and substantially represented upon it; that each Departmental Body should be directly represented upon it; that this body should have an acting power in all important matters, but that it should be bound in every case to refer the matter in hand to the departments more especially concerned; and that it should not be entitled to decide until those departments had had an opportunity of reporting.

24,434. After they had reported, the decision of the General Body should be independent and final?—Yes; the decision of the majority should be accepted, but the majority should not be entitled to decide without having heard adequate representation of the views of the minority. I think there is one matter which is almost essential, and that is that there sould be a section of both the Special Body and the General Body which is identical in its composition. The great troubles to which I particularly referred, and of which I have had unfortunate experience, mainly arose from the fact that the two bodies had no members who were equally members of both bodies or rather they had, but in practice the members of the General Body stayed away from the Special or Departmental Body, and the consequence was that the two bodies worked in total ignorance of one another's views and feelings, and there was a constant state of suspicion generated.

24,435. Which was the subordinate body, or had they both equal power. Could the Senate override the Departmental Body?—The General Body had the general power of overriding the Departmental Body on almost every point, but as the members of the Departmental Body had to work out the policy it was practically calling upon them to work out a policy of which they disapproved, and they did not do it.

24,436. And that led to confusion?—Yes.

24,437. Your remedy for that would be to give the subordinate body more power as to detail and as to small matters?—Yes.

24,438. I suppose you must give the General Body power when it chooses, to overrule the other must you not, or would you refuse it that power?—Not in some points of detail; I think in some points of detail the Departmental Body must be absolute, because it obviously has to decide.

24,439. What do you think with regard to having the real work done by the committee of the Senate, the Governing Body being really responsible even for the details, and the Board of Studies elected by the Faculty being purely consultative, and having no power at all?—I do not think that system would work. It would work as any system will work where there is a general wish to get business done, and a general harmony of opinion, but if people differ, as people do differ upon real points of principle, I think it would not work at all. I think the purely consultative body would consider that it was a mere shadow. It would cease to take any interest in its meetings and there would be a feeeling of soreness and irritation among its members.

24,440. I think I understand your plan of having two bodies and having members common to both who will attend and prevent friction?—Yes.

24,441. Each of those bodies ought to consist partly of teachers and partly of outsiders, but on the Senate the outsiders ought to be in the majority, and in the Departmental Body the teachers ought to be in the majority?—Yes, I think you may quite safely give the laymen a majority on the General Board, because

the superior knowledge of the teachers would be sure to outweigh the actual minority of votes.

24,442. Then you would give the Departmental Board representation on the General Body?—Yes, I think that is very important.

24,443. And right of precedence in all matters introduced by it?—Right of precedence in all matters either introduced by it, or specially affecting it. I think the principle should be this—whenever there is a proposal made affecting the School of Law the representatives of the Department or Faculty of Law should be asked to express their opinion.

24,444. Some people would prefer to have the last word. At any rate you think that they ought to have a leading voice?—Yes, and the decision of the majority of course should be binding, but only after the fullest opportunity of discussion.

24,445. Then you say that no encouragement should be given to the non-teaching body to absent itself from the meetings of the departmental board?—That is the result of experience. I have found it to be the result sometimes, that if the lay members consider that they are merely doing their work over again in the general body, where they are not held in check or not subject to the criticism of the practical teachers, they are very much given, on quite natural considerations, to absent themselves from the meetings of the special body, and therefore come to the meetings of the general body without that knowledge which they ought to have.

24,446. Then the non-teaching element which you have alluded to in both these bodies should consist of what kind of persons?—I think, now speaking with regard to a particular school of law, and to the contemplated school of law in London, such as the Commission has been taking evidence about, the non-teaching element should consist of three classes of persons; first of all, people officially connected with the law in great public positions, such as some of the judges and some of the higher officials at the Law Courts, secondly of representatives of professional bodies like the Inns of Court and the Incorporated Law Society; and thirdly, (and this of course is a very revolutionary proposal), of the students in both branches of the profession. I have experience of that principle in work, and I attach very great importance to it.

24,447. You mean the undergraduates?—Yes.

24,448. Does that exist in any University?—That exists, not strictly speaking in any University that I am aware of, but it exists in our Board of Legal Studies at Liverpool, and with the most happy results. There is complete harmony between the students and the teaching staff, and there is general contentment among the students. There must be a something in the nature of an organised body to provide the representatives, but that nearly always exists. In Liverpool there is a very powerful and old-established Association of law students which elects three members of the twelve who form the Board of Legal Studies.

24,449. Do they elect students?—They generally elect the older students, that is to say, men who are no longer technically students, but who remain in the Association and who are thoroughly in touch with them. They are entitled by the rules of the constitution and they elect whom they like.

24,450. (*Lord Playfair.*) Is not that the rule which exists in the Scotch Universities?—I do not think the rule in the Scotch Universities quite answers or would answer the purpose contemplated by the Liverpool Board of Legal Studies. The student representatives on the board are members not of a body which is only called in occasionally to decide disputes, but of the special departmental body which has the whole control of the school. The school of law is the only school in University College, Liverpool, which adopts that plan, and I observe a marked contrast between the relation of the students to the teachers in the school of law, and the relations of the students to the teachers in the other schools of the college.

24,451. (*Chairman.*) I suppose on the whole it would be advisable to insist that the representative of the students should not be an undergraduate himself, or do you think he might even be that?—I think there might be some little difficulty in that because questions of examinations which he would have to take might be discussed. No doubt there would be difficulties of that kind, but I think they could be overcome in practice, and I think in a body such as the contemplated University will probably be, it would be of particular importance in holding the students together.

24,452. It would be rather an unfortunate accident if the student representative was himself plucked after all?—I think he would take it in all the better part if he knew that everything was fair and above board.

24,453. Then you wish to deal with the relations of University and professional bodies. This refers to the contemplated University of London, either the present University remodelled or the new one?—Yes, and I have taken the liberty to take into account the existing conditions so far as I know them, in order to make my evidence as practical as possible. I think there will probably be two classes of students in any University of this kind that may be created. I think there will be a class, perhaps a small one, which does not intend to take a complete course in law, but only intends to take up certain special subjects connected with law with a view to official experience, business experience, and so forth. I say so, because at Liverpool I am being consulted occasionally by men of that type—men such as the Secretary of the Underwriters Association there, and people in official positions of that kind who wish to obtain a knowledge of certain branches of law. And I think with that object a Faculty of Law ought to lay down very few restrictions as to the right of attendance, and even examination on special subjects. It seems to me all that it would be necessary to do would be for the intending student to put his name down at the University and pass an examination in general knowledge. That would not even be necessary if the University did not afterwards propose to examine him; if it merely proposed to give him some teaching; but as most of the students would desire probably something in the nature of a certificate, it would probably be necessary to give him a preliminary examination. That being done, he might have the freest possible permission to attend any lectures provided by the University, his certificate of registration being his passport or key to enter into all the lecture rooms provided by or in connexion with the University. Then I think the University might examine him on any particular course that he chose, he having fulfilled the requisite time and attendance at the University, and it might give him a certificate with the bare statement of the fact that he had attended those subjects. I believe those certificates would be a great deal sought after, and would be recognized by various institutions such as banks, insurance offices, and so on, as of great value. Then the other class of students who wish to take a complete course in law I think, would nearly all be men who proposed afterwards to go into the legal profession. I do not think as a matter of fact you would get men to come and take a complete degree in law unless they contemplated going into the profession afterwards. For these I think the University might take into account the fact that they were intending to go into the profession, without assuming to qualify for the profession itself, and, on the other hand, I think the professional bodies (I speak without knowledge of their intention) might, without being afraid of losing their position, very well say to every candidate for admission to the profession: "We shall "examine you on technical subjects and teach you on "technical subjects, and we will not allow anybody "else to do away with the necessity for our certifi- "cates, but we shall require you to produce evi- "dence of a liberal education or a scientific education "to a certain extent as well. You can take it when "you like, so long as, before you are finally admitted,

E. Jenks, Esq., M.A.

16 Mar. 1893.

"you produce to us evidence that you have taken "this education, and qualified yourself in it, and the "proof that we will accept is the certificate or the "degree of the contemplated University." Having regard to the fact that the vast majority of law students live in London (even those who begin in the country come up to London), I think they would be brought well within the circuit of this contemplated University, and I think that is a way by which you might gradually introduce a higher level of education in both branches of the legal profession. As a matter of fact that is done in Melbourne University in Australia. The right of call to the Bar there is in the hands of the judges. I speak now up to the close of last year. The professions have now been amalgamated, and I cannot say exactly what the rule is, but up to the close of last year the right of call to the Bar was entirely in the hands of the judges, and the rule of the judges was to accept the law degree at Melbourne University without any further inquiry, except merely testimony as to character.

24,454. But they had a separate examination for the technical law, had they not?—No. For the Bar they simply accepted the Melbourne University degree in law as the only evidence of knowledge. But in the case of solicitors the Law Society of Victoria (which corresponds with the Incorporated Law Society here) said:—"We will examine you upon technical subjects, "but, we require you also to produce certificates of "knowledge in certain non-technical subjects, from "the University." They did not require attendance on the teaching at the University, but they did require a certificate of examination by the University, and the result was that a large number of articled clerks, I think to their own great benefit, attended courses at the University. I used to give one of those courses myself. I had a very large audience, and the plan seemed to work excellently. There were no complaints from the professional bodies; on the contrary, they seemed in every way willing and anxious to induce the articled clerks to attend. I think that is something of the kind of scheme that might work very well with the University in London. Of course that would have to be done, I suppose, as the result of arrangement with the professional bodies, but I cannot see that the professional bodies are likely to object to a moderate scheme of that kind.

24,455. Particularly if the professional bodies were largely represented on the Faculties?—Yes.

24,456. Then your next point is with regard to the relations of University and other teaching bodies, that is referring still to London?—Yes, to the contemplated University. I think that in the first place the University would provide teaching in subjects in which there is no teaching already provided. I am speaking now of law subjects, and I can instance three or four of those points if necessary. It seems to me that there is obviously an opportunity for the University in that regard. In the second place, I think it might provide higher teaching in some subjects that are taught at other places. I am thinking now not so much of the Inns of Court and the Incorporated Law Society, as of institutions like King's College and University College—educational bodies. Then in the third place, and that I think is the most important thing, the University would recognise the teaching at other institutions. I have had some experience of that too, and in practice, although it requires to be conducted with a certain amount of skill, I think the difficulties are not insuperable. I think that all institutions who can put themselves on such a footing would like to be recognised by a University, and I think they would strive to better their teaching and to raise their standard in order that they might be recognised by the University.

24,457. Are you still referring to institutions like University College and King's College?—Yes. It seems to me that that plan involves the minimum of expense in the management of these institutions. They simply submit a plan of their proposed teaching for the following year, and the General Board, upon the recommendation of the Special Board concerned, either approves of or suggests amendments in the scheme. It is entirely voluntary of course. If the institution chooses to submit it, and the University approves of it, then it is understood that the University recognises the attendance at these courses of teaching as being attendance, which will qualify candidates to sit for its own examinations, and to receive certificates of having attended the teaching in those subjects.

24,458. And the arrangement would be only a yearly one?—Yes, unless the institutions would pledge themselves for more than one year.

24,459. Do you mean with regard to Law only or other Faculties as well?—I do not venture to speak with regard to the other subjects, because I have not sufficient knowledge, but I do not see any reason why it should not be done with regard to Law. I think the prospectus which the Faculty of the University would thus bring out every year would be of immense importance to law students. It would show them at a glance where teaching was to be got on any particular subject, upon what terms, at what times, and so forth. It would be a complete guide to the higher education of law within the limits. Then I think the University, on that scheme, might very well say:—"We do not teach technical law at all." I do not think a University can teach technical law, and by that means, of course, great jealousy would be avoided.

24,460. This temporary connexion with the University, with regard to one Faculty, could hardly take place if the Colleges were united with the University, and essentially component parts of the University, in other Faculties. Law could not be on a different footing?—No, but my intention was to suggest that the Faculty of Law should not recognise the institutions, but should recognise particular teaching, that is, should not in any way pass judgment on the institution as a whole, but should simply say: "In this particular subject we recognise your teaching."

24,461. You would not object to that being the case with regard to all the Faculties?—No, I think it would be very natural that it should be.

24,462. Then as to the scheme of legal education you say that certain practical bases might be accepted?—My experience has led me to one or two general conclusions on that subject. The first one is this; and on this I imagine there is most difference of opinion. I think the teaching in the higher subjects of law should certainly not precede acquaintance with practical law. A student, that is to say, an English student (I think students of other countries might be differently constituted), will take most interest in law if he is first turned into a solicitor's office, into the purely technical part of his profession, doing altogether technical work and reading technical books. It may sound strange, but I am becoming more sure of that each year. Then after that he should be asked to make up his mind what is the particular branch he cares about most. I do not mean that he should be asked what subject, but what is the particular type of subject, whether he cares for the history of law or the philosophical or logical aspect of law or criticism or reform. I think those ought to be the bases of certain groups. I do not think that English students care at all about law regarded as an abstract study. I think it is very valuable as an abstract study, but I do not think you would get one man in a thousand who cares for it or who would appreciate it. If you get a man like John Stuart Mill he takes to it very readily without being a lawyer, but I think instances of that type are extremely rare where the English student who takes to technical work likes it. Another advantage is that you get the students much later. I do not think there is any good in attempting to teach higher law to boys of 18 or 19, but by the time a man reaches 21 he is more prepared to take to the masculine study of the law.

24,463. What sort of technical law will he learn, the same sort of thing that he will learn afterwards in Chambers?—Yes, the same sort of thing, that which

will be useful to him in his technical examination. He will get into touch with the system, and when he comes to deal with the scientific study it will not be so very much in the air as it is at present when he studies it beforehand. Then I have sketched out these three groups of the study of law, because I think the present system is entirely haphazard, and goes on the plan of giving each a little bit of everything, and I think the grouping of subjects on a definite plan in any Faculty of Law is a thing that ought to be done. I divide them into three heads, historical, logical, and critical, and I think that three or four subjects might very well be put under each head. The study of any one of those groups should entitle a man after examination to a degree in law.

24,464. Will you give us the sub-divisions?—In the historical group I would put; (i.) History of English Law; (ii.) Outlines of the course of development of Teutonic Law generally. On this point I believe 90 per cent. of English students' minds are absolutely blank. Then, "(iii.) The principles of Political Evolution"; and "(iv.) The history of specific legal ideas"; for example, such a thing as the idea of marriage to be traced out of its earliest stages downwards. I have adopted that method myself considerably, at the risk, of course, of leading my students away from the prescribed subjects, but I have always found that the students took great interest in it. I think that most of the students would be inclined to take the historical group; I think it would interest them most. Then dealing with the logical group, under that head I put; (i.) The essentials of a legal system; (ii.) The complete method of handling a given legal subject. There of course one could not have a better example than the best titles of the Digest. Take the title in the Digest "possession," and see how completely it is worked out. Then, "(iii.) The comparative study of existing systems (in outline)," which would make a splendid ground work for the technical study of the subject of the Conflict of Laws. Then "(iv.) Various bases proposed for the arrangement of codes," and "(v.) The kinds and relative value of evidence."

24,465. That concludes the logical group?—Yes. Then in the critical group I propose to put first "The actual working of various legal principles or enactments," such, for example, as the doctrine of consideration, and see how it works in various cases to which it is applied; or any other principle of that kind. Then, "(ii.) The objects aimed at by various "classes of laws and the suitability of their methods to "these ends." One may take a group of laws like the Contagious Diseases Acts, or a group of Acts of that kind, and ask the students to work them out in Blue Books, and see how far they actually achieve the objects which they had in view. Then, "(iii.) Examination of existing projects of law reform;" (iv.) "Discussion of the correctness of recorded decisions," for instance, as to whether they were in accordance with legal principles or not.

24,466. Under what head would Roman Law come? In the first two groups, but not *quâ* Roman Law. I do not see the necessity of making a special heading for Roman Law. It would come in the History of Legal Ideas. You would take a special idea, and trace its history all through Roman Law. That it is possible to do, but it is not possible for a student to get a complete acquaintance with the whole body of Roman Law. Then in the second group of subjects you would work from the Digest, and in that way Roman Law would be subservient to legal education. We have adopted the idol of the Roman Law quite illogically from continental nations. It is the basis of law in part of Germany and to some extent in France (one may say that the French Codes are based upon it) and also in Scotland; but that is not the case in England. It is an absolute stranger system, of great value, but not an essential study.

24,467. And International Law? — International Law I regard as not at all a fit subject for a Faculty of Law to deal with.

24,468. Have you anything further to say with regard to the scheme of legal education?—Only I would suggest that the students taking degrees should be advised to follow this grouping, and it should be urged upon the professional bodies that in the evidence of scientific knowledge which they require, they should follow the same principle at least in part. They might require perhaps from every candidate evidence of having studied part of one group.

24,469. You think they at present try to go over too wide a field?—I think all plans or schemes of teaching law with which I am acquainted are much too ambitious.

24,470. Then the methods of teaching?—I merely just put down that point. I do not think that I have any very special experience on that subject. I have found that lectures (although I have never felt myself that I derived great advantage from lectures) are really appreciated very much if they are suitable lectures. I found particularly in Australia that the feeling was strongly in favour of them. Men would make great sacrifices to attend lectures, and would assure one that they derived great advantage from them. I do not think that one can afford to dispense with that method of teaching.

24,471. Are they allowed to ask questions?—Yes.

24,472. Do the students and the lecturer work together at all?—Not necessarily. The way I do my own paper work is to take the men in small numbers, not more than two at once. The great advantage of paper work is that it makes men work instead of leading them to think you are going to do the work for them. You get to know something about the state of a man's mind. Then also I may say that I have found the legal moot very valuable.

24,473. Discussions?—Yes, as largely as possible allowing the discussion to be done by the student, but the teacher to be present. I have been asked to preside, and I am still asked to preside, at legal moots. One can take the opportunity of giving a little instruction, but at the same time allowing the students a very free hand.

24,474. (*Lord Reay.*) Your groups are optional groups, are they not?—Yes.

24,475. You do not require a student to attend in all the groups?—No, that is the very thing that I object to.

24,476. The degree taken in either of the three groups would, according to your system, have to be recognised by the Inns of Court, or by the professional body, would it not?—No, that is to be merely an educational degree. But I suggest that the professional bodies might, if they pleased, require the student to take a part of one of those groups. I mean, we could not expect them to require every student to take a degree, that would be too much to expect, but they might give some encouragement to men who came up with the testamur of the whole degree. I think opposition would be aroused in the professional bodies if it were proposed to make the degree compulsory.

24,477. Your plan is that the professional bodies should recognise the certificates to be given on examinations to be held in certain subjects?—Yes.

24,478. What you have called the Departmental Board is, I suppose, what we have usually heard called the Board of Studies and Examinations, which practically originates everything connected with education in the Faculty?—Yes.

24,479. Therefore, your idea would be a Faculty as a board of electors?—Yes, but I observe that the word "Faculty" has been the subject of so much discussion that I prefer to use a neutral term, "Departmental Board."

24,480. That might lead to an equal amount of discussion. "Faculty" as a rule hitherto has been used as meaning the assembly of teachers. Have you any objection to that?—Yes, because I think it is most important that people who are not teachers should be on the Board.

E. Jenks, Esq., M.A.

16 Mar. 1893.

24,481. I am coming to that. The professorial element on your Departmental Board, would be elected, I suppose, by the teachers?—Yes.

24,482. All the teachers in the Faculty?—Yes.

24,483. All the law teachers would elect the proportion of teachers on what you have called the Departmental Board, and what I have called the Board of Studies?—Yes.

24,484. May I ask how you would appoint the lay members on that Departmental Board?—I think they might very well be allotted by the General Board. I think these various institutions would have direct representation upon the General Board, or Council, or Senate—whatever it is called—and that then the Council itself would quite naturally allot those persons who would all be more less connected with one particular study, to the department to which they seemed most fitted.

24,485. Therefore you contemplate a University Council on which lay members will be appointed who represent the various Faculties in the University?—Yes.

24,486. Judges, leading physicians, leading surgeons, leading engineers, and so on?—Yes.

24,487. And the Council would appoint a certain number of those members to serve on those Departmental Boards?—Yes, I think so.

24,488. Why do you hold that International Law, which appears in the scheme of every Law Faculty in Europe with which I am acquainted, is a subject which is unfit to be taught in the Faculty of Law?—I think it is merely put in the scheme of a Law Faculty in most cases because it has the word "Law" in its title. I only know continental systems superficially. It may be that their conceptions of International Law are quite different from ours, but I think our conception of International Law places it really in the domain of diplomatic history, and not in the domain of law at all. I do not see why lawyers should be specially concerned with International Law.

24,489. Do you think that is the view held by American Universities and by American lawyers?—No. I think International Law in America fell specially into the hands of the lawyers because the lawyers represented almost the only public intellectual expression, as it were.

24,490. Do you think the Law Officers of the Crown would be very useful in some cases without a knowledge of International Law?—I think they very often have obscured questions of International Law owing to their too technical bias.

24,491. Then who is to advise the Government?—The Secretary of State for Foreign Affairs, and his officials.

24,492. Without having any regard to what you have described as the too technical knowledge of the Law Officers of the Crown?—I am almost prepared to give that as an opinion.

24,493. Have not the books which have been written on International Law mostly been written by lawyers and jurists?—And jurists, yes; but not, I think, by great professional lawyers.

24,494. (*Professor Sidgwick.*) From your experience, how large do you think the Governing Body of the Department or Faculty should be? What is the right size of a Board of Studies?—I think in practice a board of about 12 works best, giving you an average attendance of possibly eight or nine.

24,495. You think a larger body would not work so well?—Not as a Departmental Board. But I am inclined to think you can hardly make the General Board too large. It becomes, then, in the nature of a Parliament, which has a public opinion.

24,496. I rather gather from your general objection to a complicated University organisation that you are not in favour of a system which prevails, for instance, in the Scottish Universities, by which there is a general body of teachers under a supreme court?—No. Really I do not see the advantage of it, and in Victoria University there is a still more complicated system of having two superior bodies above the General Board.

24,497. You want two Boards?—Yes, I cannot see that that is not enough. I have in my mind at the present time a small alteration which I have proposed at the Victoria University, Manchester, to which everybody has practically agreed. It has to go through four bodies, and it takes six months to get it through.

24,498. You think there is no advantage in having the general body small, though there is an advantage in keeping down the number on the Board of Studies?—Yes.

24,499. I quite understand your view as to the importance of a common element in the Board of Studies and the Senate, but I am not quite clear whether you meant to lay stress on the importance of having a representation of the Senate on the Board of Studies. Supposing an effective representation the other way were secured? You did rather suggest, if I understood you, that there should be a representation both ways?—Yes.

24,500. Would it not be enough to secure an effective representation of the Faculty on the Senate?—If by any other means you could get your lay element into the Faculty.

24,501. You think there should be a lay element at any rate in the Department of Law?—I think a small lay element is very valuable.

24,502. Perhaps in Arts and Sciences it might not be so?—Perhaps. I had not thought of that.

24,503. How long a period of study do you consider desirable? Or have you intended at all to lay down the normal period for the academic study of law?—I think for purely academic study, three years is practically sufficient.

24,504. And in that three years do you conceive that only one of these groups should be studied?—I think so; because, I suppose, this University contemplates very largely students who cannot give their whole time to their work. That was my idea.

24,505. I am not quite sure that it does so contemplate. I do not mean to say that students of that class would not be admitted, but I think it will be suggested to us that we ought to frame our scheme primarily for those who are devoting the whole of their time while they are at the University. Therefore, if we take those students into account, and they have a three years' course, how would you arrange it with regard to these groups?—I still think that if they did one of these groups thoroughly, it would be far better for them than to attempt wider ground.

24,506. Do you consider that your three groups are about equally good as training for professional men, so that the choice of one or other of them should depend upon the particular bent which the student's mind takes?—Yes.

24,507. You would not as a teacher, and having in view ultimately a professional career, recommend pupils to take up any one of the three, rather than the other two. They should choose quite freely?—Yes; I think so. I think one would recognise that the value of all the groups was purely educational, and not technical, and that it depended purely on the bent of the student's mind.

24,508. The second group would seem more directly to impart the grasp of the mind a student wants to acquire, but you do not conceive it in that way?—No.

24,509. The three groups you think are all on a par?—Yes.

24,510. And in fact you conceive them to have no professional value?—No direct professional value; only an educational value.

24,511. I suppose that after this course of study a certain amount of technical training will be required?—I contemplate a technical training going on all the time.

24,512. You have not framed your scheme with a view to students who devote the whole of their time, like the students at Oxford and Cambridge?—No.

24,513. You conceive that the students of the School of Law in London would be of a class who did not give their whole time to it?—Yes.

24,514. That is from your experience at Liverpool?—And also in London. I was a law student for six years in London.

24,515. You conceive that we shall not draw into the London University a class of students who would like to give their time to law as a part of their training with a view to a degree, and who would be able to give the whole of their time?—I think they would be in small numbers, and I do not think they are a desirable class of students at all.

24,516. Why?—Because I do not think the law can be taught scientifically to a man whose mind is a blank as regards the technique of law.

24,517. But he might get a knowledge of the technique, and then go up to the University, and give his whole time while he was there?—Yes.

24,518. That would be analogous to what has been suggested with regard to the study of agriculture; that a man should go through a considerable period in acquiring practical knowledge, and then another period in which he concentrates himself on theoretical study?—It is precisely what happened to myself.

24,519. You do not regard that as a bad way?—No; the difficulty is that when a man has taken to technical training he does not like to cut himself off as a rule.

24,520. (*Sir William Savory.*) I think you told us that in your view the professorial body should in certain cases be independent of the supreme body of the University?—I think so.

24,521. Would you give us an instance of where you think it might be independent?—I think in the arrangement of the time tables of lectures it might be.

24,522. But the Senate would hardly interfere with such a thing as that, would it?—Probably not, but if it had the power it might.

24,523. If it did it would be under some urgent circumstances in some way. Perhaps it might be that the hour would clash with something else?—Then I think the Faculty would really be the better judges of that small detail than the general body.

24,524. But if you gave the final power to one Faculty, you ought to give it to the others?—Yes, each in its own department.

24,525. And it would seriously affect the question of the working of the University if the Senate were no longer to be supreme in all matters of difference between the Faculties. Might not those questions be left to the judgment and good sense of such a body as the Senate rather than incur the risk which independence of that sort might involve?—I think the matter is usually left to the decision of the Departmental Board, and I do not think any evil results follow. Of course, one must always suppose in a Departmental Board the wish to advance the interest of the University.

24,526. When you say it is usually left, it is usually left as a matter of course, but really subject to any control the Senate might choose to exercise over it?—I think I have known it left as a matter of law in more than one case.

24,527. And you think that if final power were given to the several Faculties there would be no danger of a difficulty in any case?—I cannot see the danger. It seems to me that the only possible danger would be of lectures in one Faculty overlapping the lectures of another, and if that were so it would be only for each Faculty to make the lectures come on at another hour.

24,528. You think that in such a case the judgment of a Faculty would be better than that of the Senate?—I do not think it is of great importance, but I cannot imagine a case in which the judgment of the Faculty would not be better than that of the general body on a point like that.

25,529. Better for themselves, but not better for the whole University. The Senate would sit in judgment on the whole question, looking all the way round, whereas a particular Faculty might be only acting on its own behalf?—I do not think one ought to assume that.

24,530. Why not?—Because I take it that each Faculty would do its best for the University.

24,531. But it would not be so well informed as the Senate which presides over all. However, it is your view that it would be best to make the Faculties independent of the Governing Body?—I think in some matters of pure detail it would.

24,532. (*Sir George Humphry.*) You have spoken of the recognition of teaching bodies by the University?—Yes.

24,533. Had you in your mind then the relation between the University of London, and University College, and King's College?—No, because I rather assumed that there was no definite connexion between them.

24,534. But as to any future connexion?—Yes; I was thinking that this contemplated University might recognise particular teaching in institutions like King's College and University College.

24,535. The idea put forward by the Senate of the University of London is that they should be constituent bodies of the University. You would on the whole rather that the relation should simply be one of recognition of teaching?—I think so. I think that the other plan in the case of a new University without a historical basis to work on would be extremely difficult. Of course, if the colleges were perfectly willing to submit themselves to the government of the University,—I mean bodies like the Colleges, the Inns of Court, and so on—it might be better. But I think it is extremely unlikely that they would.

24,536. You think difficulties would arise?—Yes.

24,537. And that recognition of teaching may be given without difficulties?—Yes.

24,538. Do you also contemplate a recognition of examinations?—No, I think all the examinations ought to be in the hands of the University.

24,539. You do not think that a combination of the examiners of the University with the examiners of the teaching bodies would be desirable?—I think that through the Faculties the teachers of the colleges and institutions would have great influence on the examinations; but it would not be so much as college teachers as members of the University Faculty.

24,540. You think the influence of the College should be confined to that?—Yes.

24,541. You do not think it would be well that the University should admit or recognise the examinations of the teaching bodies?—I think not. I think if one assumes that the teaching will more or less be done within the metropolitan area, there is no advantage to be gained by that, and there is a distinct disadvantage in the difficulty of keeping up a common standard.

24,542. I do not know whether you saw the scheme of the Senate of the University of London?—No, I have not seen it.

24,543. It was proposed, as an example of this, that the University should unite with the Colleges of Physicians and Surgeons to combine in an examination held by examiners appointed or by both, and that should be the examination qualifying for the degree of the new University?—Of course, I am quite ignorant of the organisation of the medical teaching of the University at the present time in London, but it seems to me that that plan would be fraught with difficulties.

24,544. And in like manner there might be a combination of the University with the Inns of Court. The Inns of Court might appoint certain examiners, and the University might appoint certain examiners; and the result of that might be a degree in the University of London, and a considerable step towards a call to the Bar?—I think it would be simpler for the University to do teaching and examining in one part of a man's education, that is, what we may call the scientific part, and for the Inns of Court to do teaching and examining in the technical part, both to be

E. Jenks, Esq., M.A.

16 Mar. 1893.

required to a certain extent for admission to the profession.

24,545. That, of course, requires that the University should have a staff of teachers?—Either of University teachers or teachers recognised in the various institutions.

24,546. Teachers recognised, we will say, in the Inns of Court?—Yes, in those subjects which it is considered the part of the University to teach and examine in.

24,547. The examination, you think, should be conducted by the University?—Yes, but it should not be in the technical subjects.

24,548. (*Professor Sidgwick.*) Would you mind describing very briefly the organisation of the University of Melbourne?—I can do that very easily. The great practical difficulty in the working of the University of Melbourne is that the legislative power that is to say, the power conferred by Act of Parliament, is entirely in the hands of a body called the Council, which does not necessarily contain, and which at the present time does not in fact contain, a single teacher of the University. It contains one or two people who are teachers, but who are rather rival teachers of the University. That is an aggravation of the matter. As to the Faculties of the University, either the Faculty of Arts, or the Faculties of Law and Medicine, although the Council nominally sends representatives to them, yet in practice those members stop away from the Faculty meetings, and consequently the business is discussed by the Council entirely in a spirit of ignorance, and, without any wish to produce friction on the part of either body, friction is always generated, because the Faculty thinks its views have not been fairly considered.

24,549. In the organisation you have described, have the Departmental Board administrative power under the Council, or have they only consultative power?—For the most part only consultative power. They have a little administrative power in details, but I think they might very well have more.

24,550. You know the system of the University of Cambridge in that respect?—I think so, but I am not quite sure.

24,551. Do you approve broadly of the extent to which the Boards of Studies have powers of administration?—I think so if I understand it. They have the absolute power in some of the details, have they not?

24,552. Yes. You think a combination of consultative functions and administrative functions in details is preferable to a purely consultative body?—Yes, I think it gives them a practical feeling.

24,553. (*Lord Reay.*) You stated in answer to Professor Sidgwick that the law cannot be taught to men whose minds are a blank with regard to the technique of law. Would you allow me to ask whether you would apply that to those who would join the Law Faculty not for the purpose of being professional lawyers?—No; I think if a man has such a decided bent that he wishes to study with a view to qualify for public life, he is so exceptional a man that he ought to be allowed his bent. But the doctrine of the University ought rather to be, "Come to us with some technical knowledge if you can."

24,554. In Germany they follow the opposite course. The first State examination is on the pure theory of law; the second State examination is after he has seen something of practices?—As assessor?

24,555. Yes?—I do not doubt that for the German mind it might be better, and I think it may be better for the Scotch mind; but I do not think it is for the English mind. I think the Englishman is peculiarly incapable of grasping abstract principles; he comes to a subject much more readily through the absolute details of technique. I may give you an example: at the University of Melbourne I taught jurisprudence as a branch of Arts. It was rather a popular subject, and my lectures were largely attended, but two-thirds of those who attended consisted of students of Scotch extraction, and the remaining third consisted partly of people who had already done something of the technique of law and partly of middle aged men who did not care for philology, and studies of that kind; who were too old for it. But the great bulk were Scotch students.

24,556. Then you think there is that distinct difference between the Scotch and the English mind?—I do indeed.

24,557. And you cannot account for it?—I will not say that.

24,558. How would you account for it?—I think it has a great deal to do with the training. Many generations of Scotch students have been trained in philosophy in Universities.

24,559. (*Professor Sidgwick.*) I presume that when you said John Stuart Mill was not an Englishman you meant he was a Scotchman?—Yes; I think so. He had a Scotch mind at any rate.

24,560. (*Lord Reay.*) For that class you would admit the study of International Law?—I would leave it very much to their discretion. I think International Law is only one branch of a jurist's work.

24,561. I did not put it higher than that. You would admit that it was one branch of the jurist's work, and therefore it ought to have a place in the Faculty of Law, although you would not make it a compulsory subject for professional lawyers?—It does not seem to me to be more specially a branch of a jurist's education than of that of a political economist. It is very useful, and to a certain class of men it is very interesting.

24,562. But I understand you do not consider it law?—No.

24,563. Then in which Faculty do you think it has its proper place?—In the Faculty of History, if there is one; if not, in the Faculty in which History is considered.

24564. Which would be the Faculty of Arts?—Yes.

24,565. Do you apply what you have said about the English mind to the study of Roman Law, that a knowledge of technique would be desirable before they approach the study of law?—Yes, but I do not think it is desirable to lay down as a general rule that a study of scientific law apart from mere technical law necessarily involves making Roman Law a special subject. Roman Law would come in any logical system in two or three distinct groups, but to label it simply as a department without giving any guide to the principle or method in which it is to be studied is merely poverty of imagination.

24,566. And that is on the ground, that the English legal system does not require it. You do not make that observation with regard to the Scotch Universities?—No, nor to the German.

25,567. You limit it entirely to the English Universities?—Yes. There is one point I should like to mention. Perhaps I might give evidence with regard to the exact construction of the Board of Legal Studies at Liverpool, which illustrates what I have been saying, but which I forgot to bring in before. The Board of Legal Studies at Liverpool is composed of three distinct parts; a part elected by the Council of University College, a part elected by the Incorporated Law Society of Liverpool, which is a professional body; and a part elected by the students; I have mentioned that already, but in other respects the academic body and the professional body meet on that Board. It is no part of Victoria University, but it is the body which deals with the legal education which University College provides.

24,568. (*Professor Sidgwick.*) I suppose the Incorporated Law Society represents only one branch of the profession?—Yes, but in Liverpool by far the more important branch. The Bar in Liverpool is very small compared with the solicitors. The solicitors are a very large and important body.

24,569. (*Lord Reay.*) You spoke of the Scotch mind and the English mind. I suppose the Australians are gradually developing a mind of a special type of its own. To what does that approximate?—That would

be more likely, I think, to approximate to the abstract study of law, not as a very deep study, for it rather takes to superficial generalities. I do not know that it would be a good thing to attempt to educate it in abstract law, but I think it would take to it rather kindly. *E. Jenks. Esq., M.A.* 16 Mar. 1893.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Sixty-third Day.

Friday, March 17th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Rev. CANON BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

ALFRED GILBERT, Esq., R.A., examined. *A. Gilbert, Esq., R.A.* 17 Mar. 1893.

24,570. (*Chairman.*) You have been good enough to come here to give us your views as to the education necessary for an artist of any description, either a painter, a sculptor, or an architect. What we particularly wish to arrive at is how a teaching University can assist that, and whether it is advisable to have a Faculty of Fine Arts or make Fine Arts a branch of any of the other Faculties. Perhaps you will begin by telling us your views as to the kind of education best fitted to make a man a successful and distinguished painter or sculptor?—I think to answer your question briefly the best education to make a man an artist is to make a man a gentleman. I mean that covers a very large field.

24,571. He ought to be a man of general knowledge?—Before everything.

24,572. In all branches?—Yes.

24,573. To use the common expression of the day he ought to be a man of culture?—A man distinctly of culture. If he has not got it by education and does not get it by his own exertions he will never be any more than the mere doer and never be the sayer, if I may so express myself.

24,574. There are two things: first of all he ought to have the power of expressing what is in him, and then he ought to have something to express besides that?—I take it the power he wants to get is the power to receive and assimilate impressions that he receives from things about him, and to express them in more than a mere material manner; that, in fact, he wants to have the power of saying much more than he wants the power of doing.

24,575. And you think it is this power of saying which the University can assist?—I believe so.

24,576. That is to say the general information and training of the mind such as is already given in any University which is worth anything?—That is quite my impression.

24,577. As to the mere technical part, the power of doing which is also necessary, is that or is it not a thing which a University can teach?—My impression is that the mind being so trained to the most delicate susceptibility and sensitiveness, well trained to command itself, and a man having a great desire to say will find the means to do.

24,578. I suppose there have been unfortunate men who have gone to their graves as failures, who have felt in their own minds that they had something to say and had not been able to express it?—They did not know the reason perhaps. I have based my idea upon the history of art, which I think is one of the most important subjects, I mean the history of art in its broad sense as a subject on which to train aspirants to art. In the whole of that history which I have been carefully looking into I do not find one single instance of a great man as painter, sculptor, or architect, who would not have been equally capable of being great in any other walk of life. They were all cultured men, educated men, if not through their early training they were men who had had the sharpness and wit to acquire their education by their own personal efforts. And besides that the greater number of these men were men who were considered fit to fulfil very important positions, sometimes that of ambassadors, sometimes that of adjudicators in great questions, and they were all very distinguished outside their art. Their art always speaks to the distinct points which they shone in. I could quote a good many names. I leave Phideas and all the rest of that time out, but when we begin with Van Eyck and end with Sir Frederick Leighton and Burne Jones at the present day it covers a large field, and is a very good example, I think.

24,579. There is no doubt that a man cannot be a great artist without being a great man in a general way, but are there any cases in which a man has had a great deal in him, and great powers, but somehow or other he has not been able to master the technical work, and cannot succeed in that particular way. For instance, I was thinking of Thackeray who tried honestly for many years to become a painter, did he not?—Never what I would call honestly.

24,580. You think he did not work honestly?—No, and therefore he did not fulfil Carlyle's definition of genius in that direction. He became impatient, if you remember, because he was refused the illustration of another man's thoughts. That is the one weak spot in the character of Thackeray, but it led to his writing things which now are even pitted against those of the man who drove him to the writing, or is supposed to have done so. Of course he began to write long before that, but I am sure he never gave any application to the study of his art, and I am not quite sure that we are not grateful that he did not.

A. Gilbert, Esq., R.A.

17 Mar. 1893.

24,581. To return to what the University can do, of course what it might do is to form the mind of a man and give him information and habits of thought, and the really technical part would come more easily after that, on account of his general nature having been so improved. Do you think the University ought to actually teach the technical part of painting or sculpture?—No, I do not.

24,582. You think that should be left to existing institutions?—Yes, and they should teach much less than they do.

24,583. Then there is no field for a University in that direction?—Except in a comparative sense as you would teach comparative anatomy, and that sort of thing; it would be more like teaching archæology and history, and general training, with special regard to subjects which deal with art and are connected with the practice of art. I am rather stultifying what I say by speaking of the practice of art, because I do not believe in a division of arts. There is only one art which governs the whole thing; I believe a general is an artist; I believe a great writer is an artist; and I believe a great actor is an artist. "Artist" is rather a generic term, but if you want to speak decisively about how I class artists, speaking of the plastic or the pictorial arts, I think to make a great artist you want to make something more general; you want to train him in the family of the one great big art, or rather as a member of that family, and then let him train himself as representing one of the subdivisions.

24,584. You speak on behalf of artists of all kinds. What we ordinarily call artists, painters, sculptors, and so on. You think there should be a University giving a good, sound, thorough education, strengthening the mind of a man and turning him out a better man than he was when he went into it?—I believe so.

24,585. And beyond that there is nothing that can be done for an artist?—I think so too.

24,586. Is there any particular view besides this that you would like to express so as to have it in evidence?—One other perhaps. If there should be any question as to the advisability or the feasibility of introducing more than theoretical training, more than the usual education, the only kind of practical training that I would suggest would be that there should be technical schools for the handicrafts because you then train the human being in two directions. You train his brain and you help his hand. I do not mean to say you would train a man to paint, because that is there existing, but you help him to train his fingers in the a b c of his art. When he has learnt the elementary training, then his brain must do the rest. You cannot teach a man and say: "In that picture which you have "to copy you must have this colour, that colour, "and another colour on your palette, and out of those "colours you must evolve that." You must leave that to what his brain will tell him; but you can tell him: "It is not safe to use that colour and this colour "together, because this colour has a chemical com-"bination which is inimical to the other colour." You can teach him those things, and to the practical part they supply what really the anatomy supplies to the other part. In anatomy you tell a man: "This man has not five tibia; he has only two;" and in the same way in the case of a painter, you teach a man that one colour is unsafe to use with another colour. It is an elementary thing when he has got those things, and he knows what he can use and what he can do with those things, then as his mind is strengthened he will use them, but if he is a dull man they only work against himself.

24,587. The technical part of the training is already provided for in existing institutions?—Yes, you have it at Oxford and you have it at Cambridge. I believe you have it at all the Universities.

24,588. And in London we have the Royal Academy?—Yes, and you have the Slade School at University College. That is admirably done, only under the new professor I fancy it is going to alter. You have enough training in one direction, but it is not a broad enough training. However, I think the new man is going to do differently.

24,589. Take the leading men of the day, the Academicians as a body, how were the bulk of them educated do you think? Were many of them educated in the Royal Academy?—I think the bulk of them were educated at the Royal Academy. They have gone through some time in the Academy, but a great many too have travelled, and that reminds me there is another point that I ought to have mentioned before, namely, the use of modern languages in the training for an artist.

24,590. They have travelled for the sake of getting instruction in art and have received instruction in foreign countries?—They have travelled at their own inspiration because they felt there was something bigger to get by travelling. They knew they had to see what other men had done, who being of different races had different ways of expressing themselves. They wanted to see these great works; and the men who have found the greatest benefit from it have taken care to learn the tongues of the men whom they admired. But they might also learn their literature, and see what inspired the thoughts of those men and the circumstances under which those works were produced. That is the greatest training they could get.

24,591. How many of them have gone to foreign institutions for technical instruction?—I think most of the younger men of to-day have gone and do continually go, but the very great fault that they make in going and settling themselves down in any particular place is that they are trying to ape what I must call the nationality of another race; they are not remembering that they themselves belong to a different race. For instance, men go to France and come back here painting for a few months like Frenchmen, but it is only like the skin; there is no soul inside it. It is not the Frenchman's inspiration, it is a shell. But they do that, and after a time they cannot help themselves. They are Englishmen, so they are a different race from the French. Even that little strip of blue which divides France from England makes the difference. The Englishman is of a very different constitution from the Frenchman. He is bound to come back to his own nature that he got from his mother and father and those before him. Of course there comes in the wide question of heredity.

24,592. Taking it that each nation has to work for its own race, is the technical instruction given better abroad than it is in England. Is it given better either in France or Germany?—I think in France, education is adapted and particularly adapted to Frenchmen, but not to Englishmen, and not to Italians. Again, the Italian method is adapted to their own countrymen, and the German method is essentially adapted to their own countrymen. Then the German schools are sub-divided again. There is the Vienna School and the Munich School, but they are all fitted to the requirements of the race; in fact, they have grown up out of those requirements.

24,593. In England, what we have to do in giving the technical instruction is not to copy foreign institutions, but to extend what we have got?—It is to foster that quality of an Englishman, and what makes his work pre-eminent in all exhibitions abroad, originality, and *naivété*; that is the highest expression of very thorough training; a man makes himself naive; it is like simplicity; a man has to be very complex before he can be simple; then he wakes up; he admires a thing that is so simple that a child can do it, and he says that is what I want to do.

24,594. And that originality and simplicity is the distinctive mark of the English School?—We have no school really, but in an exhibition when foreigners look upon a collection of English works, what they marvel at is the lack of school.

24,595. It is very much like our literature?—Exactly the same. But it has been the same in everything we have had to do. I was going to mention the Crimean incident, when the French said,

"*C'est beau, ce n'est pas la guerre.*" There is a little something there which shows what I mean, and the whole story of Napoleon and Wellington shows pretty well the difference of material, but they were both great artists.

24,596. They had different material to work upon?—Yes, you cannot bring an Englishman seriously to sit down and paint dissecting room subjects.

24,597. As far as I can gather, you think the technical instruction necessary for art, ought to be given by existing institutions, and there should not be any particular department in the University which should give it?—No, I think to make the mind so keen, so delicate that the mind that is worked upon having the predisposition and pre-inclination towards a certain expression in art, will express it better than it would have done without that help given by the general training of the mind. I am afraid I express myself in rather a complex way.

24,598. (*Lord Reay.*) I understand that what the University should do is to have a course of lectures upon the history of Art, Archæology, and Comparative Anatomy?—Yes.

24,598. And that the future artists should get also the full benefit of all the literary teaching of the University in both ancient and modern literature?—Quite so; ancient especially, because that is a closed book to him without the University. Modern literature is an open book to him, and if he will not run he cannot read.

24,600. The technical part may be left to him to be acquired afterwards in the studios of very good artists?—That is the very best suggestion that I could make. That is really going back to the old apprenticeship system.

24,601. And you prefer that system to any attempt to organise a school of art?—Yes.

24,602. You would not be in favour of having an institution like the *École des Beaux Arts* in Paris?—No, it would not do here.

24,603. It does in France?—Yes, it does admirably in France.

24,604. Just as the *Kunst Schule* does for the Germans?—Yes. The French *École des Beaux Arts* makes all men alike, and the only men who shine are men who have said something. They are all equal in their work. They make them all good machines, but what is the result in an exhibition? Year after year you go to the Salon and you are struck by the lack of subjects. You see "*La Source*," "*La Biblis*," "*La Musique*," "*La Guerre*," and "*La Gloire*." They ring the changes on these subjects, and no side issue is ever attempted so far as I remember.

24,605. There is a lack of originality and individuality?—There is a lack of individual thought. It is all tradition with them.

24,606. What we must endeavour to do is to stimulate the individuality of the artist?—To foster what other nations give us the palm for, that is individuality.

24,607. And that cannot be done by a school?—No, I think not.

24,608. (*Rev. Canon Browne.*) I suppose you would have the subject of Art tell in the final examination for a degeee in Arts?—I would ask you to put your question in a more definite form.

24,609. I suppose that a degree in Arts would be given for various different things; that a man who is a Bachelor of Arts of the new University will not have gone through the same course. This man may take English literature; another man may take Greek; and another may take Art. Would you allow that among other alternatives?—I would not have a degree in Art.

24,610. But a degree in Arts?—I understand that there are already degrees in Art. I am not quite clear what that expresses, because I have known Masters of Arts and Bachelors of Art, they are all round me. "Art" has a broader sense with them. It does not touch upon the pictorial or plastic art necessarily.

24,611. No, a degree in Arts of course is obtained by knowledge of various kinds?—That is the only degree I would have given.

24,612. Then among those knowledges of different kinds, you and your brother artists of course would like to have Art itself recognised?—Certainly.

24,613. And now it is not. That would be an alternative to something else?—I think that all I said just now covers that. I would have University degrees not for special things. I mean I would not necessarily give an artist a brevet for his particular branch. I would make him earn the brevet as the result of his training under the general curriculum.

24,614. Then the result of that training under the general curriculum is Art?—I do not mean that. I do not want an artist to go to a University simply to study one subject. I want it to be a general education.

24,615. Quite so. But in that general education would you have his knowledge of Art brought to account?—If you put it as history and archæology, but not as a knowledge of pictorial and plastic Arts in their practice, but so far as it is governed by the knowledge of archæology and history. The anomaly you have now is Musical Doctors and Musical Bachelors, men who have very often not the slightest idea of stringing any thought together, but who have been able to attain a pass degree because they were up in certain mechanism that was exacted.

24,616. We are talking of two different things. That is a degree in music?—But you would have the same thing in Art and that I would give anything to avoid.

24,617. My question only really tended to this. We do not want a one-sided version. What I have taken rather for granted is that a candidate for the Bachelor of Arts degree would be allowed to present art subjects. Would you consider it right to present history, painting, and so on, taking painting only, or would you require that he should show a knowledge of the theory and history of painting, sculpture and architecture. That is really what I was coming to?—No. I would grant no degree in Art as you put it to me.

24,618. I do not in the least want you to grant a degree in Art. I suppose a man some time or other would be allowed to be examined in his knowledge of the history of these things; at that time would you say that a man may present the theory of painting only or must he be a much broader man than that (my own opinion being that he ought to be) and know all round the subject of Art?—I agree with you; it should be in the broadest possible sense.

24,619. (*Mr. Anstie.*) We had some evidence given on this subject a little while ago by Mr. Sidney Colvin of the British Museum. His view, as I think I am correct in stating it, was that it would be desirable that a University should give teaching and recognise attainments in studies of archæology and the history of art; the history of the various schools, their characterisation, and so forth. His view seemed to be that such education would be available for the instruction and education if I might say so of critics. What I wanted to ask you was whether you think that instruction and recognition of that kind would be of advantage to the study of Art itself for its own sake?—I do not want to beg your question, but I say that any study with a view to create critics is a very ridiculous one. A critic can only come like such men as Ruskin have come, and they are the only critics that are worth reading or worth attending to, by reason of the extraordinary power which they have and which they would have given to anything else. We cannot take anybody we like and make a critic of him; he must have discretion and discernment, and he must have the power of sinking himself and entering into the skin and soul of the man whom he is criticising. It is no use his merely going to his offices at night and saying "I have notices of "these pictures to write, and write them, while the devil waits for his copy.

24,620. I do not think that is Mr. Colvin's idea of a critic. I think he has a much higher idea than that?—I know his idea. I do not wish to say anything disrespectful of Mr. Sidney Colvin, or any critic

A. Gilbert, Esq., R.A.

17 Mar. 1893.

living. I do not say any more here than I would say to their faces, and I constantly do say it; I entirely disapprove of that dragging in of a man, who would be much better employed in some other way, to adjudicate upon something that he knows nothing about. An artist is not a made thing; I do not believe an artist is actually born to paint or to model, but he is born with something of nature which is more easily trained into a particular expression or form of expression than another. Those men who excel in whatever it is are all born, I believe, with that certain nature. They are non-phlegmatic while the others are phlegmatic. And those who have the fibre and nervous disposition necessarily to make them creators or exponents of things subdivide again accordingly as they have the power to think. As to bringing a mere critic in I think it is quite impossible. An artist never makes a critic you know.

24,621. You mentioned Ruskin. Is he not an artist and a critic?—I do not say that he is an artist in painting or an artist in anything in particular. He is a very great artist. I have been talking round about the bush; I am very sorry. This is only corroborating what I said to Lord Cowper; a great man is a great artist, and Ruskin is a great artist who would be an artist in all centuries.

24,622. Then your view is that criticism cannot do much for art?—No, it clogs it.

24,623. Take the instance you have given Ruskin. Has he had no influence on Art?—He has not been a mere critic; he has been a very wide critic. I know you will take exception to this.

24,624. (*Chairman.*) He is a great literary man?—He is a great thinker, and he has made beautiful pictures of forms of architecture with his pen. Take the "Golden Gate," or the "Stones of Venice;" a man does not want anything else; but when you come down to his littleness, such as his attacks on Whistler, and so on, that is the little dross that remains in the man. Those are the things that gives scale to the things he has done. But how did he get that? He had the predisposition to assimilate and take in a wonderful education which he got. I do not know his early history, but he may not have been a prizeman at school, or a great classman at the University; he may, or may not have been. I should be surprised to find he had been, but by what whatever means he got his education, or under whatever circumstances, he has been able to assert himself in such a way as to place himself in the highest rank of artists, he is a man of great cultivation.

24,625. (*Mr. Anstie.*) But it is cultivation in certain particular channels. You would not take the view that he has not deliberately and of set purpose directed his attention to estimating the value and characterising the qualities of different artists in different Schools?—No one takes that *au grand sérieux* when he says that, but, having read his books once, men cannot help it, they are bound to come back and read his books again, and they get something out of them; there is always suggestion. I cannot admit that any man has the right or power to criticise in a particular way the production of another man; he cannot do it. He is not that man. How can he do it? How can I say that because you express yourself in a particular way it is wrong. I may think you have expressed yourself wrongly, but I cannot feel as you feel.

24,626. To put aside the critic and the historian your view is that a man with the artistic faculty wil improve his artistic faculty and power by making himself acquainted with various schools of thought and modes of execution which prevail?—Well he would do that under any circumstances. A cultivated man would naturally thirst for more knowledge, and he would get it some how or other, but I do not think a broad-minded man would simply take up one rut and go in and be a specialist. I do not believe in it.

24,627. You are not prepared to give a special direction either in whole or in part to a University course characterised by the distinction of a man being Art?—That is a very difficult question to answer directly. I have been perhaps speaking from what I consider to be an ideal point. You ask me a direct and material question, and it is difficult to answer directly. As things exist possibly I should have to say that you would be bound more or less to special directions, but all this talk of mine comes from a firm conviction that an artist naturally wants the training of other men. He wants to be, as I said at first, a man and a gentleman. By "gentleman" I mean "Handsome is that handsome does." I want him to be a man capable and fit to meet and discuss with his fellow men; a man to be on an equal footing with other men by cultivation and have the power of grasping things as other men would grasp them. I was thinking all the time of the haphazard way in which we artists grow up. We are not all born to have the advantages of education. Artists generally come from what would be called the lower middle class, the tradesman class, and sometimes from the labouring class. That shows that they cannot be made, in a sense. The parents of those boys are not always able to give them or they have not obtained the advice from people who know how to train their boys, and the pecuniary difficulties of giving a boy a first-class education in England are very great. The boy is taken away from school with the idea that he will be able to earn a few shillings here and a few shillings there, and also that his calling is so difficult to learn—I mean the finger part of his calling—the result is that he does earn a few shillings here and a few shillings there, and the fascination grows upon him; he becomes a very nimble creature with his hands; he has no time to read; he does not think, nobody puts him in the way of it. He grows up and perhaps by hazard he distinguishes himself. Then if he is a sharp fellow he finds where his fault is; how he stands with other men who are his betters by education. If he is sharp he then educates himself; if he is not he leaves it alone. What I should like to see would be that class of worker and that class of human being provided for so that he should have a facility for going and getting what has been denied him by accident, or sometimes by design in his youth, at times when he can devote himself to it in such a manner that expense is no stumbling block. He has the opportunity to get it; he can now go to certain classes here and there, but there is no organisation about the thing, and the institutions are not recognised. I should like to see these facilities open to men. I am speaking from personal experience in the matter. I was taken from school by my own request at a time when I ought not to have been taken from school, and I every day find the necessity for and lack of that very thing which my father wished to give me; and which I blamed him for wishing to give me; and now the irony of fate makes me blame him for not having had firmness and not having kept me at school. I am carrying out this idea with my own boys, and I will insist upon it till they have the nous to judge for themselves; I will educate them in a way that I think right. They will not shine in the University, but I think education is not only book-work; it has a social side too, in the sense that William of Wykeham spoke of "the manners make the man." I am trying to express myself in a broad way, but it is very difficult.

24,628. Your view of the work which the University can do for the embryo artist is to put him in the position in which he may obtain a high standard of intellectual culture, and not to give him any particular advantages?—Not to teach him how to paint a cabbage or a flower, but to teach him how to paint anything or do anything; to teach his intelligence. You cannot teach a man how to do a particular thing; you can only put him in the way how to learn. A boy leaves school not having learnt how to do things, but having learnt how to learn, and I take it it is more or less so in the case of a young man leaving a University. He has not learnt all he has got to learn, but he has learnt there the power of going on learning. I do not think it is within the power of a University

to teach a man how to paint, but it is within the power of the University to teach him in a bigger sense.

24,629. You think the Art tendency is given by nature, and cannot as such be specifically helped or furthered by a University ?—It comes to that.

24,630. (*Sir George Humphry.*) I think you feel that Art is a sort of expression of thought and idea in a physical and permanent way ?—Art as I have defined it.

24,631. So that there are to be the two things, thought and the power of expressing it. Those are the two things required. There should be the thought and then the power of expressing it well, either by colour, or in sculpture, or in some other way ?—Yes.

24,632. Then with regard to the real and practical point, I do not think I have quite yet gleaned what your idea is, that a University might do with reference to the cultivating of Art, and the power of expression ?—It is to train the mind.

24,633. Simply that general training of mind which is required for all the walks of life ?—Certainly.

24,634. That is a necessity for all walks of life. Then you do not feel that the University would do any particular good by training the mind in any special direction with reference to Art ?—No. It would do good in having these special courses open for those who choose themselves to attend them.

24,635. That is to say, that there should be some teaching in archæology, history, and modern languages ?—And anatomy, which we already have, and chemistry.

24,636. But they should not be the special lectures for an artist. They might be the lectures on archæology, history, and modern languages, which would suffice for all the students of the University, or any who chose to go to them ?—No sort of training in the nature or character of criticism. I think those are perfectly useless. It is perfectly useless for a man to get up, having prepared with paste and scissors, a *résumé* of what other men have done, because I think a student wants to read that for himself. He can read it.

24,637. Would that be archæology, especially with reference to art, art archæology and art history ?—I do not know where any history or archæology comes in without Art.

24,638. There is an instance represented by the works of the great masters of old, gems, and so on. For instance history with reference especially to gems ?—They have told their own history. The only record we have of the history of archæology is through Art. Do I understand you to say that you wish me to express my feeling in one way or the other as to whether it would be advisable to demonstrate and lecture upon those things which are the speaking history of the past ?

24,639. Yes, and to exhibit the artistic features in them ?—Take those things and tell the history of them ?

24,640. That would be the history of Art as well as general history, the mode in which it has generally grown up ?—I would have them used as illustrations and tell those who cannot read for themselves how they illustrate the history.

24,641. For instance the history of the manner in which Greek sculpture has grown up as distinguished from that of other nations. That would be the history of Art. And so with regard to gems, the mode in which they have been gradually evolved, the mode in which they have represented the artistic feeling of different peoples ?—Yes, but not how they were done.

24,642. No, I am not saying how they were done, that is another thing—but the study of Greek gems indicating the character of thought and idea of the Greeks ?—Yes.

24,643. That would be the history of Art in relation to the several nations ?—Yes, I certain would agree in that. I think that is a very essential thing.

24,644. That would be a special history with reference to Art ?—It might or might not be. It seems to me that history in any form could not exist without those things, and those things could not exist without history.

24,645. But those would be more especially with regard to that ?—Yes.

24,646. With regard to any professorial teaching of Art itself you are on the whole unfavourable to it ?—Yes.

24,647. You have said that in the French School it would tend to produce uniformity, and damp individuality ?—It would tend to produce small professors.

24,648. With regard to students it would have that effect ?—Yes.

24,649. So that on the whole thus far you are not in favour of the University taking up much the subject of Art ?—You really pose me very much by your questions. You put questions that make me ask you to define Art.

24,650. We have already defined Art as the expression of thought ?—I have my own conscious definition of Art and you are evidently speaking of another definition of Art.

24,651. No, I am speaking of Art as the expression of thought ?—Not having chosen any particular mode or method of expression, I mean we must call painting, architecture, sculpture, and music all different modes of expression must we not ?

24,652. Yes.—We cannot class them together as one mode of expression, but if you class them together as one mode of expression and add to it general culture, then we have what I understand by the Universities of to-day granting degrees in Art.

24,653. Then there is another point in relation to it, and that is whether a University and any professors in a University could utilise the great opportunities which there are in England for the study of Art in our museums; whether it would be worth while either that a University professor could utilise those museums or that those who hold office in the museum should utilise them for the purpose of instructing artists which they do not do at present. Would it be desirable to take students round and show them the artistic features we will say of particular states and particular nations ?—You can take a horse to the well but you cannot make him drink. It is no use taking them round; I want them to have the power to thirst.

24,654. You must give the horse the opportunity to drink ?—He must first have the thirst. He will find his opportunity and sometimes he will be particular what he does drink, and sometimes he will not.

24,655. You do not think that persons giving lectures, say for instance in the British Museum, on the various statues there of different nations: Assyrian, Greek, Egyptian, and so on, would be of any use ?—Speaking from my own experience of lectures I do not. I have never yet gleaned anything from a lecture, at least not anything more than I could get from an encyclopædia. There are very many ways of getting a superficial knowledge of things: it is no use taking a student into the gallery and saying: "This was done "by-so-and-so and he did it at such-and-such a time "when so-and-so was alive." That is for the boy to find out; he will find that out for himself by general reading but he wants to have the thirst. That is what he wants to have. He wants at the University in fact to eat salt beef so that he will have the thirst.

24,656. And supposing him to have a certain amount of thirst you do not think that the teacher taking the student into a gallery and pointing out the particular powers which a particular artist had, and the idea that was lying beneath that picture would be of any use ?—No. It is like a boy getting up his exercise from the crib or the translation instead of turning it up in the lexicon. If a boy does it with a lexicon or a dictionary it is fixed in his mind, but if he takes a crib it goes out of his mind directly. And in the same way if you take him round a gallery it saves him the trouble of reading up, and the lecture will go in at one ear and out at the other.

24,657. You do not think it creates in him the tendency to think over it ?—No.

A. Gilbert, Esq., R.A.

17 Mar. 1893.

24,658. You see a great number of people have not this thirst in any degree. The large mass of people are mediocre. As Lincoln said "God created a great many common people" ?—We are always trying to satisfy thirst and not to create it. I think in this particular instance we want to create thirst.

24,659. The question is how would you create thirst except in that sort of way ?—Simply by making the mind of the individual so that it must get thirsty.

24,660. Would it not make him thirsty if you took him to look at a picture and said "See how beautifully the artist has blended his colours." Do not you think it would make him look at other pictures with more thirst ?—No, I do not think so. Have museums at every corner of the street and add to the natural history musuems we have which contain every natural object which God put on the earth—that is what we are never taught—we are taught to look at the productions of man. We are never taught those things in the so-called teaching of Art.

24,661. The greater number of persons not having their thoughts directed properly do not turn their thoughts at all in that way ?—They cannot unless they are taught.

24,662. And you want to teach them ?—I know perfectly well what I want to say, but I have not the power of expressing myself under cross-examination. It comes back to this. I have harped upon it: I have used the words "training of the mind" all the time, and I have been very loyal to the expression. I do not think you can make an artist.

24,663. Still you speak of training the mind. The question is how to train the mind. That is the practical point ?—Give him a sound and good discipline to his mind; put him in the way of reading and seeing things; show things to him; give him an opportunity. Those who take the opportunity will benefit by it, but you cannot make those who will not take it, ever benefit. There are always a certain set who will not take it. That is the way you leaven the thing.

24,664. You do not believe in training the mind to Art ?—No. You will be astonished to see how little it comes to. In medicine perhaps you are trained in a different way; it is by contact with your betters all the time, the older students, it is looking at the things and so on; you are not told by a professor all the time this that and the other, and you cannot do it in any other way, but you are left a great deal to your own judgment, and that comes by the training as you go up step by step.

24,665. The mass of people are mediocre, and may be trained in any particular direction one way as much as another, and the man who is capable of training in any one direction is for the most part capable of training in another ?—I believe so. I believe if or you had taken Rubens or Van Eyck, and Vandyke a Velasquez they would have been equally good in anything they took up. Take Sir Richard Owen, the man who is just dead: if he had turned his attention to the depicting of the things he created instead of building them up he would have made most wonderful things.

24,666. You will endorse what I am in the habit of saying that the great point is to cultivate attention and perseverance, and then you may make a man pretty much anything ?—Yes.

24,667. You do not think the University can do more ?—I do not think a University will make a man an artist. The great specimens who have come out of Universities have all been men who have built upon what they have learnt. It is their nursery.

24,668. The work of the University is to cultivate attention and perseverance ?—I believe that the work of that high, if I may so call it, emporium of study is necessary for any country.

24,669. That is education ?—Yes, education in a high sense.

24,670. And that should be done in one subject as much as another ?—Yes, I believe so.

24,671. (*Lord Reay.*) I understand you would lay great stress on the development of the powers of observation of what is beautiful in nature ?—Certainly, most decidedly, always in a comparative sense. If a man is lecturing upon Art he generally confines himself to a certain particular run in Art, but if he would take to delivering his lecture upon this run that he has taken up, and comparing it with nature, comparing it with the general thing, it would be very much like the man who teaches anotomy successfully. He now and then throws in a little suggestion. I find that Art teachers are much narrower than any other kind of teacher going. I do not want to see that. I do not want to see the keeping of a secretary here and the keeping of a secretary there, and a man with paste and scissors.

24,672. I suppose you would say that even at an early age if a boy for instance is walking in the fields his powers of observation might be directed to the beauty of form in a flower ?—That comes from those who are surrounding him and it works back, because if the father and the mother have the culture in them they will direct the child. That is a way in which I think we shall get better and better: that is our development. But the person who has not got it and does not think, can not direct, and therefore we must look to the University to be a universal father, if I may say so.

The witness withdrew.

Adjourned to Tuesday the 25th March.

Sixty-fourth Day.

Tuesday, March 21st, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

The Rev. J. P. MAHAFFY, D.D., examined.

Rev. J. P. Mahaffy, D.D.
21 Mar. 1893.

24,673. (*Lord Reay.*) We know you have a wide experience of the subject. Will you give the Commission your views in general on both the teaching and the examining powers which ought to be exercised in a University such as you think would be an ideal University?—I am very glad you speak of an ideal, because I am unable to deal with the question of conflicting practical interests. I am not able to balance those. The first thing that I consider essential to a University is unity, though that unity be a unity very various. It is an unity such as exists at Oxford, at Cambridge, in the University of Dublin, and in the German Universities. The University of Leyden is a very good specimen. In this unity there are three things to be noticed, first, perhaps, the unity of the subjects taught to all the students. I will not say that considerable variation or specialisation may not be necessary, but to my mind, every University man ought to have learnt a certain number of things, without which I think a University degree has no proper meaning. If I may digress for a moment, I think that Oxford and Cambridge to my personal knowledge have specialised too much and they are in danger of losing the uniform type which University men ought to have. Still, dealing with this question of unity of subjects, everybody should know something about ancient languages, something about mathematics, and something about elementary philosophy. I say such things ought to be necessary for every member of the University to know. Secondly, comes unity of teaching; that is to say, that every student should, if he likes, attend the particular teacher who teaches the subject, and learn, not only the subject, but the particular way of teaching the subject which the particular man has adopted We assume that he has been appointed because he is a great man; if he is a great man he has views of his own and it is desirable that all the men who wish should go and learn his way of putting the question. Thirdly, there is the unity of traditions, and of society, which is created, not by the teachers, but by the social intercourse of the various people who belong to the University, who must have a certain general way of looking at one another, and a general way of looking at things, which are University traditions carried on from one to the other—a certain University feeling. We find, for example, that we have asked a certain kind of questions in Trinity College, Dublin, for a certain number of years, and these become part of the University consciousness; everybody comes to know them. You then assume this, and go on to another thing which then becomes taught to the whole University by being constantly asked, and by being before the minds of a great many people at the same time. I will revert to the question of the examinations by-and-bye; I am not omitting that.

24,674. You are laying great stress upon the University professors?—Yes.

24,675. You prefer that to a variety of college teachers?—Very much, for it ensures the unity. What I am wholly against is a conglomerate of institutions. I am for an organism not for a conglomerate, and the only way, as far as I know, you can extend an organism is by assimilating and I cannot help adding that the only way of assimilating is by eating a thing up. I object altogether to a conglomerate of institutions being called a University.

24,676. A conglomerate of institutions competing with each other?—Yes, that is not a University at all to my mind. It is a great mistake to think that Colleges of a University are that. They are not distinct things coming in from the four winds of heaven and opposing each other. Therefore, when I speak of a conglomerate of institutions I will exclude the colleges of Oxford and Cambridge. A conglomerate of institutions competing against each other is a most mischievous thing and not a university. Secondly, I ridicule the idea of an examining body, such as that of London, being called a University. I do not know a more absurd misuse of language than its being called a University. If you called it Civil Service Commission—an examining Commission—there might be some sense in it, but it does no more than examine people from the four winds of heaven. Therefore I will exclude that from my evidence. I take it that this Commission is to found a teaching University and not an examining Board. This latter ought not to be called an University at all.

These being my general views, I cannot help seeing a great difficulty in having a real and true University in London, owing to London's enormous size. There has been no instance of the kind, I suppose; even the mediæval University of Paris could not be compared to it. Paris must have been a place more like Dublin than London in size at that time. I do not know what the population of Paris was at that time, but probably not more than half a million. The danger is that if you had here a University with first rate teaching and a great reputation, in the first place it would absorb a great quantity of the lesser and very good institutions in the country everywhere, and secondly the classes would become of such size that it would be impossible to teach. Even in Edinburgh the classes come up to 300 or 400 and the teaching is a matter of very great difficulty. Any of us who have lived our lives in teaching know that the actual teaching of 300 or 400 is impossible. I myself do not think you can teach more than about 15, that is, to find out what each man knows by question and answer.

24,677. You are in favour of the lectures being catechetical?—Certainly.

24,678. And constant intercourse between the teachers and the students?—Yes. I agree with having great professorial lectures which are orations, but there is no real University teaching without constant catechetical instruction. The difficulty in Lon-

Rev. J. P. Mahaffy, D.D.

21 Mar. 1893.

don being this difficulty of size and a considerable danger of its absorbing the intellectual elements of the country, which centralisation would be dangerous, I think there must be some limit put to the sphere of operations. There are two easy limits which might be adopted; the one is that you must make your intellectual standard so high that you will exclude all the pass men. You may make it an institution like the John Hopkins University, and limit your numbers in that way or else, as you must endow the University very largely to induce the highest men to teach in it, you can restrict your numbers by making the fees very high. If you impose such fees you would only admit the leisured class, and you will exclude a great quantity of the poorer people who are now desirous of getting University education. If you ask my idea about that I think it would be much better for a great University not to have a high intellectual standard so as to exclude a great number of pass men, but I think on the whole it would be well to exclude the masses by its fees. In Ireland the Universities are seriously damaged by their cheapness, because they flood the professions with paupers. They educate people with no private means who get degrees in law and medicine and go into the world without traditions (and traditions are very important in these matters), and usually make second or third rate professional men who become discontented in their lives, and many of them were so debauched as to go into politics. In the University of Athens they had got free education for a long time. M. Tricoupi introduced fees and so cut down the number to about one third. Every poor boy who was able to live as a pot boy, a valet, or a *kellner* in a hotel went and attended the lectures, and it came to this, that they were not able to buy themselves books, and three or four students would have a candle and wake each other up at night, using the book and candle in turns, so keen was the desire. The result is that the land is not worked; Athens is full of jurists and so on, but it is very hard to buy the necessaries of life. On the other hand, if you exclude the masses who have not the time for a real University education, I think they ought to be amply provided for by technical education.

24,679. In your article in the "Nineteenth Century" you left out the subject of technical education?—Yes, that article was critical, not constructive. I omitted that in my article on the subject. I did not say a word upon it, and the Duke of Abercorn justly called my attention to it. I think technical education ought not to be called University education, and I think the poorer people ought to be taught that it is an honourable thing to practise all their various trades scientifically and systematically.

24,680. You are in favour of the German system where they keep all applied science and technical subjects, except medicine, out of the range of the University?—Yes, because you cannot give the unity of type that I think necessary, in the case of poor people who are obliged to learn those technical subjects thoroughly, and if you have no unity of type you have no University. You will say to me that it is a very bad thing if we exclude the masses because you might exclude cases of exceptional genius: that there are people of the lowest class who have exceptional genius, and whom it is most desirable to help in every way and to see that they bring their genius out. We have met that case adequately in Dublin by a certain number of free places. We have what we call sizarships, and the only condition imposed on a boy in competing for these sizarships is that he should be poor. If his father can afford to send him to an expensive school we will not let him in, but a boy may walk in out of the street and obtain a sizarship. If he obtains one he gets his dinner free and his education free. We have 40 of those places and we give about eight per annum which includes more than all the geniuses we have ever found.

24,681. The free places are given by open competition?—Yes, but we do not allow the man who can pay for a coach or an expensive school to compete, because he would have the advantage. The rich man would get his son better taught and so keep the poor man out.

24,682. (*Professor Sidgwick.*) How do you find out whether a man is poor or not?—He or his father has to make a sworn declaration declaring his means, and it is generally quite easy to verify whether that is true or not.

Now as to the details of preserving unity. When you have got your foundation made and your University established, it seems to me that one of the greatest dangers is the thing I see constantly proposed; government by a large Senate that comes together from different quarters and from different institutions, and I must say that I think the main cause why Trinity College, Dublin, has, under the most difficult circumstances, succeeded for 300 years, is that we have a small and perfectly homogeneous governing body. We have a Senate, but if the Senate had been allowed to govern us we should have gone to pieces long ago, but as the people who have taught most in the college, who have grown grey in the service of the college, have most of the power, it has been almost perfectly uniform and perfectly homogeneous. You may have heard from Dr. Ingram that recently they have established a University Council which interferes a little, but so far as it interferes it has not been to the benefit of the college, as far as my judgment goes. Our governing body in the first place must be composed of people who have been practical educators. They have been put there, not because they were Members of Parliament, successful speculators, or because they had money, but because they had won the place and were practical educators.

24,683. (*Lord Reay.*) They all belong to the profession?—Yes.

24,684. Then you would keep out of that select and small body distinguished outsiders who are selected not because they are conversant with pedagogic questions but because they are distinguished men like judges, or ex-ministers, and so on?—Yes, I should keep them out distinctly. I should make it a corporation of educational people. Now with regard to the unity to be preserved at examinations: in the first place the examinations, should be a great deal more frequent than what you call University examinations. Most Universities have two or three tests, what used to be called University examinations or Little-Go and Degree examinations. That is quite insufficient; there must be constant examinations. So it is that we do not allow any one to get a degree with us, even young men who are only examined, without nine examinations. It is desirable that the examinations should be more frequent, and therefore it is also desirable that they should be less competitive; that is to say, they should be examinations to reach a certain standard. Thirdly, it is of the last importance that they should be conducted by the teachers of the place themselves.

24,685. No outsiders?—No outsiders. I look upon examination essentially a way of testing how the men have been taught by the particular teacher in his direction, and the danger of making the examination impersonal is that the crammer outside gets the advantage immediately. If the examination is carried on by examiners from the four winds of heaven these people who are honest men cannot keep out their own peculiarities. The coach who has been watching them for a long time will easily anticipate what they will do. Moreover if I am going to examine, I look at the papers of the previous examiner, and I think it my duty to examine somewhat on that type. On the other hand, we feel that our teaching would be of little effect if we did not examine ourselves, and what is very interesting is this: so distinct a flavour have we in Dublin in our pass examinations that the young men who pass by examination only, and who live in England, or who live in Wales, find that there is no man able to prepare them in the examinations in certain subjects: they are obliged to come over for a few weeks to get the

instruction in order to get into the peculiar way we have.

24,686. You have succeeded in your system of examinations in defeating correspondence classes and crammers?—Yes, altogether. We have nothing of that kind. There are of course a good many very much valued private teachers inside the college who teach after our fashion, and whom we recognise in various ways, who live in the place. Yet if you send over a good classical scholar from an English school, he will get a first class. We quite know how to appreciate brilliancy in classics when we find it; but there are certain topics later on in the course, such as ethical philosophy and a certain amount of metaphysics as well as peculiar departments of physics which we lay stress upon and which other people do not, so our teaching has local colour. Therefore the Dublin man is stamped, not only by his A.B. but by the kind of knowledge that he has got. The coach cannot meet that. For example, I am lecturing in Ancient History: I set a number of questions, which look perfectly plain questions, but the men who have been taught by me know my way of looking at these things, and my peculiar views, and the only way an outside coach could obtain that would be by coming to attend my lectures. I cannot possibly avoid giving greater credit to the men who take my view of the subject and the illustrations that I have directed, and who have looked up the references that I have referred to. Those things are only in the man's note-book; they do not appear in the examination paper. Therefore if you want to make a definite school with traditions you must have the teacher examining.

24,687. Your point is that the better the teaching, the more original the teacher and the higher the standard of the teaching; the more difficult it would be for an outside coach or a correspondence class to meet the requirements of an examination based on that teaching?—Certainly. With regard to the dangers of abuse in such a system if there were dangers (I am not aware that there is any complaint of the unfairness or one-sidedness of it), it would be very easy to have an independent assessor who would sit by and see what was going on. I should not object to it. I should be delighted to have an assessor. I should be glad to teach him something as well as the candidates. It is essential, therefore, at such examinations when the teacher examines that all the men should be able to attend his teaching. Therefore if you had a number of men teaching at different institutions there is an unfairness in the teacher examining some men who have attended him and others who have not attended him. There is a difficulty, then, in having a number of teachers examining. Then you have to call in the machine examiner who has no colour and then you get rid of this valuable element in your instruction.

24,688. The alternative is what they used to have in Belgium: a system of mixed juries in which the teachers of the various institutions meet. You are aware that the evil of that system was that the teacher of institution A examining student of institution B, and the teacher of institution B examining the student of institution A, were always afraid to be too severe, and the result was satisfactory?—Yes. In Ireland we have what is called by a perversion of language a Royal University; I cannot state to the Commission what I have heard, but I have heard that there were grave abuses. Ours is so large a college that our tutors are so many as 20, and just as the Oxford and Cambridge Colleges have inter-collegiate lectures, we have. It was formerly the practice that each tutor taught his own pupils in all subjects, but we have got rid of that. Everyone can go and hear what tutor he likes. Therefore everyone has the chance of going to hear the teacher who will examine him, if he does not like to go it is his loss. I think that distinctly the strength of the crammers in London is the impersonal nature of the examinations. I think as soon as there is the personal examination instituted they would find themselves non-plussed.

You were kind enough to let me see some of the questions asked of Dr. Ingram with regard to the combination of men who are only being examined with men who are being taught. I should like to supplement what he said there in this way: from my many writings and from my open declarations it is evident that I admit that such a system is wrong theoretically. I would not establish it now. But in every old institution there are practical ways of relieving the difficulty and sometimes it is better to let a thing die out than to abolish it. The point upon which our examined students are peculiar is this: in the first place they do not belong to any other organisation; they are not the students of any other college; they are isolated workers. There was a time when a great number of the country gentry in Ireland would never have had their sons educated in any way if they had not had the system of sending them up occasionally to Dublin; and therefore a great number of Irish squires have attained some elements of culture in that way. It was very like the excellent fashion that subsisted until lately, of making every law student in London eat dinners in London. I regard that as valuable; it is still the system for the colonies. It brings every man into direct contact with London; otherwise he might never have known what the centre of the world is like. I think art students should be brought into contact with the great things of this world in the same way. So I think that those who lived in the country were many of them brought into contact with Dublin, and were obliged to learn a considerable quantity of science and letters, and it has had a good influence in that way. That class is rapidly diminishing with us; it is getting so small as not to be worth talking about. I do not think we have 20 per cent. of students who get their degrees by examinations only, and the class is becoming less every day, and, as I have said, they often come to spend some time in the college, learning their business on account of the peculiar flavour of the examinations, and they are examined very often. They are examined, coming over nine times, frequently from England and Wales.

24,689. You examine your own students?—Yes, twice a year at least—very often three times a year.

24,690. The object of that is to see whether they are reaping the full advantage of the education?—Yes, of the previous term. We lecture for six weeks; then there is a month's holiday, and then we examine in that business.

24,691. To prevent students from attending the lectures who are not up to the mark?—Yes, that is so. It seems to me that if such an ideal University were to be started in London, one great centre with adequate teaching power and independence — an organism not a conglomerate, it would require at the beginning an enormous endowment. I think myself it would be impossible to frame the ideal thing by endeavouring to balance the interests of existing bodies. I think you must begin *de novo*, if it is worth founding at all. It would be easy to found something or other which might be as good as one of the existing bodies, but you want something a great deal better.

24,692. According to your evidence everything depends upon the selection of the best men to teach in the various subjects?—Yes, and having them together in one uniform body. At Oxford there is a great danger owing to the Fellowships, and Chairs being diminished to a limit of 900*l.* a Chair. Able men will not sit down to such a prospect, but will go to something better. The result is that to a great extent the Fellowships at Oxford are now being obtained by second-rate men who are never heard of again. As your Lordship knows, in Dublin, in a poor country, our Fellowships are worth more than those at Oxford and Cambridge. We can attract very good men in Ireland for the Fellowships, because, as far as I know, there are not such prizes to be had at Oxford and Cambridge excepting the chance of being the head of a college. I am not for an average of salary all round;

Rev. J. P. Mahaffy, D.D.

21 Mar. 1895.

I do not think that is worth anything. I am for big prizes at the top in every profession.

24,693. Would you have Boards of Studies?—I think that our own plan of a Governing Board is better. The Governing Board is advised by the examiners, the professors and teachers of the subjects. We say to the Board, "We think you ought to make such and such changes." I think a common Board of intelligent men is the best thing.

24,694. The teachers in every Faculty should make their suggestions to such a small Board as you have described?—Yes.

24,695. How large is your Board?—Seven and the Provost.

24,696. Representing various Faculties?—Accidentally. They might have happened to be of one kind It goes by seniority, which is a dangerous thing. They are now all of them over 70 years of age.

24,697. You do not think it desirable that such a small Council should be representative of the Faculties?—No, I do not. If we had compulsory retirement we should get a body of men of about 50 years of age who had been teaching in the college for about 25 years. I think that is what was intended originally. It was not intended that they should stay so long.

24,698. Then they do not represent the various Faculties?—No, but I think that although there might not be one who is a physiologist they will know enough to take the advice of the best physiologist in the place.

24,699. Therefore the only qualification is that they should be teachers?—Yes, and of the place; they should be the old men of the place.

24,700. Besides the best men in every subject as University professors, you would have tutors?—Yes.

24,701. And those tutors would work under supervision?—With us they are really quite independent, and the tutors are much greater men than the professors. A fellow and tutor with us ranks much higher, and the tutors lecture conjointly with the professors. They lecture on more subjects because they know more subjects, but the professor does not direct them. The Board appoint whatever subjects are to be lectured upon and the tutor lectures on these subjects. The professor is not tied so closely.

24,702. And a tutor in the University ought to be as good a man as a professor?—Certainly, but he need not be a specialist. He ought to be able to teach, say, a couple of subjects.

24,703. And the professor only teaches one?—With us as a rule only one. It is very hard to say what one subject is sometimes.

24,704. The tutors would not teach the same subject?—I will take, for example, mathematics. The professor of mathematics lectures in the highest mathematics. We have several tutors lecturing in high mathematics, but they are lecturing for the Honour examinations in the same course—earlier stages in the same subject.

24,705. There is no fear of unnecessary competition?—No. The professor of Greek lectures to the highest classes in Greek, but there are just as good men among us as tutors who lecture on Greek at the same time.

24,706. Both the professors and teachers must have the maximum of freedom—*Lehrfreiheit*?—Certainly.

24,707. You object altogether to the system of merely prescribing syllabusses for the examinations purposes?—Certainly, if it is merely for that purpose. We like a prescribed syllabus if it is only in order to keep within definite lines.

24,708. The syllabus is the result of the professor's own free will; Yes, but it cannot he changed *ad libitum*; it has to be changed by law. If new books come in there will be discussions over the matter, and the Governing Body take care that a new fad does not come in.

24,709. But the Governing Body would mainly follow the advice of the professors?—Yes.

24,710. And a good teacher naturally would not have fads?—Naturally. Still if he is a specialist, it is well to have him controlled by the wise men sitting in council, who perhaps will not move so quickly as he would.

27,711. But if they will not move quickly, it may be difficult to prevent him from introducing his fads in his lectures?—You cannot prevent that.

24,712. (*Professor Sidgwick.*) You say that in your view there would be a great difficulty in realising your ideal University in London; are you acquainted with the University of Berlin?—Not recently, since Berlin became of such enormous size. At first when Berlin was not so big as it is now, I know it became so dear to live there, that the great body of students migrated to Leipsic, and there was a moment when Leipsic was bigger than Berlin. That has now, again, changed, I do not know why, but there was a great difficulty owing to the great size of Berlin, I know.

24,713. The University of Berlin has now a great position; we may say a leading position?—Certainly. They have great professors; they attract the best professors in the whole of Germany, and that is exactly why they have the best position.

24,714. You say you do not wish the University to be a conglomerate of institutions, but at the same time you do not object to the constitution of Oxford and Cambridge, and that to some extent might be described as a conglomerate of institutions?—Yes, but not justly.

24,715. Well, there are 17 or more independent corporations all engaged more or less in competition with each other for students, and each having a partially independent organisation of teaching. That of course you are aware of?—I am perfectly aware of it.

24,716. But you do not object to that?—It is only satisfactory because a growth of centuries has made the whole life of the Colleges perfectly homogeneous. I would not think it at all possible to take three separate colleges, even in the same town, far less in three different towns, and make them into an University, and secure any homogeneity. Every college in Oxford respects the traditions of every other college to a certain extent.

24,717. Are you aware that the inter-collegiate system of lectures to which you have referred is a growth within the time which I have lived in Cambridge?—Perfectly.

24,718. Therefore in that sense it has not taken centuries to bring about the kind of combination which now exists?—So far as I know, there were always many cases of men going from one college to another. Each man was not from his matriculation tied to one college, and did not necessarily get a Fellowship at that college; so far as I know, there were always men of various colleges associating together, and there was always unity of tradition.

24,719. To go to the question of examinations. You said that in the carrying out of your idea, although the examinations in the main ought to be conducted by the teacher, still you would not object to an assessor? What function do you thinkan assessor ought to have? How far ought he exercise control over the questions set, or join in marking the answers?—I think none, perhaps, unless he saw an abuse which he would report. In many of our courts we have a member of the board sitting by. The member of the Board does not examine, he sits by and listens to the *vivâ voce*, and if he saw an abuse, he would report it; but I think it is more to satisfy the world generally than anything else.

24,720. Would he have a right to examine the marks that the examiner gave?—Certainly not to alter them,

24,721. So that practically you think the decision as to the merits of the candidate's work should rest with the man who has taught him?—Yes.

24,722. With regard to the students whom you call the examined students, I think according to the information we received from Dr. Ingram they are almost entirely students who do not compete for Honours?—Almost entirely.

24,723. It is a very rare thing indeed for them to compete for Honours, is it not?—I will make one exception: they compete for high places in the Little Go and the Degree: a high place in either is an eminent honour, and there are even now emoluments attached to it, but it is an examination in the pass business. It requires 80 or 90 per cent. in all the subjects to be first.

24,724. You say that they are a diminishing number. I was not quite sure whether you meant to imply by that that there are comparatively few students who do not, some time or other, in some part of their course, come into residence?—Yes.

24,725. If you take the course alone in Arts would you still say that the number was small?—It is still small. You know that they all have to pay tutorial fees, and therefore they pay an excessively high fee if they are merely examined.

24,726. How high is the fee?—They pay 16 guineas a year.

24,727. Merely for being examined?—Yes, because we want them to come and attend the lectures; they can come and attend two hours a day for that fee. Therefore they pay the money for value which they do not choose to take. It is a way of putting pressure upon them; and shows that it was a mere laxity originally, there being no separate arrangement for merely examining candidates. It was a thing gradually allowed; it was not in the system.

24,728. In speaking of the government of the University you mentioned the University Council. What is the exact relation of that University Council to the Governing Body in Dublin?—Some years ago there was considerable pressure because it was thought when we opened our Fellowships to Roman Catholics they nevertheless could not get upon the Governing Body for a great number of years because they had to get upon the Governing body by seniority, and there would be a lapse of 30 years before they could get upon the Governing Body. For this new Council the Junior Fellows elected four members, the Senate four, and so on; we took care to have a Roman Catholic or two in order that that interest should be represented. They have nothing to do but recommend to the Board in matters of education; they recommend in the cases of new professors, and the recommendation is pretty certain to be adopted by the Board, but the Board have power to reject it.

24,729. Still they are practically the body that elect?—They are indeed of late years, and I do not think that it is as good an electing body as the Board. I do not think it is an improvement.

24,730. Have the body of graduates no powers?—The doctors and masters meet in the Senate. They send four members to this council, and the Senate to veto all Degrees. They cannot originate any scheme, fortunately, but if the College proposes anything which they do not agree with, they can put a veto upon the degrees; it is the old constitution.

24,731. Do they interfere with the progress of the University very much?—No. They air themselves by making speeches.

24,732. As regards the Council what is the whole number?—It is 17.

24,733. Then the graduates select one-fourth of the council?—Yes.

24,734. And are they contented with that?—Yes, perfectly. And what is more, they often elect men from the smaller bodies.

24,735. Then with regard to the Faculties of Law and Medicine; are those regulated by the same council?—Certainly.

24,736. They have not a Board of Studies each for itself?—They have a committee of law professors, and they have a committee of medical professors, and they prepare or draw up suggestions or alterations which are referred to the Council and submitted to the Board.

24,737. Have this committee of law professors any administrative power, or can they only advise?—They could not change the hour of lectures, that is all fitted together. They lecture, they examine, and they report. Their report is a very important thing.

24,738. I suppose in the departments of Law and Medicine the students have all been through the course in arts, have they not?—They are all obliged to do so. There are certain reliefs after a certain standing. They are remitted a certain quantity, but we insist upon them all doing a certain quantity of Arts.

24,739. You think it of fundamental importance that they should all have gone through a course in Arts first?—I think it is most important. I think the medical practitioner in Ireland has had social conditions much better than the medical practitioner of England, by the fact that he could not get his M.D. or M.B. except through us, and we insist on his studying Arts.

24,740. Are you acquainted with the working of the German Universities now in that respect?—Not intimately.

24,741. But you are aware that the special studies commence now at the beginning of a student's work?—Yes, and I think it is much worse: they are ceasing to be University students; there are too many specialists. I do not call specialists University men. It is the very thing I want to amend.

24,742. Your University ideal is a standard by which the German Universities would be condemned?—Clearly; and anyone who has had much intercourse with German professors, who are great specialists, will see plainly what I mean.

24,743. Have you discussed the question with German professors?—I must say I have the opportunity of doing so, but I have not talked much about it.

24,744. It has been represented to me, when I have urged considerations of the kind you have urged, that, the growth of knowledge continually increasing, the amount that has to be studied in each department, if a man has to be really on a level with the problems of the day, and to deal with them in a thoroughly educated way, forces the specialisation on; they may regret the necessity for it, but they think it irresistible. You do not recognise that?—I will tell you why I do not. When you meet a really great man you know he is really well cultivated all round; it is the poor, narrow specialist who is not. Every really great man is cultivated.

24,745. In the German view, as you are no doubt aware, the general culture is to a certain extent secured by a careful school training, guaranteed by a leaving examination?—Quite so.

24,746. But you do not regard that as adequate; you think a general training ought to go beyond the school course?—It certainly is not adequate in this country.

24,747. Do you think it is desirable that it should be made so, that is, that the University should rather secure in its initial examination a sufficiently high standard of general culture so far as school training is concerned, and allow specialisation afterwards?—No, unless you have two systems. Looking to Ireland, I think that the young men in Ireland who are most changed from what they would otherwise have been, by University education, are the very idle and perhaps worthless sons of country squires who would have been for the rest of their lives merely what we call in Ireland "jackeens." The clever boy would educate himself whether you sent him to a University or not, but I think it is desirable that the leisured classes should send boys of perhaps small ability to come and live with men of learning and letters.

24,748. At any rate you think it fundamentally important to secure a certain modicum, a certain adequate amount of general culture in all students who belong to a University?—Yes, every student.

24,749. And on that ground you would keep the whole organisation of applied science away from the University?—Yes.

24,750. Because that has to be open to a class of students who cannot be expected to have attained

Rev. J. P. Mahaffy, D.D.

21 Mar. 1893.

the required standard of culture at the University?—Clearly.

24,751. (*Sir George Humphry.*) It is not a question whether there is to be a teaching University in London, that is already settled and decided, and our business is to provide in the best manner we can for such teaching University. The idea is undoubtedly that that teaching University should exercise a wide influence on the teaching of London. How do you think that is to be arranged. Have you any view with regard to that. How is it to be done?—I should have to know the existing teaching colleges much better than I know them to offer an opinion about that.

24,752. That leads to the idea that you would concede those existing colleges in London should be made use of by the University?—So far as they are consistent with complete unity (the unity which I hold to be a vital thing), yes; but if they in any way detract from the unity of the thing then I should have nothing to say to them.

24,753. We have to take them as existing, and I suppose the only way in which they could conduce to unity would be by some University superintendence over them. There are several very important teaching institutions in London, and is this new University to ignore all the work that is done, or to utilise it?—You can inform me of this: at present do not the students of all those colleges work for and get examined by the London University?

24,754. Certainly?—Therefore there is that unity of type as far as that examination goes, if you like to use that.

24,755. There would be the unity of the examination conducted by the University. That would not be necessarily by the teachers. In fact it would be impossible to have a unity of examination by teachers carried out in the way in which you have it in Dublin. All your students are congregated together in the one Trinity college, and your examiners are selected from that same Trinity College?—Yes.

24,756. In London there would be numerous colleges probably, and students coming from various teachers, and therefore it would be an impossibility for them all to be examined by their own teachers. All that we have to provide for?—Then we are drifting away completely from what Lord Reay began by saying: What did I think the ideal was?

24,757. But although you may have been asked what the ideal was we may not be drifting away from what is the necessity. Perhaps we cannot meet your ideal exactly. Here we are: we have to take the facts as they are, and we must make our own ideal a little square with the facts with which we have to deal?—I feel I can answer nothing on that question without knowing the number of the existing colleges and the work they do. Then I might perhaps be able to frame a scheme which would be something better than the University which exists.

24,758. You think it probable that your ideal University is not possible in London?—I do not say it is impossible, but it would require great endowments, and it would require to be lord and master of the situation.

24,759. And if we cannot attain to that ideal we must approach to something of the kind as nearly as possible?—That may be so; but if you consider all the existing colleges and existing interests, how to approach is of course a practical question which would require an immense quantity of special knowledge.

24,760. You mentioned that you thought the strength of crammers depended upon the impersonality of the examinations?—Yes.

24,761. The examinations not being conducted by the teachers?—Let me explain myself. If I have to examine, say, for the Civil Service Commission, I abandon my personality and I set questions which any fair person ought to have learned from any fair teacher.

24,762. That, I suppose, is the real principle in examining?—I think it is the honest thing to do.

24,763. For example, you set questions which should be taught?—Yes, but without any peculiar views.

24,764. The real point of a University is to ensure that its students are well instructed in the subject, not that they are especially instructed in the peculiar views of any individual teacher?—If the man is great enough, certainly the latter. I had much rather that a man knew Helmholtz's way of looking at his subjects than that he knew all the colourless text-books.

24,765. You would rather that he looked at that which is on the whole the recognized way; in fact, must come to that in examining: that the examiner must endeavour to ascertain whether a student has a good current knowledge of his subject. It is no ascertaining whether he has the views of any particular teachers, but whether he has a good current knowledge of the subject?—I only agree to that with many qualifications.

24,766. Therefore it does not require that the student should be taught by the teacher who is examining him; but that he should have a fair current knowledge of his subject?—It is not necessary in one sense, but it is necessary to my ideal of a University in another.

24,767. In anything like a University examining a considerable number of students and exercising a teaching influence over London, an ideal of that sort is scarcely practicable?—If it is an examining body, of course I have nothing to say about it.

24,768. (*Professor Sidgwick.*) With regard to the question as to the relation of teaching to the examinations and the deleterious effect of control, do you not think it varies very much with the nature of the subjects taught?—Yes.

24,769. As you say, it is comparatively innocuous in pure languages?—Certainly.

24,770. But it is very serious in philosophy and history?—Very.

24,771. There, especially, if the teaching is to be really effective and in harmony with the examinations it must be by a combination of the two in the same hands?—I think so certainly. Even in the very highest mathematics the first-rate mathematician coming in for our Fellowship, which is the hardest examination in mathematics, I believe, which is known, would require to know the attitude of our professor, the direction in which he lectured, and the way in which he looked at the problems. That would be so even in pure mathematics.

24,772. May we not say that the more elementary examinations may be with less disadvantage abandoned to the examining Board but in the advanced examination it is especially important that the teachers should have control?—Certainly.

24,773. (*Lord Reay.*) Your point is that in what you have called the impersonal examination it is an evil for the examiner, and a disadvantage for the student, that the personality of the teacher has to be absolutely set aside?—Yes.

24,774. That is the result of your experience?—Certainly.

24,775. Then I gather from your answers to Professor Sidgwick that you would pass all law students, medical students and science students through a certain course of classical education?—Yes.

24,776. That is what you really call unity. You want to secure the unity mainly through a course of classical education which all University students should have to go through?—And mathematics and physics.

24,777. You would add that?—Not science in the modern sense but mathematics and physics. We have a good rule, I think; the students learn up to plane trigonometry and mathematics: then they learn up to the elements of mechanics, optics, and elementary astronomy in applied physics; then we always insist upon a certain quantity of ethical philosophy.

24,778. How long does that course take, say, for a medical student?—For the first two years he has to attend in classics, languages, and mathematics: he is

then remitted languages, but the physics, astronomy, and ethics go on to the end.

24,779. And in the case of the law student?—The same.

24,780. Do you remit it in the case of law students?—Yes, on account of the law he has to attend.

24,781. Therefore neither a law student nor a medical student qualify for the degree of B.A.?—Yes; we allow them to go in, stating that they are law students, and dropping only one subject.

24,782. That differentiates them from the regular B.A. students?—Yes, it does; and I should add that there are certain alternatives allowed in the applied science for these people; that is to say, if they take up the botany and mineralogy they do not take up experimental science. There is a certain alternation allowed there, but they must all answer in astronomy and ethics.

24,783. And all answer up to a certain standard?—Yes.

24,784. You do not find that this lengthens the course unduly?—No.

24,785. You distinctly wish to have this preliminary course as you have it now?—Yes.

24,786. You do not want to make any further alteration or any further reduction in the subjects which law and medical students have to go through?—No, I am against it. I have colleagues who wish to get rid of Greek, and I have colleagues who wish to bring in modern languages, which are to a certain extent allowed in later courses in substitution of Greek and Latin. I like the one type.

24,787. That is what you understand by the unity of the system?—Yes.

24,788. And what you have called the unity of the system is even now more strictly maintained in France than it was some years ago, because the French have recently restored the one type of the Baccalaureat with a slight bifurcation, which is the avenue to all the Faculties?—I am glad to hear it.

24,789. That is in accordance with the view you have laid before the Commission?—I am glad to hear it.

Rev. J. P. Mahaffy, D.D.

21 Mar. 1893.

24,970. You are aware that in France it has been obtained through the secondary education system, as Professor Sidgwick said that in Germany that object is attained through the unity of secondary education, and then at the University specialisation sets in at once. But you would not begin the specialisation immediately at the University, and the two first years you would have a greater similarity of subjects pursued by all students?—Yes. I talk of the present condition of the schools. If you look at the age to which boys remain at Eton and Harrow you would think there ought to be ample time for a good examination to take place, and you might say a boy who left at 20 ought to be able to specialise, but, so far as I know the practical results, they are not fit to specialise then even though the age is advanced.

24,791. You would rather let the students begin at the University earlier and continue the general education than let them conclude it in secondary schools?—Yes.

24,792. Have you anything to add that we have omitted to ask you, or that suggests itself to you?—I desire to add as regards the question of utilising the existing Colleges in London, that I agree with the suggestion made by my friend Mr. Thistleton Dyer, who has communicated to me, that these several Colleges might be enstrusted with training students up to the B.A. degree, and received on this condition by the new teaching University, which could then supply higher teaching and special appliances for the degree of M.A., and the Doctor's degrees. My previous answers show what I should require from these Colleges in preparing and examining for the B.A. degree. Such general culture is quite consistent with special attention on the part of some superior students to special subjects won during their undergraduate course. But with this preliminary satisfied the new University might permit any amount of specialisation.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Sixty-fifth Day.

Wednesday, March 22nd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	Professor BURDON SANDERSON, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.	JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B. *Secretary.*

Sir GEORGE YOUNG, Bart., examined.

Sir G. Young Bart.

22 Mar. 1893.

24,793. (*Chairman.*) You take as the foundation of your evidence the paper which is now Appendix No. 17, containing the Answers to Objections which had been already made up to that date. When we last examined you you had answered up to No. 14. Perhaps it would be convenient if we were to take the matter up there?—The first part of my evidence will be a continuation of my comments upon the Objections, and additions to the statements contained in the Answers.

24,794. With regard to your answer to No. 15 the objection is:—"That no other institutions are included "beside University College, King's College, and the "Medical Schools," in the Gresham Charter. Will you give us your answer to that?—I will first read what is stated in the paper. "No others proved efficiency "before the Royal Commission, as was done with "great particularity by University College and King's "College, and as is officially established for the "Medical Schools by their recognition, in accordance

Sir G. Young, Bart.

22 Mar. 1893.

"with the regulations of the General Medical "Council, for the purposes of examinations for a "license by the authorised examining bodies. Other "institutions which can prove their efficiency will be "admissible under the Charter, and can appeal to "the Privy Council if unfairly refused. The con- "ditions of efficiency are those laid down in the "Charter of the Victoria University." Upon this answer I would venture to claim that it in fact remains unanswered; but general language, imputing inadequacy to the University, and narrowness, both to the views of the promoters, and to the provisions of the Charter, has been perhaps somewhat too freely employed. Now I think it is time that attention should be recalled to the real character and magnitude of the University founded by this Charter, which is said to be inadequate as a University for London, or indeed as a University in any respect. I may refer as specimens to one or two passages in the evidence; such as Question No. 3043, where one of the Commissioners refers to "evidence before us" (which I have not succeeded in indentifying) "that the teaching of science is very "inadequate and cannot be compared with academical "teaching in other places and countries." So again at Question No. 12,168, in Mr. Stuart's evidence; the witness says that the experience of University College and King's College "lies absolutely along the line of mere lecturing institutions." And again, there are similar passages in the evidence of Mr. Busk, Mr. Dickins, Professor Huxley, and Sir Henry Roscoe. Now for the facts. I wish to refer in the first place to an answer which I passed over on the previous occasion, No. 4 in this paper. "The University will "contain at starting upwards of 400 teachers, and "of students, perhaps a majority of the 4,000, who "are at present studying in its 12 colleges; and who "are paying at the rate of 70,000*l.* a year in fees." Secondly I wish to refer to the Answer to Objection No. 9. This refers to University College and King's College only. I will not read the whole answer, which is a long one, but I will make additions to some passages in it. With regard to the calculations as to the number of students: "it is estimated that one- "third are attending a regular course of study, extend- "ing over at least two, generally three or more annual "sessions of 33 weeks each. Of the other two-thirds "many attend a regular course for one year, and many "more special lectures for two or more years." I wish to say that these are not mere guesses; they are calculations carefully taken out by the secretaries to the colleges, and by myself with their assistance for the purpose of this paper. With regard to the endowments: I mentioned in my answer to Question No. 10,707 that we had, during the last 20 years, received something like 200,000*l.* at University College alone. I have now to add that we have since received 22,000*l.* more. That is to say 10,000*l.* from the Berridge Trustees, for a much needed expansion of the department of Hygiene, and quite recently (in fact I received the official offer only last night) 12,000*l.* Consols from the Trustees of Mr. Justice Quain's Fund for a professorship of comparative law. It is a matter of satisfaction to the Council that University College should have been selected by the Quain Trustees, Lord Selborne, Mr. Justice Chitty and Mr. Jevons of Liverpool, as a suitable institution in which to found the first endowed professorship which has been made generally available for the study of law in the Metropolis. With regard to the roll of students: I noticed the other day that when somebody said that it was unprecedented that one institution (Balliol College, Oxford) should at the same time have furnished five of Her Majesty's Judges, University College was found to be in the same honourable position. With regard to the Fifth Report of the Royal Commission, which was commonly called the Duke of Devonshire's Commission on Scientific Instruction in 1874: this we put in before the previous Commission; and the documents which contain the Reports of the Departmental Committees to the Education Office upon grants to University colleges in England are, I believe, before the Commissioners or I can put them in if necessary. I do not think it can be necessary to dilate further upon this subject. We proffered to the first Commission copies of our Calendars, Annual Reports and other documents, but were told not to expatiate, as it was admitted universally that University College and King's College were efficient for the purposes of a University. Accordingly in my answer (58) to that Commission, to which I take leave to refer, I gave a short summary of a large mass of information which had been collected for the purpose, which I will not repeat even in summary on the present occasion.

24,795. Do you wish to put any statement in as an appendix?—In regard to certain statements, containing mistakes of fact which affect the credit of University College, we have decided not to trouble the Commissioners with contradictions *vivâ voce*, the matters concerned not being such as materially to affect the conclusions now under consideration; but we request leave to hand in a paper of Corrections of Mistakes in Evidence affecting University College, and I ask that it may be printed as an appendix to my evidence. (*For this document, see Appendix No.* 52.)

24,796. You wish to call attention to the amount of graduation work now done by the Colleges of the Gresham University?—Merely to give scale. A graduation record I consider to be an imperfect test of our work. But I have to tender statistics for three years of a record of that sort, and for the purpose of appreciation I have made it out in the form of a comparison with the graduation record of the Victoria University. In taking an estimate of this return I wish to note first that more than half of the graduation work of the Victoria University is done at home, that is to say, under conditions, which, whether of lower or higher standard than those of the University of London are undoubtedly easier. And in the second place I have to notice that we have taken no credit for the large and increasing amount of work equal to graduation done by us, without degrees; or for the work in the preparation of students, a very distinguished class, who leave us for Oxford and Cambridge, which I believe is more the case at University College and King's College than in the Colleges of the Victoria University. In the result I submit that we can show that we do about half as much again of this graduation work as is done in the Victoria University; somewhat less in the Faculty of Arts; as much in the Faculty of Science, and a good deal more in medicine. The Gresham University figures together make a total of 167 bachelors' degrees on an average for three years in the University of London. This has been taken from the Appendix No. 18 which is now before the Commission. In the Victoria University it is necessary to particularise, because you cannot exactly add the figures of the Victoria University, which represent degrees, to the figures which were all I was able to obtain from the London University, which represent in each case the passing of a degree examination, but as I explained on a previous occasion, these examinations are a good deal split up. Therefore I have left their totals separate. The returns of entries for the University of London amount to 44 per annum, and the degrees conferred in the Victoria University itself to 51. I think, therefore, my conclusion that the results in the Gresham University would be half as much again to start with as in the Victoria University comes out about correct. I would ask to have that return printed as part of my evidence. (*For this document, see Appendix No.* 53.)

24,797. Then with regard to the number of professorial Chairs at University College and King's College, what do you say?—I have here a return that was made out for the purpose of our application to the Privy Council. The total number of professorial Chairs at University College was 45, and at King's College 56, making a grand total of 101. In the three colleges of the Victoria University there were 56. (*For this document, see Appendix No.* 54.) In both cases there are a large number of lecturers, assistant professors, and other teachers. If we assume, as I

think we may, that there is no great divergence in practice as to the degree of independence in work, and of eminence in reputation, upon which the title of professor has been conferred, it would seem to show that we are already a much larger University than the Victoria University is, and of course very much larger than it was when it consisted merely of Owens College, that is, when the charter was granted. It is noticeable that, the Victoria University consisting of three colleges, the teaching strength represented by their total figures is not on the same scale as that in the two general colleges of the Gresham University.

24,798. With regard to the charge of financial inadequacy which has been made against the University, you wish to add to the answer given by you to Question No. 10,682?—In the first place, as I am dealing with the subject of professors, I will tender another return, of Chairs and Studies endowed under trusts at University College, London. In this table I have not included prizes, scholarships, or grants from the general funds of the college to particular Chairs that may stand in need of aid. These are funds specially appropriated to particular studies by donors. The total will be found to amount for 17 Chairs to 3,552*l.* a year paid directly to professors, and something upwards of 5,000*l.* a year, if besides the salaries of professors we include the payments to student teachers, and for appliances, and laboratories, and otherwise. That is the total of special endowments to particular studies in University College, London. (*For this document, see Appendix No.* 55.)

24,799. It comes to 5,047*l.*?—Yes. In the next place, it is far more difficult, as I think has been observed by a Commissioner in the course of the inquiry, (17,828) to obtain an endowment for the maintenance and endowment of Chairs, than for building. Yet of the last 220,000*l.* which we have received at University College there has been carried about half to the direct endowment of teaching. In Appendix No. 25, Mr. Erichsen handed in a statement of the contribution of University College alone to the Gresham University. If with that we compare what was stated on behalf of Victoria University when their charter was granted in 1880, it will be found that our resources are very much superior. They represented in their petition that they had a site, buildings, and capital, worth 400,000*l.*; that they had special trusts, including professorships, studentships, scholarships, and prizes, with an income of 1,150*l.*; and that the total expenditure—that is to say the balance sheet—represented an amount of 21,000*l.* a year. When King's College and the other medical schools are added, it is evident that the statements and figures which I have given, and those which are printed in paragraphs 4 and 9 of the Answers to Objections, so far from being exaggerated, are, in truth, a minimum estimate. Therefore when I read, as I have read with some surprise in the course of the inquiry, suggestions that the Gresham University (for instance Question No. 18,033) "starting without funds could not carry out" something which is called "the grand system," I can only conclude that some artificial point of view is taken, as to what is to be included in reckoning the funds of the University. We propose ourselves to form the University, and to contribute the funds particulars of which are now before the Commission. The objection of some is rather the other way. I have heard language to the effect that it is the great wealth, the resources, the capabilities of the Gresham University that determine some to oppose it. There has been a fear, which I think is entirely without reason, that the Victoria University, for instance, with a population behind it, which, if it is less than that of London, amounts to something like two-thirds, and great wealth and liberality on the part of those who have supported it, would dwindle beside us. Such an objection I merely mention as assisting the present argument. I do not think there is anything in it considered as a substantive objection.

24,800. Then you wish to answer the question whether the charter ought now to be delayed until larger funds have been obtained. That would be partly answered by saying that there are funds enough already. But independently of that do you assign any reason for delay?—There is no doubt that we need more, and we are very much indebted to those who have put forward the great need of further endowment which exists in London. But as an argument for refusing or delaying this charter we must question its validity. I should be glad to be allowed in this respect to give a statement of personal experience. In 1878 I was chairman of a fund which was started at University College to celebrate the jubilee of the College. The committee of the fund was a joint Committee of the Council and of Professors, and, as chairman, in company with other members of the Committee, it was my duty to visit a number of the principal houses in the City and many of the City Companies. We raised about 18,000*l.*, chiefly from friends of the College, that is to say, from those upon whose liberality and interest in us we had been accustomed to rely; and as a result I told my colleagues that until the College formed part of a University I did not think it was wise that they should attempt to raise funds in this manner by a general appeal to the city public; the confusion which existed was so great that most of the time a busy man could spare to talk over a matter of the kind with a begging deputation that called upon him was taken up in explaining who we were, and how far we were not somebody else. As to the question whether we shall delay the charter until a very much larger Government grant is obtained: the Victoria University got 2,000*l.* a year from the Government years after their charter was granted; and the Colleges of the Victoria University, as the result of a movement started by other colleges, got their 4,700*l.* only in the year 1889, nine years after their charter. We have secured 3,400*l.* a year from the Government to begin with, to say nothing about the great assistance in starting King's College which was derived from its being built on Government land granted by the State. Let the University only come into existence, and we promise you that we will be bold beggars. The objection I think is partly due to a certain pre-occupation of mind with regard to the project of great State laboratories at South Kensington. It appears to be thought that we have done amiss in not making the movement conducive to this end; perhaps that some injury may be done to the prospect, if a teaching University is founded, and these laboratories are not first started. We desire to repudiate all feelings of hostility to any such project; we have the most sincere sympathy with it. In this connexion, since the matter has been the subject of inquiry, I desire to refer to the evidence before the Devonshire Commission (Report VIII., 1873), upon which this project of laboratories at South Kensington is in fact founded. I merely quote evidence which was quoted in the report, and to which therefore weight may be assumed to have been attached by the Commissioners. Lord Kelvin stated at question 10,696 "that "such laboratories should not be connected with the "University at all;" at 10,703 "that they should be "solely for research;" at 10,711 he said he thought that they should not even be in London at all; and at 10,712 that they should contain no provision for teaching. Then Sir William Frankland at 11,064 said these laboratories should be for non-teachers engaged in research; "a class which does not exist in Germany;" they may "at first" be in London. Mr. De la Rue in 13,063 said that they should be non-educational. Colonel Strange at 10,983 said:—"Education is "quite a distinct thing from national research. They "should be kept as distinct as possible; one great "evil now existing is the mixing of the two things." On the other hand, Professor Williamson, a witness from University College, at 12,696 was opposed to the separation of research from "the humbler work of teaching;" but I do not find that he was supported by other witnesses, and the report, while quoting the evidence of the other witnesses, gives no support to Professor Williamson's views. We have taken the

Sir G. Young, Bart.

22 Mar. 1893.

result of the inquiry which started this project as a distinct "hands off" to us, the teaching bodies. We have never interfered or opposed or shown any jealousy either corporate or individual towards the project. We think the matter therefore is not one which can fairly be brought forward now, to hinder the legitimate development of us, the teaching institutions. I am induced to mention this because in Mr. Huxley's evidence at question 13,628 he speaks of certain "corporate "jealousies of a very marked kind which in some "cases have threatened to interfere very seriously "with us" at South Kensington. I do not know for certain whether he refers to this matter, but if it is so, I can assure the Commission that he is mistaken.

24,801. May we pass now to the question whether one University would attract endowment better than two; will you tell us why you think that would not be the case?—In the first place the examining University, the present University of London, is, as is well known, self-supporting; and therefore there is no question of large endowments for its present work, nor, I suppose, of very large endowments for such developments of it as may be in contemplation. Considered as an examining University, a moderate fixed grant to enable them to pay for certain services which they seem to desire, such as, for instance, those of teachers as advisers on Boards of Studies, or I should rather say of Examinations, access to laboratories on a larger scale for examination purposes, and no doubt other similar matters, would seem to cover all that is required. With this, also, we have the most hearty sympathy, and we regret much the refusal of Government some years ago to listen to the claim of the University of London until the teaching University question was settled. It produced a certain bitterness of feeling against ourselves for which we were not responsible. But that the existence of an examining University doing Imperial work and called, however unfortunately, "University of London," will prevent the Gresham University from obtaining endowment is certainly not made out. Experience is the other way. No sooner had the Charter passed the Privy Council than we proceeded, in pursuance of a plan which had been already formed, to apply at the Mansion House for assistance in raising funds for endowments at the University. We met with no such difficulty as this; no suggestion was made that the University of London was in the way, and there was no confusion between us, so soon as our case was explained. Similarly when we got into correspondence with the Grand Committee of Gresham College no such objection was raised, and no difficulty found. It was quite understood that we were now for the first time coming before the public of London with a project for a local University which must be endowed, if at all, out of local London funds. In the same way no such difficulty has been encountered with the Berridge Trustees and the Quain Trustees. But before passing from the Gresham Grand Committee I should like to refer to my answer to Question 10,701. Your Lordship put the question that since the passing of their resolution in support of the Charter the Grand Committee had passed another resolution that they would rather work with the London University. The resolution, which I find in Dr. Crosby's evidence at Question 8456, was: "That "this Committee is prepared to support such an ex- "tension of the Gresham Charter as will insure the "adhesion of the University of London to such a "teaching University for London as may be esta- "blished." That resolution is one which, under the circumstances of the case, certainly we cannot find any fault with, and the point is, of course, one of the matters which this Commission will have to consider. I do not find that they have expressed any preference for working with the University of London rather than with the colleges. I notice that the witness himself thought the policy contemplated by the resolution impracticable. Then as to the London County Council, a debate took place there on the 24th February this year, from which it seems evidently desirable that we should get rid of the connexion with the Imperial work for which they will never give local money. Dr. Collins proposed that a representative of the University of London should be added to the Committee, which was then under contemplation, for advising the County Council in educational matters. The objection was raised by Mr. Webb, the secretary to the Committee which had prepared the report, that that would lead to a good deal of difficulty when a teaching University for London came to be founded, and in the end it was rejected. There is another point which I should like to bring out in this connexion. If a single University were founded, doing at the same time Imperial examining work and local teaching work, the money which would be attracted by such an institution might not come in where it is really most wanted, in support of the teaching. So far as the proposals of the University of London witnesses go, it appears that they contemplate endowment for purposes possibly desirable in themselves, but which are, principally, the following: in the first place, research; in the second place, post-graduate lectures on higher subjects than those useful for undergraduates; and in the third place, by way of subsidies to the most eminent professors, to induce them or to induce the institutions to which they belong to hand over the professorship to the University. What we want, I should say, first of all, is to fill up the gaps—to endow, perhaps it may be the less eminent teacners, at all events the less successful branches of our work, in order that they may be made more efficient, and so come to fulfil their functions better.

24,802. That is in the first instance. You do not object to the endowment for the higher branches afterwards?—So far from it, that I may mention with regard to the Quain fund which I said had been given to us within the last week by the Quain Trustees, it is our intention, under the special circumstances, to constitute something which may be considered as a higher or post-graduate course; and the scheme which was suggested for that purpose on behalf of the council to the trustees has been accepted by them. I have dealt with private and local endowment; but if the objection is that a single University would not attract endowment from the State more easily than two, really the facts are all the other way. Take for instance Ireland, where, although they had the Dublin University, they had the Queen's University endowed by the State, and afterwards the Royal University. Take Scotland; the movement for concentrating or amalgamating the smaller Universities in Scotland was an entire failure. In Wales, three University colleges have been endowed within the last few years. Then take the Victoria University, the grant to which I have mentioned, and lastly the 15,000*l.* for University colleges in England. There is certainly no puritanic reluctance on the part of Parliament in this country to subsidize more than one institution of the kind, or even more than one institution in one place. In short, I claim to have made out my case, that we have not gone the wrong way to work, in order to obtain endowment.

24,803. Then you wish to deal with evidence as to developements commenced or contemplated?—This is a question of money no doubt, but it may be proper that I should indicate our beginnings, to show our will. There is a School of Archæology at University College, as to which I think you have already had evidence (Question 10,944) of its connexion with the British Museum. I also wish to refer in connexion with this subject to my evidence before the previous Commission in the year 1888, which appears on page 178 in column B., and to the letter of Professor Poole in the Appendix (No. 11), which was written to the Commissioners at my request. Secondly, I wish to refer to the Indian School which was founded at University College at the time when the regulations for candidates for the Civil Service of India contemplated their spending two or three years in England in study before they left, after receiving their first appointment. We founded a school which was extremely successful in the competitions for prizes before the young men

went out to India. We have now developed that into the school of modern Oriental studies, which, as we say in our Answer 12 in the paper of Answers to Objections, we are conducting in conjunction with King's College, thereby giving an example of those inter-collegiate arrangements to which we have pointed as a direction in which we desire the University should move. Thirdly, I would point to the Day Training Colleges for elementary teachers which we have lately founded. With regard to the training of teachers for secondary schools, a subject which only recently has been mooted in this country, although something has been done in Scotland, it has been the subject of a good deal of consideration among ourselves, and I have had occasion in one published letter to point to the two great secondary schools at University College and King's College as suitable (being the property of institutions which it is intended should form part of the University) to serve the purpose of a school of training for secondary teachers. Then with regard to the School of Law, there is not much to be said beyond that we had in former days, before the Inns of Court did as much as they do now for the teaching of law, a successful school of law; and we hope to make it successful again, with such assistance as may be procured from endowments and otherwise. The evidence which has been taken before this Commission with regard to law I look upon as most fortunate in one respect, as showing how very much support there may be, when the time comes, for an academic movement, a movement for University education within the Inns of Court. But that the time has not yet come seems to me equally clear, from the great differences of opinion, even upon fundamental points, which at present exist, and which have not been fully discussed. A certain change in the form of the clause of the charter to which I referred in my evidence (10,880), will be suggested in due course. Next, with regard to the Faculty of Theology; it is very interesting to us to see the Convocation of the University of London and others taking up this matter, which we have been considering since the year 1885, when conferences were held of the Association for promoting a Teaching University in London, at which the plan was laid down upon which we proposed to move. These conferences have been revived since the charter passed the Privy Council, and have produced some fruit in evidence before this Commission. I desire to call attention to the grievance of Nonconformists which was first brought to my notice by the late Dr. Allon, who asked me when trying to enlist his interest in the formation of a teaching University for London, whether I did not think it a legitimate grievance on the part of Nonconformists that their ministers should be compelled to leave their country in order to obtain degrees in Divinity, either in Scotland or abroad. The authorities of the Victoria University have, as I understand, declined to move in this direction (compare 17,866), and therefore unless the new University for Wales should do so, the Gresham University appears to be the sole remaining chance. With regard to mere projects I will not trouble the Commission at length. They will, of course, have taken notice of Mr. Erichsen's idea of a Hospital Federation; there is also the suggestion of an *École des Chartes*, which has been started, in connection with the Record Office, and suggestions for other higher schools; these I merely mention in order to show that we are not indifferent to such things; and I would add on this head a plea for the speedy release of our energies from present distractions. If we are to do our best for these objects in the great institutions which we administer, and to find endowments, funds and resources for carrying them out, it would certainly be useful that this University question should be first speedily settled.

24,804. Then you wish to reply to the charge of "narrowness" made against the promoters of the Charter, their view and proposals?—That has been made in the form of a constant repetition of the demand for a "wider basis," and sometimes also in rather sharp comments upon supposed motives of a lower sort which have been ascribed personally to the promoters. I am not going to turn aside to deal with mere ungracious language; but I have to urge that the measure of success—may I not say the success—which thus far has attended us has been to some extent a *primâ facie* proof of moderation and the reverse of narrowness in our conduct of the movement. Granted that an outcry was raised of sufficient volume to render this inquiry proper; by this time I think it must be evident that many of the objections most loudly proclaimed were founded on misconception, and we hope to show that the rest were so also, or at all events that they may be easily met. The difficulties we have already overcome were not inconsiderable; and some of those who are now trying, either to destroy what has been done, or to substitute something else, have been the loudest in former years in proclaiming that what we have done never could be done. There is no wonder that, when we succeeded last year, some surprise was felt; and it is the part of reasonable people to patiently meet and answer whatever objections may be raised. This particular objection of narrowness in our views I desire to deal with somewhat more at length, by pointing out the real liberality of our proposals.

Sir G. Young, Bart.

22 Mar. 1893.

24,805. Then you wish to call attention to the significance of the existing alliance between University College and King's College. Have they always been on good terms since they started?—There has been in past years no communication between them. There has been no quarrel, but at the same time a complete separation existed between the two institutions from the first. Whether under those circumstances jealousies existed is a matter which I could hardly answer, but I do not think there was ever any hostility.

24,806. They were started on opposite principles, but in spite of that there has never been any open hostility?—There has never been any hostility or actual fighting so far as my experience goes, which means over rather more than 20 years.

24,807. In this matter there has been a close alliance between them?—Yes, and this alliance has now lasted six years, and has stood the test of working out a charter in detail, in the course of which we have had to deal with a great many delicate questions. The same test has reduced the Association for Promoting a Professorial University almost to its component elements, and has resulted, in the case of the University of London, in the vague proposals which I shall notice hereafter. Our University, be it remarked, is strictly undenominational; that is to say, the principle of University College and not that of King's College has been accepted. I think I may say that the only point which has been found for criticism in our plan, and which is connected with the alliance between University College and King's College and with the circumstances to which your Lordship referred, of our having been founded in one important respect on different and opposite principles, is that which I referred to on a previous occasion; the absence of teachers holding University office as professors. I should wish to add something to my evidence upon this point. Those who are unfriendly to King's College have been reinforced upon this point by, in the first place, witnesses on behalf of the University of London—Londoners—who wish to expand that University into a third teaching institution in London, with a certain prerogative position and certain exclusive privileges. Secondly, by members of the Association for Promoting a Professorial University, who want to arrange the teaching staff on the German plan with one head professor in each subject, to be called a University professor. All these three reasons for urging forward this objection go further, much further, clearly, than the objection itself, and I submit that the three proposals must be separately considered, each on its own merits; but apart from the exclusion of King's College from the University, which some advocate, apart from setting

Sir G. Young, Bart.

22 Mar. 1893.

up a Burlington House College, which others seem to wish, and apart from the German organisation of teaching, the question is, as Dr. Collins (a hostile witness) frankly admits (1420), "largely a question of name." I have not been able to find that any real harm is likely to be done by the provision for the status of professors as we have arranged it. It is said that eminent men will not take the Chairs. Well, the existing state of things is a sufficient answer to that. Sir Henry Roscoe, also a hostile witness, at Question 17,843, says, "most of the pro- "fessors in these colleges are men of eminence in their "subjects." Professor Nettleship, who upon this point has submitted an important paper, though one which I think does not make for the conclusions which he seems to draw, actually signs himself by the somewhat barbarous title, "*Corpus* Professor of the Latin "Language and Literature in the University of Ox- "ford." Sir Frederick Pollock, Mr. Max Müller, and other eminent men hold the same position. It is clear that a question of name of this kind may be put on one side. But when we come to the reality of the matter, the substance of the question, I do not think I can put the case more clearly before the Commission than by reference to the letter of Professor Nettleship, which is printed in Appendix 58, Paper No. 3, paragraph 10. He is speaking of the formation of a University Professoriate outside of the colleges and medical schools, and he says:—"In answer to this I would ob- "serve that (from what I have seen of the working of "the college system at Oxford) it would, in my opinion, "be a grave mistake to establish a University in Lon- "don on the double basis of collegiate and professorial "instruction. The double system involves needless "complexity in the educational arrangement, and is "almost certain to involve waste of money, especially "when each college aims at securing for itself the "position of a small University. A college will "naturally desire to keep the teaching of their own "students in their own hands, and will probably suc- "ceed in doing so to a great extent. Thus the Uni- "versity professors will find, as they do at Oxford, "that they have very little teaching work to do, and "will, through lack of interest, be tempted to evade "the performance even of that little." This weighty argument—a weapon with the back of which the professor is trying to cut us down, without perceiving what gashes he inflicts upon himself—seems to me to state the case much as we should wish to state it. If the plans of some of our friends for sweeping away all institutions which exist were carried out, no doubt we could start one professoriate, and have, as one might call it, a "University" professoriate, but matters being as they are, to found a third professoriate, a University professoriate over the heads of University College and King's College, is to introduce the evil, which is generally deprecated by the leaders of opinion and the ablest administrators at Oxford and Cambridge. I wrote to Professor Nettleship putting this matter before him, and asking him the question, "Is your objection one to "having two sorts of professors in the first place, and "only in the second place to there not being a pro- "fessoriate called a University professoriate?" His answer is:—"Your letter quite accurately represents "my views. It is my experience of the lamentable "waste of money and force which is entailed by "the Oxford system, in which a vain attempt is "made to combine the tutorial work with the professo- "riate system, that has long weighed on my mind." With regard to the "collegiate" and "tutorial" system which Professor Nettleship appears to be comparing with ours, of course I need not repeat, except in order to avoid misunderstanding, that we could not accept that as a description of our system. Our system is professorial and of a University character. The point was put to me in my previous examination (10,794) whether an exit might not be found from the difficulty by giving the University power to confer personally on particular Professors the title of "University Professors;" and whether this might not without danger be extended to some of the University Lecturers we contemplate. To that I replied, and should still be disposed to reply, that mere questions of title I am always disposed to concede, but on perusal of the evidence I feel sure that no opponent who has raised this difficulty will be conciliated by any such compromise. Against it the sowing of jealousies, I do not mean so much between professor and professor as between institution and institution, certainly appears to me to be a stronger objection that it did at first. The danger of its developing into two sorts of professors (the objection which Professor Nettleship has urged, as I have already mentioned), I have tried to guard against by drafting amendments to the charter by way of safeguards; but I cannot say they satisfy myself, and they would certainly spoil the appearance of the charter. I believe you will find that you have two courses only open to you in this respect; one to sweep away everything and to create a University Professoriate out of nothing, and the other to let well alone, as we did.

24,808. You perfectly agree with Professor Nettleship that two sorts of professors are objectionable?—Yes, most certainly.

24,809. But he wishes for one sort and you wish for the other?—Yes; subject to the necessary correction of our language on both sides in order to bring us into close relations, because I am using the language familiar to myself and he is using what I may call perhaps Oxonian language. I think the constitution of two sorts of professors, one a University sort and the other a sort which will be connected with the colleges, though I should not call them collegiate or tutorial, will have the evil effect to which he points in this respect. The professors in colleges will be in close touch with the students or the greater part of them, and the University professors, of course, whether they are to give post-graduate teaching (if that is the plan) or not, will be more or less removed from the students. In connection with the criticism which I propose to offer upon Sir Henry Roscoe's scheme I shall have subsequently to point out some further developments of this argument.

24,810. It has been alleged that this University would be federal. I suppose it will. Will it not?—It will.

24,811. You do not see any objection to that?—The federal character of the University has been made a subject of objection. The word as I used it in 1888 was intended by me to distinguish roughly between a University of the Victoria type scattered over various centres of population, and a local University like those of Oxford, Cambridge, or the Gresham University. I have no objection to people calling the Gresham University a federal University, but let us see how far it is of a federal nature. There are several types of federal University. There is the Victoria type in which the colleges teach, the University examines, and the necessary condition in a teaching University, that the examinations shall follow the teaching, is secured by the supremacy, the exclusive presence, of college professors and administrators on the governing body of the University. The weakness in this system is, that it tends towards the system of an examining University, owing to the fact that the professors cannot conveniently meet constantly and conduct their affairs as one body. Professor Thorpe, in an important conference which we held last December at University College with representatives of the Association for promoting a Professorial University, told us that that weakness had already become evident; that there was a danger of the examinations beginning to fetter the teaching in the colleges of the Victoria University, in the same way that the examinations of the University of London are found to fetter teaching in University colleges generally. Similarly I have seen somewhere a report of a speech by Sir Henry Roscoe, in which he pointed, as a probable development, to the separation of the Victoria University into three Universities, consisting of the three colleges each in its own separate place. A second type of federal University is that which has been worked out by the committee which

met lately at Shrewsbury to settle a plan for the University for Wales, for which a petition for a Charter is shortly to be presented. There they have proposed a plan of which the salient points are that, although due diligence is to be used to maintain an equal standard of tuition in all cases as a condition for degrees, it shall not be required that the plans of study approved by the University for any degree shall be the same for all the colleges. Each constituent college is to be entitled to propose plans of study and examination for its own students, as qualifications for the several degrees of the University; and the senate, that is the general body of the professors, may not amend any proposal made by a constituent college. This almost necessitates separate examinations in each college, especially since every examination is to be conducted "in the town in which the college is situated." I do not think it would be going too far to call this a plan for three Universities under one governing body; and I do not do so by any means as censuring it on that ground. It may be the best form that can be found for associating colleges in different towns. On our side we have adopted a different constitution; and I think the University that we contemplate will have a certain recommendation arising from its federal character in so far as it is federal, that is to say, from the variety which will exist, from a certain richness of constitution, to which those indeed may object who desire to reduce everything to its simplest form, but which, I believe, in framing a scheme for an institution with so many bearings upon human life as a University must have, is in itself the reverse of objectionable. For instance, it cannot but be evident, I think, from the evidence, that my friend Dr. Wace entertains views of University life and discipline among undergraduates of what I may call a somewhat more collegiate sort than those entertained at University College. At University College our idea has been more closely approximating to that of the Scottish or German Universities. There are, however, no disadvantages in having different ideas, different plans, and different views in this respect with in the same University.

24,812. At the same time you give power to the central authority to regulate the courses of study in a greater degree than in the last case you mentioned? —We give the entire power to regulate the courses of study for degrees to the central body. Again, there is another element of richness and variety in the University which I commend to the consideration of the Commission. It is that some of the institutions included are formed upon the principle of combination between different Faculties. Others, again, are special institutions dealing only with a single study. Both have their recommendations, and that both should exist in the University I regard as an advantage.

24,813. Then you think that though the University may be called a federal University it is not so federal as many others?—That is so, and with regard to that I would refer to some points that have been already mentioned in answer to the Association for the promotion of a Professorial University. In the first place, general confirmation has been given in our evidence to the soundness of our view, or rather I should say to the care with which we have studied the matter and utilized the experience of other Universities, in respect of, in the first place, government by a single governing body, consisting largely but not exclusively of those actually engaged in teaching, and advised by consultative boards, or a single board, composed practically of such teachers. In the second place, in reposing the governing powers ultimately in this governing body alone, and giving no ultimate powers adversely to it to the consultative board. I am not sure that I altogether understood the questions which were put to me by Professor Ramsay on the previous occasion on this point, but I believe we agree. At Question 9917 I notice that Professor Ramsay qualifies the powers which he claims for the Senatus of the University by the clause "subject of course to review as in Scotland" by the governing body. That is very much what we have proposed, with the exception of a point which was raised by Professor Sidgwick, namely, that there is no express mention of delegation in the charter. My own view has been that it is not necessary to mention a power of delegation for administrative affairs, but, as Sir Frederick Pollock said in his evidence, there is no objection to its being inserted in the charter. In working out this constitution we deliberately adopted, for good reason shown, one governing body and not two chambers. I desire to lay some stress upon this. I have already said that it is a conceivable constitution to work with two chambers. In fact in many cases it has been found necessary to adopt them, but surely it is a sign of weakness. The right course is to frame the best governing body you can, and give it full powers, and then to have consultative boards, one for each Faculty, not one *Senatus Academicus*. Upon this third head I notice that there is a good deal of difference of opinion. I urge it, not that I wish in any sense to claim that the matter is or ought to be obvious, but as the result of some experience of what we have to deal with here in London. I have mentioned one reason in my answer to Question No. 10,730, which I need not repeat, as to the greater numbers of the Medical Faculty; but I would add further my personal experience for five years as president of the senate, that is to say, the general assembly of professors of University College. It appeared to me that a great deal of time was wasted by the professors in attending meetings of the Senate in which they took no interest, because the business in hand was not in any way concerned with studies with which they were acquainted. It appeared also that the opinion of the body, as expressed by the vote, was ascertained with less authority, and was therefore less useful to the Council of the College, than the opinions expressed by the Faculty Boards separately. In fact for practical purposes the senate was broken up into Faculties, and I do not think that very much utility could be alleged as compensating for the loss of time in causing the representations from the Faculties to pass through the *Senatus*. I notice in Sir Henry Roscoe's evidence at Question No. 17,855, that the Victoria University have been obliged to split up their *Senatus* already by Faculties. It will be observed of course that the consultative bodies in the Gresham University are called Boards of Studies, not Faculties, or Assemblies of Faculties, the phrase which we adopted for the general bodies of teachers to avoid confusion between Faculties in the abstract and Faculties meaning bodies of persons. These Boards of Studies are to report to the Council and their position as advisers is recognised by the charter. There is a provision for their consulting together upon any subjects upon which it is necessary that professors in two or more Faculties should come into contact with each other. I do not think it would be well, and I do not see that it has been urged, but I mention it in order to guard against mistake, that delegation should be prescribed by the charter, that the Council should be directed to delegate or rather that the charter itself should delegate functions to the Boards of Studies as distinct from the Council. It should be quite enough, I think, to allow the Council to do that which the Council will for its own sake take the first opportunity of doing, that is to say, to mark out the functions of the Boards of Studies upon which they are expected to advise. Anything which reduces the power of the Council to a mere veto is, in my opinion, bad.

24,814. You think it leads to confusion. I think there is evidence of that in some other Universities? —That is so. And I think I would say as a scheme-maker, which is the official work in which I have been engaged for 10 years, all vetoes are bad. The body which has the responsibility should have the power and duty of carrying out its own policy, and to allow one body to veto a scheme worked out by another, and send it back to be altered or dropped is not the way to produce efficiency in administration. I wish to refer, in the fourth place, to the evidence I gave at Question No. 10,731, and to

Sir G. Young, Bart

22 Mar. 1893.

Answer 12 upon the paper of Answers to Objections, as to the arrangements by which teachers enter the Assembly of the Faculty and appoint members of the Council and Boards of Studies, not by colleges but by Faculties. I submit that this is a very important matter; that it in fact constitutes the main difference between a federal University, such as we have framed, and a federal University in the sense in which the word has been employed by critics of the Charter who are opposing it. For instance, Mr. Dickins in his answer to Question No. 2352, actually denies the fact that we have made this provision, and represents the charter as making the directly oppoiste provision. I wish upon that to observe, with regard to the Association for promoting a Professorial University, in more than one instance, I am able to say from personal knowledge, adherents were obtained to the Association by this mistake as to the construction of the Charter, by the strong assertion in the papers which were put out by the promoters of that Association, that we had made a different arrangement on this head. Some of those have since left the Association upon the explanation which I was able to afford, that in this respect we had made one body of the professors in each Faculty. I notice, fifthly, the broad basis of the Faculty. I think this is right, although I am aware that different opinions are entertained upon it; and I notice that one for whose opinion I have so much respect as Mr. Erichsen has said that in the Faculty of Medicine he thinks it is a defect in the Charter that all the teachers in the Medical Schools should be admitted to the Assembly of the Faculty. I believe it to be right, because I think an immense amount of energy is secured for the institution if every teacher--I do not mean as a mere assistant, but from the time that he is given independent work to do—is made to feel that he is himself a part of the University, in the sense of having a share in its government, although it may be only that of taking part in the election of members of the Boards of Studies, or upon the Council. In the Medical Faculty I think that would be particularly useful, and I would urge that if the Commissioners should think the constitution of the Board of Study, the real consultative body, is defective, the proper remedy is not to cut down the Assembly of the Faculty, but to introduce possibly some securities for greater continuity upon the Board of Study, such as giving the Council of the University power to add nominees, within limits. It has already power to add examiners. The last point, and perhaps the most important of all, which I will recall in this connection as showing the width of constitution which we have adopted in this University, and the degree to which, although federal, it is a unified University (10,732 and 10,758) is that the key of the Assembly of the Faculty is given, not to the Councils of the colleges but to the Council of the University. The reverse is the case in the Victoria University. There it is the colleges and not the University that admit to the Faculty. When we were before the Privy Council, and when Sir John Rigby in the course of his speech came to this point, Lord Selborne expressed surprise and asked him whether he had heard aright; and he seemed to be struck with the liberality of the arrangement. I venture fearlessly to say that there is nothing in these arrangements, which I have selected for the purpose of illustrating the working of the University, which can justly be taxed with narrowness.

24,815. Then will you state the principles you followed in arranging the composition of the governing body?—The first principle we followed was to have a stable equilibrium and not an unstable one. By an unstable equilibrium, I mean where equal representation is given to two interests which may be probably antagonistic, and it is left to the odd man to decide which shall prevail. But where you have, as we shall have, different, and especially cross lines of division, you may establish a stable equilibrium. You may by giving to no single interest or probable combination an absolute majority, and by ensuring sufficient variety, provide a jury in each case who can throw a deciding vote. The symmetry of the Council, as we arranged it, was rather spoilt by the Privy Council giving ten medical schools one representative each, who will, most of them, be teachers of medicine. The dividing line between medical and other teachers is, however, as sharp as any, and there are dividing lines between one class and another class of medical teachers, between Medical Schools which are efficient and non-efficient in science, for instance, which will render the Council workable upon the principle of a stable equilibrium. I do not think it is for us to propose an amendment to reduce a representation which the Privy Council has enlarged in spite of our opposition, but I shall have to suggest an amendment to the Charter for a qualification of that representation.

24,816. Which we shall come to in its place?—If you please. The second principle which we followed in settling the composition of the Council was to give to the more important elements the minimum representation necessary, not for influence, but for information, and then work out the rest. Thus we gave three members each to the Councils of University College and King's College; not that we want to cast a vote of three, which in fact would have been a small vote in a Council, as we planned it, of over 30, but because we considered that without three members we could not represent to the Council of the University all the matters which it was important that it should know with regard to our work in the college. Again, we gave four each to the Assemblies of the Faculties; and it is the general opinion among us that they cannot do with less. The bodies with rights to admit to practise in law and physic are not included, but that was not our fault. In this connexion I desire to recognise with pleasure the more friendly tone of Sir Andrew Clark's evidence (7097); and I perceive that he now acknowledges what I think there was some reluctance on the part of the Royal College of Physicians and the Royal College of Surgeons to acknowledge at the time we were before the Privy Council, that we had had regard, in drafting the Charter, to the position which those colleges are entitled to hold in regard to medicine.

I should be glad to be allowed to compare our claims as Councils of the colleges with those which have been urged by other bodies. For instance, the Royal Colleges in their ultimatum, which was presented to us when we were before the Privy Council, signed W. S. Savory, claimed that so far as medicine was concerned, they should have the whole of the governing body. The University of London claimed 36 members out of the Council to start with. Convocation in their last scheme have increased their demand since 1885 from 9 to 12 representatives. University College claimed three at the beginning and has claimed three throughout.

24,817. Then with regard to the question whether they should be re-arranged according to Faculties for the purposes of representation on the governing body, they are partly already represented by Faculties, are they not?—Not the councils of the colleges.

24,818. But the colleges themselves?—Yes. It appears to me that the object of representing the Councils, is to have an element on the governing body of the University which officially would regard the interests of University education as a whole.

24,819. And is there a suggestion that the Councils themselves shall be represented according to Faculties?—That was made in a question of Mr. Anstie's (8878).

24,820. You think it is better that they should be represented straight?—Yes. I do not see how we could possibly distribute our councils by Faculties. They do not consist, except in part, of specialists; but rather of administrators, trained or being trained. With regard to the permanent representation of the Council, I am not going to take up time by arguing that University College should be permitted to continue to exist. It is the greatest educational institution in London. We have been accustomed to consider it the most important educating foundation of the century in England. I think that reformers

who try to clear the ground in order that they may build up something fresh, belong to a class which may certainly be distinguished from that to which it is our ambition to belong. It is an old saying that some reformers work with their hands, and others with their elbows. We have always been desirous of belonging to the class who work with hands, that is to say, we would utilise and make the best of what exists, and only in such a way, we think, can sound reforms be carried out.

Let it be remembered in favour of the Councils of these colleges, that it was left to us, without any aid from the University of London, to maintain academic principle against the petition of the Royal Colleges for a single-facultied, professional-governed University in Medicine. The University of London, by the Vice-Chancellor's casting vote, Mr. Huxley being the principal mover, carried a resolution which was thought a very surprising one by the Royal Commission of 1888, that they would not oppose the petition of the Royal Colleges for a separate University in Medicine under their control. And yet, notwithstanding this, which brought us in a manner not welcome to us into rather sharp antagonism with the medical profession, we have succeeded in bringing into this University all the Medical Schools, and they have been, with one single exception, that of the small Medical School of Westminster Hospital, working with us most heartily in the promotion of the charter.

24,821. Complaints have been made by some people that the Gresham University will be merely another examining body?—To that the answer has been already indicated, namely, the organisation of teaching which we propose, which occupies three chapters of the Charter. By organisation of teaching we do not merely mean the destruction of competition. Competition is not in all respects a bad thing, either in regard to laboratories or in regard to professors. In regard to this question of laboratories I have looked through the evidence to see what is alleged in support of the statement which surprised me very much, that we have already carried too far the competition in furnishing laboratories, that is to say, at King's College, University College, and other places of education in London. I have found nothing except in Professor Ayrton's evidence (17,759), and that I think has been sufficiently dealt with perhaps in his examination It is evident that the institution which he represented, the City and Guilds Institute at South Kensington, is full, with 92 students in electricity. That there are only 92 students in electricity in London is obviously untrue. Where are they to go? Mr. Watney admits that we are in no sense competing with each other; that there is room for, and in fact a necessity for, more laboratories; and there is a further important point, that there are limits to the numbers within which one professor might beneficially undertake, not merely to teach but to superintend, in laboratory work. It has been placed at 50, some think 70, and others think they can do with as many as 120, but you very soon reach the limit. The plan of arranging a system for higher work to be done in some places and lower work in others will stand or fall on its merits, and Professor William Ramsay will have something to say after me on that head But to limit the laboratories to one in each subject is out of the question. I might add one remark to conclude that subject. The temptation to build laboratories by way of competition of one institution against another is not what is supposed by Professor Pearson and others. They are very expensive and they do not pay. No doubt for the credit of an institution it must have an efficient laboratory in physics, biology, and so on, but the idea that we should go on building laboratories and fitting them up merely in order to decoy students from other institutions (each student costing more than he is worth to us in fees), is certainly rather chimerical.

With regard to the organisation of teaching between professors, the sort of objection that is made to the present system is like that of Sir Henry Roscoe at 17,834: — "The force and energy of the teacher "measured in a pecuniary way is to a great extent "wasted." We have not found it so in the past. In the future, by bringing together professors on Boards of Studies we enable them to suggest arrangements which it will be for their joint interest to make, and if they quarrel the Council will decide, not the colleges. If it is desired to destroy competition between teachers in order to increase their remuneration, we have to say that we do not find that the low rate of pay, which we lament, of many professors in London, is due to competition between University College and King's College. We draw from different classes and different connections, and the larger portion of those who come to University College would under no circumstances go to King's College, and *vice-versâ*. No scheme that I have seen succeeds in preventing competition between teachers except one, and that is a proposal that all payment by fees shall be abolished, that every professor shall be paid by a salary to be estimated by the University according to what is supposed to be the value of his work. How that is to be carried out it passes my mind to conceive. It would extinguish a good deal more than mere competition; it would extinguish all motives of the ordinary kind for doing hard work, and I believe the combined system which we are endeavouring to establish, by which each professor receives a limited salary and is able to supplement it by the success of his teaching through fees, is upon the whole, the best. It is that which, in the somewhat different sphere of secondary schools, is adopted by the Commission where I do my work, and which we have found successful. A regulated competition, not between professor and professor but between staff and staff, with governing bodies over them to see that it is not carried to extremes, is perhaps as near arriving at the good without the evil of competition as you can get. Opponents seem to me further to ignore the degree to which *Lern-freiheit*, as it is called, exists already. Students enter at University College in one subject and at King's College in another subject at the present day, without anybody interfering with them or asking them why they do so. There is a limit to this of course. Roaming about London from one place to another cannot be carried far without great waste of time and energy, but it is impossible to limit these things by charter.

In regard to the control of the University over colleges the language of the charter (chapter 25) has been found fault with because it is merely negative. I have explained the reason why clauses are couched in a negative form in the charter, but there is certainly no objection to turning it into an affirmative clause. We say: "A college in the University shall not in any "way be under the jurisdiction or control of the "Council except as regards the regulations for the "duration and nature of the studies to be required of "the students of the college as a qualification for "University degrees or distinctions." There can be no conceivable objection to say that the University and not the colleges shall regulate the studies for a degree.

24,822. You think the objection is to the way in which it is put?—I think the objection has arisen from somewhat casually reading the chapter, and not inquiring what the meaning of the charter or the purport of it is, as a whole.

24,823. Of course it cuts out all power of the University with regard to the appointment of the different professors except indirectly by refusing to admit them to the Faculty?—That is so; but though indirect, I maintain that it is sufficient for the purposes of the University.

24,824. You think that if it had been put the other way that the University should have complete control of the regulation, duration, and nature of the studies of the colleges, it would not have been objected to?—It is possible. Certainly we should have no objection to that alteration being now made.

24,825. Then you wish to go back to the question of the narrow basis. You have a further answer to the objection which has been made with regard to that?—In regard to the teaching institutions not included in the University the objection of narrowness

Sir G. Young, Bart.

22 Mar. 1893.

as urged by the other teaching institutions which have not proved efficiency, and which took no interest in the matter until we had passed the Privy Council, is one which I think must now be noticed. But before proceeding to consider that in detail I should like to say this; we did no doubt mean to interpose a check to the dissipation of energy which is due to the present system of University education in London; we are prepared to defend the exaction of a very high standard of efficiency in the colleges which are to be admitted to the University; we are not prepared to allow that it would be a good thing that University colleges should be established, one in every suburb of London. We do not think that the principle of taking University teaching into every street, or into every suburb, is the right one; but when you come to teaching of this class, teaching depending so largely as it does upon appliances and plant, it is rather for the student to come to the teacher than for the teacher to go to the student. We do not want to carry that out with logical severity into every province, and with regard to every lecture given by a University lecturer or professor, but in the main we are prepared to uphold that position.

24,826. I see that lower down you go into it at considerable length with regard to different institutions?—Yes, I shall come to it again, and I shall desire shortly to state some points I have collected upon each case.

24,827. Then with regard to the conditions of efficiency as laid down in the Charter?—I notice that we have followed in substance the conditions of the Victoria University Charter. In the Victoria Charter the conditions are as follows: "The college has esta- "blished a reasonably complete curriculum, and possess "a reasonably sufficient teaching staff (in Arts and "Sciences at least). Secondly, the means and ap- "pliances for teaching established on a sound basis. "Thirdly, the college is under the independent control "of its own governing body." We have recast that in this form: The college to be established on a basis justifying the expectation of its permanent existence, and under the independent control of its own governing body. Secondly, the college possesses a sufficient staff, building, and appliances; with adequate arrangements for teaching and study (in the Faculty or Faculties in respect of which it seeks admission).

24,828. You have to relax that a little in regard to the medical colleges, have you not?—Yes; in regard to the medical colleges we have to relax that with regard to the control of the governing body, because, technically, they are under the control of the hospital committees. We thought ourselves able to do that because substantially and for all practical purposes there is no doubt that, educationally speaking, the Medical Schools are under the control of their own governing body, that is to say, of the teaching staff, and it is the teaching staff, not the committee, which will be represented in the Council of the University. We have so drafted the charter as to make room in that respect for other cases of the same kind. I shall have to notice one hereafter. We follow the Victoria Charter in requiring permanence, but we improve the definition: we follow the Victoria Charter in requiring autonomy; we follow the Victoria Charter in requiring efficiency; we follow the Victoria Charter in not specifically requiring a certain minimum amount of endowment; and we vary from it in not requiring arts and sciences in all the colleges. It is not our narrowness here but our liberality which is objected to. I shall come to that objection when I deal with the case of the Victoria University.

24,829. That finishes the answers to Objection No. 15. We now go to 16, which is this: That the prayer of University College and King's College for incorporation as a University was "rejected" by the Royal Commissioners, and that by the charter, substantially granting this prayer, an essential recommendation of the Commissioners, that namely in favour (paragraph 12) of co-ordinating under a University a variety of institutions "purporting to give teaching of a high class in the metropolis" was set aside?—I will make this short. The recommendations of that Commission will be found in paragraph 22, as well as in paragraph 12. After mentioning the three schemes which were presented to the Commission by Lord Justice Fry; that of 1885, passed by a Committee of Convocation, but not accepted by Convocation; that of 1886, which was accepted by Convocation; and that of 1887 of a Committee of the Senate of the University of London; and after noting that only the scheme of 1885 was limited to London, they go on to advocate the metropolitan limit, and say that such colleges as University College and King's College may well be called "constituent colleges," and others they think should not be so called. In section 23 of the Report they "think that the suggestions for admitting "these other institutions" (institutions which they elsewhere characterise as "of a less authoritative character") to the University "contained in the scheme "of the first Committee of Convocation, and in that of "the Senate were suitable and adequate." The scheme of the first Committee of Convocation, the scheme which was not accepted, was that in which there were three terraces of institutions, the first consisting of "colleges principally intended to occupy the entire "time of their students"; the second, "colleges "in which lectures are given of the most advanced "kind"; and third, "colleges intended to aid the "evening studies of persons engaged in business, "or otherwise not falling under the first or second "class." Convocation in 1886 rejected all this, and required for association "one or more Faculties of University rank"; they also removed the limitation to London. The Senate removed the requirement of "Faculties of University rank," but did not rebuild the terraces—did not make any provision for a superior or inferior class of colleges. (See Lord Justice Fry's evidence, Question No. 1046, page 96, Column A.) Under these circumstances it was rather a dark saying that the suggestions contained in the scheme of the first committee of Convocation (that is the one with the terraces) *and* in that of the Senate, were suitable and adequate; because they do not seem in fact to be consistent. But I believe the fact to be that the matter was not intended to have been worked out by the Commissioners in their Report; they left it open to reconsideration, and when it came to be considered by the Senate of the University of London, they left it out altogether. In the scheme of 1891 there is no provision for the admission of colleges of an inferior grade or on a lower terrace.

24,830. Then you wish to refer to Evidence 12,442 and 10,892, and answer the general question whether educational institutions of different "grades" ought to be placed under one governing body?—In this connexion my attention was called to a question by Professor Burdon Sanderson (12,442). "We are all "agreed in thinking that our scheme must, in the "first place, co-ordinate all the existing teaching in- "stitutions in London." It rather took my breath away. In the first place, I would say, with regard to secondary schools, with which I am officially connected, the art of teaching boys at school is surely different from the art of teaching men at college. The problem of organising secondary education is a question of the day, and a difficult question, but it is not this question. Omitting primary schools and coming to institutions for advanced instruction I would say: "Are all to be "made part of the University? Is there no such thing "as grade in advanced education as well as in secon- "dary education"? By "grade" in secondary schools I mean the distinction which depends, in the first place, upon the age at which regular education is to cease. This affects the curriculum and, of course, the cost, but the age at which regular education is to cease is the point upon which the difference of grade in schools is understood to turn. In advanced education it similarly depends, does it not, upon the question whether regular education has ceased or has not ceased? We have, therefore, in the first place, education considered as a mere by-work of bread-winning, and in

the next place as the main work of a further period of youth, after leaving school, which is subtracted from bread-winning and given up to study. Technical education may be either of these, but for the real working classes it must be mainly education as a by-work of bread-winning, for they have to go to work. University work must be work subtracted from bread winning and given up to study. Whether that is best done by youths as in Scotland, who go to work part of the year and study the other part of the year, or, as in England, where they give up the whole of their time to study before they go to work, I do not know. Anyhow, the scope, the aim in the two classes is not the same. With regard to the first class, education considered as a by-work of bread-winning must be visibly and directly profitable, or else sensibly attractive. Take, for instance, the evidence that Mr. Barnett gives (15,427). He speaks of the students at Toynbee Hall as going there "merely to fill their lives." That is not the note of a University education. Take the evidence of Mr. Churton Collins (22,421); the education they give in the University extension lectures must be "popular." That again is not the note of University education. In Universities, at all events, knowledge for its own sake can be held up as an aim, although Law, Medicine, Applied Science, and Technology, are all among its fields of work. It must have the students' best energies. *Primâ facie* therefore, there would appear to be a strong objection to mixing up in one institution these different kinds of work; but to decide how far it will have a bad effect or a good effect further and closer examination is necessary. Co-ordination, recognition, (not full admittance,) of these inferior institutions appears to me—what? It is not very clear from the evidence. I do not think any full analysis has yet been given. I am disposed to attempt it, because I think it is a matter which has occupied a great deal of attention from the Commissioners. I am not concerned with co-ordination in another sense in which it has been used, say, by Sir Philip Magnus, (17,485) where he means division of labour between teachers. That is another question. This is co-ordination as between institutions. The first question is whether the University should absorb institutions giving advanced education of a lower grade—absorb them altogether—and this is one of several forms in which the University may be given power to interfere with them. The only question which arises, of course, is whether it shall legally absorb them. Educationally it is impossible. In this sense I have to notice that all the institutions which may be considered to be concerned in the discussion of this question rejected absorption; the City of London College, by Prebendary Whittington (12,653, 12,729); the Working Men's College, by Sir John Lubbock (12,458), and Mr. Mure (12,421); and the Birkbeck Institution, by Mr. Norris (12,770, 12,819), all reject absorption. In Bedford College there is an inclination to propose it, but as applied to their own case it appears to be accepted in a somewhat qualified way (3361). Professor Thorpe, at Questions 211 and 318, proposes to absorb the higher colleges, which, of course, educationally speaking, he might do in a University, but he only co-ordinates under the control of the University the inferior institutions. Passing from "absorption" to "co-ordination"; the next way, I shall notice, in which a University can interfere with them is by exercising a veto on the appointment of their teachers, or some of them. To this I object, because it interferes with the responsibility of the institution; they must be governed by their own governing body, and anything which interferes with its responsibility tends to less efficiency in administration. Thirdly, it might interfere with them by controlling their teaching through examinations of their students and by setting syllabuses. This is exactly what we are revolting against. To undertake to exercise a power over institutions, which we oppose in our own case, would clearly not be right.

24,831. You go very near it. You allow the University to have some control over your own teaching?—Yes, but the University in our scheme is a reproduction of ourselves.

24,832. You yourselves are represented upon it and these minor institutions would not be?—That they should be represented is, of course, is a possibility; but there are objections to it. The degree to which one set of men, fully engaged in one sort of work in which they are specialists, can beneficially be set to interfere with the work of another set which is different in scope, is very limited. For instance, in secondary schools with which I am best acquainted, it is reached if a University professor finds place in the governing body or supervising body, which appoints and dismisses the head master (who is the real governor), and sees that the scheme is observed; and secondly, if leaving examinations are offered by the University among others, that is to say, to take or leave, and are not made compulsory on the school. There is no objection to this in institutions for advanced education, or to a "special organ" or syndicate being established to do what is not University work; to award certificates and so on; and there is no objection to attaching University privileges to those certificates, as may be done under the Gresham Charter. That is covered by the general terms of the Gresham Charter and may be more particularly dealt with if desirable; but all this put together hardly, I think, amounts to what is called co-ordination.

24,833. Then with regard to power over and influence in the University?—To that we object. It is hardly urged of course that they shall, although inefficient, have actual power by representation upon the council of the University. What they urge is that they are suitable institutions to come in as efficient colleges in the University; but I am considering the case now, not with reference to what they urge but with reference to the question at large. There may be a case for giving the bodies that endow the University, especially if it be public funds with which they are dealing, representation on the Council of the University. There is, for giving to bodies that have power to admit to the practice of a profession, by examinations which must either be utilized, or reduplicated, by the University. The University benefits by that. But the University, in respect of other kinds of educational institutions, should be self-contained, for the same reason that the inferior institutions should be self-contained.

24,834. Then with regard to the question whether the University should lend its name and the advertisement of connection with it?—This would be done in the form of calling their students, or some of them, University students, and calling their teachers, or some of them, University teachers; or as it is put by Mr. Jennings at 12,373, giving them a "University tone;" but, in the first place, there is considerable danger of misleading the public by this playing with names; and in the next place there is a more serious danger, namely, that of diverting the institution from its own proper work. It is sought by these institutions not for what they do now but for what they think they may come to do. But their present work is useful and honourable, and ought not to be regarded within their doors as second rate.

24,835. Then with regard to admitting their students to examinations for degrees?—This is very naturally what they most want; but in the first place the teaching University would abandon its first principle, which, as we have expressed it in the charter, is "the providing and encouraging "systematic teaching and methods of study, for the "efficiency of which it should become responsible;" and, secondly, the admission of outside students to the degrees of a teaching University has a tendency to force down the standard of degrees. They want them easy. Thirdly, their successes in graduation, which are chiefly of course obtained in the cheaper teaching, in the Faculty of Arts more especially, (which are by no means depreciated on our part,) would undoubtedly tend to make cases for full admission. In other words the conditions of efficiency which are so carefully

Sir G. Young, Bart.

22 Mar. 1893.

worded in the charter will degenerate into the production of a mere graduation record, or even into the production of a mere matriculation, record as in some cases before us to which I shall have to allude. This is the "slope" of which I spoke in my answer to question 10,970, which is a part of the recorded history of the University of London. The appeal to a mere record of the passing of examinations in the case of the University of London led to the total abandonment of affiliation; and this again ends in a mere examining University. The tendency to put forward a graduation record is well illustrated by Mr. Busk at question 988; "I think the University "should judge of the results produced by the teaching "institutions rather than the means by which these "results are produced." We incline to the view which is the direct opposite of this.

24,836. Can there be any co-ordination short of admission as "colleges"?—Short of full admission as colleges, the "less authoritative institutions seem to reject co-ordination on these lines. They put out large claims; they want full admission as colleges (Bedford College, 3349, 3841; City of London College, 12,638, 12,674; Working Men's College, 12,330, 12,445; *contra*, Birkbeck Institution, 12,776.); they want representation in the governing body (Bedford College, 3446, 3450, 3841; City of London College, 12,666 (but *see* 12,413), Working Men's College, 12,442 (but *see* 12,413); Birkbeck Institution, 12,772, 12,825); they want degrees, not certificates for their students (City of London College, 12,649; Working Men's College, 12,323, 12,409); Birkbeck Institution, 12,773, 12,806); and they reject sending on their students to an efficient college after they have been a year or two years with themselves (City of London College (except for one year) 12,642; Working Men's College, 12343, 12,353; Birkbeck Institution, 12,840). That is practically universal with them.

24,837. What do you think could be given to them independently of whether it satisfies them or not—very little more than the University certificates?—Certificates, to which the University, I have no doubt, would be willing to attach—and to which you may, if you please, insert in the Charter, that it shall have power to attach—privileges in the shape of excusing a certain portion of attendance which is some part of the qualification for degrees in the case of other students.

24,838. Then you wish to notice the question of the doubtful attitude of the University of London witnesses on this point?—Yes, I notice the doubtful attitude of those witnesses on this question, because there has been a certain change of front in this matter. I have already pointed out the non-acceptance by Convocation of the scheme of 1885, that of Lord Justice Fry's Committee. I notice that Sir Phillip Magnus still adheres to the principle which was laid down by the Committee over which he presided in 1886. In question 17,459 he says, "It is not desirable that the University should "extend itself so as to embrace teaching which cannot "properly be said to be of the highest academic "character." But the Convocation witnesses seem now to have changed, they seek to co-ordinate all institutions alike under the University, and appear inclined to make common cause with the less authoritative institutions in order to defeat the University Colleges.

24,839. Now we come to objection 17, "that "Bedford College for ladies is not included"?—Assuming that this Commission is prepared to conduct the inquiry whether this institution fulfils the conditions of efficiency, there can be no objection of course to giving such information as it has fallen within my individual power to collect. I would submit, however, that this is a question which the Privy Council thought should be left to the University, that is to say, in all cases where no distinct claim had been made out in evidence for admission, the question was thought more suitable for inquiry by the University after the University was founded. In the first place, it is obvious that something in the nature of an *advocatus diaboli* is wanted. Without any ill-will to the institution, and with no desire to deprecate the excellent work they are doing, it may be necessary for us to point out weaknesses in their case and to make statements which will bring us into a position of antagonism, or at all events of criticism, and which may nevertheless be useful to the Commissioners. Therefore, if I am obliged to follow in this track, I wish to do so only after guarding myself most carefully against its being supposed that we, at University College, or that I in particular, ignore or am ignorant of the excellent work which is done at Bedford College and elsewhere which is to some extent of a University character. It does not follow that because some good work of a University character is done in an institution, it therefore has made out a case for admission as a college in the University in one or more faculties. I am obliged to note, however, that in their statement (Appendix No. 6) Bedford College has attacked the Charter. They have made a complaint (3,347) against our personal conduct of the movement, and they have proposed the destruction of University College and King's College, which they call absorption, while practically rejecting it for themselves (3,361). I wish, in the first place, to reply to the censure contained in the answer to 3,347, in which they say, "we ought "to have been asked in the first instance to join the "federation." In the year 1884, the Association for promoting a Teaching University was founded, and I took an active part in getting together representatives of the various institutions which it was supposed might be interested in the matter. Among others a member of the council of Bedford College was consulted, and we were told in the first place that Bedford College was perfectly satisfied with the existing state of things, that is to say, with the University for London, and with the success they had had in preparing students for its examinations. In the next place, that since it was undeniably possible that in the course of the movement we might be brought into antagonism with the University of London, they would not wish to have anything to do with it, because they were far too grateful to the University of London for having opened degrees to women, and therefore they would not wish to interfere with them or do anything to which they might object. These answers, which appeared perfectly intelligible, and even creditable, were of course quite sufficient for us, and no further communication of either a personal or an official character was made to the authorities of Bedford College at that time. In the year 1887 the petition for a Charter was presented by University College and King's College, and the Charter was drawn up in consequence of an intimation from the Privy Council that no such petition could be attended to without a draft Charter. The Association for the Promotion of a Teaching University was thereupon moved to support the Charter by a petition, and the Committee of it met several times during the summer, Dr. Russell being a member of it. Dr. Russell was a member of Council, and during that year, I believe, was appointed president of Bedford College, but he was present on the Committee as Chemistry Lecturer at St. Bartholomew's. During all the debates, at which I was personally present, when the petition of the association was being drawn up, Dr. Russell never mentioned for a moment that Bedford College would wish to be included in the University. In the year 1888 the Commission sat and took evidence, and in the Appendix No. 9 will be found the letter of the authorities of Bedford College, who do not seem to have applied to give evidence, or at all events did not give evidence, before the Commission, but who sent a letter—a short letter of two paragraphs—merely stating that they would wish to be included in any University that might be founded. In 1891 they appeared before the Privy Council, and presented a short Case which I have here, but from which I do not propose to make many extracts, because in fact the evidence they have given must be taken as superseding what was then said, and as covering a larger ground. I submit that under these circumstances no

reproach, no censure, can attach to the conductors of this movement, to those who were responsible for the association up to 1887, or to the Councils of the University Colleges afterwards, because Bedford College was not included in the University.

That, of course, in no way affects the question to which I come next, whether they ought now to be admitted. The evidence of efficiency which has been tendered by Bedford College, in order to satisfy the conditions of the 24th chapter of the Gresham Charter, is chiefly a reliance upon their graduation record in the University of London. Now it is necessary to sift the graduation record which has been presented by Bedford College. It appeared to me on a first perusal of the evidence of Dr. Russell as revised (3315) that he must have very much exaggerated it. He speaks of 248, of whom 200 passed. I thought, and I believe my further researches have established the fact, that by "passed" he must mean "matriculated" in the University of London, and not, as a reference to the question would seem to imply, having taken degrees. I notice that in the Case of Bedford College presented in 1891 they claimed during the 10 years during which degrees had been open to women 58 for the degree of B.A., 15 for the degree of B.Sc., total 73; and this is confirmed by another figure which has been furnished to me as the present state of the record, namely, "96 including higher degrees." That is from the secretary of the college. Therefore the number 248 which Dr. Russell gives in that answer must be considered as a mistake so far as graduation is concerned, and I have no reason to doubt that it was by a slip quoted from a record of matriculations. The importance of this point will not be thought to have been over-estimated, on reference to the extraordinary statements in the same direction of Sir Henry Roscoe, contradicted, App. 52. The 200 who passed, out of that 248, represents, I submit, good preparatory work for a University, good girls' school work. It is quite true that the matriculation of the University of London is a rather more difficult examination than can be passed by the average student leaving an average school; it in fact corresponds to the "Little Go," or Previous Examination at Cambridge. I notice, according to the evidence of Dr. Bryant, at 3936, that out of 112 students now in the college, only 44 are to be considered as University of London students, and among "University of London students" it is clear they may be including students for matriculation, which would reduce the number of those corresponding to undergraduates to something less; leaving certainly more than one half, and probably a good deal more than one half, belonging strictly to a girls' school, or to the classes of the Fine Arts School which they keep, which numbers 16. This is confirmed by the ninth paragraph of their Case, which states that "nearly one third," (and therefore we may say not one third) "of their students, matriculate in the University of "London."

I now come to further evidence which I have collected with regard to the claim of Bedford College to be admitted as an efficient college in the University. The probability of permanent existence is inferred for the college from its having a "charter of its own" (I am quoting from their Case), that is to say, it is registered under the Companies' Act, 1867, section 23, the liability of each member of the college being limited to 5*l*. It is also claimed that it is under the independent control of its own governing body, because it has a governing body and committees. No balance sheet is submitted, and none is accessible to the public. Companies under the 23rd section, which are registered "not for profit" are not called upon by the Board of Trade to furnish a balance sheet, and since the college has no endowment, it does not furnish a balance sheet to the Charity Commission. I now wish to refer to Appendix 18, to the entries there included of students who have succeeded in graduation examinations of the University of London. Of these it will be observed that one half are "joint entries." That is so also in some of the Faculties at Univarsity College, but it must be noted that there is a different significance in a joint entry as I explained it when I was before the Commission previously, according as a college is completely or incompletely equipped. Many of the girls from Bedford College come on to University College. Why? Because, of course, we have a far more complete equipment, and they come to us for the teaching that they cannot get there. Some girls, who otherwise might study entirely at University College, will, I daresay, be found at Bedford College; but the reason for their going there, if they were originally entered at University College, would be, no doubt, merely the greater quiet of the place, and the fact that they might obtain a quiet seat in a laboratory without the intrusion of young men; not that the laboratories, though they may be efficient at Bedford College, are more efficient than the laboratories of University College. Thus many of the Bedford College girls come to us at University College, and I notice in an extract that I have made from the prospectus of another college for girls—the Westfield College, Hampstead, which was established in 1872 for the preparation of students for the degrees of the University of London—that "those students who are working with a view to the "B.Sc. degree take Physics at Bedford College and "Botany at University College." Again, the name of "Dr. Bryant," who gave evidence before this Commission, the very able assistant of Miss Buss in the North London Collegiate School, appears in both calendars, that of University College and that of Bedford College. In the next place, are they completely equipped for the purposes of a University? Sir Henry Roscoe, in his evidence at 18,012, seems doubtful about it. He says, "I do not know about that," but Sir Henry Roscoe has the best means of knowing about it, for Lady Roscoe is a member of the council and committees of Bedford College. Therefore, I conclude that what he means is that he is not quite sure that he can say they are completely equipped for the purposes of a University. In the next place as to their staff. It has been noticed in former years that the phenomenon of doubling, that is to say, the professor taking duties in more than one subject, was frequent. They have very much improved, but still there is one accomplished lady who teaches botany, geology, and geography, and there are no less than three who take Bedford College work together with work in other institutions. Professor Womack is also a teacher of physics at St. Bartholomew's. Professor Heath is an assistant teaches of English at King's College, and Mr. Benham, the teacher of physiology, is a demonstrator at Oxford. In the next place as to their buildings. They claim that they have now buildings "of their own." So they have, but they are leasehold, and with regard to the rent and term it was not stated in their evidence, and I have not succeeded in discovering it. I know this, that for the laboratories they have recently built the term of the lease is only 40 years. Therefore, the question of expectation of permanent existence cannot be considered as entirely settled. In the next place as to their endowment; it is admitted that they have none for maintenance. A small sum which was raised (according to their Calendar of 1888, page 12), was applied to pay the current expenses of the college. Under these circumstances I submit with confidence that the resources of the college are not on a University footing; that they are not, as claimed, of equal standing with University College, Kings' College, Owens College, and the Liverpool College.

Then there remains an important matter to notice; which I mention with an intent which is distinctly friendly to the college, and in the hope that it may be of some use to them. It affects the question of "the control of its own governing body." I refer to the Reid Trust. This was a trust for the general promotion of education of a University character for girls, founded in the year 1866 by the will of Mrs. Reid, who in the year 1849 had founded Bedford College. She left her property not to Bed-

Sir G. Young, Bart.

22 Mar. 1893.

ford College, but to three trustees, ladies, with general powers to distribute the money as they pleased to promote the higher education of women; and she left them also the house in Bedford Square where the College was then conducted. The reason of this may possibly have been that Bedford College at this time was under a government and constitution which had not been very successful—a constitution originally planned by Professor Francis Newman, which bore a more strict analogy to the constitution of the College of Physicians or to the constitution of the University of London as proposed in the Senate's Scheme of 1891, than to that which, from my point of view, I should prefer, that is to say, a constitution consisting of a very large governing body, working through an executive committee. It had not worked well, and in 1868, two years after the death of the foundress, the Reid Trustees, who were supporting the college, carried out a *coup d'état* which possibly was of a beneficial character; they gave the college notice to quit, refused to subsidise it any further, and submitted a new constitution for the acceptance of the council. The council, having previously voted against it, were obliged to accept it in the end, and since then the five Reid Trustees, who are all of them governors, and three of them members of the council of Bedford College, have exercised a very large influence, though perhaps not quite so autocratically as in the year 1868. At all events the College can rightly say that they have now leasehold buildings "of their own." The Reid Trust consists of 14,790*l.* Canadian Bonds, income 585*l.* a year. They subsidise the funds of Bedford College, not by a fixed grant, but by paying whatever deficit may be found upon the annual accounts, if they so please. Thus in the year 1890, they paid to Bedford College 300*l.*; in 1891 they paid 34*l.*; in 1892, 189*l.*; and the rest, which amounted to 338*l.* in 1892, goes in payment "by results" of fees for girls passing the Oxford and Cambridge Local Examinations and the Matriculation Examination of the University of London. Now the principle of requiring public support has been accepted very largely as a condition of the receipt of public money. When we consider this question of the conditions on which colleges should be admitted to a federal university, should not Bedford College show more public support than they do? At all events, should not its founders, or the representatives of its founder, signify their own belief in the permanence of its existence and the beneficial character of its works to the extent of a permanent appropriation of the Reed Trust to the maintenance of the college?

The next point in connexion with Bedford College is the argument from the recommendation of the departmental committee of 1892. (*See* Dr. Bryant's evidence, 3,855.) When we were before the Privy Council we claimed that the Charter might proceed as it was, with only University College and King's College included as colleges, because they were the only colleges in London which received recognition of their University position by a Government grant. And, very naturally, in the evidence before this Commission Dr. Bryant has now pointed out that although the necessary increase of the grant was not made last year so that they might receive it, the committee of that year did recommend them for a grant of 1,000*l.* I do not wish to press the point that this recommendation has not been adopted; I hope it will be adopted, and I hope that 1,000*l.* a year will be granted to Bedford College; a more meritorious institution could hardly receive it. We certainly do not oppose it, and far less do we oppose that they should receive money from the London County Council. On the contrary, we shall be ready to support them. Still it is necessary to call attention to some points in which the report of the departmental committee of last year differs from the report of the departmental committee of 1889. In 1889 the instructions given to the departmental committee called upon them to consider four grounds as qualifying for a Government grant; the quality of the teaching, the amount of work done, the income, and the amount of local support that they received. It might be supposed that the committee of 1892 were appointed to consider the question upon the same grounds; in fact, two members of the committee, Sir Henry Roscoe and Mr. Bryce, say on page 5 of the report, that "questions of general policy have not "been referred to this committee." I maintain that under these instructions the condition of efficiency was required in 1889, and I call the attention of the Commissioners to the fact that Hartley College, Southampton, was excluded because it was not considered efficient-although I should very much doubt from what we heard, of Hartley College, at the time when we were promoting this movement, that it is in any respect inferior to Bedford College. I applied to Mr. Oakley, the secretary of the departmental committee, for information with regard to this and other matters, and he told me that in 1892 the need of a Government grant was practically exclusively considered, and that soundness, financially speaking, was "put into the background." Those are the words he uses. Although I do not mention this as impugning the report of the departmental committee, or as arguing that Bedford College ought not to receive the grant which they recommended, now that the conditions have been changed, I do mention it as showing that it ought not to influence this Commission, with regard to the still more important matter, whether it is, or is not efficient as a University College.

The last point that I have to urge with regard to Bedford College is this: I quite understand the objection which has been mentioned to me by some of those interested in the college, that if a teaching University for London is founded, and Bedford College is left out, it will have a detrimental effect upon their entries; and in their present condition any such detrimental effect would probably lead to the closing of their doors. That is a contingency which no one would wish to see brought about, and it is for that reason that I desire to make a suggestion, which I have no power to enforce or to promote, except so far as personal exertions may contribute to it, either with the Council of University College or with the Council of Bedford College, but which a recommendation from this Commission might I think go a long way to make effectual. That suggestion is that Bedford College should be amalgamated with University College. If the objection noticed by Canon Elwyn (15,551 and 15,581), as to the pecuniary burden which might be entailed by any other institution coalescing with Bedford College can be overcome, I think this ought to be done. I think we should recognise at University College the benefit of a separate department for girls. The conditions are easier than might be supposed; it would merely require the alteration of a byelaw at University College to take over the Governors of Bedford College, or all who wish to remain Governors, and make them Governors of University College. It would then be possible to place an adequate representation of their council upon the Council of University College, and there is no obstacle whatever to the welcoming of women on the Council of University College, although we have never had a woman there yet. The Educational Committee which works under the Council of Bedford College would remain for the purpose of conducting the special work of the separate Women's Department as it would then become, and for this we have already a precedent in the special committee that manages our hospital, and one still closer in the Committee which the late Mr. Mylne instituted and conducted for some years, for superintending women's classes at University College up the time when, the experiment having been fairly tried, we thought it safe to admit women to the men's classes at the College. The limited company might then be wound up, and there might be an application by the Reed Trustees for a scheme to appropriate the proceeds of the Reed Fund to the maintenance of the Women's Department. There would be no objection to its being kept as a

separate endowment for the Women's Department. As regards the sentiment of the matter, I need only refer to the Scholarship Deed of 1857, whereby in regard to the first endowment Mrs. Reed gave, she provided that if at any time the college should be discontinued, her Scholarship Fund, its only endowment at the time, should be ultimately applied "as Uni- "versity College might declare."

24,840. Has your proposal ever been suggested to anybody? Do you think they would receive it favourably? Have you any reason to know?—It has not been suggested to anyone except privately to friends of my own, and, therefore, I have no right to say anything as to the probability of its acceptance either by the Council of University College or the Council of Bedford College. But I give it as my personal opinion that it is one of the matters upon which the recommendation of this Commission would go a long way, if it seemed proper to the Commissioners to record any expression of its approval.

24,841. I suppose there would be a great number of advantages, even supposing no University were established at at all. Supposing things to remain as they are, there would be certain advantages attending their joining University College?—There would be great advantages to Bedford College, and there would be one advantage, I am prepared to admit, to University College, that is to say, I do consider that a separate department for girls, at all events for some girls, is by no means a thing without its recommendations.

24,842. Then with regard to other women's colleges?—With regard to other women's colleges that can be suggested for inclusion, I notice that in the foundation of Bedford College (I refer here to the preface written by Miss Busk for the Calendar to which I have already referred) it was aimed at that the University education of girls should be given in institutions upon a small scale founded in different parts of London (a principle to which I have expressed myself as hostile on general grounds in regard to University matters) with a view to bringing University education home, it was said, to all girls, in all parts of the metropolis. And this, no doubt, has been the plan on which the administrators of University education for girls have generally proceeded in London, a course which undoubtedly has resulted in some difficulties. There is, for instance, beside Bedford College, in the next street but one, Queen's College, inferior in success and efficiency to Bedford College, but still not largely to be differentiated from it in its plan or in its results. Then there is, as I have already shown, Westfield College, treading hard upon the heels of Bedford College. In 1892, when Bedford College had 10 candidates who passed in the bachelors' degree examinations, three of them in honours, Westfield had seven who passed, of whom two passed in honours. Lastly, there is Holloway College, which does not, however, appear seriously to press any claim, and which is, undoubtedly, outside the area of a local University for London. But with regard to all these institutions, perhaps I may pass away from them, and say simply, that the claim is not seriously pressed. I notice, in particular, with regard to Queen's College that it is undoubtedly dropped. The destiny of Queen's College I take to be, since it is a denominational institution like King's College, that it should accept the place of a second department to King's College, like that at Kensington for girls, or become amalgamated with the Kensington Department. It is distinctly understood that the girls at Kensington will be eligible for degrees as partaking in the privileges of King's College students, and as being taught by the same teachers. Sir Henry Roscoe at Question 18,010, I notice, considers that the instruction in Queen's College is not of University rank.

24,843. Then we come to objection No. 18: "That the Birkbeck Institute, the City of Lon- "don College, and the Working Men's College are "not included"?—I would only add to what I have already said upon the general question of co-ordination, that I would ask the Commissioners' attention to my Appendix No. 18, and in particular to the very successful and creditable record of the Birkbeck Institution; which is, however, to a very much larger extent than common composed of joint entries, that is to say, of students who obtain some of their education at the Birkbeck Institution, but who obtain the rest either as private students from tutors or in other institutions. As I have already said, they all claim, not for work they now do, but for new work which they think they will do. No doubt they may; but at whose expense? I think it will be at the expense of the old class of students, and that they will stand in some danger of being neglected for the more attractive class of University students, who, if the institution is pretty full, may possibly not be able to be accommodated without turning some of them out. Any how a new sort of teaching, or the appropriation of endowment to new teaching, must withdraw some portion of their energies, and must withdraw some portion of their funds from the work they already do; and to expand their borders greatly in provinces of study which are otherwise provided for, must institute new competition with other agencies which exist.

24,844. Then you wish to deal with the new cases of the residential training colleges for elementary teachers?—I hardly know whether this is considered to have been put forward by the institutions themselves. No claim of the training colleges has appeared; no information has been given, even of any attention having been paid to the subject by those who are responsible in the training colleges, with the exception of a casual reference in Mr. Sharpe's evidence (18,586) to an anonymous spokesman of the colleges. The anonymous spokesman says that he would not wish these colleges to be admitted upon any inferior grade to that of full recognition as a University College, equal in fact to University College and King's College. I take it that this claim has been started in consequence of representations by two member of the Senate of the University of London, Dr. Fitch and Sir William Smith the editor of the Quarterly Review, who has reproduced in his Review Dr. Fitch's arguments. This must be considered, therefore, as a part of the case of the University of London against the establishment of such a Teaching University as we contemplate; one senior inspector and the two inspectors of the Education Department, who came up to give evidence or rather, and Mr. Oakley, who has recently resigned his post as inspector, give their own personal opinions and a good deal of valuable information about the Training Colleges, but do not appear in any sense to be authorised to speak for them. In so far as general University training may be beneficially substituted for the special training of these Residential Colleges, the Day Training Colleges which have recently been founded in University College throughout England will provide it. If it is found that this general University training is sufficient, and is the best training for teachers in elementary schools, then no doubt these day colleges will eventually supersede the residential colleges. If on the other hand the day training colleges turn out to be a failure, and the residential training colleges are found to be after all the best plan for training teachers for elementary schools, that in itself would show that University teaching in the strict sense of the word is not the best training for the man who is to be a teacher in an elementary school, and that some special professional training is required, such as can be best carried on in an institution apart from the University. That is all I need say upon this question at the present stage.

24,845. Then with regard to objection 19:—"That "the Normal School of Science of the Government "Department of Science and Art and the Schools of "the City and Guilds of London Institute are not "included"?—In the first place I am here to defend the promoters of this movement from a sort of accusation that has been made that they have gone over the heads of the very able teachers at South Kensington, and exercised a certain presumption in founding a University which leaves them out. It is not the case

Sir G. Young, Bart.

22 Mar. 1893.

that we have not communicated with and endeavoured to act in concert with the teachers at South Kensington. Besides what I have already stated of my conversations with Mr. Huxley, I notice that Sir William Frankland seconded the first resolution at the first meeting of the Association for Promoting a Teaching University. Professor Guthrie attended the meetings, which were held in 1885, of the London teachers in Arts, in Science, and in Medicine, for the purpose of laying down a programme for that association, as a representative of the South Kensington teachers of science, and gave us material assistance in working out the programme. The particular professors there who have given evidence before this Commission—Professor Thorpe and Professor Rücker—who are in no way inferior in eminence, are nevertheless gentlemen of very recent appointment, and they do not appear to know all that took place before they were professors at South Kensington. With regard to the inclusion of South Kensington, of course it cannot claim to be under the control of its own governing body, if by "its own governing body" is to be understood the teachers, and they are the to be represented in the Council of the University. That is to say, it is under the control, not of its own educational staff, or of any body either including them or guided by their advice, but of a government department; and it is difficult to see how a government department can be represented in the governing body of a University, as such. The merely formal control by an outside body, as in the hospital schools of medicine, can be got over as I have pointed out, and an express inclusion of them in the Charter is a proper way of meeting the difficulty. The same might be said of South Kensington if the ground were clear. But, educationally speaking, referring to Professor Thorpe's answers to Questions No. 46 and 169, it is evident that they are under outside, that is, under Government control. Professor Thorpe's words (Question 169) are "The whole scheme of evening class instruction, and "the whole machinery for inspection of such instruc- "tion and the whole system of initiating and con- "trolling the schools, might be affected by it"—that is to say by conjunction with the University—"or the "department might conceive that it would be affected "by it, and therefore they might think it best to leave "well alone" (*see* also Question 79). I do not think that we are called upon to raise any objection on the ground of the present non-academic character of the education; that no general culture is required of the scientific specialist. The powers reserved to the University are sufficient in that as in other cases, and are such as can be exercised; but this is a case of educational control reserved to a Government Department for purposes not of a University character, purposes of the training of teachers in elementary science. That undoubtedly is a very serious objection, and a very difficult one to meet. How would it affect inter-collegiate arrangements, for instance, between the colleges? We have been told that the institution is based on a system of Science and Art classes, national in scope, which sends up nearly half the students upon exhibitions provided by the State, and the holders are to be trained as teachers of science purely elementary. To this "Normal School" as it is called are added other students on a more purely University footing, and there is also a technical school of mines; but the University teaching is merely accessory. In a University it should be the principal work, and if there is any conflict, it should prevail. Again, assuming that there is no such difference in the training of the exhibitioners and the other students as to create an insuperable difficulty, a point upon which I will hardly venture to pronounce, how justify the monopoly with regard to the place to which these exhibitions are to be carried? Considered as a school of science, I maintain that South Kensington at the present day would not have been founded; there are a sufficient number of efficient schools of science in various parts of the Kingdom to render it unnecessary. Its existence as such is due to the deficiency at the time of suitable training in Universities and University Colleges for students of science, and to the personal efforts and influence of Professor Huxley. It appears, however, that an association with the University might be facilitated, if the college were turned adrift by Government as Sir Henry Roscoe contemplates (17,837) with a suitable endowment; but in that case its monopoly must be abandoned. Then the exhibitioners would be free to hold their exhibitions at University College, the Liverpool College, or Owens College, or at any recognised University College in London or elsewhere. I doubt if this scheme is feasible. I have not had the advantage of seeing the evidence given by General Donnelly on the subject. In any case what I have to urge is that the University ought to be founded first, and that this question should be left to be dealt with by the Council of the University when founded.

24,846. Then we come to the case of the City and Guilds Central Institute?—On March 4th, 1892, there appeared an announcement in the papers that a motion was to be brought forward at the Council of the City and Guilds Institute to make a claim for admittance immediately on the passing of the Charter. To judge by the evidence no resolution was taken at that time, and it is possible that the opposition, which about that time culminated, to the immediate passing of the Charter, prevented any resolution of the kind being come to. The governing body, and even the professors, seem rather cool about it at present. Mr. Watney, at Question No. 8,687, says they have not considered it; Professor Unwin is rather against it (17,692); Professor Ayrton is in favour of it, but only if "some big" result could be brought about (17,766). The only institution to be taken into account, of those which are supported by the City and Guilds, is the Central Institute. The Finsbury school, admirable as its work is, is not of a University character. The Central Institute was founded only eight years ago—1884—that is to say, just about the time when this movement was first started; and for some years after that they had very few students, and the classes were very scantily attended, of course. The endowment, a minimum of 5,000*l.* a year dependent upon donations from City Companies (not upon any permanent grant), and the fees of 200 students, which is all they have room for (many of those scholars being maintained out of the endowment), is not a very great endowment. It certainly is not, as has been somewhere stated, a larger endowment than that of University College, nor anything nearly so great; but it would do. It is quite a mistake to say that this college would be excluded by the Gresham Charter. A reasonable "expectation of permanent existence" cannot be denied to an institution which is in possession of the magnificent building at South Kensington, and which has the Prince of Wales as its president, and the mere fact that the contributions of the City Companies are in the shape of donations is one that the University may very well put up with. I notice that there is one condition precedent with the professors; that is, that before they come in there must be a separate Faculty of Applied Science. This is a point, I think, eminently suitable for treatment by the University when founded. One solution is adopted in England and another in Scotland, and I doubt whether Professor Unwin and Professor Ayrton appreciate the position. What they really seem to want is that the special applied science work of their school shall count not merely towards a degree, but towards a first degree, and they think that must be obtained by calling it a degree in Applied Science. I would rather say that it might well be included in the Faculty of Science and that the science degree is the better form in which to give it. But this is a matter of detail. At all events I hope that the University will be allowed full freedom in regard to the Faculties which it will establish, and with regard to changing and modifying them; to unite the Faculties, to divide them, and to institute new ones.

24,847. You lay down four in the Charter, do you object to our laying down more than four—arts,

science, medicine, and law?—Arts, science, law, and medicine are specified, and "such other Faculties cor- "responding to the provinces of study and educational "work occupied by the University as shall from time "to time be determined by the Council of the Uni- "versity. The University should not have power to confer degrees in any but those provinces which correspond to its actual work.

24,848. Have they power to strike out any of those four?—I think they have. If they like to amalgamate any two or even to knock off one I think they may do so. But the last is hardly a practical question.

24,849. You would not lay down any others in the Charter except those four?—I shall come to that presently. I shall have some proposals to make of a special character.

24,850. With regard to applied science, do you think that would be a Faculty to lay down in the Charter? I think you say you would rather leave it to the University?—In order to give a full answer I will anticipate and put it in this way. I think it would be advisable to modify some clauses in the Charter so as to place Law, and perhaps also Theology, upon the footing of Faculties which the University shall proceed to found so soon as conveniently may be. In that category, if the Commissioners think proper, they may also place Applied Science. For my own part I would prefer that Applied Science should be left entirely to the University, that is to say, that the question of severing it from Science should be referred to the consideration of experts hereafter.

24,851. Still, in the way of principle we might as well put in applied science or technology as theology, divinity or anything else?—In theory there is no greater difficulty in so inserting one thing than another.

24,852. There is no principle involved; it is merely a question of expediency?—I think so. I should like to note the story of the foundation of the City and Guilds Central Institute. At the time of their foundation there was considerable desire entertained among ourselves that this Technical University, as it was the custom then to call it, should be founded, if possible, as a department of University College, and I was one of a deputation that went to Goldsmiths' Hall to urge this view before the committee of experts who were advising the City and Guilds upon the staff of their various institutions. We failed to bring them to Gower Street, but they listened with interest to an account of our work in the same class, and afterwards communicated to us that they had determined to confer upon us an endowment of two chairs of technology in the college, if we thought proper to accept it. The chairs selected were those of chemical technology, and mechanical technology, or engineering, and for some years we received an endowment for two of our ablest professors in these departments. When one of the City companies withdrew from supporting the institute, they were temporarily straitened for funds, and they knocked off the grant to University College. In the result the two professors in question resigned, and their places had to be supplied. We make no complaint. Under the circumstances of the case I admit that it was hardly likely that a body like the City and Guilds should accept the proposal to found this institution as a mere department in that which was one of two University colleges in London. But at the same time, speaking for myself, it impressed upon me more forcibly than before the urgent necessity of something being done to put an end to the dissipation of energies which was proceeding year by year in the foundation of new institutions to do work which was being done, or might most conveniently be done, in existing institutions. I notice that the chemical technology at South Kensington does not appear to be successful; they only speak of 11 students in that branch.

24,853. Then you take objections 20 to 25 with regard to University Extension in London?—All these objections treat of the University Extension Society. We were so particular in our reply to that Society, which at that time was inspiring a good many articles in various newspapers, that it will be less necessary for me to trouble you with much evidence now. There are a few points I wish to touch upon. There is no reply to our answer with regard to Objection No. 20. With regard to Objection No. 21, I notice a reason which was alleged, I think by Canon Browne (11,987 and 12,210), why the Association for the Extension of University Education avoids the severer Muses in its work; that is to say, why no languages and no mathematics are taught. The reason advanced is because sufficiently good instruction is already given in those branches. I think that explanation is, at least to some extent, fallacious. The real reason why these University Extension lectures are provided is given in 11,996, and it is this: "be- "cause the masses of people cannot go far to attend "courses of instruction." But the elementary science and political economy which they do give certainly can be obtained at University College and King's College just as well as mathematics and the study of languages. The real reason is that the severer studies are not sufficiently attractive to the classes attending the lectures. Then, coming to Objection No. 22, this states the true difficulty of arranging subjects of study so as to constitute university courses. Mr. Stuart, at Question No. 12,037, says that there is not the slightest difficulty in balancing courses and subjects of study so that continuous attendance upon these lectures should be equivalent to a fairly liberal education. All I can say is that the small experience I have had at the Council of the University Extension Society convinces me that there is very great difficulty; that, in fact, the local centres are entirely independent of the central body, and that the central body has next to no control whatever over the order in which classes shall be taken. Upon this head I wish to add statistics, which were not given in the evidence of Dr. Roberts and Mr. Stuart, with regard to the continuous certificate. The continuous certificate is that which implies success in obtaining sessional certificates for four years running, and is supposed at Cambridge to be equivalent to one year's attendance as a resident in the University. In the year 1892 two only of these continuous certificates were granted, one of them to a lady who had attended sessional courses in three different sciences, and one literary course, and another to a lady who had attended three literary courses and one scientific course. The age-limit in these lectures is another point which I wish to notice. It is 15. In the representation which we made jointly with other University Colleges to the Government when we were applying for a University grant, we suggested that the age of 16 as an inferior limit was the very lowest that could be permitted in testing the conditions of efficiency. For my own part I should be inclined to place it as a matter of practice at 17.

24,854. The age limit begins at 15 and goes up indefinitely?—They admit even younger people to their lectures, and quite rightly, but they also quite rightly exonerate the lecturers from the task of looking over the papers of people younger than 15. But still at 15 they can hardly be said to be of a University character. I think the exact number of attendances corresponding to sessional certificates has nowhere been clearly stated. A good many questions were put upon it at No. 14,165 and thereabouts. Moreover the number now is not quite the same as it was when that evidence was given; it has been slightly increased. I should wish to give credit for that. Ten lectures and nine classes twice over constitute the winter sessional attendance, that is to say, 38; and adding in 5 for the summer you obtain 43. The next point that I call your attention to with regard to this Association is an objection that they have urged with considerable vehemence, and upon which now a good deal turns, since the purpose of their Association is, and rightly is, to bring such teaching as the class concerned will accept as near as possible to the homes of those who

Sir G. Young, Bart.

22 Mar. 1893.

will accept it. They say that the instruction which we require in a college of the University will oblige everybody to come to Gower Street and the Strand, or to such other streets as a college may be founded in. That is not so. There is nothing whatever to prevent departments or extensions of the teaching at University College or King's College, from being given in any part of London. Instruction in a college does not necessarily mean within the walls of the existing college buildings. I think I ought perhaps to mention, although Canon Browne is absent, an answer which I have to give to a question of his put to Dr. Wace (14,222). The question is: "It was so simple to put that in"—meaning that the University should give the same privileges that Cambridge offers to the possessors of a continuous certificate, namely, that they should be excused 12 months' attendance of a residential sort—"that I have never been able to "conceive why it was not done. It only wanted two "lines, and the friends of the University extension "would not have had a word to say then." Of course if we had refused to put two lines into the Charter to say what we were perfectly willing to do we should have shown ourselves not only very stupid but entirely unfit for the position we hold. But that is not the case. This Charter was drafted in 1887, and certain provisions were then made in the direction of University Extension, although we were not so well acquainted with the subject of University Extension as we afterwards became. When we first became aware of the claims of the University Extension Society to recognition, we pointed out that these provisions met very largely their claims. That was pointed out, among others, by myself to Dr. Roberts when I first made his acquaintance at Cambridge, and though I was not able to promise him on the part of the promoters of the Charter that we would go the full length that he claimed of University degrees for attendance at evening lectures of the Society, I pointed out that we had already made a provision for lectures outside the colleges, and for certificates of proficiency. These provisions, with a slight amendment, would have covered the power to confer privileges as at Cambridge. After the rejection of the University of London scheme in 1891, when our draft scheme went before the Privy Council, I made certain suggestions for the alteration of the drafting of the Charter to our counsel in this, among other matters, but I was told, and very properly told, that that was not the time to make amendments; amendments could only be made by the Privy Council; if anybody came there to say that such and such things ought to be done, and if we then said we had no objection, then amendments could be made, but for us to be amending our Charter before we began defending it was premature. When we went before the Privy Council, somewhat to our surprise the University Extension Society was not represented. I believe they said they were taken by surprise. I do not know how that should be, considering it was in all the newspapers, and that six weeks were given for preparation. Anyhow, they were not represented, and nothing was said on their behalf. Then it became a matter of anxiety with me to see in what manner certain changes could be made in order to meet what I had told Dr. Roberts we were willing to do. Those arrangements were made at a later stage, when the Charter was remitted to us for settlement. I said, "I am bound to put this in if I can. I said to Sir John Rigby, "You must put it in and explain to "the Privy Council why you have done it." He did so, and in the end some slight changes covering what they wanted were inserted. That they do not convey to a casual reader all that was intended is true. It was not our business to put in more than the minimum of change that was necessary. This was explained to Dr. Roberts. He called upon me when he returned from Austria in the autumn. I explained to him how careful we had been to put in the result of what I had promised him. It was not an agreement, but it was an understanding. From that time up to Christmas we had to meet the most persistent attempts on the part of Dr. Roberts to show that we had not done what I considered we had done.

24,855. You have power in the Charter to do what Cambridge has done?—Yes; I will read a paragraph from the full letter of explanation which I wrote in the *University Extension Journal:* "The asser- "tion that the University will have no power to "grant to University Extension students privileges "equal to those granted by Cambridge may now, per- "haps, be taken as abandoned. But the concluding "sentence of the article in the last number of the "*Journal*, which represents the promoters of the "Charter as contending that 'by a certain mode of "'interpretation it may be made to cover what is "'required,' and thereupon charges them with "'evading its plain meaning,' renders it necessary to "repeat that, on the contrary, the powers required "were in fact contemplated when the Charter was "settled, that they are conferred by it in its plain and "only meaning, and that this has been questioned "only through a far-fetched inference from a pro- "vision in another matter by a process of construc- "tion which is inapplicable and unsound. With these "powers the University takes, beyond all question, "the power to proceed, if it pleases, 'further in the "'same direction'; as, for instance, by not requiring "of such students that they should pass an examina "tion in the Greek language." I have only to add, upon this question of University Extension, some further reply upon Objection 25, where we are charged with a hostile attitude towards the society, an accusation which is entirely unjust. In witness thereof I will state that in November 1890 we prepared for issue at University College, in conjunction with King's College, a special appeal for funds. This movement may be said to have failed of effect through the agitation got up against the Charter. But in the appeal we laid special stress upon the University Extension work which, at the request of the Society, University College was desirous to do, and called for funds in view of the severe burden it must entail upon the resources of the University. In 1891, when we went to the Mansion House to start this fund, the Lord Mayor urged that the University Extension Society should be joined with us and all funds divided in three between themselves, King's College, and University College. We agreed to this; the University Extension Society declined. I think it would be far more correct to say, though I am not anxious to say it, that the University Extension Society, at all events by some of its members, has conducted its affairs of late in a spirit somewhat hostile to University development.

24,856. (*Professor Sidgwick.*) Might I ask what were the words added?—In Chapter III. of the Charter the last paragraph but two. "The University "shall also have power to grant to students of any "college in the University, or who have attended "University lectures."—Those words, "or who have "attended University lectures" were inserted. There were also inserted in Chapter XI., at my instance, words which rendered lectures outside the colleges eligible to the assembly of the Faculty.

24,857. Then, with regard to the present position of the case, as stated in evidence, for admitting attendants upon the University Extension Society lectures and classes to degree examinations. Have you anything to say upon that?—I have something to add. I do not know that it is important I should analyse the whole of the evidence. I have analysed it completely, and perhaps I may be allowed to give a short abstract. I notice that Mr. Stuart, M.P., states in the first place (12,042) that two Universities are better than one in London; in the next place (12,048, 12,307), that two systems of graduation and two degrees, if not three, are necessary; in the third place (11,996), that the less authoritative institutions are not fitted to be colleges in the University; in the fourth place (12,243), he rejects the provincial element entirely; in the fifth place (12,266), though disagreeing with us as to the appointment of professors, he

proposes virtually the same system in detail. Then, in the sixth place (12,069, 12,155, 12,245, 12,256), he advocates the leaving of details to the University, and having a very simple form of Charter. But, on the other hand, what he advocates is a system of graduation for University Extension students in which attendance at University Extension lectures and classes, and the obtaining of their certificate, with part of a single final University examination, should entitle to a degree (12,008, 12,041, 12,220, 12,300). This is to be the normal avenue in the Teaching University for degrees (12,207), and he goes so far as to intimate that the colleges, and their more regularly trained students, may perhaps be content with the external examinations (12,307), which is a curious reversal of what one would expect to find him saying. Canon Browne does not seem to agree with him. At Question No. 14,256 he puts this: "of course these students should pass the final examination for a degree like other students." I would submit that there should be something more, otherwise it would land the University at once upon the "slope" of admission of all manner of institutions, and of teaching agencies which cannot be dignified with the name of institution. Dr. Roberts, whose evidence upon this point is somewhat ambiguous, went down into Wales to the conference to which I have already referred, to advocate the dispensing with all regular training, in order to break down the limitation to University colleges. In reply to a communication from Mr. Cunynghame, who seems to have written to him from his personal interest in the matter, he is more definite; he seems to admit that whether in regard to examinations, from beginning to end of the course, or in regard to attendance at lectures and classes, the University extension student should do exactly the same amount as the regularly trained student in a college. But the conditions he lays down here cannot be fulfilled; they would take too large a portion of the life of a University Extension student. In conclusion, if University names, privileges, access to degrees, are conceded to the students of the University Extension Society, I can certainly conceive one excellent result following, that is to say, it would give great additional influence in the University Extension Society to the Central Council. The Central Council might use this to control the local committees for their good. They might, in fact, gradually form these classes into something like University classes. Supposing we grant this, for argument's sake, and that this is an advantage so great as to render it advisable to contemplate the proposal; is there not a very serious reason to believe that the result would be that the present auditors of University Extension lectures would fall off, and be replaced by real students, and that these real students would be such as might very well come to the regular colleges? The class from which they are now drawn is not the class of regular University students; that is admitted. It is a class among which the lectures must be popular; that is admitted. What I fear is that, if, instead of choosing a popular lecturer, instead of changing their subjects every term, and choosing the subject which the majority prefer, they are compelled to accept the severer conditions of University teaching, a large portion of them will not come. Some will come, but they will be such students as might very well be invited to the regular colleges.

24,858. (*Lord Reay.*) Before we leave the subject I should like to ask Sir George Young what he thinks of the theory which has been advocated before us, that in the new University evening courses should be instituted, which should be in every respect similar in their method, similar in their scope, and similar in their standard to the lectures given in the morning in the colleges, and that the only difference should be that students attending those evening lectures should be allowed a curriculum of eight or nine years as compared with the curriculum of three years within which the day students would obtain their degree?—It is certainly not a matter on which I would prohibit the University from trying an experiment. But it can be done under the Gresham Charter.

24,859. You would make degrees available for that class of students, under those conditions?—That is not a question which I personally can answer, that is to say, whether the University ought to do it. The point to which my answer is directed is that the University can do it if it think fit under the Gresham Charter, but it is not a thing which they ought to be compelled to do. They may try the experiment, and find it fail.

24,860. You would not prohibit them from trying the experiment?—Certainly not, nor have we done so.

24,861. (*Professor Sidgwick.*) Is there not an intermediate position possible between prescribing anything of that kind and merely giving general power. There might be a specific statement that the University has power to do this particular thing. Would that be objectionable?—I do not think that is a suggestion to which we ought to object.

24,862. I do not know whether Sir George Young's attention has been drawn to a report of the Committee of the London County Council, indicating the possibility of the donation of a considerable annual sum to the Gresham University on the condition of their doing work which may be regarded as University Extension work?—Yes, I have seen that, and I have seen also that there were several other conditions mentioned in the report of Mr. Llewellyn Smith. That is the report of a very able man, but of one who upon University matters must be regarded as giving second-hand information, and as expressing an opinion which, though drawn from a large examination of the subject, is not that of an expert. It appears to me that any conditions indicated in a report to the County Council are matters worthy of all respect, but what we have rather to do is to found the University upon the lines which appear to the Commissioners to be best, and, to rest confident that when founded, the County Council will certainly endow it, whether it entirely meets the conditions laid down by Mr. Llewellyn Smith, or other conditions. I would not regard it as necessary to the obtaining of that grant that all the conditions of Mr. Llewellyn's Smith's report should be assented to.

24,863. May it not be possible on the condition of our obtaining a grant from the London County Council, that we shall in some marked way express an intention of meeting the needs of the class with which the London County Council appears to be largely concerned—the class of those who go to the University Extension lectures?—I have already said, and I think I said in my evidence on the previous occasion, that words to explain that which I say is already in the Charter, so far from being objectionable in my opinion, might, no doubt, with advantage, be inserted at this stage; the exact drafting I should be inclined to leave to the Commission, provided it is understood that the words to be added are by way of empowering the University to do it, and not of compelling it to continue the experiment, which may prove a failure.

24,864. (*Chairman.*) Putting aside the question of the degrees, and regarding merely the question of the encouragement to education, considering the advantages of this University Extension movement, and the good the lectures do to certain classes who would not get the same sort of instruction otherwise, do you think it a thing that the University authorities could themselves take up? I think a good many of those who are carrying on the University Extension movement would be glad to hand it over to the new University, merely keeping the certificates, and not thinking of the degrees. Do you think it would be possible that through a Committee of the Senate, or by some means like that, the new University itself should carry on this University Extension movement in London?—I must distinguish. It would be not only possible, but desirable and expedient, that the work which

Sir G. Young, Bart.
10 Mar. 1893.

is done by the Central Committee that meets at Lady Stanley's should be done by a Committee of the University, or a committee recognised by the University; but it must not be supposed that that committee carries on the work of University Extension lectures. It is merely a central authority, acting largely by advice and influence, and partly by pressure, upon the committees at local centres, which really do carry on the work. Every one of these is entirely independent of the central authority; does not contribute to its funds; keeps the fees received from lectures in its own hands; and is prepared at a moment's notice if they do not get the lecturer they want, or the courses which they prefer, to break off, and say: "We will "start as a lecturing society ourselves."

24,865. Do the central body find the lecturers?—They have a large connexion, and good men are willing to work for them; but out of those who are found by the central body the choice is left to the local centres.

24,866. If the University took over the work they would have to make the discipline a little stronger, I suppose?—They might attempt it, no doubt, and though the present central committee attempts to screw up the standard of efficiency and influence the local centres for their good, possibly the University might do so more effectually; that is why some think the University might take it over; but that the work must be carried on in local centres, and by local committees, who are themselves interested in the lectures, is equally clear to me.

24,867. The only thing the University can do is to fill the place of the present central authority?—That is all.

24,868. And that you think might be advisable?—If desired, the governing body of the University could, either by itself or by a committee working under its direction, fill the place of the present central committee, and the professors of the University could fill the place of the present advising board.

Adjourned to to-morrow at 12 o'clock.

Sixty-sixth Day.

Thursday, March 23rd, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The Lord REAY, G.C.S.I., LL.D.	Professor H. SIDGWICK, Litt.D.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.	JAMES ANSTIE, Esq., Q.C., B.A.
Professor GEORGE G. RAMSAY, LL.D.	RALPH C. PALMER, Esq., B.A.
The Rev. Canon BROWNE, B.D.	Principal G. H. RENDALL, M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

Sir G. Young, Bart.
23 Mar. 1893.

Sir GEORGE YOUNG, Bart., further examined.

24,869. (*Chairman.*) We had got as far as Objection 26; that is the case of King's College?—In answer to this objection, which was started by Sir H. Roscoe's notice of opposition in the House of Commons, July 30, 1890, I refer, first, to the second paragraph of the Answer viz., that: "When the "Act passed for the Abolition of Tests at Oxford "and Cambridge, in 1871, University offices and "degrees (except in divinity), and offices and fellowships in the ancient colleges, were thrown "open; but the foundation of modern denominational "colleges, and their admittance to University privileges, was not prohibited." I should wish to add something to that from personal knowledge at the time, and something from public documents. I was present at certain conferences which took place at Lincoln's Inn at the time, and in particular at a conference between the representatives of those at Oxford and Cambridge who were desirous of seeing the Universities Test Abolition Bill passed into law, and the representatives of the Nonconformist associations, and I heard the late Mr. Miall lay it down as a distinct principle, to which he and his friends were disposed to adhere, that future endowments or modern endowments for denominational purposes within a University were not to be prohibited. That position was adhered to in the debates upon the Tests Abolition Bill, and was further confirmed in certain conferences which took place after the passing of the Act, at which I was also present. In the preamble to the Universities Test Act, 1871, it is declared that "It is "expedient that the Universities of Oxford, Cam"bridge, Dublin, and the colleges and halls now "subsisting therein should be rendered freely acces"sible to all Her Majesty's subjects." After the passing of the Act an endowment was offered to a hall at Oxford, and an Act was promoted for changing it into a college, the new endowment being restricted to a particular denomination. That appeared to some to contravene the provisions or the spirit of the Universities Tests Act, and certain conferences took place. In the end a case was taken to the courts of law, when the Court of Appeal decided in the following terms. This is the Hertford College case, decided on the 2nd of May 1878: "We are clearly of opinion that "the Universities Tests Act does not of itself prevent "the creation in the Universities of fresh colleges, the "endowments of which may be confined to members "of a particular religious community. It does not "appear to be the intention of Parliament that no "endowment for the future should be allowed to be "erected in favour of particular forms of religious "belief. The Act provided that the wishes of "founders expressed generally speaking centuries "ago should not now prevail in a state of things "altogether different, which could not have been "foreseen, and which, if it could have been, might "have modified the expression of their wishes. But "it was to existing endowments only that its opera"tion was expressly confined." Of course the line of partition between existing endowments and future endowments in the case of Oxford and Cambridge is

represented in the case of our present question by the line of partition between ancient and modern. King's College, although it is existing, and is not a future endowment, distinctly falls within the principle by being a modern endowment, that is, one which is within the limitations which are usually assigned by Acts of Parliament in dealing with trusts. It appeared, therefore, to us, the members and representatives of University College, which is a strictly undenominational institution, when this matter first came up, that we were in no sense violating the principles which have been approved by the Legislature and accepted by the Nonconformist bodies, in entering into an alliance for the purpose of an undenominational University with those who represented a denominational college. We noticed further, that, as here stated, in the Charter of Victoria University the provision as to tests is the same as in this charter; and under it King's College could now claim admittance as a college to that University. That is confirmed by Sir Henry Roscoe in his evidence at 17,909 and 18,002. It appears, therefore, that if certain proposals, the result of which could only be to exclude King's College from the University, were to take effect, the result might be this, that we should have half the University power of London engaged in a teaching University here, and the other half applying for admission to the Victoria University, the representatives of which will have played a large part in keeping or trying to keep King's College out of the London University; a condition of things which I should think Sir Henry Roscoe could hardly have contemplated. It is said further that things have changed since 1871. I doubt this. At all events it is a matter which requires to be proved on the other side. I have seen no such proof. In the Report of the Departmental Committee of 1889, which was signed, among others, by Sir Henry Roscoe himself, King's College was recommended for a grant from public funds of 1,700*l.*, the same amount that was recommended for University College. This was not a haphazard estimate. In fact so much discrimination was displayed as to discover that Owens College was worth just 100*l.* more than either. In the Report of 1892 it is quite true that two members out of five in the Departmental Committee who signed that Report now dissent to King's College getting any money at all; but at the same time they take no exception to the estimate of 1,700*l.* if King's College is to have anything. Passing to Objection 28, it appears, therefore, that not only are we proceeding upon recognised lines in admitting King's College to the University, and recognising it as an institution of a sort which Government, Parliament, and public opinion generally have declined to exclude from Universities, but also that the scale upon which we have admitted it, that of equality with University College, has been approved by very high authority. I observe that when the Report of 1889 went down to the House of Commons notice had been given, I think by Mr. Labouchere, of opposition on the ground that King's College was included, but, I presume on explanations given, the opposition was withdrawn, and the grant passed *sub silentio*.

24,870. Then Objection 27, that it is unfair to Nonconformists?—The answer is a reference to the desirability of founding a Faculty of Theology. Of this I said something yesterday. Upon this subject I wish at present to state the attitude of University College towards a Faculty of Theology. University College would not take any part in such a Faculty; and if, therefore, any mention of a Faculty of Theology is to be made in the charter, some consequential amendment will be required to the general clause, which provides at present that University College, together with King's College, shall be a college of the University in all the Faculties. We did not consider at the time that that obliged us to take part in a future Faculty if founded, supposing that we were unwilling to do so; but it would be clearly improper that a Faculty should be alluded to in the charter, and that the clause should stand, if one of the colleges so mentioned were not disposed to take part in it. University College would hold the position of seeing fair play. It would be the advocate of equality, and being perhaps the most powerful college in the University it would have advantages for holding that position.

24,871. Being undenominational?—Yes, being undenominational. I have mentioned the negotiations with the theological colleges, which took place in 1885, with a view so to draft the charter as to render it possible that a Faculty of Theology might be founded. It was not thought desirable that any express mention of such a Faculty should be made in the charter, or that any special provision should at that time be laid down. But I must point out that if there is to be a Faculty of Theology in the University, the University must be of what is commonly called a federal kind, that is to say, there must be institutions within the University which can take charge of and become guarantees for, the efficiency of those parts of the theological teaching with which the University will not concern itself. I regard it as wholly chimerical to endeavour, as Mr. Busk has done, to draw up a programme for a Faculty of Theology upon which all denominations are to agree.

24,872. In German Universities it is not done through colleges, is it? Where these Nonconformists at present go to get degrees it is a University degree of a non-federal University, is it not?—I am not sufficiently acquainted with the way in which these matters are arranged in German Universities to give an answer which would be of use; but the Nonconformist ministers who are invited to Bonn and elsewhere for the sake of receiving divinity degrees probably receive honorary degrees. I do not suppose that is any part of the arrangement for tuition.

24,873. You think a professorial University as they call it, should not have a Faculty of theology?—Not in this country, and so far as I am aware, from the amount of reading that I have been able to pursue in this subject, I believe that where there are theological degrees given in foreign Universities there are separate Faculties for Protestants and Roman Catholics. In theory, I know, that is so in the University of France, but as a fact, there is but one Faculty, that of Protestant theology, because the Roman Catholics have persistently refused to recognise the University as a proper authority to give a degree. This arrangement may be considered as federal, and approximates to the type which I have called "Separate Universities under "one Governing Body."

24,874. Although the examination may be entirely undenominational theology cannot be taught, except in connexion with some denomination?—Some subjects which are proper for a curriculum in theology can be taught in common. Other subjects I conceive cannot, and, therefore, the tuition must be divided, the curriculum must be divided, and the responsibility must be divided, between the colleges and the University. That would not be necessary for us in London in any other Faculty.

24,875. Therefore, you contemplate that if this Faculty of theology is given the Nonconformist colleges which apply to us about it would have to be affiliated with regard to that one Faculty?—Certainly; and I believe no one would hesitate to admit that the Nonconformist colleges which appeared before this Commission are efficient for the purpose of a Faculty of Theology in the respective denominations to which they belong; although they are capable of very great improvement if they can make use of the historical, philosophical, logical, and other Chairs in the University of which all denominations can fairly avail themselves in common.

24,876. You are in favour of affiliating the London theological colleges?—Yes, only those. But there is a special case of the London theological colleges which happen to be outside the city and county of London, that is to say, the Cheshunt College belonging to the Congregational denominations, and the Richmond Wesleyan College. We had originally drafted the

Sir G. Young, Bart.

23 Mar. 1893.

district of the University for London before the County Council came into existence.

24,877. What is the exact area—the limit which you put down in the charter?—The city and county of London.

24,878. What sort of radius does that extend to? Is it 15 miles?—Not quite 15 miles, the difference between that and 15 miles just makes the difference between excluding and including Cheshunt.

24,879. (*Mr. Anstie.*) It is very much short of 15 miles?—Yes, I was wrong. It is the larger London, the Metropolitan police district, which goes very near Cheshunt, but the city and county district is smaller. Lord Selborne in the Privy Council declared the opinion of the Lords of the Council to be that now the County Council has come into existence theirs was the proper area to adopt. I thereupon endeavoured through our counsel to put in a plea which should save the Cheshunt and Richmond Colleges, which we had intended to include, and which were in danger of being omitted by a side wind. But I was unable to get it in. It is not easy to say anything to counsel when a judgment is being given, and in fact it was impossible to interrupt the Lords of the Privy Council when they were giving judgment, and so the matter was overlooked. What I would now suggest is that in any recommendation the Commission may think fit to make on this subject they should not take away from us the great advantage of preserving as the district of the University the city and county of London. It is quite sufficient, and may be extended from time to time as the population extends. But I think they should adopt a similar resource to that which we adopted with regard to the "control of its own governing body" in the case of the Medical Schools, viz., mentioning these two colleges, which having been founded before the charter have a sort of right to come in, and possibly eventually may see fit to remove nearer to London. I mean, that the Richmond College and the Cheshunt College should be inserted in the charter *nominatim*.

24,880. (*Mr. Rendall.*) Would that apply also to Holloway?—I dealt with the case of Holloway yesterday. Moreover, I do regard it as too remote. There are other difficulties which I do not think it necessary to deal with; since I believe they are perfectly well satisfied with the privileges they have already got of obtaining what is equivalent to a degree at the University of Oxford; besides which the degrees which exist in the University of London will remain open to them as before. That finishes the case of King's College and the theological colleges. That is all I wish to say upon that subject.

24,881. (*Chairman.*) Now we come to Objections Nos. 30 and 32, with respect to the Faculty of Medicine?—With respect to the Faculty of Medicine, and, in the first place, with respect to the case made by the Victoria University against the Charter, I wish to call attention to the great importance of the part that was played by the Victoria University in the proceedings that led to, and I admit necessitated, this inquiry. Of 22 members of the two houses, who are mentioned as having gone to the Prime Minister upon the deputation which stopped the Charter, 16 went in the interest, real or supposed, of the Victoria University. Oxford, Cambridge, Durham—all the Universities and University Colleges in England outside the Victoria University were unrepresented. There were three or four Medical Schools, besides those of the Victoria University, which were represented. In particular I note, since the contrary has been stated in evidence, that Mason's College, Birmingham, refused to join. Now, as to the nature of this opposition: the statements that were made, to which I do not propose to allude, except where necessary for purposes of reply in detail, as I come to them, were of a very grave character, and I am able to state from personal knowledge that they had considerable effect. I called upon several of the members of Parliament who went upon that deputation, and discussed the points which were raised in the paper that was used by the deputation, the paper of the Victoria University.

24,882. (*Mr. Rendall.*) Mason's College was represented by Professor Heath, Mr. Windle, and Mr. Chamberlain, who took the most prominent part in the deputation?—The authorities of Mason's College told me at the time that they took no part in the matter, and did not intend to be represented. I have always understood that Mr. Windle is a medical man; therefore he was a member at that time of Queen's College, Birmingham, and not of Mason's College. Queen's College has now been severed in two, and the Medical Faculty has been taken over by Mason's College, but at that time I believe Mr. Windle was not a member of Mason's College. Mr. Heath is a member of the University of London, and may have appeared in that capacity.

24,883. Mr. Chamberlain spoke on their behalf?—No; Mr. Chamberlain spoke on behalf of the Medical School of Birmingham, exclusively upon medical points, with which Mason's College had no concern; that he mentioned Mason's College is, I believe, the fact; but I was told by the authorities of Mason's College at the time that they did not take part in the opposition, and concluded that he mentioned it by mistake. I was remarking that, in the course of interviews with members of Parliament, who accompanied that deputation, I was met by the objection, "What you say may be very true, but when the "medical men in the town which I represent come "to me and say that their interests will be very "materially affected by this charter, you cannot ex-"pect me to vote against inquiry." To that my "reply was, "Why was not this inquiry undertaken "before the Privy Council, the proper tribunal, at "the hearing of our petition, of which full notice was "given, and of which Victoria University had, in "particular, full notice, having previously taken part "by presenting a memorial to the Privy Council, "before the appointment of the first Commission?" To which the answer was, "I cannot say; but if a "mistake was made we must do our best, as repre-"sentatives of the local interests of the place, to "have it set right." Of course, there is no answer to an argument of that kind, and in the result this inquiry was rendered necessary. I now come to the particular points which have been raised by the Victoria University in opposition to us. I notice that they must be collected from various schemes; from the first paper, which was privately circulated during December 1891 and January 1892, and from the speeches made by the members of the deputation which went to Lord Salisbury in March last year; partly also from the letters of Dr. Ward in the *Times*, and from the evidence which has been taken before this Commission. A second paper has been presented to this Commission (*see Appendix* No. 4) which is by no means identical with, and which, in fact, varies very considerably from the first paper.

24,884. (*Chairman.*) Nothing has happened since this paper of yours was drawn up to alter the order in which you wish to take the objections. You stick to that and you take first of all the objection "that some of "the London Medical Schools do not possess complete "equipment for all the branches of scientific teaching "allied with medicine, and that no such school ought "to be a college in the University?"—That is so. It has been otherwise worded thus; that a balance between arts and sciences on the one hand, and medicine on the other, does not exist within these colleges. Upon this objection I have to notice that it is not concurred in by the other Medical Schools. Mr. Heath, the Principal of Mason's College and Mr. Windle do not take it. I am not sure that I may not consider it as abandoned, for the second Victoria University paper does not notice it. (*But see* Evidence 1735-7.) Of course the answer is tolerably clear. We have here in London 12 very famous Medical Schools, not one of which is inefficient in medicine. If those which are recognised to be thoroughly efficient for medical purposes are to be excluded because they

have no Faculty of Arts, no possibility of forming a University in which they should be included, will ever be open to us. If it is said: "Oh, but they may form a Faculty of Science," that does not meet the original objection; and, as a matter of fact, to form 12 Faculties of Science, one at every Medical School in London, is an end above all others which it is undesirable to pursue. These Medical Schools must, perhaps, before the University is formed accept amalgamation with other Medical Schools which have efficient schools of science? Those who have read the evidence which was given before the first Commission are aware that one of the principal reasons stated for seeking to form this University was the impossibility of effecting such amalgamations. It was found to be impossible to do so until the schools were brought together into what was then called a common forum, in which this object might be pursued with advantage. We speak with experience; we speak after two or three negotiations which had been conducted with great energy, and at one time with fair promise of success, but which eventually failed. That will be found in my evidence before the first Commission at Question 103. I do not hesitate to say that the objection which is urged that the Hospital Medical Schools must be kept out until medical teaching is revolutionised in London, is an objection not to detail, but to the formation of any teaching University whatever. That completes my answer to the first objection.

24,885. Then the second objection that there are too many medical representatives in the governing body?—This is an objection, not to the charter as we drafted it, but to an alteration which was made after due consideration, not with our assent, by the Privy Council. The words used in the first paper, privately circulated, of the Victoria University were that the Medical Faculty was thereby rendered "paramount," and had a "commanding ascendency." This has been criticised, and they now substitute "practically irresistible" (*Appendix* 4, *par.* 2); but irresistible for what? We must distinguish. It is not a practical objection to say that the medical representatives would be all united together for some purpose that was undesirable in itself, and would succeed at the same time in gathering together a sufficient amount of support from outsiders to render that which was a minority a majority. The mere fact that they were so banded together for an object which by the hypothesis is undesirable, would have a tendency not merely to set all those who were not engaged in the same interest with themselves against them, but also to detach from their body some of the existing minority. It is said they are all resident in London. Well, so are the rest. Professor Stirling (1480, 1609, 1697) counts unfairly. The number is 14 out of 40. He ignores the Chancellor and the High Steward, who certainly would not be by any means to be ignored on such an occasion as I have assumed, that is to say, an unfair attempt to set up a medical interest against the general interests of education. He then assumes that two of the six representatives from University College and King's College Councils will be medical, without admitting that at the same time any representative of the hospital schools may be a scientific man; and he then adds the possible (but improbable) additional representative under the present charter, if the Royal Colleges come in, and also the hypothetical representative of the Apothecaries' Company, without adding them to the total; thus obtaining 18, which he raises to "18 or 19" by assuming a Crown representative to be medical, out of "36 or 37," which he ought to have made, of course, 42. But why are all these medical representatives to be counted to the bad in any conceivable division in which medical sentiment may possibly be antagonistic to the general interests of education? There are schools which are efficient in science; Saint Bartholomew's is generally recognised to be so, and there may be others. University College and King's College have interests of their own which, as has been sufficiently proved in the course of this controversy, are by no means identical with those, say, of Middlesex or Westminster Hospital. Above all, it must be remembered that the division of the Medical Schools into those which are efficient and those which are non-efficient in science will in the constitution of the University as we have framed it of itself introduce a very important element of variety and add greatly to the improbability of "paramount ascendancy." The argument is by no means strengthened by limiting the consideration, as Professor Stirling does in questions 1483 and 1486, to those who are Faculty members. They stand 12 to 4 against medicine. If the college representatives are to be added they must be added on both sides, making 16 to 16. The balance is thus re-established as between Medicine and the other Faculties, and the Crown members and the high officers of the University will then hold a casting vote of eight. Why seek to disturb a settlement which we have accepted on those conditions? We at University College and King's College (I say it with confidence) are the guardians, more especially, of those scientific interests in medical education which the Victoria University has come forward to assist us in protecting. We think we can work this University, and we apprehend no difficulty, after the long continued intercourse we have had with those who manage the other Medical Schools in London, in working with them upon such principles as an University ought to be managed upon. Why is it to be urged now that the Privy Council is to be overruled, and a serious controversy re-opened, merely because of the existence of four or five votes which some may think too many in what is an acknowledged minority? I shall have something to say in recurring to this subject when I come to the amendments of the charter. It has occurred to me that it might be useful to the Commissioners, and might be proper upon our part, or at least not improper, that we should here and there indicate amendments for the expression in terms of that which we say virtually already exists. If, therefore, we say a somewhat large medical representation is not detrimental, not injurious, because there are varieties in it, it may be proper so to re-distribute it as to insure a suitable representation of these varieties. To that extent, I think, there will be no impropriety in my suggesting an amendment to the charter.

24,886–7. That will come by-and-by?—Yes, that will come by-and-by. It is a matter of detail.

24,888. Then the third objection is?—That attendance is required of medical students for the final two years before proceeding to a degree?—In the paper privately circulated to members of Parliament and others, it was stated, and actually believed by many, that "all students of colleges and Universities "outside London will be compelled to spend two ad- "ditional years in a college of the Albert University" (as it was then called). "In short," they went on, "a monopoly would be created in favour of the London "schools which would prove practically irresistible." Of course, the work of other Universities will not be interfered with in the least by the requirement of a certain amount of residence at a particular University, as a qualification for its own degrees; and, as was shown at the time, such a provision existed in a more emphatic form in the Victoria University itself. But I think the objection must be taken as being now abandoned; yet not before it had produced a considerable effect in the minds of those who rightly conceived themselves to be charged with local interests in the matter. Once more, it is no fight of ours. The Privy Council inserted it on representations made to them by the University of London, and no attempt has been made to answer the reply which I gave at the time:—"If we had taken the first two years you would "have said it was done to injure your Science Schools." The scientific instruction is given in the first two years of a medical course, but the practical instruction later in the medical course. The Privy Council thought that since it was admitted everywhere that the clinical opportunities of London were greater than those at other places the proper time would be to fix the

Sir G. Young, Bart.

23 Mar. 1893.

later two years. If this Commission thinks it ought to be left to the discretion of the University we have nothing to say against that. But further, this is the only grievance which, as distinct from things of which the Privy Council are better, and we as good, judges as they, was even alleged by the Victoria University.

24,889. Then the fourth Objection is: that no University ought to be founded until Parliament has amended section 3 of the Medical Acts Amendment Act, 1886, so as to enable its degrees to carry with them a license to practise?—This is a new objection which formed no part of their original case. In the original case they quote the charter, paragraph 3, and they say it "is in accordance with the requirements of the Medical Acts Amendment Act, 1886," and they proceed straight to the inference that no more will be required for a degree than for a license. The second paper states, I think I must be allowed to point out erroneously, that we "were obliged" to insert this clause; and so says Professor Stirling in Question 1847. "I will give you the reason for that. It is necessitated "by the Medical Acts Amendment Act, 1886." Of course we might have taken the other course. We might have said, "We will give a medical degree which will not carry with it a license to practise;" and as a matter of fact I have been reading over within the last two days some very weighty arguments that were addressed to the Committee which drafted the charter to show that that would have been the best course. But we thought differently; and the reasons that weighed with us were, practically, that a medical degree which did not carry with it a license to practise would be of very questionable value; it might confer a certain scientific eminence, but that object could be equally well obtained by a science degree. The facts of the case were familiar to us from the first; even before the passing of the Act of 1886 they had been fully considered. Mr. Marshall, who was then President of the General Medical Council, was Chairman of the Committee of the Association for Promoting a Teaching University in London, and in the earliest conversation we had together, he pointed out that the public opinion of medical thought was entirely opposed to the further multiplication of bodies conferring a license to practise; that there was a strong weight of opinion in favour of the distinction between Universities and Licensing bodies, and that we should have to deal in all probability with an Act (it passed the next year) which would render it impossible for new Universities to give degrees which would confer a license to practise. Afterwards in discussion when we were drafting the charter the Act was brought before us by Mr. Rotton, and we drafted this section accordingly. Now if this Commission think fit to recommend a reversal of the policy of 1886 that is no business of ours; but that policy, to limit the number of licensing bodies in England, was deliberately adopted after a controversy of a great many years. I may note as a proof that Parliament had this matter under consideration, section 3 of the Act, subsection *c*, which points to a still further reduction by providing carefully for combinations between existing licensing bodies. It is evident from evidence given by Professor Heath (13,295) and Mr. Windle (13,428 and 13,463) that Birmingham is afraid that the Midland University will not get it if we do not; and it is just possible that the Victoria University is afraid of losing it. But the circumstances are different. It is not necessary for us to argue the case from the point of view of Birmingham and the Victoria University. Here, in London, of all places, a reversal of that policy is most unlikely, because there are already no less than three licensing bodies situate in London: the University of London, the Royal Colleges and the Apothecaries' Company. Then is it desirable? So far as my opinion goes, it is not worth giving, but I merely repeat what has been said to me by authorities of the medical profession and authorities in University matters for many years past, that it is in their opinion most undesirable that licensing bodies should be further multiplied. The proposal to interfere with the privilege of the Inns of Court to call to the Bar is one even more impossible to contemplate; and that proposal has arisen partly, I think, out of this controversy. Then on the other side I maintain that the precedent of Divinity Degrees is good. They postulate, at the Universities where degrees in divinity are now given, an external qualification, namely, Holy Orders.

24,890. Then you wish to notice the development of this objection: that the examinations of the University may be uninspected by the General Medical Council?—This objection, which was raised by Professor Stirling at Questions 1511 and 1551, was, I think, sufficiently dealt with by your Lordship, by whom the question "Why should they?" was put. I should venture to add "Why should they not?" The examiners can report (in the language of the Act) upon any qualifying examination "and any other matters "in relation thereto which the General Medical Council "may require them to report upon." I think that meets the objection sufficiently.

24,891. They will have the power?—If the General Medical Council and the University please.

24,892. Then the further answer to the fifth objection. That the Charter contains no specific safeguard against the lowering of the standard of degrees?—This was originally raised in a letter from Mr. Paul, the Liverpool Dean of Faculty in Medicine, and it was alleged of the standard first in general culture as assured by a previous examination, or what is called in London matriculation; secondly, in science as assured by the preliminary scientific; and, thirdly, in final examinations for the degree of M.B. or M.D. I notice in the last paper that has been submitted to this Commission that the first two have been dropped. As to the second point, the question of the preliminary scientific examination, I have nothing to add to my answer already given (10,951 and 10,953). With regard to the third point, the final examinations, they now seek to raise the inference that because students must secure a qualification before they proceed to degrees, therefore no more will be required than this for M.D. But why? why not infer the reverse? why not infer that it would be especially the duty and the desire of the University to require something more, if only because the examination upon which the license is given will not be their own examination? The tendency of all examining bodies is rather to magnify their office than to diminish it.

24,893. Do any charters put in safeguards against lowering a degree? Is it possible to do that in a charter?—I have already stated my opinion to be that it is impossible, and that of the Victoria University will serve as an instance. To that all they have to say is that our charter is in other respects so objectionable that there ought to be put in safeguards; but in their case they have such pure and innocent intentions that these are not necessary.

24,894. Then with regard to the answer to the new statement of this objection. That there is a possibility of a degree being given, so far as the final examination is concerned, on proficiency in medical subjects only. That you have dealt with?—Upon that, I wish to add further merely this. I will read a passage from the prospectus of the Victoria University Calendar for the final examination at pages 76 and 77. These are the subjects in which they examine for the degrees of M.B. and B.Ch.: "(1) Surgery, "systematic, clinical, and practical; (2) Medicine "systematic and clinical, inluding mental diseases and "diseases of children; (3) Forensic medicine and "toxicology and public health; (4) Pharmacology and "therapeutics; (5) Obstetrics and diseases of women; "(6) General pathology and morbid anatomy." That is to say, for the Bachelor's degree, all their subjects are medical and practical; exactly that which they say now is objectionable in so far as there is a possibility of our giving our degree on those subjects only. Then, secondly, for the degree of Master of Surgery all the subjects again are surgical and practical. For the degree of M.D. there is an alternative: a dissertation is required, which may deal with some

department of medicine; that is to say, there is a possibility of a degree being given on a medical subject only; or again it may be on some department of science bearing upon medicine; which I think is a very suitable arrangement.

24,895. Then the sixth Objection: That the promoters of the charter "intend" to give degrees upon an insufficient standard of attainment?—I do not know that I need dwell much upon this. It was of course a very important part of the case which, as I have pointed out, necessitated this inquiry. If it had been possible to establish any such intention on the part of the promoters of the charter nobody could say that the charter ought to proceed, and if sufficient reasons for thinking that there was a danger of this were alleged, it would be impossible for any minister, and impossible perhaps for any member of Parliament who took an interest in the matter, to say that a case had not been made out for inquiry. It was, therefore, eminently proper, I think, that evidence at some length should have been adduced in support of so very serious a personal imputation. So far as I can make out what has been resorted to is a sort of double arrangement. They adduce the objectionable arrangements which they say they find in the Charter, Nos. 1 to 5, with which I have dealt already, as proofs of our evil intention; but of these they now seem to have abandoned the first and third. For the second, third and fourth I have shown that we are not responsible; that is, whether the University is the better or the worse for them, they cannot show a wicked intention in us, because it was not ourselves, but the Privy Council, which inserted them. As to No. 5, I have shown it is their own case. What remains? Then comes in the other branch of the argument, and they shift their ground and say, "Arrangements which would be unobjec- "tionable in our hands, are intolerable in yours, "because your intentions are bad." But this approaches nearly to a *petitio principii*. I have examined the evidence carefully to see whether anything has been added to the quotation from a speech of mine at Westminster Hospital, with which I have already (10,807) dealt sufficiently, and that from a letter of Mr. Erichsen's. Nothing was put to Mr. Erichsen when he came up, and I think everybody who knows him would agree that it was the most gratuitous of imputations that he, of all people in the world, ever should have had an intention of promoting a charter to give medical degrees on an insufficient standard of scientific attainment. To settle this matter I have been obliged to travel outside the paper which is before the Commission. I find in a document which was put forward upon the subject, apparently inspired, namely a leading article in the "Manchester Guardian" of the 12th January 1892, that it was put as a dilemma. "If the standard were as high as that of "the University of London, nothing would have "been done to remedy the medical grievance; on the "other hand, if the standard is lower, the protest "of the Victoria University is justified." But the answer is that even those who, like Lord Selborne's Commission, come to the conclusion that the University of London has unduly forced up the standard, do not consider that the Victoria University's and other teaching Universities' degrees of good repute are too high. All that is wanted is a reasonable teaching University degree, and teaching University degrees are undoubtedly easier. In concluding this subject, which I dwell upon because of the very great moment of it, because it had so very much to do with the two years' delay which will have taken place in the sanctioning of the charter, I wish to add documentary evidence to what I have had occasion more than once to state, namely, that the University College and King's College are the guardians, more especially, of scientific eminence in the Faculty of Medicine in London. Some figures were referred to by Professor William Ramsay in his evidence, and the table which he then used I think, deserves that it should be printed as an appendix to our evidence, and I tender it for that purpose. (*For this document, see Appendix No.* 56.) It is a table of honours obtained in the examinations of the University of London, 1840–1889, in medicine, sciences connected with medicine, and pure science, by the 12 London Medical Schools. I will read a few of the totals: University College, 1,338; King's College, 428. The two University schools thus have 1,766 out of a grand total of 3,065. The second in eminence is Guy's Hospital with a total of 615, thus exceeding King's College; St. Bartholomew's is next with 295, and the rest follow. Of 34 separate columns which were analysed in order to form this table, University College was easily first in all. The honours in science at University College exceed one-half of those conferred throughout the whole 12 Medical Schools; and those conferred in University College and King's College taken together are not far short of one-half of the whole number, 2,371, of science honours ever conferred by the University. We trust that this Commission will see its way to give to us, who have suffered considerably from this imputation, a full vindication.

24,896. There was a good deal said about the present London University degree being a good deal too difficult for a medical student, but in examination it was made out that it was not that the degree was too high, but that the way of taking it was too difficult, and that too many subjects had to be taken up at one time. But I think the remarks about London degrees being so difficult to take, led to the inference that the degree of the new University was intended to be easier. I think that is how the idea got about?—There is no doubt that it is intended it should be easier; and I do not think it would be a position consistent with what we have urged, if we denied that we intended it also to be, in a sense, lower; that is to say, if we are to accept the conclusion of Lord Selborne's Commission, the standard of the University of London appearing to have been arranged so as to be equivalent, as far as possible, to that of an honours degree in other Universities, they said, "We see no "reason why there should not be an ordinary degree "as well." If that is so (and I take it upon the statement of the Royal Commission who examined into the matter; it is not a point upon which my personal authority is of weight), there is no doubt that, in the teaching University as we have planned it, we intend to have a creditable ordinary degree, of sufficient standard in the various branches which go to make up the education of a medical man, who is also a cultivated man.

24,897. Then you wish to say something about the course adopted by the Victoria University?—I think it will have become evident by this time that there was an extreme public inconvenience in the course adopted by the Victoria University, that is to say, in abstaining from appearing before the Privy Council, and presenting their case, (which I will assume, for the purpose of argument, was a good case, though, I think, I have shown that it was a weak one,) in private to Members of Parliament with special connexion with Lancashire and Yorkshire, and by circulars to the other places of education in England, culminating in a deputation to the Prime Minister, upon which were represented, not merely the interests of the Victoria University and the Medical Schools, but a great many other cases and objections with which, so far as the course of this inquiry has made it clear, Victoria University has no sympathy whatever. They objected upon grounds of detail, and, I think I have shown, without fully informing themselves; they ignored contentious issues which had already been raised before the Privy Council, and had been decided by the proper tribunal, upon what appeared to them, in the absence of complainants, to be sufficient ground; they disclaimed the jurisdiction of the Privy Council as a final tribunal, and appealed to Members of Parliament, as to matters of detail of a technical description for the mere statement of which time could not be found in the House of Commons; finally, they coalesced with opponents on other grounds which were

Sir G. Young, Bart.

23 Mar. 1893.

inconsistent with, and even opposed to, their own. But this of itself is a matter of past history; and we shall be perfectly ready to shake hands and forget the aberration if, as I fully anticipate, the Victoria University, in the future as in past times, is found heartily supporting the foundation of a really effective and well-designed teaching University, upon feasible lines, in London. I feel, however, that it is not amiss that I should call attention to certain very ominous announcements which have been made. In Lord Spencer's speech, in introducing the deputation, he mentioned nothing but the medical grounds of objection upon which I have dwelt; but, he said, there were other objections which would be dealt with at the proper time. Professor Stirling, at Questions 1473, 1654, and 1655, alludes also to these other grounds of objection; and I have searched the whole of the evidence referring to this subject without finding that these objections have ever been produced. I have nothing to say about objections which the Victoria University does not intend to urge, but I do deprecate this course being pursued at a further stage. I deprecate, when this Commission has reported, the Victoria University again consulting the members for Lancashire and Yorkshire, and raising new objections in the last stage in the House of Commons, and so again necessitating further inquiry.

24,898. (*Mr. Anstie.*) Can we control the action of the House of Commons?—Do you say can a Royal Commission control the action of the House of Commons?

24,899. Yes. What have we to do with what proceedings may take place in Parliament? How can we affect it?—I am not sure that I understand the bearing of the question.

24,900. I thought you were addressing some argument to us with respect to what course we should take?—I am addressing a Royal Commission upon which the Victoria University is represented, and I am deprecating the pursuance by the Victoria University of a particular course.

24,901. Which is to take place in Parliament?—Which is to take place outside Parliament, if it is action on the part of the Victoria University. Is not that so?

(*Mr. Anstie.*) I do not see what we have to do with it?—You are to inquire.

24,902. (*Chairman.*) I think it is fair to show, as you are speaking against the general opposition of the Victoria University, that you do think they have not behaved quite well in their opposition, but you would not wish to go into it at any great length?—I have finished upon that subject.

24,903. Then we come to Objection No. 33: "That "degrees cannot be conferred upon past or pre- "sent students in the schools unless they will go "through their course over again"?—With regard to medical matters there was, no doubt, as you are aware, a very considerable desire that students who had passed through our schools, and who are now practising, but who, owing to the unfortunate condition of affairs, had not been able to obtain degrees, should have the opportunity of taking them upon such proper conditions as the University might appoint; and there were precedents for this course. There was a slight miscarriage that took place in the presentation of our case before the Privy Council. We were asked for a precedent, and desired to point to that of Dublin University as giving honorary degrees in Medicine; which, I am able to say, from personal acquaintance with what was done at the time, were first given many years ago at a time when it was desired to strengthen medical teaching in the University by a closer association with the physicians and surgeons who were at the head of their profession in Dublin, but who, although they had obtained licenses from the King and Queen's College of Physicians in Dublin, had not obtained degrees at the University. A limited power to confer honorary degrees was taken by the Dublin University, and has been exercised with great advantages. It has not been merely conferred upon old students of the University, nor merely upon Dublin practitioners, but many of the most eminent men in this country have been invited over and have received an honorary degree in medicine at the University of Dublin. Unfortunately, by a mistake, our counsel used the word "Durham" for "Dublin," and the precedent of the University of Durham was not thought to be quite so good by their Lordships. Rather than attempt to upset a decision of the Privy Council refusing the University the power to give honorary degrees in medicine I would suggest, if the Commissioners think a case has been made out for amendment on this ground, that a temporary provision should be inserted for giving to old students, not honorary degrees but degrees upon certain specially arranged conditions. There is a precedent which rather more than covers this ground in the foundation and practice of the Victoria University. Out of, I think, little more than 400 graduates up to date upwards of 100, or more than a quarter of the whole number of their graduates, consist of gentlemen who were educated at Owens College before the granting of the charter, and upon whom degrees were conferred at the first starting of the University upon terms approximating to those of an honorary degree. I do not think any further thesis or examination was required of them. These are not in medicine, because when Victoria University was founded they did not give degrees in medicine, and indeed had no medical school. But what was done in their case for Science and Arts is a good precedent in ours for Medicine as well, and it is in Medicine that it is more especially desired. I do not suggest that the power, if conferred upon us, should be limited to medical degrees. It may be well that power should be taken to give only a certain number of degrees to old students; another limitation that may be suggested is, old students who have comparatively recently passed through the school. I do not think it would be desirable that a University should be giving degrees of this kind to gentlemen whose position in life has been long since established. I do not press the point, but I believe it would please a good many, and, as I have already said, there are precedents for it.

24,904. (*Mr. Rendall.*) Old students of all the constituent colleges, do you mean?—All the constituent colleges, of course; that is to say, University College, King's College, and the 10 Medical Schools which are to be admitted in the first place.

24,905. (*Chairman.*) You wish to explain the working of the charter for medicine?—Briefly I would point out how I conceive the Gresham Charter would operate, broadly speaking, in medicine. In the first place the necessity, in order to obtain a degree, of passing as soon as possible the first examination, whether it was called a Previous Examination, a Little Go, or Matriculation, which is the guarantee of general culture for a medical student, would be kept constantly before the students in all the Medical Schools. They would be members of the University, and the Previous Examination would be an examination, the notifications of which and the preparation for which, would be constantly in their minds. This is very important. There is no doubt that under present circumstances a great many medical students coming up to London, of all degrees of thought and temperament, omit to take it, through ignorance or carelessness, and find afterwards that they are too busy in the subjects of their more strictly medical education to go back and get up their Latin and other subjects necessary for matriculation. Next, the University would have its efficient schools of science, not necessarily limited to University College and King's College, but not unduly multiplied, which would train students for the Preliminary Scientific. All students, whether reading or not reading for a degree, would be at least encouraged, under arrangements which would be approved by their own medical school, to go to a science school of the University. At the same time there would be nothing to prohibit students who were merely reading for the examination of the Conjoint Board from obtaining the

minimum of science which was required in other places if they themselves thought it desirable. On this subject I should like to point to a misconception in the second paper of the Victoria University as to students "not being able to commence degree courses *ab initio*," (I really do not understand upon what ground that is alleged,) and "not passing preliminary examinations "contributing to the qualification for a degree." Some later examinations of course they will have to pass which will not contribute to the qualification for a degree, except so far as the University may recognise them, but that is not the case with the Preliminary Scientific. After the Preliminary Scientific Examination the student will enter upon that well-defined part of his course which would be the subject from the first of communication with the authorities of the licensing bodies in London. The University could recognise, so far as they were deemed satisfactory, the examinations which these authorities are bound to retain, that is to say, the examinations in medicine, surgery, and midwifery, which belong to the third and final of the four series of examinations required by the Conjoint Board. The University would endeavour to obtain the recognition by the Conjoint Board—a recognition which Dr. Liveing informs me has been conceded freely to English Universities which are of a satisfactory character—of the University examinations in the other later subjects, such as physiology and anatomy. Supposing any difficulties arose, as difficulties will sometimes arise, even with the best intentions between bodies, the University of course would not be helpless, because there would be a second string in the examinations of the Apothecaries' Company; but that we should be limited to the Apothecaries' Company, as Mr. Lawson Tait suggested in an amusing letter, is certainly not part of our contemplation, and, so far as I can judge of the evidence which has been given on part of the Royal Colleges of Physicians and Surgeons, there would be no chance of such limitation being established. Whether, after obtaining the license, a student should be required to go through a further course of study and a further set of examinations before he received the M.B. degree, is a point which naturally has been the subject of much discussion; it is quite clear that the final examination of the Royal Colleges does to a very large extent reproduce, and at a sufficiently high standard, the examination for a Bachelor's degree in Medicine. But if not, no M.B. degree could be given in the University. The University should on no account give an M.B. degree to a gentleman who has passed the external examination of the Conjoint Board, merely because he has passed such examination. No one has suggested such a thing. Examinations which are not under the control of the University could not be recognised as the last qualifying examinations for the degree. As to the M.D. degree, which is the really important one, the arrangement in the Victoria University is one apparently adopted in many other Universities, and has been stated by authorities on our own part as probably the right one to adopt, that is to say, that it would be given upon a thesis, and not upon what is more properly described as a paper-work examination. I conceive that such arrangements come within the general description of examinations in the charter. Objections have been raised, and arguments founded upon those objections have been urged, to the effect that some more complete amalgation with the Royal Colleges is desirable. I think that is very questionable. I will not urge upon the Commission arguments which, proceeding from a layman, would not have the weight with them that the arguments of those who are acquainted with these matters professionally would, but I may be allowed to point out that any such union as has been indicated in various plans, any such more close and organic union between the governing bodies of the Royal College of Physicians of London, and the Royal College of Surgeons of England, with the teaching University for London, or with any teaching University in London, would be inevitably the subject of a considerable amount of opposition which has not yet been heard; that is to say, opposition from Edinburgh, Dublin, and the provincial schools of medicine. So far as Edinburgh University is concerned they presented a memorial to that effect to the Privy Council, not in reference to our charter or our petition, but in reference to the petition o the Royal Colleges that they should have the power to give medical degrees. That opposition, we afterwards heard, was likely to be enlarged, so as to embrace our proposal of a teaching University in London, and, as I pointed out at the time of giving evidence before the first Commission, it was upon correspondence between ourselves and friends at Edinburgh that it was dropped. But it would not have been dropped if we had proposed to incorporate or amalgamate the University with the governing body of the Royal Colleges. I do not understand that any such opposition as this implies would be urged to the mere representation of the Royal Colleges upon the Governing Body of the University.

24,906. You have seen the scheme of the Senate of the University of London in which it was recommended that they should be brought in?—In the scheme of 1891 there is a representation given to the Royal Colleges in the first place, and certain arrangements for joint action in conferring a pass M.B. degree in the second.

24,907. You do not feel at all inclined, supposing they were willing to meet you in the way they were willing to meet the London University, to adopt anything like that, making arrangements so that you could work with them, in order to prevent too many examinations and in order to give them a position?—I think the first object, that of preventing the duplication of examinations, as I have shown in the short description I have given of the course, is already obtained; but with regard to this particular clause, No. 47, in the Senate scheme, anticipating what I shall have to say at a later stage, we should certainly not accept it or approve of it.

24,908. (*Professor Sidgwick.*) In order to make the point clear, may I ask Sir George Young whether he thinks the proposal of the Senate in clause 47 would excite the opposition of Edinburgh?—So far as my judgment and experience enable me to give an opinion it would be very strongly to the effect that that is so, but of course, it must be taken as an opinion. I do not wish to urge it as an ascertained fact.

24,909. (*Chairman.*) I believe as the Gresham Charter now stands there would be nothing to prevent the Senate making such an arrangement with the Royal Colleges if they chose, would there?—The Council of the Gresham University would not have power to make an arrangement which involved the giving to an external body what amounted to an equal, or possibly even a superior power in regard to examinations for degrees, because it is bound to give degrees upon its own examinations. In regard to the question which your Lordship has just put, so far as it applies to this scheme, the scheme of the Senate of the University of London, that is the point I was next going to deal with. I notice that it has been urged in evidence that a sufficient remedy for the medical grievance would be found if the University of London were to combine with the Conjoint Board in holding qualifying examinations for a license under the Medical Acts Amendment Act, 1886, section 3, sub-section *c*. Of course the medical grievance, as urged, would not be satisfied unless at the same time the standard were considerably lowered for the M.D. degree of the University of London, so that most licentiates could obtain it. It appears to be thought that this would detach from supporting the teaching University the bulk of the medical profession, and possibly that in that case no more would be heard of the cry for a teaching University. I do not think that is the case. The question whether a teaching University is desirable extends very much beyond the limits of the medical grievance. But with regard to this particular proposal and the effect and result of it, I wish to say that it is by

Sir G. Young, Bart.

23 Mar 1893.

no means a proposal to which the University colleges are to be supposed as antagonistic. It would be an excellent thing if the two great examining Boards could reconcile it with their dignity to recognise each other's examinations, so as to not to go on duplicating examinations as at present, for those energetic members of the medical profession who desire both the M.D. of the University of London and the license of the Conjoint Board. But it is not so easy as Mr Anstie seems to think, if I may quote him from the evidence. At Question No. 20,991, Mr. Anstie says: "It is expressly provided by Act of Parliament "that they (the University of London) can do it"—that is, combine with the Royal Colleges—"and they "do not want the assent of Convocation or anybody "else to do it." And then Sir George Humphry says: "You mean an arrangement with the Royal "Colleges like the scheme the Senate prepared?" "Yes, they have express power to do it." To that I must take exception. All that the Medical Acts Amendment Act provides, so far as my judgment and my perusal of it enable me to give an opinion, is that they may combine without forfeiting the character of a qualifying examination. It does not remove—it never affected to remove—any extrinsic bar that might exist to such a combination. The question whether there is such an extrinsic bar is an important one. Referring to clause 47 of the Senate's scheme the point of it appears to be that certain examinations for pass M.B. degrees are to be conducted by a board of examiners, consisting in part of examiners to be appointed by the Senate of the University of London, and in part of examiners to be appointed by the Royal Colleges. On the other hand, the charter of the University of London, section 33, expressly requires that the examiners in all examinations for degrees shall be appointed by the Senate; which would naturally seem to imply that they should all be appointed by the Senate, and not some by the Senate and some by the Royal Colleges. Of course their charter may be altered, but the assent of Convocation is required to an alteration of the charter. On the other hand, supposing my interpretation is wrong, and that it could be done by a by-law, the assent of the Secretary of State is required to a by-law of the University (s. 43), and that of course would be given on public grounds; and no doubt in any matter that raised controversy it would not be given without hearing both sides.

24,910. (*Mr. Anstie.*) I may say that in the opinion of competent lawyers upon the Senate, and we have some, there is no obstacle in the way?—Well, I have given my reasons for thinking that there is a very considerable obstacle; not as urging that it ought not to be done, because as I have already said, I believe it would be a good thing. Supposing the obstacle to be overcome, the movement for a teaching University in London will not have ended, even in Medicine. Supposing there to be one grand combined board for examinations, consisting of the University of London and the Conjoint Board, it will be a unified control, and in some respects a dual control, where both the elements are external, is less oppressive than a unified control. We have reason to think, from the communications which have taken place, and the common action we have been engaged in with the representatives of the Medical Schools, that we should still be supported by many of the leading teachers in them in desiring to establish something which can be more properly called a teaching University.

24,911. (*Professor Sidgwick.*) Clause XVII. is: "All examinations of members of the University shall "be conducted by such members of the assemblies of "the Faculties, and such other persons to be called "'external examiners,' as the Council may from "time to time appoint." That would preclude the Council from accepting examiners appointed by another body. Is that the clause?—The clause in the Gresham Charter to which I was referring is in Chapter III.: "That the University shall have power "to confer degrees in the Faculties of Arts, Science, "Laws, and Medicine, and in such other Faculties "corresponding to the provinces of study and educational work occupied by the University as shall "from time to time be determined by the Council of "the University, on all persons, male or female, who "shall have pursued a regular course of study in a "college of the University, and shall submit themselves for examination." That does not mean to submit themselves to the examinations of all and sundry outside the University, but to submit themselves to examination within the University.

24,912. Would that prevent the University if it chose from accepting an external appointment of examiners?—I think not from accepting an external appointment of examiners.

24,913. Therefore that would allow the scheme of the Senate?—Yes, it is possible, I admit, that that would allow of an arrangement which, so far as the appointment of examiners was concerned, but not in other respects, would be analogous to the scheme of the Senate.

24,914. (*Chairman.*) Now you wish to examine some rival schemes?—The one referred to in the evidence, Question 20,991, is that which I have dealt with. The next is the plan of the Association for promoting a Professorial University. No scheme has been submitted by this Association, and I am obliged, therefore, to gather the practical bearing of their proposals from individual evidence, of which the most important, unquestionably, is that of Sir Henry Roscoe, a leading member in the foundation of the Association. I understand that the members of the Association are now a good deal divided among themselves, but they agree, no doubt, in certain main principles. Sir Henry Roscoe has formulated a plan from their point of view; he opposes the Gresham University from this point of view, and others. His scheme proposes a clean sweep of the educational institutions of London which do University work (17,836). University College must go; not that he has anything against it, but for the sake of abolishing the rest. King's College (17,839) he clearly does not intend to admit at all; South Kensington he sees no difficulty about (17,837). The cursory glance which I was able to give this morning to the evidence just received, of General Donnelly, certainly tends rather to confirm the impression I previously held, that there would be considerable difficulty, either in sweeping away South Kensington and refounding it, or in including it in the University on the present basis. In Sir Henry Roscoe's opinion, Government have only to build the new laboratories, and then abandon all control. That is not a course of the kind which is usually taken by Government in this country. Then at 17,847, Sir Henry Roscoe says, upon the governing body the Crown (that is, the advisers on academic matters of the Minister of the day), is to have a clear majority; and there are also to be University professors upon it. I have had some difficulty in ascertaining whether these University professor members are to be limited to the head professors, afterwards described by him, or whether among University professors who can be represented or who can have seats, he includes his inferior professors. But I believe I am right in saying, that he only intends head professors to have a seat on the governing body, and in that case certain important consequences must follow. The philosophy of his scheme (17,838) consists of a differentiation between research in the first place, post-graduate or higher teaching in the next place, and thirdly, undergraduate or "elementary" teaching. He proceeds to concentrate the teaching of the University (17,843) in separate centres for the purposes of the post-graduate teaching, and eventually for purposes of research. He proposes that the buildings in the Strand, which are now called King's College, should be appropriated to the Faculty of Arts, which, I suppose, would include something like 20 or 30 Chairs—perhaps 20 head Chairs; the buildings in Gower Street are to be appropriated to a section of the Faculty of Science, such as the Biological Sciences, of which, if we should take the present division as a

test, there would be about three head Chairs. The buildings at South Kensington are to be appropriated to chemical, physical and geological sciences, and would, I suppose, carry with them about six of the head Chairs, and the teaching of these Chairs would then cease to exist, for all purposes except undergraduate or elementary teaching, at the present University Colleges. Finally, the City and Guilds Institute would come in as they stand, for applied science, with four or five Chairs. Then at 17,973 I notice that head professors in each branch are to have no control over the other professors, and (17,841, 17,844, 17,914, 17924) that both classes of professors—the head professors and the inferior professors—are to be free each to do some of the other's work. He goes so far as to say (17,979) that the inferior professors are somewhat to resemble the ill-paid class of *privat docenten* in Germany. Faculties, Boards of Studies, or *Senatus Academicus* he proposes very much as other witnesses have done; but he would only allow one sort of degree to be given (17,833) and only one set of examinations, both for University students and external students (17,888) though he permits considerable modifications to meet the case of their having been taught by different professors (18,014), and he winds up by telling us that "it would be impossible to adopt "a simpler organisation" (17,844); simplicity is the ideal he has set up. Now, I do not think I should be properly representing the views of those who have commissioned me to appear on their behalf, if, in commenting on this proposal, I took up anything that could be called a merely institutional attitude. I accept the challenge to deal with this scheme on purely educational grounds. I propose, therefore, to put aside all traditions of the College, all respect for our founders, or our trusts; and I certainly will not stop to discuss transitional arrangements which are supposed to make it pleasanter for those concerned. I will just assume the buildings to be mere bricks and mortar, and all the endowments to be carried off to Great George Street for a statutory Commission to sit upon, and adjudicate upon as they think right, for educational reasons only. Then I ask: what is the educational outcome?—In the first place, on the power of attracting able men as professors? I say confidently it would be a dead loss. We should have the head professors, and they would be able men; their Chairs would attract the ablest men in the country, as our professorships do at present. Yes, but they would be far fewer in number; and they would be withdrawn from their proper function of University teaching work, at least among undergraduates. They would be withdrawn in the same way as in that older system which has now been condemned at Oxford and Cambridge. Secondly, we should have inferior professors in considerable numbers. At the head kraal of each branch of study they would be subordinates to the head professors, but they would be in very tolerable positions for young men or inferior men. At the other centres where they are still to continue their teaching and have their laboratories, they would be in a perfectly intolerable position; they would be mere outcasts, held up by the very nature of their office as limited to elementary teaching and confined to an inferior laboratory; except indeed that they might take a cab and go to headquarters when they wanted to conduct research on their own account; but they would be unable to retain their best students or to found a school, which every professor of mark desires to found, both to assist him in his own investigations and to carry them on beside him in his own laboratory. I desire here to note the benefit of having a second string in University appointments. It constantly happens that an important appointment has to be made when for special circumstantial reasons there is no very first-rate man in the field. Under circumstances as at present arranged we should be in the position that an appointment which would never be, I think, very much below a first rate one, but which sometimes might not be in the very first rank, could be supplemented when a vacancy in the corresponding Chair at another institution occurred; and in the studies most pursued we should in a position to strengthen the staff at far more frequent intervals than under the conditions that Sir Henry Roscoe has drafted for us. In the second place, I will take the government and the administration of Sir Henry Roscoe's scheme, and I am prepared to show that it would lead to an inevitable deadlock. Referring to the evidence at 17,850, the governing body is to concern itself with everything, but the educational work is to be administered by the *Senatus*. Well, what will be the leading agencies upon these two bodies? On the governing body the head professors, that is clear. On the *Senatus* the inferior professors, that is equally clear, as being far superior in numbers. That is to say, the leading agencies will be different, even if an absolute majority is not secured to each of those agencies in its own fixed. This sort of institution can only work if it is so arranged that every probable cause of serious difference is guarded against. Is that so? What are the probable causes of difference which remain in the University as Sir Henry Roscoe has arranged it? In the first place there is the very important question of fees; in the second place the question of what the division of work is to be between the head professor and the inferior professor, both parties being likely, as I have already said, to encroach upon each other, and there being no special control given to the head professor, to tell the inferior professor when he is encroaching too far. In the third place what is to be the limit of the development of the inferior laboratories? A most important question and a very thorny one in such a matter as this. How far is the development of the teaching in these laboratories to be carried? Some professors would say to the very highest point, and that you could not go too far. But it is clear that the head professors, when it comes to a question of how money is to be spent, might have a different opinion. Then, fourthly, with regard to the control of the examinations. Upon this subject the effect of Sir Henry Roscoe's proposals upon my mind is that of sheer bewilderment. He has an open door and a shut door, and he tries to make out that they are the same (17,833 and 17,888). He says there are various ways of meeting the difficulty, which he does not regard as a very serious one. But of these, one examination entirely controlled by the head professors might indeed be independent and impartial, in the same sense in which the examinations of the present University are so; but only if the professors were strictly limited to this post-graduate work; and in that case we should not have a teaching University at all; we should merely have another series of external examinations conducted, no doubt, by very able men, but not by those who were teachers in the University of the men examined. In the next place he proposes alternative papers for University class students; or again, that they should be excused from some of the papers; next, he accepts from a Commissioner that there should be one final examination for all; fourthly, he admits considerable modifications of all examinations for University class students. Is it too much to say that he has not thought the matter out? But further, what is the effect of Sir Henry Roscoe's scheme upon students and upon undergraduate life? Upon this a good deal that I might have been induced to trouble the Commission with has been better stated by Dr. Stoney at 18,844. The best men will crowd to the laboratories of the head professor and will be separated there from the other men in their own studies. But above all, they would be separated from the best men in other studies. Sir Henry Roscoe does not seem to understand the advantage in a University of the constant association of the best men pursuing different lines of study. He does not seem to understand what is meant by *esprit de corps* (17,841). Lastly, there is the point as to the line of severance between groups of schools. This will have a disastrous effect on border studies. What would he do with Archæology as distinguished from Ethnology? What will he do with Logic as distinguished from Psychology? It is evident that

Sir G. Young, Bart.

23 Mar. 1893.

a Chair in each of these subjects, according as it was founded in one place or another, would be materially affected, and the mere separation would have a disastrous element in it. As between physical and biological sciences other difficulties of the same kind would arise. But, in truth, it appears to me that his theory is mistaken. The order of importance, as laid down by him, is, in the first place, research; secondly, post-graduate or higher teaching; and, thirdly, under-graduate teaching. In a University it is the other way. It is the teaching of undergraduates for which the University must be mainly constructed, and, what is more the undergraduate teaching, and the higher teaching ought not, in the opinion of, I think I may say, a majority of good judges, to be considered as properly separable. This is a subject on which I had prepared a good deal to say, but finding that Professor Ramsay was prepared to deal with it I have abandoned it to him. It appears to me that that mistake in Sir Henry Roscoe's philosophy vitiates all his proposals. But even if it is conceivable that a University might be constructed to carry out such a theory, which should not have the bad effects I have indicated, I do not think the constitution he has given it can be said to be that University. His practice is surely very inconsistent with his theories. Sir Henry Roscoe justly boasts of having had a good deal to do with the formation of the Victoria University (17,808 and 17,904). But on what lines? On federal lines. And this was by no means a matter undiscussed or free from controversy at the time. There were many who thought they would have been wiser to wait till Owens College had been fully constituted as and could have been formed into a local University for Manchester. But Sir Henry Roscoe has no business to get back to the principles he was at that time in favour of at our expense. There are reasons for forming a federal University in London, which are at least as cogent as those which impelled Owens College at the time to adopt a weaker form. Sir Henry Roscoe recommended King's College for a Government grant, wishing to get the Victoria University grants through. Now he wants to cut it out; but as he also wants to get a grant for Bedford College, he puts in Queen's College, although that is a denominational institution (3987), and although he himself considers it to be an institution not up to University mark.

Mr. Huxley's plan I do not propose to criticise at anything like such length, and I desire to speak with the greatest respect of Mr. Huxley personally. I owe to him a good deal of valuable information in dealing with all this matter, and although I regret very much the tone of some of his remarks, I have no doubt that there will be a great deal in what he said that will be of value. I gather his plan from three important sources, differing in effect: first, from his letter to the *Times* of the 4th December 1892, in which he gave the abstract, which he had handed to the Commission, of his evidence, as carefully settled by himself; secondly, from his evidence as revised at 13,492, and what follows; and thirdly, in some respects which are not of material importance to our present discussion, from statements made to ourselves at the conference which we held on the 22nd December last at University College with the representatives of his Association. The examination of Mr. Huxley by the Commissioners shows that between the time of giving it and the revision he altered his evidence (13,492) by inserting the words "collections of" before "institutions," and altering "colleges" into "Faculties," that is to say, he altered the whole basis of his University. His first proposal, as it was understood by everyone, and as I believe it was intended by himself, was one for giving degrees in the separate institutions, by, of course, the authorities of the institutions, which the University was to recognise by an admission "ad eundem gradum." The second proposal was for re-constituting, it might be by absorbing or re-founding, these institutions according to Faculties in a very different and a very much more definite arrangement. However, I will confine myself to the evidence as he revised it, and more especially to one point in it. I notice with pleasure that he abandons, in name at all events, the idea of "absorbing" the existing University teaching institutions (13,493). In detail, I am not quite sure that it is completely abandoned. For instance, he takes all the endowments which we possess at University College for the purpose of maintenance (13,682) absolutely. He takes all our fee fund, and he takes all the teachers who are to be considered in any sense as University teachers. This is repeated emphatically, and was repeated by himself over and over again at the conference which he held with us at University College. There was to be one class of teachers only. I need not repeat to the Commissioners how entirely I agree with him in this respect. He says no compromise on this point is possible; all the teachers in London are to be of one class, that is to say, are to be taken over by the University, and taken away from the colleges. With that I do not agree. And lastly, he now takes away the examinations. His original plan was rather wittily described to me as a plan for making the University do all the colleges' work and the colleges all the University's work, that is to say, for having the examinations conducted in the colleges and the teaching in the University. But it appears that now, on maturer consideration, he thinks the examinations must follow the teaching; a conclusion which, I need not say, so far as that alone is concerned, I do not disagree with. But now take the question of endowments. I have already handed in a table of the very important endowments, almost all of quite recent gift, which we administer at University College, for special studies, in the shape chiefly of endowment of professorial Chairs, and partly also, and a very valuable part, of endowment in the shape of appliance funds for laboratories, and endowment of student teachers who are to work with the professors and under their direction. Mr. Huxley distinguishes between "public" endowments and "private" endowments, a distinction not known to the law. Sir Henry Roscoe calls them (17,863), rather more in accordance with usual parlance, "special endowments," a term which I prefer and which I will use. Now neither our general nor our special funds are trifles. Mr. Erichsen handed in a return which is printed in Appendix No. 25 from which an allotment can easily be made as between the general funds and the special trusts at University College. For the purposes of my present answer I transfer from one head to the other the important Goldsmid Trust, because, although it is the gift of a recent founder, it was left so entirely at the disposal of the Council that it is more proper to consider it a fund for maintenance than a special fund. In the result we find that, including buildings and equipments, we have about 357,000*l.* trust funds, and 312,000*l.* which may be considered as property or general fund. When we are called upon at the Charity Commission to alter the scheme of a trust for reasons shown, and for the public good, the main design of the founder, under the doctrines of the Court of Chancery, has to be considered; and surely it is not improper that it should be considered, so long as any respect is to be paid to the wishes of founders in regard to the distribution of what they have given. Now what is the main design of the founder in giving a fund generally to University College? I say with confidence it is that that fund shall be administered by University College, as being the best body, in his opinion, to administer it. On the other hand, what is the main design of such a founder as Mr. Jodrell, in given money for the purpose to which Mr. Huxley alluded—an endowment for which I gratefully acknowledge we are very largely indebted to Mr. Huxley's instance? This was a small endowment for two valuable Chairs, given to us by a gentleman whose main wish in life was to promote the interests of science. He gave it to University College on Mr. Huxley's recommendation, because Mr. Huxley told him that University College was a very good institution for the purpose. If *per impossibile* University College ceased

to employ the Jodrell Fund for teaching Zoology and Physiology, combined with research in accordance with the terms of the Jodrell Deed, it would be possibly necessary for some future Charity Commission to see how they could otherwise employ the fund in a manner which embodied the main design of the founder, and they might ultimately take it away from the college. It is this fund which Mr. Huxley proposes to leave. But the Goldsmid Trust, which Sir Francis Goldsmid gave to us without any control as to how the Council should expend the income, because he trusted us, because he took an interest in the Council on which he had sat for years, as great as it is possible for a man to do in good work on which his energies are engaged, merely providing that whenever we changed the destination there should be a very large quorum—that is the sort of fund which is to be taken away from University College! The whole thing does not stand in reason. It could not be carried. It could not be accepted. Take the question of maintenance. Since we are left with nothing but these specially appropriated funds the shutters must be put up next day. The college could not be kept open. Of course I am not speaking now of the colleges being absorbed; I understand that it is conceded they are to retain an independent existence. But after all, perhaps this will not greatly matter as far as education is concerned, because the University having got our funds is to pay for building and fitting new colleges which have insufficient endowments (13,492). He does not say maintaining old ones. And this is to be done out of our money! His University has not one penny of its own. If this is not to be called "absorption" we may perhaps be tempted to invent a new term for it, and call it deglutition of the colleges; and there I will leave it. Among the "various other matters" left for the Council to do (13,494), I think one will be to keep the college open at their own expense.

24,915. Then we come to your point No. 77 dealing with the letters of the Senate of the University of London, dated 16th December 1892 and 7th March 1893?—We have read these letters, of course, with care. The first remark that it occurs to me to make upon them is that this is now the seventh year since the first communication upon the subject was made to the Senate the University of London, and that in the seven years we have received and have carefully considered and analysed from this source, that is to say, either from the Senate or from Convocation, no less than ten schemes for a University in London widely differing from each other in their object and in their details.

24,916. (*Mr. Anstie.*) Could you give us the dates of those schemes? Perhaps in the word "schemes" you include modifications of schemes?—The first was the scheme of 1885 of Lord Justice Fry's Committee of Convocation, mentioned in my evidence of yesterday. The second was the scheme of the Committee of Convocation, presided over by Sir Philip Magnus in 1886. The third was the scheme of a Senate Committee which was communicated to us at University College by Lord Kimberley during the month of March 1887; a fourth scheme was submitted to the Royal Commission of 1888 which constituted a very distinct change upon that, although in most respects it was the same scheme. The matters in which it differed consisted of a retractation of certain concessions which had been made in No. 3.

24,917. Is the third scheme printed anywhere. There were three schemes printed in the old Blue Book?—Those are the first, second, and fourth, I presume.

24,918. The third we have not any evidence upon at present?—I doubt whether it was ever published, but as I say it was communicated by Lord Kimberley to University College at the time when we had under consideration, the question of a petition to the Privy Council, professedly and intentionally with the view of inducing the college to pause in presenting that petition. But the consideration which was given to it, and a very careful analysis which was made by the Committee which was charged with that work, convinced the Council that they ought rather to proceed with their original design. After the Report of the Commission of 1881, the fifth scheme was submitted to us at University College at or about Christmas, 1889, and during the season of 1890 we had various schemes. In the first place when we went to the first conference at the University of London, in the month of February 1890, the scheme which had been submitted to us in December was not discussed, but another scheme, not drawn up in form, but contained in a published paper written by Prof. Carey Foster was substituted for it, and the whole discussion, so far as it was devoted to any scheme at all, was devoted to that. We then went away and presented our answer with regard to that scheme. The two next were both during the summer of 1890, and when I speak of them as different schemes I mean that the alterations that were made in them, from time to time, so materially altered the bearing of them, and the working of them, from our point of view, that the amount of consideration which we had to expend upon them, which is the point I am now dealing with, was equivalent to that which we should have had to give to a different scheme altogether.

24,919. Then you include modifications?—No, I think I have shown that we do not include mere modifications. However closely each might have appeared to resemble another scheme it was in fact for our purposes a new scheme. The next was a scheme which was not submitted to us, dated November 1890, which was afterwards embodied in a charter, and after considerable delay was presented to Convocation in the month of May 1891, and then rejected. The tenth was the scheme of Convocation which we received the other day.

24,920. (*Chairman.*) Have you anything more to say with regard to these two letters?—The first point that I would urge is that after so long a period, after so many attempts, and after so much discussion on almost every question which could possibly be raised in connection with this subject, these letters certainly do not represent a stage of formation of opinion in a great Institution so advanced as to justify the hope that their deliberations will lead easily to anything more conclusive. In fact, they seem to us to have gone back; to have resolved themselves into a more uncertain state than before; because the only scheme which the senate submits for consideration, and which in both these letters is referred to as of authority is the rejected scheme of 1891.

24,921. Rejected by Convocation?—Yes.

24,922. (*Mr. Anstie.*) Do you say it is referred to as of authority?—Convocation is the Body, or one of the Bodies, charged with the function of accepting or rejecting a scheme.

24,923. Why do you say it is referred to as of authority?—By that I mean as an authority for outsiders to ascertain what the mind of the Senate is.

24,924. Where is it referred to as an authority to ascertain what the mind of the Senate is?—I do not think my words are improper. "The Senate having reason to believe that a distinct expression of opinion "may be useful to the Gresham University Commis- "sioners at the present stage of the inquiry, desire to "recall to their attention the fact that during last year "the Senate approved a scheme for a reconstitution "of the University" and then it goes on to describe it.

(*Mr. Anstie.*) Yes, but it does not refer to it as of authority now.

(*Chairman.*) It was enclosed with these papers, was it not?

24,925. (*Mr. Anstie.*) No. Copies were subsequently asked for by the Secretary, but it was not enclosed with these papers?—It was presented by Sir James Paget when he gave evidence, is printed in Appendices 14, 15, is formally recited in the letter of December 16th, 1892, and further referred to, page 2, paragraph 2, in the letter of March 7th, 1893. The next thing that I would call attention to is that in the letter of December 16th, 1892, which I do not understand to be in any sense withdrawn or superseded by the second

Sir G. Young, Bart.

23 Mar. 1893.

letter, there are omissions of points which it certainly cannot be said have not been brought to the notice of the Senate by this time. There is, for instance, no reference to the question whether the constitution of the University should be what is commonly called federal or professorial, or some other constitution. There is no reference to the question whether there should be one graduation system or two, and finally the important point whether there should be one or two sorts of degrees is not even alluded to.

24,926. (*Chairman.*) They say: "To provide for "the incorporation with the University of teaching "institutions of higher rank." That looks like a federal scheme, does it not?—I do not know. I was going to add to what I said before that the terms used are very ambiguous. I do not know whether the term incorporation means absorption or co-ordination, or what I have ventured to call deglutition; nor do I know exactly what is meant by the Senate when they speak of higher rank. I know that different opinions have been taken of the meaning of those terms. I do not know what they mean by "utilising existing organisations," whether they mean to use us as we stand, or to use us up. I do not know what they mean by "subject to such utilisation." I could not possibly guess what are the "other purposes" for which professorships and lectureships are to be maintained, purposes, that is to say, "other than academical"; and with regard to the professoriate that is to be represented on the Senate it does not say whether the professoriate is ours or some new professoriate invented for the purpose. This being so, it is difficult to discuss the question of a combination with the Universlty of London, or to deal with their proposals without falling back upon the one scheme which they have presented in evidence, that is the Senate's scheme of 1891. With regard to this scheme I notice that it has been stated by a Commissioner (13,003, 18,276) that it was "accepted by the Benchers of Lincoln's Inn." I think it right to read the resolution which was come to by the Benchers of my Inn: "Read a communication from the Senate of "the University of London with copies of a revised "scheme for the reconstitution of the University, and "a request for the concurrence of this Society in the "proposal that the Chairman of the Council of Legal "Education should have a seat on the Senate. "Ordered:—That the other Inns be asked to concur "in authorising the Council of Legal Education to "accept the proposal." It has sometimes been urged that this scheme was accepted, or in some sense accepted, by the Colleges of Physicians and Surgeons; but I notice that the acceptance by Sir Andrew Clark is qualified, at all events in his evidence, by three most important exceptions or alterations. In 7,014 and 7,068 he stipulates for one distinct University, quite free from the trammels of the Imperial functions which it has been performing; secondly, for a Pass M.D. as well as a Pass M.B., under the control of the Royal Colleges (7,044 and 7,053); thirdly, that the Provincial Colleges should be entirely excluded (7,058). Therefore, any acceptance by the Royal Colleges, so far as the evidence of the authorised spokesman of one of them is concerned, must be taken certainly with a good deal of modification.

24,927. (*Mr. Anstie.*) It is hardly worth while to go into these historical details perhaps, but in order that the matter may be clear it is perfectly certain that it was accepted, and it was stated before the Privy Council that it was accepted, by the Royal Colleges of Physicians and Surgeons. What the Royal Colleges of Physicians and Surgeons have done since is another matter, and it is also another matter what the Senate of the London University have done since, but that it was then accepted is quite clear?—If that is a question to me I must reply that my previous answer is not contravened by the statement that has been made. I say that any acceptance by the Royal Colleges, if it is to be taken as qualified by the evidence given by the authorised spokesman to this Commission, must be taken as qualified in the fashion I have quoted. I said in my evidence (10,689) that there were four great faults, in my opinion, in the scheme of 1891, which were non-essential, it is true, to combination with the London University. I dealt with the separation of the medical graduation system, or rather systems, from the other Faculties. I dealt with the limitation of the teaching side of the University in point of Faculties to a Faculty of Arts and a mutilated Faculty of Science; that is to say, to a Faculty of Science from which the scientific portion of medical education would have been subtracted; with the denial to us of the preliminary scientific examination, and with the limitation of the degrees in Arts and Sciences to be conferred upon the teaching side, the side in which alone we were interested, to pass degrees, or at all events to something which did not include that which was called honours. I wish to recognise here that a change was made in our favour, a concession I may take it, or possibly an explanation, which removes some part of the objection taken under the last head, that is to say, that the word "Pass," which was insisted upon throughout the correspondence with the University of London, and which appeared in the scheme, was removed from it when it was turned into a draft charter. We said that to charge the Committee in which we were interested with the administration of a Pass degree only was not merely substantially objectionable but offensive, and that objection, I am glad to recognise, was removed by the draft of the charter which was afterwards framed. But the question how far we should have been at liberty to give honours, or that which might have been described by another name, but which would have been equivalent to honours, in the colleges, was left very doubtful. We were still excluded, in fact, from "the examinations in honours." If that merely meant that we were excluded from the examinations in honours that were then being conducted under that name by the University of London, we might have got along. But if it meant from all examinations by which anything in the shape of honourable distinction was to be conferred, we should have rejected it. I wish to call attention to the separations that are introduced, for institutional reasons, not educational, between the various bodies which would have had the responsibility of conducting the various systems of graduation. There was a singular absence of provision for mutual communication between the committees; but I do not think a mere provision for consultation between the standing committees of the Senate would have been enough to obviate the difficulties in trying to work a University constructed upon the weak plan of an unwieldy governing body, the whole of the work of which was to be done by these committees. In the different committees persons elected from different quarters would have exercised the leading influence, representing different and possibly antagonistic interests. In detail there were some very serious objections. I do not think it will be denied after the evidence that has been given that University College and King's College hold a most important place, not merely in general education in London, but in medical education in London, yet King's College and University College did not find any seats upon the standing committee which would have regulated the present degrees as continued in medicine.

24,928. (*Mr. Anstie.*) Through their Faculties they did?—Through the representation of the Faculty of Medicine at large, upon which University College and King's College taken together would constitute something more than one fifth, a medical professor from University College or King's College might (or might not) have found a place upon the standing committee. That much is true.

24,929. And so far as science is concerned by the Science Faculty?—I am speaking now of the medical standing committee upon which there was no provision for a representation of the Science Faculty; in regard to the Arts and Science Committee we should probably have had a larger share.

24,930. (*Chairman.*) These are rather points of detail?—Yes, but I am dealing with this scheme in

detail because it is the only proposal of a practical sort we have from the University of London. With regard to section 47 of the scheme—the Pass M.B. degree—of course we should have objected to it had we been admitted to conference upon the medical question by the University at the time when they were by the Report of the first Commission entirely charged with the conduct of this movement. The arrangement for a Pass M.B. degree dissociated from other degrees and conducted as a separate system is one which could not be tolerated in a self-respecting University; and we should have objected especially to an arrangement in which it is provided that three institutions, each of them possessing a certain independent existence and proud of their independence, should have been required to consent to every single thing before anything could be done. It is an introduction of the false principle of the veto, with the dangers incident to it considerably magnified. All the arrangements are to be subject, you will observe, to the approval of the Senate and of each of the two Royal Colleges separately.

24,931. For the examination in this particular subject which they examine in now?—Upon which they separately examine now. But the joint arrangement is precarious, and upon the first serious difference that arose, if it is allowed to be considered that a serious difference might arise between such bodies, the whole thing would have come to a termination. In that case this arrangement for the pass M.B. degree would have fallen through, and the University would have been thrown back on the arrangements for the original medical degrees conducted by the standing committee, to which I have already taken the objection that the University Colleges were excluded, as they were also from this Committee. I have now to add a few comments upon other faults in this scheme. In the first place with regard to the precariousness of all the concessions that were made to ourselves; we discovered only recently, to our surprise, the extreme precariousness of the tenure upon which we should have held the primary concession of separate examinations. At Question No. 9953, Sir James Paget says: "It was never intended, under the scheme of "1891, to have the examinations different." He is speaking there, I should say, more especially of the arrangements for provincial colleges. I have examined the evidence with considerable care to discover whether the evidence in that respect is to be taken as applying to all the various (I think I may say six) different systems on which degrees would have been given under this scheme, or only to the difference between the provincial system and the external examination—the old system. I think I am right, but I admit, with some hesitation, in quoting this answer as showing that Sir James Paget was under the impression that it was never intended under the scheme of 1891 to have the examination different for external students and for students in the University Colleges.

24,932. (*Mr. Anstie.*) I think that would be a very incorrect inference?—I will give my grounds for thinking so. In 9,954 and 10,074 I notice that Sir James Paget accepts from a Commissioner "one final examination" as a thing settled. In 9,957 he says he never heard of anyone proposing to give up the present Matriculation for collegiate students; and in 9,993 he says he had clean forgotten the clause (13) in which examination was expressly mentioned as a possible function of the Teaching Side Committee. That would have been a very great disappointment to us. At the same time I have no doubt that Sir James Paget was perfectly justified, whatever was his impression, at the time. I am quite sure that he must have stated in evidence, so far as the matter had conveyed itself to his mind, what he considered to be our impression also. I have only to say on the part of the colleges that it was not our impression, and that a mistake appears to have been made.

24,933. (*Mr. Rendall.*) In saying "us" and "our," might I ask whether you allude to University and King's College, or whether you include the medical schools as well?—I include the medical schools as well, so far as I am entitled to include them; that is to say, after the passing of the Charter through the Privy Council we got into communication with the medical schools, and we found then from the language held by the representatives who were in communication with us, that they were like minded with us. But I am not speaking of the medical schools in regard to anything which took place before 1891, previous to the hearing in the Privy Council, because at that time the medical schools were to a certain extent antagonistic. In Mr. Milman's evidence I find the explanation of what otherwise would have been a very serious difficulty to us to explain, that is to say, the false impression under which either Sir James Paget or ourselves must be as to the nature of the concession which the University made with regard to examinations. At 10,295 Mr. Milman says: "There was an idea "that it might be necessary to establish different "examinations for different students, but I think when "the newly constituted governing body met to consider what was best to be done, they really would find "that the examinations that were fitted for one class "of students would be fitted for all. In point of fact, "that we should fall back upon the system of one "examination for all, possibly allowing the intermediate examinations to be held at the colleges, but "keeping the final degree examination as one examination for all candidates at one University." Afterwards, in 10,316, he works this out. And with this I would ask leave to compare my own evidence at 10,689, 10,765, and 10,918. It is evident that Mr. Milman and myself came to the same practical conclusion, though from opposite points of view; that is to say, that in the working out of the system a University so constructed would have fallen back upon a single system of examinations. But that was not our intention, and that was not our desire. When we went into conference with the University of London in the spring of 1890, and were asked (a very proper question): "What is the point upon which you lay most stress?"; we placed this first, and declared it to be essential; and I have only to add that it is so still. Those conferences were held on the 5th and 27th of February 1890. I took full notes at the time, and I do not think it will be denied by anyone who was present, that when we were asked that question we stated two things, of which the first was by far the most important, and the second was also in our opinion essential. The first was separate examinations, the second was the minimum representation, to the number of six, of the Councils of the Colleges upon the Governing Body of the University.

24,934. (*Chairman.*) If you get the sort of examination you want you do not mind the external students being obliged to pass it too. That would be very fair?—We do not believe in it; we do not believe it to be possible; we do not think that the independent external examinations of the University of London are going to be abolished. We are quite sure that the Convocation of the University would resist it to the last extent, and also we are quite sure that from the point of view of the outside world Convocation will be held to be right.

24,935. But if you get the examination such as you want, and so on, you leave the external students to take care of themselves. It is nothimg to you whether they are at an unfair disadvantage in coming in, not having received the some training. That is not your concern?—In that case of course it ceases to be our fight, but when we are asked to give up a well-considered scheme for a Teaching University in London, and to accept one which we are quite sure will never be carried and will break down, we ask to be allowed to go a little further with our case. This was the subject of rather sharp dealing on the part of members of the Senate of the University of London with me personally, at the Conference. The same question was put to me:—"Is this your business?" Yes, I reply, it is our business, because we shall not succeed unless we keep very clearly before us that it is

Sir G. Young, Bart.

23 Mar. 1893.

not our business to interfere with the external examinations of the University of London, and that there is no power in this country to destroy those examinations; they are too highly esteemed and they are too highly thought of by a very large class of the public to be destroyed or so modified either in government or detail as to place them under the control of a single section of those who are interested in them, and that only a small section comparatively. And so it proved on that occasion.

24,936. (*Rev. Canon Browne.*) You speak of examinations generally. Do you include the final examination for a degree in what you say?—We include the final examination for a degree, and we lay even more stress upon that than upon others, although control of the matriculation examination is also important and, in fact, essential to us.

24,937. (*Chairman.*) You insist that there should be two papers and two syllabuses and two distinct examinations for the final degree, one for external and the other for London students?—My answer is limited to this single point. We cannot accept the external examination.

24,938. Not even if you have a share in regulating it?—Not even if this Commission offers to us a sufficient share in regulating it; because we must look a little further as to what it is possible to do, and even what it is on general grounds desirable should be done. I do not, for my own part, assume to be an authority on the subject of this system; but I am not at all prepared to say that it is desirable that the external examinations which are looked to as an independent source of degrees by candidates scattered all over England and the Empire, should be placed under London teachers.

24,939. Somebody must settle it, and they would settle it as well as the people who settle it at present, would they not?—I do not wish to carry it further. I suggest that it will not be done, and in my opinion it cannot be done.

24,940. (*Rev. Canon Browne.*) You do not claim a separate examination for University College, and a separate examination for some other college, but one joint agreement on an examination different from that of the present University of London?—We do not claim separate examinations in the separate colleges. I do not give this merely as my opinion, but I may refer the Commission to our action with regard to one of the schemes out of the ten which I have been discussing, namely, that of Professor Carey Foster, submitted to us in February 1860. That was a scheme drawn up by a gentleman who was a professor at University College, though not a member of the governing body at the time, and who was also a member of the governing body of the University of London, in which that proposal was worked out. We told them at the time that we could not accept that, not that we objected to it from the point of view of teachers, and of those who were responsible for the administration of teaching, but because we did not consider that it would give sufficient character to our degrees. We thought that as matters stood it was not likely that a degree given on separate examinations, held, not merely in University College, but also in King's College, and also in each Medical School, since what was given to one must be conceded to all, would carry much weight. And I must add that it would be better, in my opinion, that there should be one teaching University for London, than several Universities under one governing body, which is, to my mind, the true description of Professor Carey Foster's plan.

24,941. (*Mr. Anstie.*) Medical degrees were under consideration at that time, and did not form any part of the plan at all?—Medical degrees were, and the whole medical question was, under consideration by the University of London during the summer of 1890, and, of course, under our consideration also; but they excluded us from all conference and from all discussion of the subject with them, and the proposals which they finally made with regard to the medical question were never submitted to us, and were never accepted by us.

24,942. (*Chairman.*) Do you wish to say anything more about the scheme?—No, I am ready to pass to the general question of a combination with the University of London. In the first place I wish to deal with a question put to me by Mr. Rendall in my previous examination (10,903 and 10,904). I had been explaining the various forms in which combination with the University of London might be conceived of, and among others, I specified and explained what we meant by a dual University, that is to say, two distinct systems of graduation under separate administrative bodies. I admit, of course, an ultimate controlling body for both. "According to strong evidence from "the Vice-Chancellor and the Registrar," the question runs, "these propositions were both practicable and "likely to be adopted by the Senate and by the Con- "vocation of the University of London." That appeared to be a most important suggestion and one which I promised to go into more fully when I should have seen the evidence. I have now gone through the evidence of the Vice-Chancellor and the Registrar with the greatest care, and I say with confidence that the suggestion is not borne out by the evidence, nor by the official documents which have since been submitted to us. I find in fact quite the reverse. To word it otherwise: it has been said that times have changed since 1891, and that some combination more favourable than the scheme then rejected by Convocation might be effected through the recommendation of this Commission. That also I cannot find any trace of in the evidence which has been submitted. The only changes of importance would be those traceable in the evidence which was given by witnesses for the University of London on a previous occasion, who have also given evidence on the present occasion. Or again, there might be changes in the *personnel*, in the officials and representatives of the University. It is not necessary to go into much detail. I note that the Earl of Derby is now Chancellor of the University, and that he voted in the minority in two important divisions in the Senate of the University of London, on the 20th of November 1889, and the 12th of March 1890, against proposals of concession which were, at that time under consideration with a view to a combination with the promoters of a Teaching University. I believe it is no secret—his first speech as Chancellor, I think, showed—that Lord Derby's opinions are, if anything, rather more unfavourable to any modification of the present system of the London University in the direction of our claims than those of some others, at all events, of the body. I have examined the evidence of 13 members of the Senate, and the questions put by two Commissioners, who are also members of the Senate, and the evidence of the Registrar and Assistant Registrar with great care. I do not propose to trouble the Commissioners with my analysis of all this evidence, but I do not think I shall be wasting time if I offer some rather careful examination of the evidence of Sir James Paget; because, in the first place, the moderate tone with which he speaks upon all these subjects renders him eminently suitable to represent that which we must consider to be the most promising element, personally speaking, for a combination with the University of London; and in the next place because of the universal respect in which he is held. I find at 9902 that the Vice-Chancellor does not mean the same thing as we mean by a Teaching University. We do not hold that, as he says at Question No. 9815, the only essential principle of a Teaching University is that the representation of teachers should be much larger than it is now on their Senate. We find that, except in medicine (9,849), he does not consider that a degree has greater real value when it implies systematic study as well as passing the examination. Systematic study with him is so wide a name (9,855), that only the examination can determine whether it is better than non-systematic. Other subjects (medicine of course being excepted) may be studied, he thinks, in a more casual manner (9,851). With regard to all

these principles and statements our opinion is the direct reverse.

The scheme of the 17th of January, 1893, the report which was approved by Convocation on that date, and Mr. Busk's evidence, have also been under our consideration. Upon this scheme I am rather doubtful how far to consider it as a very weighty contribution to the solution of the matter. I find that it has been passed without much consideration at a meeting of Convocation where only 286 were present, and where proxies were said to have been received in favour of it to the number of 607. At the same meeting a vote of 1,715 was cast, not, of course, of those present, but I suppose by letter, for the election of a Fellow, that election resulting in the choice of a candidate who certainly, by his evidence, may be shown to be the least favourable of the three to anything like a combination of the teaching element. Dr. Collins, who was a witness before the Commission, Mr. Howse, also a witness, and Mr. Bennett, who was understood to be put forward by the Association for the promotion of a Professorial University, were the candidates. Dr. Collins obtained 855 votes, Mr. Howse 642, and Mr. Bennett 218. In the next place Mr. Busk did not stand by the scheme. He admitted modification of it to a very large extent, to which I did not gather that he had any title to pledge Convocation. In the third place, I notice that it was opposed, and opposed especially by Mr. Bompas, Q.C., who is well known as a leading member of Convocation, and who was, in fact, their representative before the Privy Council. Upon the various points upon which Mr. Busk's evidence admitted the possibility of modification of the Convocation scheme, the most important is the question whether the direct sway of the University over teaching is to be contemplated outside London. It is evident that Convocation contemplates to appoint professors, at Mason's College for instance, who shall be professors of the University of London (20,800). That has been already rejected; and the evidence was here within a day or two of the date at which Mr. Chamberlain made his speech at Birmingham to that effect. In the next place, although on considerable pressure from members of this Commission, Mr. Busk said he thought Convocation might be induced to abandon the idea of dealing equally with colleges outside London and colleges inside London, I find that the subject was under discussion at Convocation: that a distinct attempt was made on the motion of Dr. Roberts to confine the teaching side to London, and that it was formally moved and seconded, and negatived without a division. This is an important point, when Mr. Busk says (20,804) that possibly Convocation may be found indifferent to the matter. With regard to the plan for picking out those whom the University, as planned, may consider to be of sufficient eminence among the professors of University College, and endowing them out of funds which are not yet in existence, and calling them University professors on condition of our allowing that the University so constituted is to appoint their successors, I really do not think I should be justified in taking up the time of the Commission with discussing our objections to it. It is a plan upon which no institution could be carried on upon for any, however limited, time. The existence of professors, and those the most important, in teaching institutions, where professors are at least expected to work together, who would be exempt from all control of the institution, and would pride themselves upon belonging to a superior rank, and upon being appointed, and their successors being appointed, by a body of superior dignity, is calculated to lead to most serious complications, and I think the only possible result of establishing such a scheme as this would be that from the very first it would become a dead letter, owing to the refusal of all institutions interested to permit of this selection of any of their professors as University professors.

24,943. They would be appointed by the college, but upon the understanding that unless the University approved they would not get endowment?—Yes, and I think there was also a stipulation that their successors were to be appointed by the University.

24,944. I think it was understood that it was to be a joint appointment, that the college was to appoint them, the University having the endowment?—The University taking possession of the general funds, and leaving the particular endowments to the college, is a merely colourable matter. A professor who had an endowment from the college would have that amount deducted from his receipts from the University. That is a device really not worth discussing.

24,945. Practically they would settle it between them?—I do not think the college would be in a position to settle any thing; I think they would be shut out. I take it it would be a proposal for transferring piecemeal to the University the whole of the effective agency for the sake of which the college exists and is founded. As soon as the professors are all gone, I, for one, should certainly decline to go and sit at Gower Street any longer, in order to discuss any matters that might be left to us of the nature of discipline among the students. Now I go straight to paragraph 17 of the scheme:—"The Imperial character of the University to be retained, and its examination to remain open to all candidates who have complied with the regulations, irrespective of the place or manner of their education." It is quite clear that this is not a teaching University, and that it is not a University for London. The question with us is not whether some teachers, town and country, post-graduate and undergraduate, University and intermediate, are to come in and help the Senate as it at present exists, to control the external examinations which at present control our teaching. The question is how our teaching is to be relieved from this control, how it is to be put upon the same footing as that of all Universities and all teaching institutions of the higher sort elsewhere. We do not value this pyramid of examinations of which Mr. Busk is so proud. We find it at a dead weight upon our exertions and desire to be relieved from it. For that purpose the organisation must be such that the examinations shall in future follow the teaching. Now this Convocation consistently reject in all their schemes. Mr. Busk at Question No. 540, repeating it at 21,027 and 21,112, rejects "different manners" of graduating at the University. At Question No. 560, repeating it at 21,029, he rejects all "preferences" and all "disadvantages" as between one class of students and another. At 905 he disapproves even of the presence of teachers on the governing body. It is true that this is now conceded to a certain extent, but in 20,989 he contemplates the teachers having no direct influence on the examinations whatever, and in 20,990 he says they are to have no share in examining, beyond the intermediate. Then in 656 I find that in the opinion of Mr. Busk and of those whom he represents, by "University of London" he means Convocation. He thinks that the time is come when Convocation might be allowed to govern the University.

24,946. I do not know whether that is worth discussing?—And finally, he sums up (and in this I am in hearty agreement with him), and says (617), "the differences between us and the colleges are vital." In 21,071 and 21,114 he goes so far as to indicate that some additional disabilities, such as that of not getting a degree if they have not attended enough lectures, may properly be inflicted on regularly trained students to compensate for the unfair advantage they gain by being taught on a regular system. Now why should we be asked, when pursuing the object of our legitimate development as teaching institutions, to couple ourselves with an institution and with bodies the leading opinions of which have been described, I have no doubt with perfect accuracy, by Sir James Paget and Mr. Busk, in very different tones, but so as, upon the whole, to lead us all to the same conclusion, that "the differences between us are vital"?

It has been urged upon us in reference to this and similar schemes that if a number of London teachers get in and can help to govern the University, we shall

Sir G. Young, Bart.

23 Mar. 1893.

soon have influence enough to run the University, in effect, although actual authority is denied both to the teachers and to the teaching institutions. Well, I confess that this prospect is not satisfactory to me. How far is it to be carried? In the Convocation evidence I find neither matriculation, intermediate, nor final examinations are to be conceded (20,984, 20,990, 21,027, 21,078). The representation of the Councils is practically negatived (20,842), although they are willing to see the President of University College and the Principal of King's College, on account of their personal eminence, among them; and the Faculty representation is watered down (20,814) by the admission, to take part in electing of a very limited number of representatives, of provincial teachers, Convocation members, teachers in co-ordinated institutions, and (20,953) University professors who are, as Mr. Busk puts it (21,049, 20,887), "not to fritter away their time in teaching undergraduates," and who will be as external to us as a professor from Birmingham would be. In the next place I notice that the Faculty representation is distributed among the Faculties in such a way as carefully to minimise the weight of influence which the University colleges might exercise; and in the meantime Convocation is to have a representation equal to that which is assigned to all the teaching elements together, 12 to 12, and to retain a veto as at present upon all reforms. I think under those circumstances that if any members of our Councils or any members of our teaching staffs, were to accept positions in the governing body of the University as planned by Convocation, they could only do so with an honest desire to work the scheme as it was intended by its framers, that is to say, to work it as an examining University. There may be some who may be perfectly willing to do such work in an institution which has very much to recommend it, although it is not the sort of institution we wish to found. But I do not think it will be a creditable thing for a man to go into such an institution with an intention to work it in the way in which we desire to see a teaching institution worked. The whole idea of such an institution would be alien from our idea; at least, any such attempt would inevitably lead to dissension, acrimonious discussion, and to issues upon which the representatives of the colleges might be in serious danger of putting themselves in the wrong.

24,947. You see no chance of working upon the lines of the Convocation scheme?—No; for the reasons stated I see no chance whatever of working upon those lines.

24,948. Then may we go to head No. 83 with regard to what the chances may be of a combination with the University of London upon different lines?—I confess that I am inclined to consider the letters of the Senate and the scheme of Convocation as concluding the question. I do not find that there is any such prospect open to us, of a sufficient chance of a workable scheme, to compensate for the very serious disadvantages which (as I explained in previous evidence which I do not propose to repeat on this occasion), attend all the schemes in combination with a University of London. I refer especially to the confusion that must necessarily attend any proposal to give two sorts of degrees in one University, or the unmeaningness which would attend the proposal to give one sort of degree which should follow upon two graduation systems of different kinds. Those initial difficulties, it must be admitted, are serious, and whatever may be the advantages—advantages which I think have been strangely over-estimated—of a combination between a teaching University and an examining University in London, I do not see any such chance, in the vague generalities of these letters, of a scheme which is workable and which would give us what we want, to compensate for those initial disadvantages.

24,949. Then we come to No. 84; whether the veto of Convocation should be taken away by law in order to facilitate a combination. If you think no combination would be possible, in your opinion, it is not only Convocation that stands in your way?—No, certainly not; and what is more, there will be a very considerable additional difficulty in abolishing Convocation arising from the evidence given before this Commission; because there has been a singular agreement on the part of a very large number of witnesses, possibly even including some members of the Senate of the University of London, that Convocation in that case would be abolished for doing what Convocation was right in doing, that is to say, rejecting the scheme of 1891. Mr. Dickens, their Assistant Registrar, actually puts it that the one good thing Convocation ever did was to reject that scheme; and really after the objections I have given to it, I do not think I go too far in saying that I think Convocation did very good service in rejecting that scheme.

24,950. But still the veto of a large fluctuating body like Convocation is in itself a bad thing, is itnot?—Yes, I must admit that. A veto, especially of a large fluctuating body, is a bad thing under any circumstances. It is not so bad in regard to an institution of simple character like the present University of London as it would be in regard to a teaching University, but I do not wish to carry that further.

24,951. Then you wish to deal with the point of the enumeration of the principal advantages of a separate Teaching University for London over any form of combination with the present University. That we have had a great deal of evidence about from the very beginning?—Then I will merely recapitulate them in the shortest possible form. But see the Senate letter, 7th March, paragraph 3. In the first place, as I think will generally be allowed, a separate University will be more independent in conducting its examinations, and in determining its courses of study, than if it were, for instance, as Sir Andrew Clark says, engaged in the trammels of a combination with the present imperial examining system. In the second place it would have a better claim as a local institution to endowment from the county council, and greater power to attract endowment from the city and from private benefactors. That I give, partly as the result of my own experience, partly as the experience of those who have been engaged for many years in seeking endowments for University purposes in London, and as the result of the arguments I submitted yesterday. In the third place there would be no confusion in the public mind, such as must result from either one set of degrees meaning two different things, or two sorts of degrees in one University. In the fourth place we shall have one implement for one kind of work and another for the other which is different in kind. One institution attempting both would probably, as I endeavoured to show in my evidence last summer, do both ill, because the two different kinds of work have so many points in which they cross each other, and in which the minds of those who regard the thing from the point of view of one system will differ from the minds of those who regard the thing from the point of view of the other. In the fifth place there would be better examinations, from our not having to examine candidates by the thousand for Matriculation, and by the hundred for Intermediates. In the sixth place we shall have the power of keeping high the conditions of efficiency in admitting institutions which it is the tendency of an examining University to disregard, thus checking the progress of dissipation of energy, and promoting regular education. Upon this I will add what I forgot to state yesterday, an interesting historical fact. It was the admission of the Working Men's College (which is one of the institutions claiming to be co-ordinated in the University) which turned the scale in 1857 and converted Mr. Grote to the belief that the idea of affiliation must be given up. In the seventh place there would be a smaller governing body, and therefore a better one. Beyond a certain point all admissions to the governing body are so much to the bad.

24,952. You have 40 instead of 50. That is not much difference, is it?—Yes, it is a good deal of difference; but, of course, this is only an objection of secondary importance. It must be remembered that

although your Lordship speaks of 40 and 50, 40 is the outside of what we have now come to under the Privy Council scheme, and 50 is somewhat less than the commencement of what will have to be taken into account if a combination scheme is taken into consideration.

24,953. That will be 52 ?—Yes, but if you seriously mean to consider provincial institutions and students in institutions of inferior grade you will have to enlarge that number considerably. Those two points have not yet, I think, been adequately considered. Now I come to the objections to two Universities. The first is one which has been pressed at considerable length, but I think I may cut my answer short. It is the objection that if a teaching University was founded separately from the University of London the University of London would inevitably follow suit, and then there would be two teaching Universities in London (716, 1302). I am prepared to prove at considerable length that that is impossible without such an amount of public consideration, and hearing of bodies interested, as would effectually prevent it, unless it was really found desirable there should be two teaching Universities in London, but I will dispense with the particulars of this argument and merely read from Mr. Busk's latest evidence at question No. 20,834. "In any case there must be an alteration in the "charter if we are to undertake tuition." I call attention to that admission, because this objection has been urged with great effect on several of our friends; for instance, on a witness before this Commission, Mr. Stanley Boyd, the Secretary to the Joint Committee of the medical schools, which co-operated with us in defending the charter after it passed the Privy Council. In giving evidence before this Commission he expressed himself as having changed his opinions rather in favour of a University on the plan of the Professorial Association. He said (11,471) his reason for doing so was that it had been represented to him that there was nothing to prevent the University of London tomorrow setting up as a teaching University in opposition to the Gresham University. Of course if that is the case his objection to the Gresham Charter must be taken with that reservation. *See also* 5389, 12,223, 13,139, 14,607, and the late Dr. Carpenter, Devonshire Commission, 10,926.

24,954. Then with regard to the objections taken by Sir James Paget, Mr. Thiselton Dyer, and others ?—There are a few which I will just notice, because a good deal of stress has been laid in the letter of the University of London of 7th March upon the general issue that a separate University is objectionable. I find the actual objections to a separate University are singularly slight. I will take Sir James Paget again as representing what I may call the central opinion of the University of London. I think the objections are put very candidly and well by him. I notice with pleasure that he does not suggest that it will be injurious to the University of London that a separate University should be founded (10,117). He says the only injury that occurs to him is a possible difficulty in getting together Boards of Studies such as they wish to establish (10,112). I should prefer to call them Boards of Examination rather than Boards of Studies, but that is a question only of name. The difficulty would be overcome at once if the University is prepared to pay gentlemen who are professional men, and not by any means over well paid in their profession, for the important additional duties they would perform on its behalf. I doubt very much whether, as has been suggested by a Commissioner, this would extend to the Senate. I doubt whether it could really be maintained that there ever will be a difficulty in inducing suitable persons of sufficient distinction to serve upon a body with so honourable a career behind it, and so considerable a work before it, as the Senate of the University of London. That one University would better maintain a standard and act with greater power over London education generally (9737, &c.), are objections with regard to which I need not trouble the Commission with any extended answer. The University, if well founded, is pretty sure to maintain its standard, however many other Universities there are, and if it is badly founded it will not maintain it however few Universities there are. As to greater power over London education generally, that seems to point, I think, to the co-ordination with which I dealt yesterday. I doubt very much whether it is desirable to promote in the minds of those who administer one institution a desire to act with power upon the education which is given in institutions of a different kind; and I notice with pleasure that Sir James Paget does not set store upon this objection. (9863, 9943). The economy as to buildings (9759) I confess I do not see. We must have buildings large enough to teach all who come to us, whether we establish one University or two. Economy as to examinations (10,084) is a small matter. In parting from the Vice-Chancellor's evidence I have to notice with gratitude that he disapproves entirely of the absorption of the existing Teaching Institutions of London (9802); that he disapproves of extending control over the colleges (9892); that he disapproves of the compulsory appointment of all teachers by the University governing body (9887, 9893, 10,106); and finally that he approves of the Governing body as we have proposed it in the Gresham Charter, if there is to be a separate University at all (9871). After this we can forgive him for thinking us "unreasonable" (10,039). Mr. Thiselton Dyer has started the objection (14,560) that "preparation will still be necessary" (although two Universities may be founded) "for two examinations." That is to say, a certain number of students in the teaching University will desire to take the degree of the external University. Undoubtedly that is so. It exists in the Victoria University to a very large extent. It may be an argument, for what it is worth, for not having a University founded upon a system of external examinations. It is no argument against us, for the witness believes, as we do, in the teaching system, not in the examining system (14,602); and he really wants the examining University to be absorbed in the teaching side. In fact a strong University may laugh at the objection.

24,955. Then we come to the answer to the objection that the Teaching University degrees would not take over the prestige already earned by the degrees of the Examining University ?—The prestige already earned by the degrees of the Examining University, if taken over by the Teaching University would be a false prestige. We do not ask for it. I think there is something a little weak in the persistence and iteration with which this has been urged.

24,956. It is very difficult to argue about: it is more a question of sentiment ?—Yes; personally I am by no means disposed to discuss these questions of sentiment. A suggestion has occurred to me which I think may be made, simply upon my personal responsibility, and it may be taken as a fancy of my own. I cannot but notice that there is a serious apprehension, with which I have every sympathy, that if institution after institution fully equipped for University education sets up as a Teaching University for itself, and gradually withdraws, as I believe the Victoria University is gradually withdrawing, its students from the examinations of the University of London, a serious diminution of the work of the existing University will take place, and it will be even possible that the Senate might come to be performing a work of very inferior importance and usefulness to that which it is performing at present. That is not a conclusive argument, but it is one which is worth consideration. The suggestion that I have to make is this. In the Act for the reform of the Scottish Universities, s. 14, (14), there is a clause which empowers the Commissioners to establish a joint Universities Committee for the whole of Scotland. I do not understand that any Ordinance has yet been framed for the establishment of any such Committee.

Sir G. Young, Bart.

23 Mar. 1893.

24,957. (*Professor Ramsay.*) It is not to be established by the Commissioners, but by the Government?—I thought they might frame an Ordinance for it.

24,958. No, not upon that point. There is another point on which they might frame an Ordinance. It is the Common Consulting Committee?—I think that is what I am referring to—the General Universities Committee.

24,959. They refer to the Special Committee of the Privy Council to deal with certain matters and matters of appeal hereafter between the four Universities?—It is not the Committee of the Privy Council that I refer to, but the other. With regard to this proposal I believe the reason for it may have been—I do not say in the minds of the Commissioners because I understand they have not yet put forward any such ordinance—but in the minds of those who passed the Act it may have been thought that there was a serious danger of the degradation of degrees owing to competition between Universities, and that as Universities were multiplied and changes introduced in them, some form of consultation between Universities,—some forum where they might meet together and review the condition of University Education,—would be useful. It does appear to me that in this respect there is a future open to the Senate of the University of London. I do not mean that such a body should be entrusted with control over the Universities of England any more than over the Universities of Scotland. No such control is contemplated in the Universities of Scotland Act. But a body to be in communication with the Universities Committee of the Privy Council, or rather in communication with the Privy Council,—for there is no University Committee of the Privy Council for England as yet established, though there may be hereafter,—might be useful, and if it would admit representatives of the various Universities in England I can conceive it being of even very great use as time goes on. I have thought that the opinion expressed by Lord Justice Fry as to the possibility of a Dutch auction of degrees between imperfectly endowed and small Universities, is an opinion worthy of respect, though I do not sympathise with it; and it is in that respect that work may be found for the University of London such as well wishers of University Education might contemplate with satisfaction.

24,960. (*Chairman.*) Now we come to the objection to the plan of proceeding by way of "Executive Commission" instead of reporting a Charter?—I notice in particular that Professor Sanderson at 2820 and 5753, Mr. Anstie at 8878 and Mr. Stewart, 12,016, 12,122, and others elsewhere, have very strongly favoured the proposal that this Commission should not report a Charter, but should report that the difficulties of the question were great, and that what is called an executive or otherwise a statutory Commission should be formed to deal with the question.

24,961. (*Mr. Anstie.*) I have suggested a statutory Commission, but not a statutory commission which would dispense with the necessity of this Commission making definite recommendations?—"Reporting a Charter" was the phrase I used, and I borrowed it from the Royal Commission. Of course, if this Commission reports a Charter, there is no necessity for a statutory Commission. If this Commission reports a Charter, all that is necessary will be for the Privy Council to take into consideration that Charter, subject of course to its power of amendment, and proceed.

24,962. You must not assume that that follows, and as you have quoted me, I must say that I should not agree with that opinion?—The precedents of Oxford and Cambridge appear to me to be quite inapplicable to this case. The Statutory Executive Commissions which were there appointed were to reform institutions which were already Universities, or colleges which had no independent existence apart from the Universities themselves. They were all within a ring fence as it were, and certain essential conditions were admitted on all hands. This is a proposal for a re-foundation of an institution or group of independent institutions.

24,963. (*Chairman.*) That depends upon which line we take—whether we re-model the London University or start a new one?—The object of proposing an Executive Commission, is in order as I understand that it should deal with existing institutions, with a higher hand, than it can be considered as within reasonable contemplation that this Commission should do. It is a proposition for re-foundation rather than reform, and the nearest precedent is the Endowed Schools Act, 1869, of which I have been for the last 10 years engaged in taking part in the administration. That is to say, you would have to pass an Act appointing commissioners for the purpose of establishing in London, either on the basis of existing institutions or otherwise, a brand new teaching University for London, with power to deal with all institutions which might apply to be admitted (or without waiting for application), all trusts, all Acts of Parliament, Charters, &c., notwithstanding, something like the way in which the effete parochial charities of the City of London were dealt with in a recent Act—in such a manner as would render them most conducive to the interests of University education. (*See* the Endowed Schools Act, 1869, s. 9.) In such a proposal you would have to deal with the University of London. You could assign it no prerogative position, but you would have to guarantee the independence and impartiality of its present graduation system. You would have to deal with University College and King's College, and you would have to guarantee the undenominational character of the one, and the Church of England character of the other. If you want to meddle with questions of licensing, or with questions of call to the Bar, you must give power to act, notwithstanding the Medical Acts Amendment Act 1886, and notwithstanding all the privileges of the Inns of Court and the Incorporated Law Society. Unless you gave such powers as those to a statutory Commission they could not proceed at all. I do not say that they would have to use them; I do not say that they would be obliged to abolish all those privileges, or to sweep away, or even seriously to interfere with these institutions; but such powers must be given or no progress could be made; and the difficulty of passing such an Act is to my mind insuperable. You would have then to give an appeal to the Judicial Committee on points of law, and I suppose to a Committee of the Privy Council over again (it could hardly be to the Education Department) on points of policy. This is a very serious undertaking, and in the present condition of public affairs, the prospects of passing such an Act under one, two, or perhaps five years are infinitesimal. In the meantime, what effects are likely to ensue after you have got the Act passed? In the first place, a recommendation of this Commission may be as definite as you please, but it will be open to the objection that it is made by a Commission which has not done its work. You are authorised to consider, and, if you think fit, to alter, and to amend and extend the proposed Charter, so as to form and report a scheme for the establishment under charter of an efficient teaching University for London. The recommendations may be admirable in themselves, but they will not hold any prerogative position in going beyond the terms of the Commission. It is a very great power which is given to a Royal Commission to exercise by its report; but, if you merely recommend that somebody else should grapple with the difficulties, and yourselves perform the easier task of laying down a general programme, how can you ensure that Parliament or the new commissioners will be bound by the programme you lay down? It might be very seriously modified in the course of passing such an Act. We had got beyond the stage of programmes; we had got to the details; we had got to a Charter. The new Commission will have to do the work of this Commission, besides that of the University itself for perhaps 10 or 20 years of its existence. If I may be allowed to give with modesty the results of some personal experience of the

working of such an Act, I would lay down two conclusions as necessary to success; I would say the powers conferred by it must be very sweeping, almost unlimited; and in the next place if their work is to have any useful result they must make a very moderate use of them; and in the result, at the shortest in two years or so from the passing of the Act, and in three, or it may be four, or more from the report of this Commission, you might (or you might not) see a University come into existence which, as a matter of argument, I admit might be somewhat better than the University to be founded now under the Gresham Charter, but which I am quite sure would not be so good as the Gresham University by that time would have become, if this Commission will only give the requisite assistance to bring it to birth.

24,964. In fact, you would wish us to keep to the Gresham Charter?—We wish you to keep to the Gresham Charter, amending it where you find necessary.

24,965. If we pass the Gresham Charter this would be all right, but if we reject it you suggest that we have nothing more to do?—Supposing you find that it is impossible to agree to recommend the Gresham Charter with any possible or conceivable amendments to it, I do not say for a moment that this Commission would have nothing more it could do, but I have been urging as strongly as I am permitted to do that the other course is preferable.

24,966. Then you wish to make an examination of the Charter, and suggest certain amendments which you are willing to make in it. What is the evidence you wish to refer to?—It is at Question No. 599, and it is something that fell from your Lordship, "It is on "this Charter really that we are sitting; that is the "subject before us."

24,967. Then with regard to the amendment on Chapter II.?—There is an amendment of some importance which after consultation with those who are in communication with me on the part of the promoters, I wish to submit for the consideration of the Commission. Before submitting any suggestion by way of amendment to the Charter, I hope it will not be said, even by those with whom I have not been able to agree, that I am throwing over or tearing up the Charter which I am here to defend. I am desirous to assist the Commission so far as possible in meeting objections the weight of which I must admit, in consequence of the numbers and position of those by whom they have been urged, although the force of them in all respects I do not admit. But still, I recognise that amendments which are suitable and innocuous in themselves may be suggested, and it is solely with the desire to assist the Commission if they wish, that I submit this suggestion.

24,968. Do you speak on behalf of anybody besides yourself?—On behalf of myself and those who are more particularly associated with me, the representatives of University College, Mr. Erichsen, Professor William Ramsay, and in some respects Dr. Wace, of King's College.

24,969. Those who are promoting the Charter would be willing to agree with this proposed amendment?—Yes. I am able to say that. I notice a very serious difficulty that has arisen with regard to the use of the word "College." It is not part of our case. We took names as we found them, and did not bother ourselves about them. In Chapter II. we have the words "University College, London, and King's College, "London, shall be, and are hereby constituted colleges "of all the Faculties in the University"; and then it constitutes the various Medical Schools' Colleges in the University. I know that has been objected to in various quarters, more especially by the provincial medical schools, as an assumption on the part of the London schools. What I have to propose is that instead of "Colleges in the University" the chapter should be headed "Schools of Faculties in the University," and that it should run as follows:—"Upon the establish-"ment of the University the following shall become "and be schools of particular Faculties therein: Of "the Faculty of Arts, the Faculty of Arts and Laws of "University College, and the Faculty of Arts of King's "College." In reference to this point I may explain that King's College Calendar will show that a different nomenclature up to this time has been used at King's College; they have not spoken of "Faculties," but of various "Departments"; but, as I was informed yesterday by Dr. Wace, a change, which has been partly carried out with some such view as this, has now been effected, and the nomenclature has been assimilated to ours. "Of the Faculty of Science, "the Faculty of Science of University College, the "Faculty of Science, Natural and Applied, of "King's College," and to that you may add, since they have no corporate name, the lecturers and teachers of scientific subjects in the medical school of any hospital which you find to be efficient in science. In that respect I will only say at this stage that we have always recognised that St. Bartholomew's, which gave evidence to that effect before the first Commission, and which repeated the evidence before this Commission, is efficient in science so far as the medical students are concerned, and, therefore, is efficient as a college of science for purposes of the University, or, as here proposed, a School of Faculty. The same, as I have reason to believe, but I understand the evidence has not been fully printed yet, is the case with Guy's Hospital. Then, "Of the Faculty of Medicine, the "Faculty of Medicine of University College, the "Faculty of Medicine of King's College, the phy-"sicians and surgeons, and the lecturers and teachers "of medical subjects in" other medical schools (naming them). Then certain consequential amendments would follow, such as "Other institutions or depart-"ments of institutions may from time to time be "admitted as schools in the proper Faculties of the "University." In leaving this subject I will only notice that some amendment of this chapter, as I think I have previously said, will be necessary if a Theological Faculty is in any sense contemplated, because in that case University College, London, cannot be constituted a college in all the Faculties of the University.

I now come to Chapter III. I notice the objection raised to our Chapter XXV., that it is insufficient. Our Chapter XXV. is that which says that the University shall not exercise control over the colleges except as regards the University courses of studies, and something of this kind may be inserted, perhaps most suitably in this position, "The University shall "make regulations as to the duration and nature of "the courses of study to be pursued by students in "schools of the University as a qualification for Uni-"versity degrees or distinctions, and as to attendance "on instruction."

24,970. Would you substitute that for Chapter XXV.?—No. I would add that at the commencement of Chapter III., and leave XXV. alone, merely changing "studies" into courses of study. You would then be able to proceed as the first paragraph of the existing Chapter III. with some modification towards the conclusion of that paragraph. I would suggest "on all persons, male or female, who shall have "pursued a regular course of study under the regu-"lations of the University, and who shall submit "themselves for examination."

24,971. You would leave out "in a college"?—The words would not any longer be necessary. They are words which have been objected to, and which I explained yesterday I thought had been somewhat misapprehended, but I am willing to obviate that misapprehension by using other words; that is to say, the courses of study need not be taken within the buildings of a college, but may be taken elsewhere, provided only that they are taken under the guidance of schools in the University.

24,972. (*Professor Sidgwick.*) Where would the words "under the guidance of the schools" come?—"Who shall have pursued the regular courses of study "under the regulations of the University" is what I am now putting.

Sir G. Young, Bart.

23 Mar. 1893.

24,973. Would that mean under the guidance of the schools?—The regulations of the University would enforce attendance in its own schools except in so far as the University might dispense with attendance at schools in favour of University lectures, which is a second point, which will come in more appropriately at the conclusion of the chapter. I should rather say that attendance in a school of the University will be the normal course, subject to possible exceptions.

24,974. But, as I understand, you would not express that, you would leave that to be understood?—I should be content to leave it to be understood. I may perhaps suggest another addition here. Of course I cannot estimate how far the arguments upon the subject have impressed the mind of the Commission, or in what direction, but I notice that certainly considerable difficulty has been incurred by ourselves on account of the lop-sided form given to a paragraph of this chapter of the Charter by the insertion by the Privy Council of the two years' attendance in the Medical Faculty. Whatever minimum attendance it may seem proper to the Commission to require, it will, I think, hardly be less than two years, and this, I think, may with advantage be extended to all Faculties. I do not see why that should not be done; extending it to all Faculties will add nothing further than all Universities require, or than all teaching Universities must require. I have already said enough upon the last paragraph in Chapter III. of the Charter as to the honorary degrees in medicine which were struck out by the Privy Council. We should certainly be glad if some temporary provision could here be devised for degrees to be open to our own old students within limits. With regard to the clauses at the conclusion of that chapter which provide for the attendance at University lectures, and for the appointment of lecturers in the University, certain words no doubt may properly be added, and with advantage, to explain that which we have said we have always contemplated and are by no means opposed to, such, for instance, as after the clause with regard to certificates, the last clause but two of the chapter, to add the words, "and to attach to "such certificates such privileges in the way of exemp- "tion from part of the regular course of study as to "the Council shall seem proper."

24,975. So as to enable them to do what they do at Cambridge with regard to the University extension?—So as to make it clear that that is included in the Charter, which we have maintained is already competent to the University under the Charter. That comes at the conclusion of the paragraph last but two of Chapter III. Similarly in the last clause after the words "the University may appoint" it will be expedient to add the words "and pay."

24,976. (*Chairman.*) You do not approve of two different sorts of professors?—I have nothing to add to the evidence I gave on the previous occasion on that subject. If the Commissioners should think it advisable to add words in regard to evening instruction in the University, or to specify that the instruction recognised by the University as a qualification for degrees might be given either within or without the buildings of any particular school, we entertain no objection. Upon all these questions I am able to save myself a good deal of trouble, and possibly the Commissioners also, by a general reference to the ordinances of the Commission upon Scottish Universities. I have examined carefully ordinance No. 17, and I find nothing in that which this University could not accept in my opinion without disadvantage.

24,977. (*Professor Sidgwick.*) That seems rather important?—I will read the material part. "It "shall be in the power of the University Court "of each University, after consultation with the "Senatus, to appoint lecturers in any subject "not already taught within the University. With "respect to subjects already taught within the Uni- "versity, it shall be in the power of each University "Court, after consultation with the Senatus, to appoint "lecturers in the cases following:—(1.) When, with "a view to preparing candidates for graduation in "honours or otherwise, it is desired to provide instruc- "tion in special branches of the said subjects not "usually or fully covered by the professor's lectures. "(2.) When, from the number of the students, or any "other cause, it appears to be necessary that provision "should be made for increasing the teaching power "in any of the said subjects within the University. "The teaching of lecturers appointed under this Ordi- "nance shall (unless otherwise determined by the "University Court) qualify for graduation."

24,978. (*Chairman.*) Then you wish to suggest a redistribution of the medical representation on the Governing Body. That is Chapter IX.?—If the Commissioners decide to reopen the question of the 10 representatives of Medical Schools, which was a clause inserted in the Charter by the Privy Council, I would suggest a re-distribution of this kind: that, in the first place, the representation of the Royal Colleges of Physicians and Surgeons should not be conditional as at present upon the reduction of the representation of the medical schools—a difficult matter in itself, and a task of some invidiousness—but that one place on the Council of the University should be set apart for those colleges in any case. If they decline to fill it, it may remain so.

24,979. One place for each?—Yes, one place for each. And if they come in, following the precedent of the Incorporated Law Society, I think there should still be power to assign one also to the Apothecaries' Company—but only in case the Royal Colleges come in. That would be three places out of the ten for licensing bodies. With regard to the remaining seven, it has occurred to me (and I merely make the suggestion) that there is one school, although a small one, which deserves special recognition; that is, the School of Medicine for women. As is well known, the School of Medicine for women is excluded from the examinations of the Conjoint Board; but they are a school of very great distinction; the honours they have obtained in the examinations of the University of London show that they are taking a very high position, and in a University like ours it may be that one of the seven representatives might be assigned to that school as having special interests to represent in the University. There remain six places which, as it occurs to me, might be divided equally between the collegesof medicine which are efficient in science, and those which are found by the University to be efficient in medicine, yet not possessed of sufficient scientific apparatus or staff to constitute them efficient for the purpose of science teaching. I am now, of course, excluding University College and King's College their medical schools, which are otherwise provided for. If, for instance, the Commission should find that St. Bartholomew's and Guy's Hospitals are efficient in science—St. Thomas's is a somewhat more doubtful case—three representatives would be assigned to them, and it might be suggested as a possible way of carrying out the representation of various interests of which I have previously spoken, that one of these three representatives should be limited to the science side of the schools. In that case there would be a reduction by one of the 10 representatives of Medicine in its strictly professional sense. The remaining three would, in that case, fall to the schools of medicine which are efficient only, for the purpose of the University, in Medicine. I put this forward merely as a suggestion; but it is to be preferred in my opinion, to an attempt to reduce now what has been settled by the Committee of the Privy Council, namely, the total representation of Medicine. Then going to the last paragraph of Chapter IX. of the Charter, in the first line, the words "any college "represented on the Council," have been objected to as taking away the power of appeal from a college in the University, which may have been admitted originally without representation on the Council. It is a small point. We have no objection to the omission of the words "represented on the Council." I do not think the objection has been urged before this Commission, but in the course of reading the mass of

literature which it has been my duty to examine, I have found that the objection has been urged on the ground that the language is invidious.

Then with regard to Chapter X.: I do not mean to say that this is all that they have had to urge, but a certain feeling, I will not say of jealousy, but of objection, has been raised in the Scottish Universities at the notion that the Council of this University was to make statutes of its own authority. The word "Statutes" was perhaps used without sufficient reflection.

24,980. You think "by-laws" would cover everything that is wanted?—Yes; that is sufficient. Then going to Chapter XI., I notice the objection that the Faculties have no power except that of voting and appointing representatives. In our original proposal we gave the Faculty power to deliberate and represent their opinions to the Council. In my own private opinion the Privy Council was right in striking that out. I do not think you want a second series of deliberative bodies besides the Boards of Studies; but it is a point upon which we lay no stress, naturally, since our original proposal was the other. In forming the assemblies of the Faculties, I have already alluded to the desirability of making them as large as possible, that is to say, including all the teachers whom the University Council may see fit to sanction. With regard to the admission of lecturers upon the Assembly of the Faculties, the objection is raised that this is left entirely to the existing members of the Faculty, and that the Council has no power, however distinguished a man it may appoint as lecturer, to ensure his admission to the Faculty. I do not think the objection is a practical one. A really good man will always be welcomed, but there cannot be any objection of weight to allowing the Council to nominate to the Faculty lecturers who are paid by the University. I think a merely complimentary appointment as lecturer ought not to admit to the Faculty. The Faculty is to consist of the working bees, those who do the hard work of the University. I would therefore add to that clause a power to the council to appoint to the Faculty lecturers who are paid by the University.

I observe that under Chapter XII. no express power is taken to establish new Faculties. It may be well to express that, and power also to amalgamate and divide Faculties. I more especially urge this because I am now about to propose a matter of a little more importance, namely, the form in which it may be most convenient in starting the University to deal with the Faculties of law and theology. I would suggest something of this kind: that Chapter III. shall begin "the Council shall "as soon as conveniently may be take steps for the "establishment of a Faculty of Law with like repre-"sentation of the assembly on the Council," and with representation of the Inns of Court and the Incorporated Law Society, if such can be arranged. I am not attempting to draft the clause, but merely to suggest the form of it. Then, "before establishing any new "Faculty other than a Faculty of Law, the Council "shall refer the matter for consideration and report." I would deal in the same way with the Faculty of Theology. I will not attempt at this stage to draft the clause.

24,981. You would leave other things, such as applied science or technology, music, or anything of that sort, to be dealt with by the University?—Yes, that is to say, I would leave them to the future disposition of the University, unless the Commissioners were of opinion that in the case of any particular Faculty a sufficient case had been made out for saying "the "Council shall, as soon as conveniently may be, "establish such a Faculty."

24,982. Putting it in the same position?—Yes. Upon that I have no opinion to offer. I have not been able to study the evidence upon all these subjects. As far as we are concerned we think the Commission are the most suitable body to deal with the question, whether these Faculties shall now be contemplated, or the University be left to decide.

24,983. (*Professor Sidgwick.*) In Chapter IX. would not the paragraph "Four members elected by each of the Faculties of Art, Science, Law, and Medicine" require some change to bring it into harmony?—That is so. I have a note upon that clause that a consequential amendment would there be required, but I have not troubled the Commission with consequential amendments. Then upon Chapter XIII. the objection has been raised, and it is felt by some among ourselves, that the Boards of Studies are not constituted with sufficient elasticity for the purposes of the University; there are members of the Faculty elected by the assembly from among its own members, and there are examiners, but some power to the Council to add members to the Board of Studies is thought desirable. In that case I would say that there appears to be no objection on the part of the promoters to a limited power to the Council to add members not exceeding a certain proportion of the whole.

Sir G. Young, Bart.
23 Mar. 1893.

24,984. (*Chairman.*) How long are the examiners appointed for?—The length of time for which they hold office is a matter which is left to the University.

24,985. (*Rev. Canon Browne.*) It would be during their holding office, or afterwards?—In that case no provision is made, but it would, of course, fall under the general clause which I am now proposing.

24,986. Have you an opinion upon that—that the examiner who has performed his function is the useful person?—It might be the examiner who has performed his function, or a teacher, or an outsider.

24,987. (*Chairman.*) You also wish to add words to this clause as in the evidence at Question 16,271?—That is to say, we have no objection to the suggestion made by Professor Sidgwick, that the power to exercise administrative functions expressly delegated to them should be added— that the power of delegation should be added in the charter. We are willing to be on the same lines as other Universities in that respect. And we agree that the Boards of Studies, who are the consultative bodies, might also have a limited and subordinate executive function.

24,988. (*Professor Sidgwick.*) You have referred to the examiners. I am not sure how far the clause of Chapter XIII., "Such of the examiners of the Uni-"versity in the subjects of the Faculty as shall be "nominated by the Council," enabled the Council to make a general regulation for putting the examiners on. Should you object to any such general regulations as, for instance, those in the University of Cambridge?—It was thought that it was better to leave the matter to the discretion of the Council. It was rather doubtful how far the placing on the Board of Studies of all the examiners might open a risk of their having a distinct majority over the teachers.

24,989. What I rather meant was that the words perhaps might be taken to exclude the plan at Cambridge, and that it was better to say, "The Council may from time to time determine"?—There would be no objection to that.

24,990. (*Chairman.*) Then you would omit Chapter XVI.?—I think chapter XVI., which came in as a sort of common form, is neither objectionable nor beneficial in itself, but I have noticed a certain point of controversy which has arisen out of it which I should be anxious to avoid. It is the claim on the part of the Association for promoting University Extension in London that the attendants at their lectures, or some of them, should be recognised as "University students." I do not think we need go into such matters, and I would prefer to omit the chapter entirely.

24,991. (*Rev. Canon Browne.*) Would that cause any difficulty in any part of the Charter? Have "members of the University" been referred to anywhere?—I think nowhere except in the line to which we are now coming.

24,992. (*Chairman.*) You wish to suggest the form of an amendment for conceding greater liberty as to

Sir G. Young, Bart.

23 Mar. 1893.

"external" examiners? That is Chapter XVII.?—I have undertaken to suggest this, not as from myself, but because I find that among the professors at University College and elsewhere there is a strong opinion that an undue burden is placed upon the University by obliging them to employ and pay an external examiner in all the examinations. What they urge is that the teacher at King's College, for instance, is entirely external to the teacher at University College, and, provided the Council take sufficient precautions to prevent two examiners settling it between them, "You pass my students and I pass yours," the guarantee of externality will be sufficiently supplied in a University framed upon the federal lines embodied in this Charter. Upon that I have only to say that in drafting the Charter we followed the lines of the Victoria Charter. I do not urge the change, but if the Commission thinks the point is made out, the amendment, it appears to me, should be made in this way: "Provided that no University examination in any "subject, of any student, shall be conducted ex- "clusively by teachers in the school to which he at "the time belongs." That we would accept.

24,993. Then what do you say with regard to Chapter XXIV.?—I think I have already sufficiently dealt with that. It is the proposal that there shall be in this clause, which provides for the admission of colleges, or, as it would be if my previous amendment is accepted, "institutions or departments of institu- "tions, as Schools of Faculties in the University," special mention of the Cheshunt Congregational College, and the Richmond Wesleyan College, saving, of course, that which is provided in Chapter XXVII., namely, the definition of the London district.

24,994. Then you suggest that with regard to any amendments as to matters of detail we should consult the promoters of the Charter?—Yes.

24,995. (*Professor Sidgwick.*) I should like to ask whether Sir George Young and those whom he represents urge upon us that we should admit theological colleges so remote from London that they will not practically use the London teaching, or whether it is only that they do not object?—I have to draw a distinction between those who are so remote from London that they will not practically use London teaching, and those who are not entirely within that definition. I think that covers Cheshunt and Richmond. In any case we are to be understood as wishing to include both Cheshunt and Richmond. To recur to the question of detail, considerable drawback has been experienced in previous stages of this question, where we were not consulted upon points which were settled by others, upon which we had no reason to think there would have been any objection to concede what we desired, but where it was too late when the time came to suggest the alteration; and it appears to me that after the principles on which the amendments to the charter, if any are to be made, have been settled by the Commission, we might perhaps with advantage be consulted as to the drafting of them. I have merely to submit that, with respect, to the consideration of the Commissioners. We shall, of course, be willing to place our resources at the disposal of the Commission, in the shape of professional drafting, if the Commissioners should require anything of the kind.

In concluding the case which it has been my duty to lay at such great length before the Commissioners, I have only to thank them for the patience with which they have listened to a very lengthy statement, and to ask leave to read, rather than to speak, words which were maturely weighed at the time when they were published. "The Charter as we settled it is "not the University; it is not even in any educa- "tional sense the foundation of a University. It is "a general commission to the administrators of it to "go forward and make the University: it is a skeleton "constitution for its administrative and consultative "bodies, and a collection of restrictions imposed, for "various reasons, upon its action. The work of the "promoters has been to keep the Commission as gene- "ral, the constitution as simple, and the restrictions "as unimportant as possible. The initiative in educa- "tional matters is reserved for members of the educa- "tional profession, engaged, not in education generally, "but in University education; and organised, not on "the basis of separate institutions, but of separate "faculties. The governing power is reserved to a "single body carefully composed, on which no institu- "tion or interest will have an absolute majority, and "on which experts engaged in the actual work of the "University, will have sufficient representation and "considerable voting power. The conditions under "which University teaching is now given in London "have been accepted, and the best has been made of "them. Scope is given for alteration, both in the "educational and in the institutional arrangements; "and the two great colleges which did the whole of "the work of promoting the Charter have contented "themselves with an infinitesimal share of direct "power in the University." That is our case.

(*Chairman.*) Sir George Young, we are obliged to you for the clear way in which you have stated your views, and we will take them into consideration.

24,996. (*Professor Sidgwick.*) I should like to ask one question with regard to the exact manner in which Sir George Young in his own mind distinguishes the admission of the University Lecturers to give lectures to students, which lectures give certain privileges, from what he firmly refuses, that is, the admission of professors. In thinking over the line of objection taken to giving the University power to appoint professors other than those of the colleges,—the danger of founding a third college—I was not quite clear why the objections applied so strongly to the appointment of professors, and why they did not apply to the appointment of lecturers?—The objection that I entertain to the appointment of two sorts of professors is, of course, well understood by those who know the objections that have been raised at Oxford and Cambridge to the present system. We provide in the University Colleges, what for all the normal purposes of a University may be taken perhaps as a sufficient staff of teachers; but we recognise that there are gaps, deficiencies, even in that staff as it stands, and that in the development which we contemplate for the University, there will be continually means and opportunities offered of good work such as may not be fitted in to the work now done, at all events at first. Therefore, the appointment of University Lecturers, I contemplate mainly in the shape of what is called in the strictest sense of the words, "University Extension," as missionary agencies for carrying the work of the University into new regions, both local and educational. I do not think that that is part of the same question as the question of having two sorts of professors; and it is from the point of view of the objection to two sorts of professors rather than from the point of view of the objection to calling or not calling any particular person a University professor that I have preferred to treat this subject.

24,997. In admitting the appointment of teachers by the University, outside the colleges, you want it to be indicated that it is rather for the purpose of supplementing the gaps?—I think the word "supplementary" expresses my position very well; and I would refer again to the passage which I read from the Scotch Ordinances (No. 17).

24,998. (*Professor Ramsay.*) The lecturers are put into quite a subordinate position by the ordinances. They have no ulterior rights, such as pensions, which the professors have. Their only function is that they may be put on the Boards of Studies so long as they are lecturers?—That expressly represents the position I have indicated. Of course, I have not gone into the question of pensions and pay, beyond taking power to the University to pay them.

24,999. (*Professor Sidgwick.*) It is, of course, conceivable that the liberty to appoint lecturers which you propose to give to the University might be used in a

less subordinate way than that suggested by you. But this, I understand, you would leave to the common sense of the University. You consider the use of the word "Lecturer" instead of "Professor" sufficient to indicate the kind of way in which the lectures outside the University ought to be applied?—I do not anticipate any danger of the University utilizing this liberty so as to endanger the regular teaching in the schools, provided the University is so constituted, or approximately so constituted, as we have recommended. It might be very different if a diffierent constitution were adopted.

Sir G. Young, Bart.

23 Mar. 1893.

The witness withdrew.

Adjourned to to-morrow at 12 o'clock.

Sixty-seventh Day.

Friday, March 24th, 1893.

PRESENT:

THE RIGHT HON. THE EARL COWPER, K.G., M.A., IN THE CHAIR.

The LORD REAY, G.C.S.I., LL.D.
Sir WILLIAM S. SAVORY, Bart., M.B.
Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor GEORGE G. RAMSAY, LL.D.
Professor H. SIDGWICK, Litt.D.
Professor BURDON SANDERSON, M.D., F.R.S.
JAMES ANSTIE, Esq., Q.C., B.A.
Principal G. H. RENDALL, Esq., M.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary*.

WILLIAM RAMSAY, Esq., Ph.D., F.R.S., examined.

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

25,000. (*Chairman.*) You appear on behalf of the promoters of the Gresham University?—Yes.

25,001. You say you represent to some extent the opinions of your colleagues?—Yes, to some extent.

25,002. The principal points you are unanimous in?—Perhaps I may state those points. I think we are quite unanimous in desiring freedom to teach apart from syllabuses. For example, as Dr. Thorpe and Professor Rücker have told us, and as evidence has been given by Professors Ayrton and Unwin of the City and Guilds Institution, they examine their own students. General Donnelly said that at South Kensington they have lately introduced external examiners. I am not opposed, and my colleagues are not opposed, to external examiners, but they think that the teachers themselves should also examine their students. Then I should like to direct attention to answers of Professor Emmott's, 10,392, 10,393 and 10,616, in which he states that having tried the method of *quasi*-external examination they were obliged to revert to examination by their own teachers.

25,003. Do you object to the presence of an external examiner?—No. Next, I think we also agree in objecting to the present system of London University, because the syllabuses are apt to become obsolete; they are too seldom altered; and again, because the Professors in University College have to teach more or less according to those syllabuses. We have our own ideas as regards the subjects which we teach, and the methods of teaching them, and, in point of fact, I think I am right in saying that no, or at any rate very few, teachers at University College pay any attention to the London syllabuses. The result of that is that a student has two kinds of work to do: to follow what the professor regards as the right method of learning the subject, and at the same time to keep the examination of the London University before his eyes. This distracts attention, and I have frequently heard from students complaints that they have this double work to do.

25,004. When you say you object to a syllabus you mean a syllabus imposed upon you from outside?—Yes.

25,005. Would you object to a syllabus in the framing of which the teachers had the principal share?—I think it is a mistake, except for junior examination, to give syllabuses at all. For instance, for the Bachelor of Science examination I should have no syllabus. I should expect the student to know what the examiner regarded as fair to ask him on the whole subject.

25,006. With regard to the final examination I suppose there would have to be some list of books, or something of that sort?—I am speaking rather with regard to science than arts. There would probably have to be some list of books, though even here many would agree with me that it would be better for a candidate for the B.A. degree to be examined on what he knows rather than on books.

25,007. You mean put on to construe something that he had not read?—Yes. The examiner should make allowance for the fact that he might not be expected to know every word, and so on. Then there is another point upon which we agree at University College, namely, that very frequently we distrust the examiners. I am quite aware that the University of London does its best to appoint eminent men, but it is sometimes not successful, and there are two or three cases in which at present there is a certain amount of distrust of the examiner.

25,008. You think that would be remedied if the examiners were chosen partly from the teachers, and if the teachers had a voice as to the external examiners?—Yes. Another point on which we are agreed is in our attitude towards the University Extension Society. I may say shortly at this stage that we do not regard it as University work, and we have provided a considerable number of lecturers for the University Extension Society with whom we have come into constant contact at University College, and their opinion is the same; they regard it as a good work, work well worth doing, but not University work.

25,009. Not likely to lead up to a degree?—No, not likely to lead up to a degree—not of the kind that could lead to a degree profitably. I should like, however, to reserve that point till afterwards. I merely

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

mention it now as one of the subjects upon which we are agreed.

25,010. Then with regard to the points on which you differ?—We differ in our views as regards the precise means by which the objects upon which we are agreed are to be realised. A certain number—a minority—of our staff is in favour of what is called the professorial scheme.

25,011. Are you now speaking on behalf of University College?—Yes.

25,012. Not on behalf of the advocates of the Gresham Charter?—No; on behalf of University College. The majority of the staff of University College is in favour of the Gresham Charter with certain modifications. They regard the Gresham Charter as the one most likely to work, though perhaps not the best; not an ideal scheme. I may mention that I myself am a member of the Association for Promoting a professorial University simply because I quite agree with their ideas, but I am doubtful whether it is possible to carry them out. Theoretically I concur with their principles, but practically I doubt whether it is feasible to put these principles in practice in London. Both of these schemes provide for the freedom of teaching, with regard to which the professors of University College are all agreed.

25,013. You say you partly approve of the aims of those who wish to have a professorial University. You do not mean to go so far as absorbing existing institutions?—If it can be done I should see no objection, but I do not see any practical possibility of such a thing coming to pass.

25,014. A good number of your colleagues are very much against that and cling closely to the autonomy of the existing institutions being preserved?—It comes very much to this: University College possesses by far the largest portion of the capital—larger than can be assigned to any institution which would be likely to join without Government help, and it is not a pleasant prospect to be obliged to divide our money among different institutions. Of course that might be arranged afterwards by grants from Government, or in other ways.

25,015. On the whole the majority are in favour of the Gresham scheme?—Yes.

25,016. But there is a minority who favours the professorial scheme?—Yes.

25,017. Are there any who favour the scheme of 1891 of the University of London, which was rejected by Convocation?—No, none, I think, and no one whom I have heard of is in favour of the new Convocation scheme.

25,018. (*Mr. Anstie.*) Of course you are aware that the Senate scheme is no longer before us?—I thought they had sent in a further document.

(*Mr. Anstie*). Yes, a further document, but entirely superseding the scheme of 1891.

25,019. (*Chairman.*) Are you all unanimous that it would be impossible to make use of the London University in any attempt to establish a teaching University?—I think if the University is to be made use of it must be very radically altered from what it is. There must be a large majority of the teachers on the Senate or the Governing Body, so that the teachers will be able to judge of their own students to a very much greater extent than is possible now. I should like to mention here that attempts have been frequently made to what I may call reform the present system of London University, and largely by my colleague Professor Foster. He has frequently urged upon them the necessity of revising the syllabuses; he has generally been the mover of such motions, and could not find a seconder. After many attempts we have given it up in despair. The procedure is quite antiquated and quite useless having regard to the present state of knowledge.

25,020. But there is nothing to prevent it being altered?—No. But we think under the circumstances, so many attempts having been made to alter the present method of the London University, we should give it up.

25,021. The only chance would be so to reform it that the teachers should have large powers, large representation on the Senate, and that the Faculties and Board of Studies should be composed very much like they are in the Gresham scheme?—That is our view.

25,022. Do you think the real substance of the Gresham scheme could be engrafted upon the existing system of the University of London?—I think if the present system of the University of London were kept quite separate the University of London might be divided into two branches governed by two different Senates in which the two schemes could be worked concurrently. But it would be really two Universities.

25,023. Supposing there to be an insuperable objection to establishing a second University you do think the advantages could be secured in this plan of a dual University?—I think it could be secured in this plan of a dual University perfectly.

25,024. You told us that you differ from one another with regard to the method of securing what you have already alluded to, that there was a minority in favour of the professorial system but the majority were in favour of a different scheme?—Yes.

25,025. You said you would rather postpone the question with regard to the University extension teaching?—Yes, I would merely mention at present that we are all agreed as to our attitude with regard to the University extension teaching.

25,026. And as to the matriculation?—I have thought it better to take up the subject from the students' point of view, beginning with matriculation and passing on next to the training of the students; then to the position of professors in a University, and to the various points connected with the government of the University, and thus to treat the matter rather from the University point of view. The question first arises as to whether a student should be obliged to matriculate before being allowed to enter the University. Evidence has already been given on such points by the representatives of the Central Institution, and by the South Kensington authorities. I strongly agree with General Donnelly in his remarks that it is a pity to exclude anyone from the privileges of a University by barring the way by matriculation. I think if it is left as it was in Scotland—and as I fancy it is still—very largely a matter of payment or fee for registration on the books that would be sufficient. Professor Ramsay can tell me if that still holds. I really do not know.

25,027. You do not think it necessary to sift them before they come in?—I think not. I have noticed cases of this kind in my experience. I have noticed a man who came to my class in chemistry and was absolutely unteachable. I asked him why. He said he was reading hard; he was a diligent student. It turned out that his whole mind was devoted to literature and history, and when he took up literature and history he did exceedingly well. I think he is an editor of a newspaper now. There are persons who are incapable of taking up certain subjects.

25,028-29. (*Mr. Rendall.*) When you speak of exclusion do you mean exclusion from the higher examinations or from University teaching?—University teaching.

(*Professor Ramsay.*) I can answer your question with regard to the present system which has just come into force in the Scotch Universities. No one can go forward to a degree unless he has passed a preliminary examination which contains four subjects, but any one may attend any University classes whatever for the purposes of instruction. There is no distinction between one kind of degreee or another kind of degree, but whether the degree is in Arts, Science, or Medicine, a preliminary examination must be passed, and until that is passed no class can count as part of the curriculum for a degree. The door is shut upon no one for instruction.

(*Chairman.*) Are the outside public admitted?

(*Professor Ramsay.*) Anybody who matriculates is admitted. The matriculation simply means paying 1*l.*, and enrolling your name.

(*Chairman.*) Then a man gets the privilege of attending the lectures?

(*Professor Ramsay.*) Yes. In Germany there is this system which I think is an improvement. Supposing a man enters a University and works there for two or three years, and proves to be a very good student there is a loop-hole by which he can be admitted to his degree examination without having passed the previous examination if he satisfies the Faculty that he is an educated person.

25,030. (*Mr. Anstie.*) What would he do?—Practically it is known to them.

25,031. Is it a personal dispensation?—Yes, it is a personal dispensation. I think that to reserve a power of that sort is very useful sometimes.

25,032. (*Chairman.*) There are certain men who could not pass the matriculation examination, and yet come under the head of educated people?—Yes. I have an example at present of a boy from the People's Palace who ultimately managed to matriculate at London University, but it cost him two years to prepare his Latin. He had never done it before.

25,033. (*Professor Sidgwick.*) In Germany are students allowed to attend the University lectures without having gone through the leaving examination?—Yes, they are perfectly open to any one who chooses to attend, but without having passed the leaving examination the student is not admitted to the degree examination without special dispensation.

25,034. How often is that?—I believe in Leipsic there are four cases a year or something like that.

25,035. (*Professor Ramsay.*) They are judged by the Faculty?—Yes, they are judged by the Faculty, on the recommendation probably of the professor who knows most about the pupil.

25,036. (*Mr. Anstie.*) On the ground of special excellence?—Yes.

26,037. (*Professor Ramsay.*) Not on the ground of poverty or appeals *ad misericordiam*?—No.

25,038. (*Chairman.*) They could take degrees without having had the preliminary examination?—Yes. Then there is another point as regards exclusiveness. I think it must be granted that when certain classes become overfull the colleges or the University teachers should have the power to exclude students by starting a preliminary examination. That is what takes place, I believe, at present at South Kensington, and in the engineering class at the City and Guilds Institution, and it is likely to take place in our engineering class. I think power must be reserved for the professor to say, "We cannot teach more students. I am physically incapable of teaching more students."

25,039. You mean they shut the door?—Yes, or practically they impose a preliminary examination in order to make it more difficult to enter.

25,040. (*Professor Ramsay.*) They might, of course, teach those who were excluded in separate classes?—Yes, they might, but there really is not room. As I shall have occasion to show later on a professor can only manage satisfactorily a certain number of students.

25,041. (*Chairman.*) There is no power of weeding out the students that the professor thinks are deriving no benefit?—No. Then I should suggest that the power to insist on a preliminary examination, if he thought fit, might be reserved to the individual teacher.

25,042. (*Mr. Anstie.*) You think it should belong rather to the special institution or to the special teacher than to the University?—Yes, that is my point.

25,043. (*Chairman.*) Then with regard to the training of students?—The next point is that it would be inexpedient to teach classics at King's College, science at University College, and technology at the City and Guilds Institution.

25,044. And that is what has been suggested?—Yes, it has been suggested. There are various reasons. First of all, as has been pointed out before, it is of great advantage to have various subjects taught under one roof. For instance an institution which is attended by men working at science, which also contains classes of Arts, tends to bring men who are working in science and arts into contact. I am quite aware that evidence has been given (and I think there was a remark made by Mr. Anstie) that at King's College the Arts students hardly knew of the existence of the medical school. I quite grant that the medical students, everywhere, keep apart, but medical students really are exceptional in that way.

25,045. (*Mr. Anstie.*) Evidence to that effect was given with regard to University College?—Yes, and you made a remark with regard to King's College. The medical students keep apart, but the other students mix together; they have debating societies, and they lunch together, and they come into contact in that way.

25,046. (*Chairman.*) Do they come into contact with the teacher after lecture hours?—If the teacher asks them to dine, or anything of that sort.

25,047. But not enough to influence them?—Not unless they work in laboratories.

25,048. It is more the influence they have upon one another?—It is more the influence they have upon one another, and that is not to be disregarded.

25,049. There is a certain amount of the advantage that residence has at Oxford and Cambridge?—A certain amount, but it is by no means so good.

25,050. (*Mr. Anstie.*) Do your Applied Science students mix much with the others?—Yes. The engineering students, for example, do not keep to themselves, but are constantly mixing with the students attending other classes. There is a certain amount of dovetailing.

25,051. (*Sir George Humphry.*) Do you know why the medical students keep so much apart?—We have made effort after effort to induce them to mix with the others, but they will not. They have their own clubs, and I believe they look upon themselves as an aristocracy. I suppose the reason is that they stay longer at the college, and many of the men are older, and look down upon the juniors.

25,052. (*Professor Ramsay.*) The hours are very different too?—Yes, they are different.

25,053. We find in all kinds of University matters that you cannot get the men at the same hours to come together?—Yes, there are those difficulties which tell against the pupils in the Medical School mixing with the others.

25,054. (*Chairman.*) Is there any other objection?—There is another objection. Supposing we had, for instances, classes for philosophy at King's College, and classes for science at University College it would be practically impossible for a young man to attend lectures on two such subjects as Chemistry and Philosophy. In actual fact there are three of my men who are taking their London degree in Chemistry—one in Physics, one in Biology, and one in Physiology—I forget how they are arranged, but all three are taking philosophy as the third subject. The reason for that is that it requires no practical work. Then another reason is that it is a thorough change of subject, and I have advised men to take that course with advantage. It is not every man who will take such a course. I have had two cases of men who rebelled after attending some lectures on Philosophy, and said that they did not care for the subject, and of course I let them take their choice. Then as regards distance, it takes close upon half-an-hour to walk from King's College to University College, and to go and come would be exceedingly awkward. To go by train from University College to South Kensington takes 35 minutes, so that twice 35 minutes would be consumed, which is too much time. London is too large for it to be possible to make students go from place to place. Then the next point I wish to mention is that it would be a mistake to separate senior from junior teaching.

25,055. You think central laboratories would be a mistake?—I think central laboratories would be a mistake for a good many reasons. First of all from the students' point of view, it is a great advantage for students that senior and junior students should mix. The senior students act as junior demonstrators, and the junior students will ask questions of senior students that they do not dare or that they do not like to ask of

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

one of the appointed demonstrators. All that virtue of contact would be done away with if senior and junior students were taken separately.

25,056. That is connected with what you were saying about the senior and junior students?—Yes. I also wish to remark that it is exceedingly useful for senior students to have such questions put to them; they are obliged to find answers, and very often the questions which the junior student puts are very suggestive questions which make the senior students think, or possibly make them apply to the professor. In my own laboratory there is constant interchange of that kind. There is, as it were, an atmosphere of chemistry pervading the place. The senior and junior students come into contact, and the senior students help the junior students. They soon get to know each other.

25,057. Would not the teaching be more advanced for a senior student than for a junior? Would the same lecture do for both?—No, it would not do for both, but both the senior and the junior students work in the same laboratory. They almost always work at the same time, and there the junior students can get a great deal of good from, and can give a great deal of good to, the senior students. From the point of view of the professor or demonstrator it is of great advantage to teach junior students. One is obliged to revise one's foundations of knowledge every year, to reconsider the whole case, and I can personally say that it has led me to a great many suggestive ideas which have resulted in new work. I think that if a professor is obliged to teach certain senior students alone in what may be called a research University he is very apt to drift into one corner, and pursue a special department of work. His attention is not directed to the problems which lie at the base of the science. Then from another point of view by teaching junior students a professor gets to know their capabilities. I may remark here that capacity for work in science is not always well tested by any examination. It is tested by personal intercourse with the student from day to day, and a professor is able to form a judgment as to whether such and such a student, provided he goes on with him, is worth developing in the subject. If he is not worth developing in the subject one can tell the student that he had better give up and take to some other branch of knowledge. It is not possible to test this capacity for development by any examination that I have ever seen. It is only possible to test capacity for development by constant communication, and by watching methods of work.

25,058. Then you say a post-graduate University is not good in itself, and it is unreliable?—Yes, I think it is unreliable. There have been two attempts in America to start post-graduate Universities. One is the Johns Hopkins University, the well-known one, the other is the Clark University. The Clark University had very great difficulty in finding capable men to take its Chairs. I have not heard lately how it has succeeded. The Johns Hopkins University starting as a post-graduate University had to take on junior students, and I think the reason of that was simply that it found what I have remarked before, that the professors in a University do not get the best men unless they have trained them themselves, or, at all events, they do not know the men they get. They may or may not be good. The Commission will probably remember that the Johns Hopkins University required to take on a junior school, in spite of the fact that another junior school existed at Baltimore. They found it to their advantage.

25,059. In the way of money?—In the way of money, and also, I think, in the way of selecting students. Professor Emmott's evidence shows that the two classes of students are taught by the same teachers. There are one or two exceptions to this. In some cases there are teachers for senior and in other cases there are teachers for junior students. But in the large majority of cases the same teacher teaches both the senior and junior students. The Johns Hopkins Institution is no doubt thoroughly excellent, but I think it may, perhaps, be appreciated to the disadvantage of some of our London institutions; and here trying to compare as well as one can (the data are not completely comparable) the work which University College does with that which the Johns Hopkins University does, University College does a great deal of what may be termed post-graduate work; the persons who do such work are not always persons who have taken a degree. Often they are persons who are proceeding to a degree, and often they are persons who have no intention of taking a degree. I think it must be remembered also that graduation in America resembles more nearly graduation in France—the *Bachelier ès Lettres* and the *Bachelier ès Science*, examinations for which may be taken from school. I believe a good many of the students who take such degrees go to the University for a year before they take them. Such degrees are not on the same platform as our B.Sc. or B.A.

25,060. That would be more like a matriculation?—Yes. I have been making some inquiries as regards American schools and Universities, and I find there are certain high schools which confer upon their pupils the name of graduates. They are not supposed to have degrees, but yet they call them graduates. They give them a diploma. This is the case, for instance, in the Free Academy of New York, and the central High School of Philadelphia. In those two schools the teachers are called professors, and their assembly is called a Faculty; they actually give diplomas, and their students are called graduates.

25,061. (*Mr. Rendall.*) Are these schools of exceptional excellence or are they schools that are rather pretentious?—I think they are fairly excellent. They are secondary schools. Then there are a great many so called Universities in America. Some are renowned, such as Yale, Harvard, and so on. But there are a great many Universities of second-rate stamp, and which in this country we should put down as secondary schools. Inquiry should be made upon those matters before it can be assumed that a post-graduate course is what we usually mean when we speak of a post-graduate course.

25,062. (*Mr. Anstie.*) You say that the American idea of what is a post-graduate degree is different from what it would be in England?—Yes, that is my point. I have not got precise information, but I think it would be advisable to get it. It would be easy to get some examination papers and compare them with the London University examination papers.

25,063. (*Chairman.*) Do you know what sort of age they are?—I have not made inquiries. It is difficult to get such information, but I am sure it is worth getting. However, I believe that the impression as to what is the meaning of post-graduate is very liable to lead to confusion in the English mind. Comparing the Johns Hopkins University with University College from the statistics of the Johns Hopkins University, I see that it has given 37 degrees of Doctor of Philosophy, and 41 degrees of Bachelor of Arts since its foundation; of course in University College we do not give degrees, but we produce a certain amount of research work such as is required for the Doctor of Philosophy degree at the Johns Hopkins University. This is not a complete comparison, but I wish to point out that there have been 10 theses of research in the last three years which have emanated from our chemical laboratory. Two of those have been presented for the degree of Doctor of Science at London University, and eight are from men who are not graduating at the University, but who, at a German University, would probably have got a Doctor's degree, so that there are in the chemical laboratory 10 persons who may be counted equivalent to having taken the D.Ph. degree of the Johns Hopkins. This is only in the chemical department. I know that Prof. Weldon and Prof. Ray Lankester could have named at least four or five other persons who could have done the same sort of work in the Biological Department, and Prof. Schaeffer in

the Physiological Department. So that probably one might name 20 people in University College who would have presented a thesis for the D.Ph. degree had there been a D.Ph. degree to be obtained, or had they passed the junior examination of the London University, which not all of them have done. I think it must be granted that University College does to a very great extent the same kind of work as is done in the Johns Hopkins University, without the same inducement. Our fees are very much higher than theirs, comparison being made as regards the comparative value of the dollar and the shilling. We have certainly inferior equipment and inferior endowment, and the attention of our students is largely distracted by the necessity which I mentioned before of having two objects in view; one to attend the courses given by our teachers, and the other to prepare for the examinations of London University. I should like now to say a few words as regards centralisation; having a large central laboratory or a large central institution superintended by one man. The point I think has been raised that it would be advisable to have a central institution where an exceedingly eminent man should preside, and the best students should be drafted into his hands. The reply to that is, that the outside number of students whom a teacher can possibly superintend in science is some 50 or 60, or possibly 80. It is desirable that he should come into personal contact more or less with those people. If he has more than 60 or 80 it is impossible that he can do so, and they must be given over to demonstrators. Even with such a number as 80 the main bulk of the teaching by far must be done by demonstrators. But the professor should, at least, know the name and appearance of most of the men, and have spoken to them pretty often. Next, such central laboratories as are suggested are supposed to be specially applicable to research. A man cannot look after more than six or eight researches at once. Professor Ayrton has told me how distracting it is and how impossible it is for him to work the large number of men he has who are engaged in researches in advanced physics; and in German Universities this impossibility is recognised. No man has more than eight or ten researches going on under his control. If he gets more he hands them over to the demonstrator, indicating to the demonstrator what he should do. In such institutions the assistants and demonstrators themselves should be persons actively engaged in research. They should not be merely teachers. It must be remembered that these are the future professors, and they have to be trained; it is unfair to take up the whole of a demonstrator's time in teaching. In a large central institution with a great number of students the tendency would be to lower the number of demonstrators and to make them spend most of their time in teaching. I regard that as an evil which one sees elsewhere. It is an evil one sees at South Kensington, and which one sees at Manchester. There are too few demonstrators for the number of students. These men are overworked by having to teach too large a number of students. They get very little time for research. Their pay is very small; the usual payment is 100*l.* to 150*l.* a year. A young man will take such payment and regard it as a good opening in life if he has time to prepare for research, and advance himself in that way. It is well worth his while to do so if he has something like half his time free to pursue his own research. I do my best to secure that in my own laboratory. I have at present two assistant professors, as they are termed, and one assistant, all three men spending quite half their time in carrying on their own work, which I am interested in, and which I ask them questions about, but which I do not in any way supervise.

25,064. And you and they are on a more intimate footing, and they get more good from you in private conversation than if there were great many of them? —The students do.

25,065. (*Mr. Rendall.*) I think you will find that the payments to demonstrators vary from 100*l.* to 250*l.*? —Yes, perhaps so; 250*l.* is high. I think, therefore, a research laboratory with a few students would fail in its object for reasons I have already given; that the professor who superintended it would be too much inclined to specialise in a minute corner and make his students specialise too. It would not be for the advantage of the students. A large central laboratory would be of use for junior students, but could not be effectively supervised by a senior professor without depriving the students of personal contact, which I regard as the great advantage of having a professor in a comparatively small laboratory. Supposing the professor spent his time in trying to make the acquaintance of a student and getting to know what he was doing, he would be wasting time which might be very much more profitably employed in other work. My view of the position of a professor in a laboratory is this: he should leave the teaching of junior students almost entirely to the demonstrators, but should go round once or twice a week to see each student and ask him what he is doing, and if he has any complaint to make, or any difficulties. That does not take up much of the professor's time, and it puts him in touch with the students. Then he is able to tell the demonstrator what paths the students should walk in. That is the plan as it is worked on the Continent. In Leipsic, for example, there are four laboratories nearly all of a size; there is no central laboratory. The chief professor, as he is called, is merely chief by name. He has absolutely no control over any one of the other three professors. He has his own laboratory, which is not much larger than theirs, and there is an active competition for students between all four professors. I made special inquiries about that from two men who have just come from Leipsic. The fees are the same, but students go to one man rather than to another because they like him, or because they prefer to go to a man with few students, or very often they go because they think his particular character of work is what they would like to follow up. The professors have different titles; there is Professor Wislicenus, the professor of Chemistry; then there is a professor of Technical Chemistry, a professor of Agricultural Chemistry, and a professor of Physical Chemistry. All four professors meet on the Faculty on terms of absolute equality. Each will teach anything in his laboratory which the student desires to learn. The professor of Physical Chemistry will undertake organic researches if students come to him for that.

25,066. (*Professor Sidgwick.*) Are the laboratories all equally equipped for doing the work?—Yes, they are all fairly well equipped.

25,067. (*Professor Ramsay.*) So that the title goes absolutely for nothing?—Yes, the title goes absolutely for nothing. Letters are dated from chemical laboratory No. 1, No. 2, and so on.

25,068. (*Mr. Anstie.*) Does each professor answer for the conduct of the laboratory to the University authorities?—To the Faculty.

25,069. Each professor answers for the conduct of his own special laboratory?—Yes.

25,070. And no one answers for the whole?—No one professor answers for the whole. Ultimately, of course, he is under the control of the Government censor, who is an official who is never known to interfere.

25,071. (*Professor Ramsay.*) Do they get their own fees?—Yes.

25,072. And how about class expenses; has the professor anything to do with those?—No. Each of them gets a small endowment. The chief professor gets the largest endowment from the Government.

25,073. (*Lord Reay.*) And does not the popularity of one laboratory lead to that one being overcrowded? —Then the students go to other laboratories.

25,074. (*Mr. Rendall.*) Do they take their courses indiscriminately?—No, the chief professor takes the most paying course, say, inorganic chemistry, in the

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

winter, and then another professor takes a corresponding course in the summer. There are fewer students in the summer.

25,075. (*Mr. Anstie.*) The chief professor chooses his course?—Yes.

25,076. He has the right as chief?—Yes.

25,077. (*Mr. Rendall.*) Under the direction of the Faculty?—Yes.

25,078. (*Professor Sanderson.*) Are these all ordinary professors?—Yes, they are all ordinary professors. Then there is still a little more to be said about the question of a central laboratory. It would be exceedingly difficult if there were one chief professor who was placed with any power over a number of subsidiary professors. Conceive this state of things. I am giving an example, but I do not wish to lay any stress upon it; supposing South Kensington were fixed upon as a central laboratory; it is probably about to build new laboratories; Dr. Thorpe, who is an exceedingly able and well-known man, would be appointed Professor No. 1. I should have no objection to that, supposing he had no say whatever in controlling the laboratories at University College or King's College. If we are on an absolutely separate footing we are perfectly able to compete as we do now, and be very good friends, but if Dr. Thorpe had any jurisdiction over my laboratory as regards courses or arrangements I should naturally object, and any arrangement of that kind would be sure to lead to friction. It would also tend very largely to make such a man a business manager, who would require to organise the teaching everywhere. It would be difficult to get a distinguished teacher to undertake such an office. I do not think, for instance, that Faraday would have undertaken or that Lord Kelvin would undertake such an office. Then it has been suggested that the position would attract men of the first calibre. I ask, who are they? It has been said that we lose professors frequently who go elsewhere. That has been largely exaggerated. Professor Burdon Sanderson and Professor Ray Lankester have left us for Oxford, but, putting those exceptions aside, I do not remember that we have been robbed of eminent men.

25,079. Physiology—Professor Michael Foster?—Yes, there are a few instances. I think on the whole we get the best men who are in the field when we elect to professorships, and I do not think they are attracted away elsewhere. I do not think the establishment of a large central laboratory with large emoluments would attract any better men than we get now.

25,080. (*Professor Ramsay.*) Are you speaking of the science side or of all branches?—I am speaking especially of the science side, because the suggestion of a central laboratory applies to the science side.

25,081. I mean with regard to the professors not going elsewhere?—Professor Masson went to Edinburgh. But on the whole we keep our men fairly well.

25,082. (*Chairman.*) Do you get any men from other places in return for those you lose?—Not from Oxford or Cambridge or from Scotland. We have one professor from Dublin Trinity College.

25,083. (*Mr. Anstie.*) If you are leaving the question of the central laboratory, would you allow me to suggest one point, that a central laboratory should be rather a laboratory which professors should use in common with those more permanent and promising students, whom they may desire to have co-operated with them in their labours?—I have not heard that view presented, but it appears to me that it would be very difficult owing to the size of London to carry out that recommendation.

25,084. Not to supersede the other laboratories but to be common ground on which the scientific ability of the metropolis might be united?—I think the size of London would make such an arrangement impossible. Take my own case. I could not spend time in going to South Kensington and then returning to my work, taking over an hour. The expenditure of time would prevent my doing it. One would not go.

25,085. You think it would not be used?—I am sure it would not be used. In cases where expensive instruments are required it might be done occasionally.

25,086. That is precisely the point. In a laboratory of that kind this very expensive apparatus would be at the service of professors, who could not expect to find it in their own particular institutions?—Well, this is practically what happens. In actual fact I occasionally go to the Royal Institution to make use of apparatus that I have not got; but it is a thing that occurs very rarely, and it is easily provided for when it does occur. It would be impossible to have a room for a professor at South Kensington while his main work is being carried on at University College. The distance precludes it. He may go to make some measurement, or he may go for some special purpose, as he would go to the British Museum to consult a book.

25,087. (*Professor Sanderson.*) Would you kindly explain the official relations between the chief professor and the other three that you have mentioned, at Leipsic?—The titles are different. Professor Wislicenus is Professor of Chemistry; Professor Ostwald is Professor of Technical Chemistry; then there are two other professors, one, Professor of Agricultural Chemistry, and the other Professor of Analytical Chemistry.

25,088. Are they quite independent of one another?—They are practically independent of one another.

25,089. Is there any subordination of any sort?—No.

25,090. There is no relation of subordination between the Professor of Chemistry and the rest?—No, none whatever. Each is a member of the Faculty, and quite independent. Before I pass away from this subject I should like to say a few words still on the subject of University professors. In reply to a suggestion in the scheme of Convocation that in the new University professors should be appointed with the special title of "University Professors," leaving as college professors those who are supposed for some reason to be unworthy or unsuitable, in reading the scheme which Convocation has published, it appears to me that they regard the title of "University Professor" as an honourable title. Surely it is not an honour which would be sought after except by inferior men. The title of "Professor" in England, as is very well known, does not carry with it the same prestige as the title of "Professor" in Germany, or even in Scotland, and I think it would require that the public should first be educated before the title of "University Professor" should be regarded as anything specially to be desired. The better men are known by their work, and not by any recognition from an examining board. Of course, there may be an inducement attached in the shape of an increase of income; that would throw a different complexion upon the matter. It might be a case of bargaining; the question might be: "What do you expect me to give "in return for what I am going to receive"? Supposing that, as Convocation suggests, the professors should have a voice in electing the Senate, that, no doubt, would be valuable, but it is a question whether the trouble taken in managing the University would be sufficiently recompensed by an increase of income. I think it ought to be clearly understood that neither my colleagues nor I would regard it as an honour to be termed "University Professors." Then another point of view is this: when we are engaged by University College we are engaged by the Council; the Council, therefore, has the first claim on our services, and the Council might have a word to say about an external body (for in this case it would be an external body) appointing a certain number of their men to certain duties outside, members of the staff University College. At present the Council is willing to allow members of staff to undertake examinerships and various public duties, but as a matter of form always

apply for leave. I think the Council might distinctly have a voice in the question as to whether any one of their professors should be allowed to form part of the governing body of a different institution. It would be, in fact, becoming the servant of another corporation. That is what it would mean, practically, if our professors were to accept such a title as "University Professor."

25,091. (*Chairman.*) Of course there is a much stronger objection to having the professors appointed by the University, which was one suggestion. The University was to endow the professors on the condition that it was to have the future appointment?—I am perfectly indifferent with regard to that point. It appears to me that it does not matter in the least by whom a professor is appointed; it matters more by whom he is recommended. If the Committee of the Faculty, that is a committee of persons who are teaching and conversant with the same sort of subjects, selects the professor, it does not matter in the least who appoints him. That is the way in which matters are managed abroad, and it is also the way in which matters are managed at University College. Abroad, the Faculty is called together in the case of a vacancy, and it selects a certain man who in its opinion is a fit person. He is not asked to apply; he is chosen, and negotiations are opened to see if he is willing to accept. If he is willing to accept his name is sent in to the Minister of Education; if the minister objects to the name proposed it may be sent back. At University College our Council occupy the same position as that which the Minister of Education occupies abroad. The names are sent in, usually with a very detailed account of the past history and the claims of all the candidates. The Committee reports first to the Senate. If the name is acceptable to the Senate the report of the Senate is sent to the Council, again read before the Council, and the Council in all but two instances, I believe, has accepted the nomination of the Committee. The two instances were these: one was connected with some religious question with regard to some religious disability, and in the other case the Council reversed a decision of the Senate to divide one Chair into two. There has been no serious difficulty in the matter of appointment. If such a plan had been carried out in Scotland under the new statutes I think it would have been well if the Senate had recommended the appointment, and the appointment had belonged to the Crown.

25,092. (*Professor Sidgwick.*) In your opinion, the Committee recommending is not influenced by any consideration of what the Council is likely to do? You think they recommend without regard to that?—Absolutely without regard. Some six or eight appointments have been made in my experience at University College, and we have chosen in each case the person whom we regarded as the best man all round.

25,093. (*Chairman.*) Now we pass to the question of examination *versus* training?—I wish to make this point: that purely external examination, as required by this scheme of Convocation, and as at present enforced in the University of London, is objected to by the staff of University College for reasons I have given already. Various schemes have suggested that if the professor had a voice in the setting of the paper that would satisfy his objection. I do not think it does satisfy his objection. A mere voice in the setting of the paper is not what we want. In actual fact we do not lay any great stress in examination upon science subjects. The object of a science student is not to be able to get up a quantity of information in a short time and to reproduce it on paper or *viva voce*. That is the sort of training which I should think exceedingly useful for a barrister, and possibly for a Government official; but the training which a science student requires is the development of his inventive power. As a rule there is no press of time: he can take any amount of time he likes in thinking out new processes or devising improvements in old ones, and it must be remembered that science students are being trained very largely for that purpose. They are persons who will ultimately be occupied in promoting the science of the country or who will be drafted off into industrial pursuits. In every case the problems that they will have to deal with are problems that they can be trained for at the University. If a student finds that something will not work he must find out why it is that it will not: Then as regards the external examiner question. If examinations are to continue, as I suppose they must, I regard the external examiner as a protection for the professor. The habit is not to trust the judgment of the professor, and in order that there may be fair play I think the external examiner may very well be allowed to co-operate with him. But I also regard it as a positive advantage. An external examiner who co-operates with the professor very often gives hints which are exceedingly valuable to the professor. I have found it so in my own case. Supposing the Commission accept anything in the nature of the Gresham Charter it implies a number of colleges, and they will hold examinations in common. The professor in one college, I think, might, with a great saving of money, act as external examiner to the professor in another college. It is precisely what happens at present as regards the examinations of the London University and the examinations of the Colleges of Physicians and Surgeons, where they have some science subjects. The teacher examines, but the teacher of one place examines along with another as an external examiner. It would save a very great deal of revenue, for the payment to actual teachers might be very much less than the payment to those coming from outside.

25,094. (*Sir William Savory.*) The teacher does not examine his own men at the Royal Colleges?—I happen to be at present an examiner. It is always possible for a teacher to know what his student does in the examination.

25,095. Yes, but as a matter of fact, as far as it can be avoided, a teacher does not examine his own men?—The teacher has the power of setting the papers on which his own men are to be examined.

25,096. He has a voice amongst others in it?—Yes.

25,097. But that is not quite the same thing as examining his own men?—It is not quite the same I admit. I should much prefer that a teacher should examine his own men in the College of Surgeons. I think under a system of this sort where a professor examined his own man and knew him, such an anomaly could never take place as this one. One of my students has entered for the B.Sc. examination of the University of London five times; he has passed every subject twice, but he has not got his degree because he has never passed all three at the same time. I am perfectly sure that in a case where the examiner knew the student such a thing could not happen. I have asked the examiners if they had any clue to the examinees, and they said no; the examinee is simply a number to them. They give him no credit for having passed in many cases the same subject twice before. The student I have referred to is a man of considerable ability; he would do good research work; but his time has been frittered away in the last five years, and he has now given it up.

25,098. (*Mr. Anstie.*) You mean he always broke down in some necessary subject?—Yes; I say that such a thing is a scandal.

25,099. (*Sir William Savory.*) Why?—Because it is deemed necessary that a man should know at one time three rather difficult subjects up to a particular standard. I say that a man ought to have known the subjects and ought to know where to find the knowledge if he wants it. The examination ought to be the test of a man having been through the subject. Whether he remembers it a year afterwards does not signify.

25,100. But what is the object of the examination?—The object of the examination is to test whether a man has gained a certain amount of knowledge.

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

25,101. Is it "gained" it or "possesses" it. There is rather a difference?—Gained it.

25,102. The object of the examination is to see whether the man possesses the knowledge, not whether he has gained it and lost it?—I apprehend that to see whether he has gained it is the object of the examination. I think the instruction in Latin that Professor Ramsay was good enough to give me long ago and which I have entirely forgotten, has been of good effect.

25,103. (*Professor Ramsay.*) Do you mean that an examiner at a specific examination is to pass a man who fails in an indispensable subject, because he happens to know from other people that two years ago, or twelve months ago, at an equally difficult examination he would have passed?—At Scotch examinations would not this happen? A man who had come up two or three times would have been let off easily if he had passed the subject before. The examiner would have lowered his marks.

25,104. I do not think so?—It is common at the College of Surgeons. An examiner will say, "He did better last year, we will pass him."

25,105. (*Sir William Savory.*) The object of the examination is to test whether a man is fit for practice and that fitness must depend, not upon whether he once knew a thing and had forgotten it, but whether he knows it at the present time. The question is whether it is a scandal that because a man does not know one subject he should not be allowed to pass in the others?—Of course. The University of London plan might easily be modified so that fewer subjects might be taken up at once.

25,106. (*Professor Ramsay.*) So that there might be a certain amount of give and take between different subjects?—Yes.

25,107. (*Professor Sidgwick.*) I understand your view to be that with regard to subjects whose educational value lies in the training that they give the faculty of knowing a lot of different subjects at the same time is not important?—That is so.

25,108. So it would rather point to a different organisation of the examination?—Yes.

25,109. (*Professor Ramsay.*) You mean he might take up his different subjects individually?—Yes.

25,110. Such as is now, I am sorry to say, being arranged in Scotland?—It may become an abuse sometimes, but it would certainly remedy a very great many hard cases which one meets with frequently: that a man knows one subject and cannot retain it.

25,111. (*Mr. Anstie.*) To that extent your view would coincide with the view expressed by some of those who have appeared before us on behalf of the University Extension Society, that it might be taken in portions?—To some extent it might be taken in portions. A great many men who could do work would be encouraged to go on. This power of taking in portions has been given to science students on the medical side of London University.

25,112. (*Chairman.*) Your next head is the lowering of degrees?—I think that this requires very little to be said about it. It has been stated that the Gresham University would tend to lower degrees; I am quite sure it would not. The professors at University College would know what a suicidal policy it would be. Good students would fail to attend, and the public knowing such a degree to be cheap and worthless, would fail to try for it.

25,113. Why should the medical men, even supposing there was a preponderance of medical men to settle it, wish the succeeding medical men to be badly educated?—I cannot say why it should be. I think it must be generally acknowledged that it is the outside public who keep down the standard of degrees and not the teachers themselves. I know that wherever I have been examiner the difficulty has been to frame a paper which would not be objected to by some superior body as being too stiff.

25,114. The idea is that they would wish to attract students by making it easier?—Yes.

25,115. (*Professor Ramsay.*) You said it was the outside public who kept down the standard?—Yes.

25,116. Now you say it was the superior body that objected to the papers?—Yes, that is also true. In the College of Surgeons, for example, the papers we have set have frequently been objected to, and we are in the habit of setting easy questions.

25,117. That is not an outside body?—No, the College of Surgeons is not; that is quite true. But in anything of the nature of a Professorial University there would not be such a revising body at all.

25,118. (*Mr. Anstie.*) What instance would you give of an outside body?—That the public want degrees, I suppose.

25,119. You mean the body of candidates?—Yes.

25,120. That is to say, that the body of candidates does tend to lower the examination to their requirements?—Yes, that is what I mean.

25,121. (*Professor Ramsay.*) Too many people come up for them?—Yes.

25,122. (*Chairman.*) Then with regard to the proposal to admit all sorts of institutions, or to recognise teachers, not institutions?—Supposing men are admitted to professorial rank or are even recognised by the University as teachers who are in the habit of coaching for the examinations of the London University, or of working to a detailed syllabus, then the evil will arise that the degree will be lowered. I have been brought particularly in contact with the Correspondence College in this respect, inasmuch as two of my men have gone to be teachers in the Correspondence College. They are very well held in check by the exceedingly able Principal of the Correspondence College, Mr. Briggs, and the system is this: They carefully go through the syllabus of the London University examination. Take physics, as that is one of the subjects I happen to know about; there are various departments of physics in which a syllabus is given. In a paper on physics, perhaps two questions would be set on magnetism and light. It is not worth while for the student to learn up those subjects, because if he answers the other questions reasonably he will pass. The whole of their system is on that principle: a very careful examination of the questions is made, they are carefully tabulated, and those particular questions which will pass a man are taught.

25,123. But then they have to guess; they do not know what the questions will be?—A clever man can guess pretty fairly as to what questions will be asked year after year. I will ask you to contrast that with the teaching given at University College where it is considered from the point of view of the subject not the examination. Four or five of the lecturers at University College could club together and pass any number of candidates for the London University examination. But the actual process is quite different. I am very much afraid if all and sundry are admitted as teachers, according to the Convocation scheme—persons, for instance, from the Birkbeck Institute, who may be excellent teachers for all I know, but persons, who are in the habit of training students in that particular way—there will be a tendency to lower degrees, because they have not the interests of science at heart, but merely the *kudos* of passing the degrees.

25,124. You mean that they will arrange the examinations on too low a scale?—Yes.

25,125. (*Mr. Anstie.*) They will not be exactly in the same position as the Correspondence College. The Correspondence College is really a corporation of crammers?—Yes. I have recently visited the Birkbeck Institution, the Regent Street Polytechnic, and several other similar places, with a view to make a report to the county council, which has been incorporated in the report they have issued. Those institutions conduct evening classes in chemistry and physics. I find that there the teaching is entirely according to the syllabus of the Science and Art Department. The teachers are, some of them, fairly good men, but they are absolutely fettered by the syllabus of the Science and Art Department. They have very little time to prepare their

students for these examinations; they regard it as impossible to pursue their subject. What they do is to aim at having the largest number of passes because it means income. They get a Government grant, and also they get a larger number of pupils next year.

25,126. (*Professor Sidgwick.*) If the examiners devoted their attention to defeating the irregular modes of study which may be encouraged by examination, do you think the thing can be done, or do you mean that you think the preparation with a view to examination must necessarily be a bad preparation?—I think it must necessarily be a bad preparation. I know several London University examiners well, and I gave hints to the examiners in physics of what was being done by the Correspondence College. They tried to defeat it, but it is difficult.

25,127. (*Mr. Anstie.*) Perhaps you are aware that there are several instances where it has been defeated successfully?—Is it of any use having a struggle between crammers and examiners?

25,128. (*Lord Reay.*) Your point is that it distinctly lowers the teaching?—Yes, the existence of such a class of men lowers the professional status. It lowers the teaching.

25,129. (*Professor Ramsay.*) Does that apply to anything which is founded upon a syllabus? Do I understand you to mean that?—I am afraid I must say, yes. As regards the junior examinations I do not mind so much. It is when it comes to senior examinations that it becomes so important.

25,130. (*Sir George Humphry.*) You think there must be some sort of limitation?—Yes.

25,131. And the limitation must be a fixed one more or less. A syllabus is a fixation of examination within certain limits?—Yes, for junior examinations, I think that should hold. For senior examinations I had rather it did not hold.

25,132. It is almost confined to junior examinations, is it not?—Not for the London B.A. and B.Sc., there are syllabuses for those examinations.

25,133. (*Professor Ramsay.*) I suppose you are speaking only of scientific subjects?—Yes, I think so. I hold the opinion that in literary subjects it would be also an advantage not to provide a syllabus—to see what general knowledge a man has.

25,134. (*Sir George Humphry.*) The great mass of teaching is for junior students?—I do not know.

25,135. And therefore the great mass of teaching will have to be conducted according to syllabus?—I do not know whether you can say the great mass of teaching. Anyone who begins for a degree usually goes on and tries to finish.

25,136. The greater number would be included in the junior class?—Some would fall out and not proceed to a degree.

25,137. (*Professor Sidgwick.*) Could you make rather more definite where you think an examination under syllabus ought to end, say, in your own department. Assume a three years' course?—At the end of the second year the syllabus should end.

25,138. Personally, the third year you would wish to keep free?—Yes.

25,139. (*Chairman.*) Would not doing away with the syllabus make it rather a matter of luck whether a man got through or not. If he happened to be examined in a book he had read he would get through; and if he were examined in a book he had not read he might not get through?—I think that is more a matter for the examiners to decide.

25,140. (*Professor Sidgwick.*) But I take it that in the third year you hold that the teacher ought to be an examiner, and, therefore, he would take care that the student was examined in what he had done?—My position is this. As regards the first year where simply facts are to be learnt it does not very much matter who examines or who tests the knowledge. As soon as the student proves himself capable and comes under the supervision of the professor in his third year the only way of testing his ability and his likelihood to be of any use is the plan of personal contact—judgment being very largely made by personal contact and supplemented by examinations.

25,141. (*Sir George Humphry.*) So that the remark with respect to syllabuses and examiners does not apply so much to the juniors?—Not to the juniors.

25,142. (*Mr. Anstie.*) Then would you take the syllabuses and examinations on this different footing up to about two years; then mark that as a stage reached, and then go on to recognise the more scientific and distinguished attainments by a different kind of degree?—No, I do not think a degree is granted as a rule on an elementary knowledge of facts. What I should like to see is that the intermediate examination in science at the University of London, and a little of what is termed the bachelor of science examination should be put together as such elementary knowledge, and made the subject of examination. The remainder of the examination for what is termed the Bachelor of Science degree should be in the hands of the teacher. The first part should refer to facts, the second part should refer to capacity of work. It is not so in the University of London.

25,143. (*Sir George Humphry.*) Do you limit it to facts? Should not facts always have some kind of ideas associated with them? Would you limit it to a knowledge of facts?—You will find that a student does not get many ideas until he has a fair knowledge of facts. He is not able to grasp theories before he has a knowledge of facts. I am speaking principally of science subjects.

25,144. (*Professor Sidgwick.*) In what you say of the examinations proper in the earlier stage and in the later stage of the course, may I ask whether you represent the views of your colleagues in Arts?—Yes, I represent the views of Professor Ker at all events, my colleague in literature. I have not spoken to all the others.

25,145. (*Mr. Anstie.*) The earlier examination relating to that study would less involve the power of research and independent judgment in the candidate than the later?—Yes.

25,146. (*Professor Sidgwick.*) The specific view that I was interested in here, was that for the earlier studies what we may call the traditional mode of examination is specially appropriate, but a different kind of examination from what has usually been applied in England is required to properly test the third year?—Yes, I should even say the end of the second year.

25,147. You would say half the course?—Yes.

25,148. (*Professor Sanderson.*) The final examination of course is very largely on the practical part. Does your view as to the desirability of having teachers examiners apply as strongly to the practical examination as to the theoretical examination?—My experience of practical examinations is that they are very useless; that it is impossible to see what a man is capable of doing in a strange laboratory among strange apparatus, very nervous, and not knowing where to find anything in a great hurry. I do not think it is any test of his ability.

25,149. What are the reasons why you say those examinations are useless?—I say the man has not a fair chance. He does not know where his apparatus is to be found, he is strange to the place, he is nervous, he cannot do anything with precision, and it is altogether no test of what the man knows.

25,150. What would make those examinations effectual?—Nothing. Abolish them altogether and give a report from the observation of the professor for months beforehand as to what the man has been doing in the laboratory.

25,151. You would substitute a prolonged practical examination by the teacher?—Yes.

25,152. Then, in point of fact, you think that the practical examinations, for example the University of London, in the higher subjects of science are inefficient, because not sufficient time is given to them?—No amount of time would make them efficient. The examiner cannot be in contact with the student and see him from day to day as the professor does. Might

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

I just relate my own experience as regards one of the London University examinations? One of my students lately took his D.Sc. in the University of London. The examiners of the University of London are so conscious of the impossibility of examining in the higher subjects, that this examiner gave the man his examination in my laboratory. He was given a research to carry out, and was allowed the full use of books and everything he required; he was even allowed to consult me on minor points. He took his D.Sc. on those terms.

25,153. (*Mr. Anstie.*) That was the doctor's degree, that is not the ordinary degree?—That is so; but the practical examinations for the B.Sc. are no tests whatever of a candidate's knowledge. He invariably make slips, is very nervous, does not know where to find things. It is anything but a test of his knowledge.

25,154. (*Professor Sanderson.*) But supposing the examinations were conducted in such a way that the man should have two or three days for each subject to show his practical power. Do you still think that it would not be a very effectual method of ascertaining his competency?—I think it is very doubtful. An examiner in the London University has to superintend some 30 or 40 people at present. He cannot see what they do. It is not merely the getting out a certain result that is of use; it is the way he does it. The examiner cannot look after all of them.

25,155. Does its being ineffectual in this regard depend upon the amount of time?—I think not, unless the examiner were to work a week or two, which would take up a great deal of his time. I do not see how you could make it of use unless you prolong it so as to make it training.

25,156. Is that the general opinion?—Yes, I think it is.

25,157. (*Mr. Anstie.*) Do not your objections apply equally to the *vivâ voce* examination in literary subjects?—I have not considered the point.

25,158. (*Lord Reay.*) Can you tell us this: Does the average science student in Germany come to the University with a broader knowledge of the elementary facts which you have just mentioned, than your college student?—No. There is practically no science taught in German schools. There is what they call science, but it is a smattering of geology and a little botany, and it is very elementary. A student going to the German Universities goes practically unequipped as regards science.

25,159. And have they got a syllabus?—No, such a thing is unknown.

25,160. (*Mr. Rendall.*) Do I understand that, even for the pass degree, you hold that every individual student in every separate subject, from a great variety of different institutions, should be examined and graduated by his own individual teacher?—With the co-operation of the teachers in other institutions—the teachers in the special subjects in the other institutions.

25,161. (*Chairman.*) And that the teacher should take into account not only his answers given in examination, but what he knows of his previous work?—Yes.

25,162. And you are not at all afraid of that leading of favouritism?—No. In England we have a curious way of working. We appoint professors whom we believe to be able; we then proceed to suspect them; we then make them examiners and put them in a position where they are liable to be suspected, but we do not suspect them.

25,163. (*Mr. Rendall.*) I should have thought that what is wished is to secure something like uniformity of standard, and if you have in 12 medical schools 12 different teachers, it is not easy to maintain uniformity of standard?—That is no doubt so.

25,164. It would apply to the student for the pass degree as well as to the honour student?—It should be equally applicable to honours. A degree should be worth something.

25,165. It should be in the judgment of the individual teacher?—Yes.

25,166. (*Mr. Anstie.*) I do not see that, as you put the matter, there is anything very illogical. We appoint a man and trust him because he is able; we distrust him because he is human; and we give him a check; then we trust him again because we have supplied his deficiency?—How have you supplied his deficiency?

25,167. By giving him the assistance of another expert?—I should never deny that he should have the assistance of another expert, but that the professor should examine his own student with the assistance of another expert is what I contend for.

25,168–9. (*Sir William Savory.*) When a man examines his own student is he not likely to take more partial views than a man who is not a teacher?—I think he is more likely to be severe. I think he would be so much afraid of being partial that he would go the other way.

25,170. You have had considerable experience in examinations?—I have.

25,171. Supposing a man who was an utter stranger to you were placed before you and you had to find out by examination whether he knew the subject of chemistry, do you think you could do it?—It would be very difficult without taking a long time over it.

25,172. But given a fair amount of time, do you think you would be able to arrive at a fair conclusion regarding the knowledge of that man of chemistry?—I might or might not.

25,173. And do you think it would be the same with anybody else?—I think so.

25,174. Do you think you would be able to form an adequate idea how that man had obtained his knowledge, whether by honest work or by cram? Only by recognising in his answers extracts from text-books.

25,175. Do you think it would be possible to form an adequate idea whether he had obtained his knowledge by honest work or by cram?—I think it would be exceedingly difficult to tell. I can give you an example from the Royal College of Surgeons. I know what text-books men have read when they talk of "the superincumbent atmospheric pressure." I recognise at once where that comes from, because I happen to know.

25,176. Then in your opinion it would come to this: that, however an examination were conducted, however competent the examiner might be, he would be able only with extreme difficulty and in a very imperfect way to come at the knowledge of what the candidate knew?—Precisely.

25,177. Could you suggest to us any superior plan for arriving at a knowledge of what the candidates knew?—That the professor who is in contact with the student for a long time who watches him daily for months should take a very large part in the examination.

25,178. Still, you would have the examination?—I should have an examination to give the professor the full opportunity to say whether such a man should or should not pass.

25,179. But I understand that the professor would gain his knowledge much more largely from the education of the man than from examining him?—Yes.

25,180. Then why have any examinations at all?—Owing to a popular opinion that examinations should exist.

25,181. You would only have it exist in deference to public opinion?—Precisely.

25,182. Your own idea being that they are inadequate things and could be thoroughly superseded by daily education?—You are putting it strongly.

25,183. I intend to put it as strongly as I can?—That is my opinion.

25,184. (*Professor Sidgwick.*) According to the information I have obtained with regard to the German Universities, it is the practice in the case of students from other Universities that examinations are really made more severe than in the case of their own students, because in the case of their own students

they feel that they have derived information from the previous course of teaching?—Yes.

25,185. Professor Armstrong pointed that out?—Yes. It is very commonly so in Germany in the case of a student going to a University where he has not studied for one professor to write to his teacher and get an opinion.

25,186. (*Professor Sanderson.*) Would the observation you have made as to the mode of examination apply quite as strongly to what are called qualifying examinations in your view—I mean to examinations which serve to satisfy the public of a man's competency to practise his profession?—No, I think not. I think the standard in such a case should be fairly low.

25,187. And in that case you would hardly see the desirability of having all examinations conducted by teachers?—No, I think where the public is to be protected it is rather a different case.

25,188. (*Chairman.*) Now we come to the question of the proposal by the Senate of the University of London to hand over certain examinations to the colleges while keeping others?—Yes, I should like to say a word or two about that. I think the system of assigning some examinations to the colleges and some to the University is as bad one, whether the junior or the senior be delegated to the colleges. If one is obliged to make a choice, I should say, let the junior examinations be in the hands of the University, and the senior examinations in the hands of the colleges. There are several objections. First of all it multiplies work. The professor has to examine his students under any circumstances, the oftener the better, and it exposes the students to the distraction of having to cram where they should be steadily working. Then secondly, as I said before, it is the having known a subject, and knowing where to get information that is really valuable to an advanced man, a man who is engaged in a profession, and not the retaining of a multitude of small facts in his mind at once. I think that the lower examinations should deal with the systematic acquisition of knowledge, and the higher examinations with the application of principles. I think it is the ignoring of this which makes the examinations in science at the University of London unsatisfactory. The questions deal almost entirely with matters of fact, and it is impossible for an examiner to put other kinds of questions than those dealing with matters of fact, because if he introduces theory, then there is a large choice of answers.

25,189. Then I gather that you are against this proposal of the senate, but you think if it were to be adopted it ought to be the contrary of what they suggest?—Yes, that the University should conduct the junior examinations, leaving the senior ones to the teachers.

25,190. What do you say with regard to the medical question so far as it relates to scientific training?—The scientific part of a medical student's work is science and not medicine, and it should therefore be under the control of science teachers who should be unfettered by what I may term the dictation of the Medical Faculty; this was one of the weak points of the Senate's scheme in 1891. That scheme reserved to the University a preliminary scientific examination kept up exactly as it is. I admit that it is a very difficult point to deal with, seeing that there are so many medical schools which are sending up candidates for the preliminary scientific examination, and there may have been no way out of the difficulty; but it was a blot upon the scheme that the preliminary scientific student should be examined by what practically amounts to the Medical Faculty. A competent medical man must have a good knowledge of elementary physics and elementary biology, and he ought to be a reasonably good chemist: he ought at least at one time to have known the subject. One does not require a medical man to have the modern facts of chemistry at his finger's ends, but he ought to know enough to understand when chemical facts are brought before him in connexion with his profession. Now the Conjoint Board have power to accept external examinations even in anatomy and physiology if they like. They are treated as science subjects. The Medical Acts Amendment Act only requires the colleges to examine in medicine, surgery, and midwifery, so that even the Royal College of Surgeons might give up to a science Faculty the science examinations connected with medicine. The result of so many medical schools attempting to provide instruction in science subjects has been that in all the medical schools excepting the largest, and not always excepting even those, there are peripatetic teachers, who come in to give a lesson, and then go on to the next place.

25,191. (*Sir William Savory.*) Is that general?—It is general, I think, all through the small schools. I can give one or two instances. Dr. Morley is a teacher in St. George's Hospital, the Dental Hospital, and is taking part of the chemical work of Charing Cross Hospital.

25,192. The Dental Hospital would not be one of the general hospitals in London?—It is not one of the general hospitals.

25,193. You do not know any instance in which it is done among the general hospitals?—I do not think that as a rule, the same man teaches in more than one hospital, but to teach chemistry or physics in a hospital is only a small part of the employment of the teacher.

(*Sir William Savory.*) That is another thing.

25,194. (*Professor Sanderson.*) Are you considering that as an evil?—I think it is an evil that one should drop in, give a lesson, and then go away. If the hospitals cannot afford to have a permanent official of the kind, two or three of the hospitals should club together to have one.

25,195. (*Mr. Anstie.*) That is what they seem to do?—But they do not.

25,196. (*Chairman.*) Do the students come to University College and King's College for their scientific education?—No, they do not do that in the least. We have people who are permanently posted for all such work.

25,197. Where do you think they ought to get their scientific education?—I think the hospitals are too scattered to make it possible for a student to get his scientific teaching in any one place. An attempt was made to get the smaller schools to send their pupils to South Kensington, but it was found impossible.

25,198. (*Sir William Savory.*) Then you would approve of the concentration of the science teaching?—Yes.

25,199. That would be a very grand step?—Yes.

25,200. (*Professor Sidgwick.*) May I ask if your attention has been directed to Dr. Russell's view with regard to the great importance of each hospital having its own chemical laboratory in order that the chemical cases coming into the hospital might be referred to the laboratory?—I think it would be an advantage, but what happens now is that these problems are sent on to somewhere else; they are sent to the nearest place where there is a laboratory, and it involves very little delay. Such problems are occasionally put to me by the members of our own medical staff, and there is no trouble.

25,201. (*Sir William Savory.*) You used the expression just now that science teaching is at the dictation of the Medical Faculty. Do the Medical Faculty dictate?—The Medical Faculty are too apt to think that the science teachers require too high a standard.

25,202. But that is hardly dictation. The science teacher has a free hand; he is subject to the criticisms or suggestions of his fellows, but they do not compel him?—No, they cannot, but a strong pressure is brought to bear. There is a constant conflict going on between the two Faculties.

25,203. I suppose it is a good thing for a man to believe in his own subject, and it is natural that a man should take a higher view of his subject than other men would take, and that is the reason why you rather objected to the revising authorities. The revising authorities have to consider the whole subject of the

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

examination and the several parts of it, whereas each teacher and examiner has only to consider his own part, and if they were left without any control there would be a natural tendency (and that would be shown in the best men) to raise their particular standard at the expense of others?—Yes I agree that there should be some sort of control.

25,204. It is clearly a great advantage, is it not?—Yes.

25,205. (*Professor Sanderson.*) Your point was that you objected to the former scheme of the London University in this respect as regards the science examinations?—Yes, I objected to the former scheme of the London University, reserving the Preliminary Scientific Examination in its own hands. It would have amounted to this in University College: we should been obliged to conduct two sets of classes, one for the Preliminary Scientific syllabus, and the second to teach chemistry. The two aims are not by any means identical. At present the London scientific students attend the general chemistry class, but if the London University reserved the power of examining scientific students we should have to teach according to their syllabus, or we could not get the students to attend. That is what is done in the other hospitals.

25,206. (*Sir William Savory.*) You naturally rank chemistry very high amongst the attainments which a medical man should possess?—I certainly do.

25,207. Supposing a man came up for examination and passed an excellent examination in other subjects, but knew no chemistry, and the plea was that he had once learnt it and had forgotten it, would you let him through?—If I knew the man to be a capable man otherwise I think I should.

25,208. You would want some pressure?—I should want some pressure and some knowledge of the man. It would entirely depend upon what one knew of him.

25,209. (*Professor Sidgwick.*) I rather thought from what you said before that this Preliminary Scientific Examination of medical students would come within the class of examinations in more elementary work where you did not object to the plan of the syllabus and the external examiner?—I do not object to the plan of the syllabus and the external examiner in this case, but I object to be obliged to teach to the syllabus.

25,210. (*Chairman.*) Have you anything more to say on this particular head?—I think I ought to point out that there is no such thing as medical chemistry apart from other chemistry. Medical students must not expect to learn a special branch of chemistry for their own particular purposes.

25,211. (*Professor Sidgwick.*) We have had evidence of an opposite kind to that, and I should like to know how you would deal with it. It is said that though no doubt the methods taught are the same for all, still there must be some selection of the particular substances to which the student's attention is directed, and it is contended that a medical student might have the teacher select for him substances which are of special importance in medical work?—I think that would be done by any reasonable teacher, and an examiner would put questions in general chemistry work with regard to substances which were of interest to the medical student. That is a matter which I think might be left to take care of itself.

25,212. (*Professor Sanderson.*) Is your point that the whole scientific examination for medicine should be under the direction of the Faculty of Science?—I think it should. Students are not medical students until they have passed that examination.

25,213. And you would include physiology?—Physiology I do not know enough about to be able to say.

25,214. (*Chairman.*) The next head is the double paper system?—It has been suggested that it would be possible to carry on the examinations in one University, having two sets of papers, one for external candidates who are not taught by members of the University, and the other for those students who follow the regular courses of the University. There are three possible systems for carrying on this work, first, the same papers are set to both sets of students; in the second place different sets of papers are set to the different students, one for external, the other for internal; and in the third place, the professors examine their own students, with, possibly, the help of external examiners. As regards the first two heads I think, as I said before, it is personal contact that is required for forming an estimate of the capacity of the student; and it would be inoperative—we should be no further on than we are now—if the same papers were to be set or if the same examiner were to set the papers. The present examination system would in this case be changed. On the other hand the possibility is that external examiners should examine external students, and that the professor should examine internal students. To that I can see no objection whatever.

25,215. (*Professor Sidgwick.*) You do not see the same objection to the intermediate?—No, I do not see the same objection to the intermediate.

25,215*a*. (*Mr. Rendall.*) This is assuming a combination between the University of London and the Gresham University?—Yes, it is assuming a combination in which the University of London will take part. I can see no objection to it. I have been examining my students every fortnight this last session. I shall certainly not classify them according to the results of the examination, for this reason. The best answers do not always entail the highest number of marks on one paper—a set of six questions. Of these some people answer two or three questions exceedingly well; a large number of others answer all six. Those who answer the six get a larger aggregate of marks than the others, but it would be unfair to classify them in that way. That always operates in an unfair way, I think.

25,216. (*Chairman.*) It gives an unfair advantage to those who answer all six?—Yes, those who can write quickly.

25,217. (*Mr. Anstie.*) Is that the experience of an examiner?—Yes, I think so. One ought to correct one's marks.

25,218. (*Professor Sidgwick.*) May I ask why an examiner should not make his marks to express his views?—There is no reason except that when an examiner examines a large number of students he is tempted to go by number alone.

25,219. (*Mr. Anstie.*) Why should he not make his marks to express his views?—It always seems a little like cooking.

25,220. You mean if he has not the courage of his opinions?—Yes.

25,221. (*Professor Ramsay.*) Would you object to this system: Let us take 10 questions, giving each marks up to 10, making a maximum of 100. You object to that?—Yes.

25,222. You think it would be impossible to value the worth of your questions at a different number of marks?—Yes.

25,223. (*Professor Sidgwick.*) In an examination which I myself had to conduct in Cambridge, I once only brought out the candidates in the right places by giving one candidate three times the full marks for one question. No rule prevented me from doing that. Do I understand you to hold that there is a custom or tradition that would prevent an examiner from doing that?—It is exceedingly difficult to defend that course to an examiner.

25,224. (*Mr. Anstie.*) Is it difficult to defend that course to an examiner?—If there is a good understanding between them it is not, I know.

25,225. (*Sir George Humphry.*) But your advice to a candidate is to take care and answer all the questions?—Yes, that is always my advice.

25,226. (*Chairman.*) And it is often necessary to put a man whom you know to be an inferior man over another who is better than he?—Yes; that question always crops up. Then it has been frequently stated with approval that the examinations of the London University are so contrived that the student and the examiner do not know each other. That applies only to

the examinations which are conducted entirely on paper. The only chance of the professor knowing his student is if he happens to recognise his handwriting, which is very unlikely, but in practical examinations the examiners who are professors do know their own students, and they in many cases adopt the system, which they are perfectly justified in adopting, of attaching weight to what they know of the previous conduct of the candidate. I think they are perfectly justified in doing so; but it is stated that London University examiners are free from that imputation. I should like to point out that they are not free from that imputation, but wherever a practical examination is conducted they must know the candidate. Then there is also another point with regard to the method of conducting examinations. When a man has to conduct a great many examinations he loses interest in the answers; he does not know the writers; but, on the other hand, if he knows the writers he is interested in the answers they give.

25,227. (*Sir William Savory.*) But at the London University it need not follow that even in the *vivâ voce* a man comes into contact with his own students. If there are two examiners they can transfer?—They can probably, but in a practical examination both are present.

25,228. If one of the professors' men came up he could transfer him to his colleague?—That can be done sometimes.

25,229. Therefore it does not follow of necessity?—It does not follow of necessity but the opportunity is there.

25,230. (*Chairman.*) All this is against paper examinations altogether?—Yes.

25,231. You have gone from the point of double papers?—Yes.

25,232. (*Mr. Anstie.*) Will you allow me to say that the objection you have stated is not one which depends upon the question of external examiner because I myself know a direct instance where, at University College, the professor examining his own student set a question which was absolutely inconsistent with the fundamental principles of the subject upon which he was examining?—Of course it is not confined to any one place.

25,233. (*Chairman.*) As to this paper examination what would be the alternative?—I think a written examination coupled with general knowledge of the subject.

25,234. Not *vivâ voce* examination?—One must always bear in mind that a candidate may not do himself justice in *vivâ voce*.

25,235. One man is much readier?—Yes, one man is much readier and another man gets confused and flurried.

25,236. (*Professor Ramsay.*) Then you attach importance partly to the character of the man?—Yes.

25,237. (*Chairman.*) Then with regard to favouritism?—With regard to favouritism, I think that when the students come to the professor to begin with, he is utterly unable to make one or other a favourite; but, as time goes on, one or other becomes a favourite simply because he has earned his title to be a favourite.

25,238. It may be that he is of the same turn of mind as the professor or that there is something about him which interests the professor?—One cannot guard against that. The probability is that in after life he will have the same turn and interest other people. It shows that he has moral qualities which deserve recognition.

25,239. Then your next head is: "The English and "foreign methods of regarding teachers and examiners"?—That I have already spoken of and I need not revert to that subject again. In a foreign University the utmost care is taken to elect a teacher, and then he is left a free hand. In England the tendency is to mistrust a teacher.

25,240. Then with regard to your next head, which is: "The arguments of the so-called University Extension Society," you have already touched upon that to a certain extent, but you said you would deal with it later on?—I mentioned that that was one of the subjects upon which the University College professors are fairly well agreed. In the University Extension Society the course of lectures which is given depends upon the popular vote of the persons who hear it. The plan is this: In a centre a short course of lectures is given. It is advertised as widely as possible, and usually two or three alternative propositions are put before the students who happen to come to the first two or three lectures. Usually some one or other who is pretty well known, is asked to open the course by giving two or three purely popular lectures. This collects an audience. The members of the audience are supplied with voting papers and they are asked whether they will have a course of lectures on history, political economy, or what not. The largest number of votes wins, and a course of lectures is provided on whatever subject gains the day. Then at the end of the course the same question is put to the students; they are asked whether they would like to continue this subject or have some other subject, and, again, the majority of votes decides. The result is a set of desultory courses—small courses of 10 lectures each—on various subjects.

25,241. And you do not think this system would be at all a satisfactory method of leading up to a degree?—I think not. And I should like to point out that the present degrees of the University of London are perfectly open to University extension students, as they are to all the world. I admit that the students would have to matriculate, but that is a condition which the London University thinks is necessary for its degrees. It is intended to imply the possession of an ordinary school education.

25,242. You would not object to the University giving certificates or assisting the students at these evening classes in some way, independent of the degree?—Certainly not.

25,243. Or perhaps by the plan which they have adopted at Cambridge of allowing a certain length of attendance, coupled with the certificate, to count instead of residence and instead of part of the Little Go?—The difficulty here is that the preliminary subjects are not sufficiently well learnt. Take such a subject as physics: in order to study advanced physics it is necessary to know a certain amount of mathematics. The amount need not be great, but a certain amount of mathematics is required. Lectures on physics are being given at Toynbee Hall—I think it is a fourth course—by my late colleague, Dr. Fison. He told me the other day that his students do not know mathematics. What is he to do? He cannot continue the course. I may mention that Toynbee Hall is one of the few places where there are continuous courses, and this is one of the few instances where there have been continuous courses. Here is the difficulty. To admit such persons to a degree would be absurd because they have not studied physics in the true sense of the word. They are unable to appreciate the science to its full extent from want of a knowledge of mathematics.

25,244. (*Mr. Anstie.*) They do not know mathematics, and therefore they are rather out of the question?—Yes. As another example, take geology of which several courses have been given on various occasions by University extension lecturers. The University of London requires of anybody who takes a degree of which geology is a part that he shall know some chemistry, some biology, and some physics, but these lectures on geology are given on geology alone; they are bound to be elementary lectures, and I do not think would qualify for any part of a degree without the preliminary knowledge which is necessary. Then I should like to direct the attention of the Commission to the review of a book on geology by the Secretary of the University Extension Society, Dr. Roberts. The last sentence in the review expresses

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

our views very clearly: "We cannot help doubting "the wisdom of encouraging, by manuals necessarily "partial and incomplete, students to imagine that "they have really mastered a subject; at any rate it "should be frankly admitted that this, however useful "and interesting, is not education."

25,245. (*Mr. Anstie.*) Then your objection is that there is no sufficient sequence and co-ordination of study?—There is no sufficient provision for sequence and co-ordination of study.

25,246. But supposing the University to make some provision for sequence and co-ordination on lines such as those indicated to us by Mr. Cunyngham, who gave evidence before us some little time ago, and who had communicated with Dr. Roberts on the subject, this objection would be removed?—Then you would require to alter one fundamental point as regards the University extension, namely, giving the students the choice of what they themselves wish to study. I think if regular classes were appointed they would become just as popular or unpopular as regular classes are in other institutions.

25,247. But if they wanted it to tell for University purposes they must make their choice on University lines?—Yes, in that case there could be no objection.

25,248. (*Chairman.*) If the present University extension body in London wished to hand over their work to the University do you think they could be taken over by standing committees of the Senate?—I think there is not the slightest difficulty, and I think they might be found useful because every now and then somebody turns up who is capable of education, and then he attends the regular courses. I may mention that classes of the kind have been known for a long time in Scotland. In Glasgow, in the Andersonian University, there have been courses something like these ever since 1840. These classes are attended by the general public for amusement and instruction, and every now and then some excellent work has been produced by men who have been induced by attendance at such classes to give up their lives to that particular kind of work.

25,249. (*Professor Ramsay.*) Under the new government these same popular lectures in the evening have been co-related to the course for which a regular diploma is given in the day, in the same manner as suggested for the University extension. A certain number of the evening courses will count as equivalent to the regular work done for the diploma?—I see no objection to such a course.

25,250. (*Professor Sidgwick.*) I was going to ask you on the same point, whether you have read Mr. Stuart's evidence?—Yes.

25,251. Because according to my recollection Mr. Stuart is desirous, not at all of obtaining degree for a the University extension as now carried on, against which your argument has been urged, but of obtaining a degree for an improved kind of University extension in which the unsystematic character should be carefully removed at any rate for those who were preparing for a degree. I wanted to ask whether your objection, and the objection of your colleagues, would apply to the general idea of a course of study pursued by means of evening instruction and extending over a long term of years, if that instruction was made adequately systematic?—I think not. I think one would be perfectly willing to accept it, but the difficulty comes to this. There is a want of funds and the only way of getting the University extension lectures to go at present is by making them subject to the popular vote.

25,252. Have you seen the report of the Committee of the London County Council?—I have.

25,253. That suggests a way of removing that difficulty?—Yes. Then the University Extension Society must also be prepared to see a very large falling off in the number of people attending the classes. What has happened at Bristol and elsewhere is that University colleges have grown out of extension lectures.

25,254. (*Mr. Anstie.*) Have you read the report?—No, I have not.

25,255. Then you are probably not aware that there are growing up in London very large centres indeed, and very fairly endowed centres, which it is always contemplated should be centres of University extension instruction in their higher levels. That would tend to give a certain amount of consolidation to the work?—The experience at Bristol was this: large audiences were obtained both of ladies from Clifton College in the day and of artizans from Bristol in the evening. The moment the thing was made more systematic and people were expected to pursue a more regular system of instruction the attendance fell off.

25,256. The experience of the Birkbeck Institution is against that?—I do not think that the Birkbeck Institution should be compared with University extension instruction. There they teach mainly to prepare for the Science and Art examinations of South Kensington. There there is a pecuniary reward and a certain amount of kudos to be gained.

25,257. But it is not entirely confined to South Kensington?—Not wholly, but nearly all the instruction given in science and art. The teachers themselves have told me so.

25,258. (*Chairman.*) There is only one other point which you have already touched upon, namely, the proposal that the University should appoint the professor?—As I have already said, I do not think it matters who appoints the professor; the point is who recommends him.

25,259. (*Mr. Anstie.*) Recommends officially?—Yes, recommends officially. The ultimate appointment may be left to the Crown or to any Council.

25,260. (*Chairman.*) You would rather the professors were recommended by the body of teachers?—A committee of experts among the body of teachers is really what is required.

25,261. (*Professor Sanderson.*) But considering that, as stated a little time ago, a great deal turns on the care taken in electing teachers, and considering that you propose to impose on all teachers great responsibility, how do you reconcile that with the proposal that the University should incorporate bodies which would take very little pains in this respect?—I am not aware of the proposal.

25,262. You were speaking of medicine?—That opens a very difficult question. I wish we could see the Medical Schools reformed.

25,263. You have not taken into consideration the Medical Schools at all?—No, I think that is a necessary evil. I think the Medical Schools will continue to appoint their own men. But if some arrangement could be made so as to supervise their appointments in such a sense that the central body would confirm the appointment, or, if the appointment was manifestly an unsuitable one, would refuse it, it would make the Medical Schools more careful in recommending.

25,264. (*Sir William Savory.*) As the matter at present stands, the several schools make their own appointments in an independent way, but it is within the power of the Royal Colleges to say that they would not recognise the course of such and such a teacher if he were absolutely incompetent, and the University you suggest might have such a power as that?—I think it would be exceedingly difficult to refuse to recognise an existing teacher.

25,265. It would be a strong measure, and such a question would not be likely often to occur, but it might be for consideration whether such a power as that might not exist in the background?—Do you not think it would be a better solution of the question if the Medical Schools were to agree to submit their nominees to a central body?

25,266. If they would agree to that, it would be a step considerably further, because at present they are independent, except in the case of some gross abuse which is not likely to arise?—Do you think there would be a difficulty in getting them to submit their nominees?

25,267. I only mention that at present, the system works very well, and one does not see why the same system should not work equally well within the

University?—Of course either alternative might be tried.

25,268. (*Mr. Anstie.*) So what you really attach weight to is the original recommending body, the body that looks after the testimonials and sifts, and makes inquiries?—Yes.

25,269. And you do not attach very much weight to question who it is who finally appoints. Therefore, I suppose that if the appointment were so recommended you would not see very great objection to the University saying that large powers of sanction on their part would be necessary for the appointment of teachers?—Certainly not, I should think by no means. I should also add that I do not think as a rule it matters. There may be cases of course in which it does, but, as a rule, it does not matter; nominee No. 1 or No. 2 is taken. The French system might be chosen, where two people are required to be nominated.

25,270. As it is in the Royal School of Science now?—Yes; in point of fact I think it would be very rare for the Minister or public body to select the last nominee in preference to the first. Then there is one other point which I wish to take up, that is, the relation of the Council of University College to the professors, has touched upon a good deal in the evidence. I should like to say a word or two about that. I have been since 1887 a professor of the college, and for the last year and a half I have been on the Council. I should like to state that our Council in no sense whatever acts as a drill serjeant. I have never known it to interfere in the management of the college affairs, or the proceedings of the Senate, or the Faculties, in any arbitrary way. There has been no difference of opinion between the Council and the Senate as such; of course we divide the Council and we divide the Senate, and we have differences of opinion among ourselves, but there is no Council party and Senate party; in my experience there has been nothing of the kind.

25,271. (*Chairman.*) No friction of that sort?—No, there has been no friction of that sort. Then, again, I think the staff as a whole have no feeling of subordination to the Council. We are represented on the Council by six members, and there is a feeling that the Council occupies itself with one class of business, namely, financial business, and that the Senate occupies itself with another class of business, namely, educational business, and both bodies are very careful to keep within their limits. I think that might be taken as possibly a pattern to be followed in any constitution of the University. If the functions of the Senate and those of the ultimate governing body are not one, their functions ought to be definitely laid down. The governing body as a Court of Appeal has one class of business to follow, and the Senate has another class of business to follow. That arrangement has answered perfectly in University College, and there has been no friction.

25,272. (*Sir William Savory.*) Neither body is supreme?—The Council is supreme.

25,273. If a disputed question arose, the Council would overrule the Senate?—Yes, the Council would overrule the Senate, but the Senate would have a right to appeal to the body of governors, which would be the last resort. I think I may say that we all feel that we owe the Council a great deal for giving us so much of their time. Most of the members of the Council are exemplary in the way they come, and they take an immense amount of trouble over our affairs.

25,274. (*Professor Ramsay.*) You have mentioned that you were a supporter of the professorial scheme?—Yes, in theory.

25,275. Could you state exactly the reasons for which you separated yourself from that scheme?—Supposing there were no institutions whatever of a University character, I could conceive the possibility of founding a University by starting in various places colleges under a central administration, and organisation and colleges on the German principle, very much as they exist in Berlin at this present moment. That is not our position in London; we have to deal with a great many vested interests of all kinds, and it is quite hopeless to imagine that it is possible to override these vested interests, and to create such a central body; and in that way I differ from my colleagues on the subject. I think it is hardly worth while struggling, for the difficulties are so great.

25,276. Then the point upon which you approved of the professorial scheme was the great general principle, that the real control of the teaching and examining must be in the hands of the professorial body?—Yes.

25,277. Would that condition be realised under the conditions of the Gresham Charter?—To a certain extent. The interference by outsiders on the Senate of the Gresham University would be comparatively small. There is a very large representation given to the professorial element in the Gresham Scheme.

25,278. Then the real ground on which you prefer the Gresham Charter to any possible scheme in which the University of London would take part, would be that you feel that in any such scheme the college would have to sacrifice a greater amount of their present independence?—In any scheme that I have seen they would require to sacrifice a greater amount of their present independence.

25,279. And also the Council especially would lose its importance in relation to University College?—I do not attach so much importance to the actual existing Council at University College. I admit that it is a very capable body and exceedingly well chosen, but I should conceive that another Council might answer the purpose equally well.

25,280. But do you conceive that a general Council appointed with a view to the whole of the colleges joining this new University could stand towards them all, and towards each of them individually, in as satisfactory a relationship as the Council of University College does to University College?—I cannot answer that question.

25,281. Is it one of your grounds of objection that you feel that under the Gresham Charter the college would have an individuality?—It would have an individuality.

25,282. You would have a greater certainty that the points you have mentioned to-day would be preserved under the Gresham Charter than in any scheme under which the University of London should assume the headship of the University?—That is so, but I can conceive a scheme of this kind; that the Senate of University College should be left very much to manage University Colleges with, as it were, the Council over them, which might consist of a certain number of themselves and a certain number of other people. That does not appear to be impossible. For instance, if the Senate of the London University were entirely re-organised; if the members who do not attend it were given permanent leave of absence, if I may say so, and if a number of professors were added to it, I think London University Senate, as it is called, would form a Council practically of the same character as that of University College.

25,283. That is to say, you do not regard it as essential that the Council of University College which is the ultimate Governing Body of University College, should have no interest except those of University College to consider?—No.

25,284. May I suggest that the whole of your evidence to-day has rather pointed in the direction that you think it desirable to establish University College as a University by itself?—I think so. I think we are a small University.

25,285. And that your whole scheme, and the ideas on which it is based, have not been drawn up mainly with a view to the other educational agencies which the University of London is expected to comprehend?—I think the difficulties are these; that the South Kensington establishment is a Government establishment. Of course one can conceive a radical alteration in Government views as to its purposes and aims, and that it could be incorporated into a University, but I do not think it is likely to happen. Then with regard to the City and Guilds Institute we have

W. Ramsay, Esq. Ph.D., F.R.S.

24 Mar. 1893.

heard that the authorities of the City and Guilds Institute do not regard it as permanently endowed; they appoint their professors from year to year. And both these bodies declare that they prefer to keep aloof and see the University founded, and then afterwards ascertain their relationship to it. That leaves us with practically only two bodies, University College and King's College, and of course it is the Gresham scheme that those two should be federated in the University.

25,286. And one of the grounds upon which you support the Gresham Charter is the fact that it is confined mainly to those two colleges, though you are obliged as a necessity to introduce medical schools which do not come up to your standard?—I cannot say that they do not come up to our standard, because I do not know what their standard is in medicine. I fancy it is good.

25,287. You said it would be desirable in view of vested interests that the whole scheme of medical education should be reformed. Consequently your idea would have been a junction of those schools and the two colleges together?—I do not recollect saying that.

25,288. I thought you gave that particular answer when you were asked about the Medical Schools. I thought you said you would like to see them reformed? (*Professor Sidgwick.*) I think Professor William Ramsay was dealing with science?—(*Witness.*) I was thinking of science really. What I meant to say was that it would be a great advantage to Medical Schools to centralise the science teaching and club together to have one competent man instead of a number of teachers, as they have at present.

25,289. (*Professor Ramsay.*) Then you do not regard the admission of these schools as a blot upon your system?—No, I think not. The Medical Faculty of course will always stick up for its own rights very forcibly; there would be a majority against the other Faculties if it ever came to a vote.

25,290. That is in the supreme body?—Yes.

25,291. But the great point in your evidence has been the superiority of the professorial training which knows the student and which examines the student, with a view to his whole past and his whole character in the college?—Yes.

25,292. Without going into the question of the governing body at present, do you consider that those conditions are fulfilled in a way which meets your view in each one of the medical colleges? Do you think they have the same guarantee for that high professorial mode of teaching which you describe?—I think it might be worked in this way. If the teachers in one Medical School were to act as the external examiners with the others, to be associated in groups of three or four, so that there should be a board of examination for anatomy, a board of examination for surgery, and so on, the standard would be equalised in that way.

25,293. That refers to examinations. Do you suppose that each one of these schools carries on their complete system of examinations, side by side?—I really am no judge of that. I do not know what the smaller hospitals do in the way of examination. I am no judge whatever of their efficiency.

25,294. So that your view of the Gresham Charter is not formed with regard to the special case of the Medical Schools?—No.

25,295. You have to accept them, and to hope that arrangements may be made afterwards which will enable them to fulfil the necessary conditions?—Yes; I think the great argument in favour of the Gresham scheme is that it was accepted by the Medical Schools; it is so difficult to get them to agree to accept anything.

25,296. Therefore you must take them at their own price?—You must take them at their own price, and trust to better things.

25,297. Therefore, would it be one of the elements of your scheme that the Gresham University should have power under the Charter to govern the Medical Schools as a whole, and introduce what reforms they choose?—I think pressure could be brought to bear on the Medical Schools gradually to introduce reforms.

25,298. And that representation on the Council would be sufficient to enable the non-medical school element to bring them gradually into conformity?—I should not like to say the non-medical school element, because some of the Medical Schools have teachers who would support us in the views we are advocating.

25,299. The real question is the vested interests?—Yes.

25,300. Do you consider that your governing body would be powerful enough to deal with those vested interests in the way which purely educational interests require?—I am sorry that the Gresham Charter contains no scheme for possible incorporation. It appears to me that it would be greatly improved by some provision for it, or some provision that, should incorporation be found desirable, there should be some means for carrying it out. But it must grow. I think if we had the Gresham Charter with some powers of that sort, the tendency of the Gresham scheme would have been that the colleges would have drawn nearer and nearer each other.

25,301. With regard to other outside bodies your plan is founded upon their exclusion?—The only other bodies that one can mention are Bedford College and Queen's College.

25,302. You have mentioned the College of Science, and so forth?—The College of Science and the City and Guilds Institute, I fancy, exclude themselves.

25,303. (*Mr. Anstie.*) I do not recollect the evidence of that?—I take it as the result of what I have read, but, of course opinions may differ.

25,304. (*Professor Ramsay.*) You take it as the result of the evidence that the Royal College of Science, and the City and Guilds Institute, exclude themselves?—By saying that their schemes were not worked on the lines of a University. I think that, put shortly, the evidence of their representatives has been this; found the University, and we shall see where we come in.

25,305. (*Mr. Rendall.*) Is not that true also of University College and King's College, if you summarise the evidence?—I have not thought so.

25,306. (*Professor Ramsay.*) With regard to the University extension movement, I understand that you make no definite provision for that?—I should give power to grant certificates or diplomas.

25,307. And you would trust to the inherent adaptability of the Gresham University when constituted to go outside its own sphere, and provide for legitimate wants of that kind?—There is a very great temptation to do so, because it is difficult to find anything for senior students to do. The extension lectures are the great outlet for young Oxford and Cambridge men who are waiting for something to turn up.

25,308. And you think that the University might be trusted to manage that in as large and liberal a way as circumstances might warrant?—I think so. But a compulsory paragraph might be necessary.

25,309. You spoke about three different modes in which two systems of examination might be combined. I did not understand the ground on which you dismissed entirely the idea of a common set of papers for the external student and the internal student?—The reason of that is that the same papers would not be applicable. In the one case you wish to test the training of a candidate, and in the other case you wish to test the knowledge of a candidate.

25,310. And in your view it is impossible to test the training of a candidate by papers?—It is very difficult. One can attempt to do so, but as a rule it fails.

25,311. You know it has been done in the Trinity College, Dublin?—They are very much dissatisfied with it.

25,312. Not all. We have had before us the principal spokesman of the whole system, and he did not take that view?—Professor Fitzgerald, with whom I have talked, takes the opposite view. He says they would be willingly rid of it; it is a blot.

25,313. (*Mr. Anstie.*) That is not Professor Mahaffy's view?—I suppose there are differences of opinion there as here.

25,314. (*Sir George Humphry.*) They put it that they are satisfied with it as it exercises a general influence over the education of Ireland?—That may be so.

25,315. (*Professor Ramsay.*) At any rate, you have formed an opinion so strongly about it that you would not contemplate it as a possibility?—I think we should be no better off than we are. There would be no improvement.

25,316. But supposing the Senate of the University were constituted in just such a way as you proposed to constitute the Gresham University Senate, I do not mean exactly in the same proportion, but in the same way, giving the colleges which now exist, University College, King's College, and so forth, precisely the same amount of influence which they would have under the Gresham Charter, then would not the objection as to the possibility of changing their papers, and the style and mode of the examination, be removed?—Who would frame the papers? Who would examine them?

25,317. I am presuming a system of precisely the same kind as you have in the Gresham scheme; that the Senate were composed of persons drawn from professors in London, precisely in the same way as the governing body under the Gresham scheme. Why should not new ideas about papers &c. permeate to them as much as to the Council of the Gresham University?—Take a concrete instance. If I were setting papers on chemistry with my colleague, Professor Thomson, of King's College, I imagine we should consult together and examine the students in constant consultation as to how each student did, how he worked individually, and how much about him was known to us. If an internal examiner is employed he would necessarily be employed with us in considering the results. Supposing one had to deal with outsiders——

25,318. I was putting the question of outsiders away just now, and considering how you internally would be affected differently by a scheme of which the Senate of the University should be the head, in your relation to that examination?—Not in the least.

25,319. You do not contemplate having one set of examination papers in King's College, and another in University College, do you?—No; *i.e.* for junior students.

25,320. You would have one common system in King's College, University College, and all the Medical Schools?—Yes.

25,321. Therefore a scheme for reconstituting London University, which should have a Senate realising your fundamental conditions for admitting professors, &c. would quite meet your view?—Yes.

25,322. Then the only question remaining would be in what way would the external student be at a disadvantage by being given the privilege of being examined by the same examiners?—If you say examined by the same professors, I think the external student would be at a disadvantage because he would not be known to them.

25,323. The college would be at a disadvantage?—Yes.

25,324. The external students would come to a college without having those facilities given to them?—Yes. I must have expressed myself indistinctly to begin with. I was thinking of examiners external to the professors.

25,325. Of course that is a matter of detail, and it does not go to the root of the matter. Then in the next place, if you take the position of the external student, under the system which I have suggested, by which he should be subjected to the same questions which met your approval in the case of the internal student, how would you compare his position with that which he now enjoys, of being examined by examiners who have no relation to teachers elsewhere? Can you point out any particular in which the external student would be worse off by having to submit to an examination by London teachers, conversant with teaching, than under the present system of having as examiners men who have no relation to the teacher at all?—I do not think he would be worse off, except by contrast.

25,326. That is to say, that a greater portion of the external students might be rejected?—Yes.

25,327. (*Sir George Humphry.*) You have given us a great deal of interesting evidence with reference to examinations, examiners, and examinees. Do you not think that subjects of that sort should be left very largely to the University itself to determine. Ought they to be made the subject of Charter, which we have chiefly to deal with?—I think not.

25,328. They should be rather left to the University, when formed, to decide and modify from time to time as it may seem to the authorities of the University desirable?—Yes, I quite agree. The University should have a free hand in such matters.

25,329. So that in reality it is a matter that scarcely concerns us?—Probably not as such: but I think it is a matter which would very largely influence you in determining what constitution you would give to the University.

25,330. Given such a constitution as would enable it to decide matters as far as can be judged in the best manner, it would be better to leave the University a very free hand to decide such matters as these?—Yes.

25,331. In fact the Charter should embrace no more points than are absolutely necessary?—I quite agree.

25,332. (*Mr. Anstie.*) May I take it that substantially what you desire is that the educational regulations of the University, including the settlement of a syllabus, where a syllabus was necessary, the courses of instruction, and the courses of the examinations, and the recommendations for professorships should be practically left in the hands of the professoriate?—Yes.

25,333. That is the one basal idea?—That is the fundamental idea.

25,334. You would desire that the administrative details, financial business, the conduct of the University in relation to external bodies, and the settlement of any disputes that could not be otherwise decided, should be in the hands of the Council or Senate?—On which the professors should be largely represented.

25,335. When you say largely, I do not know whether you stipulate for a majority or not?—No, I think not. A third would be large enough.

25,336. With regard to the combination which has been suggested by Professor Ramsay, and the conduct of a uniform system in which University teaching should be made the basis of examinations, might not that tend advantageously to bring what are called external students within good lines of advice as to the mode in which they should acquire their information and cultivate their understanding?—Yes, I quite agree, but my point is the practical one as to whether such an arrangement is possible.

25,337. At any rate you think it might be desirable?—Certainly.

25,338. And might tend to induce him—I will not say to drive him—within those more regular courses of instruction which you would agree it is desirable he should have?—I think it is probable.

25,339. As to the practicability of it we have had some very valuable evidence from the University of Dublin, from the later witness; indeed, we find that the external students, notwithstanding that supposed disadvantage, occasionally do extremely well, even in honours?—So I understand.

25,340. So that the disadvantage would not seem to be of that magnitude which has been represented by some?—I think the disadvantage is entirely on the side of the external student; that he must look out for himself.

25,341. And that the disadvantage is not so great as to preclude his earning his fair position on the

W. Ramsay, Esq., Ph.D., F.R.S.

4 Mar. 1893.

University lists?—Probably not. If he has got this instruction somewhere, he probably has got good instruction.

25,342. And without that instruction he probably will not succeed?—Probably; but my point was as to the possibility of carrying out such a scheme in London. Remember that Convocation would oppose it.

25,343. That is the next point I was going to. Are you aware that Convocation has advocated a scheme of University professorial examination, and has expressed an opinion that that will be of no prejudice to external students. So that Convocation appears to have so far given up the case?—It is a professorial examination of a curious kind. They propose to recognise professors of various institutions, without paying any regard to those institutions. I should be sorry to entrust Convocation with that power of recognition.

25,344. I am not suggesting that Convocation should have any powers of recognition or otherwise, I am only pointing out that Convocation appears by its latest utterances not to attach so much weight to the objection as other persons do?—I am very glad to hear it.

25,345. That at least would go some way towards removing the objection?—Yes.

25,346. And, amongst others, the late Royal Commission did not feel that the external student would be at an unfair disadvantage by having the courses prescribed and the examinations controlled by a teaching University. That might be left to the University to consider?—Yes.

25,347. With respect to what you said about the City and Guilds I rather gathered from their evidence that what they objected to was not that they were not on University lines, but that the University was not on their lines, and what they claimed was that if they came in there should be a Faculty of Applied Science. I understand that you at University College practically teach applied science in the same way that they do at the City and Guilds?—Certainly.

25,348. And I suppose you would desire that applied science courses should, as has been urged by some of your professors before us, be recognised?—Certainly.

25,349. If recognised as they desire, the objection of the City and Guilds would be met?—I thought the question was one of funds.

25,350. No, it had nothing to do with funds?—I thought Mr. Watney gave evidence about that.

25,351. So far as the professors were concerned which is the evidence we have now principally to consider, their objection seemed to be only on the line that applied science was not given due weight?—Then I should like to state on behalf of University College that we should be only too glad to welcome them in.

25,352. You have pointed out a defect in the Gresham Charter in the absence of any means of stimulating or promoting the co-ordination of institutions. Supposing the University had the power (I do not speak of existing professorships, that would be a matter to be dealt with by itself) but supposing the University had in the future the power of appointing University professors, and recognising in various institutions of higher learning in London the teaching of the professors appointed by them on such recommendations as you have just suggested, would not the possession of a power of that kind, coupled with a recognition of the teaching of the professors so appointed, be of great value as a means for co-ordinating the teaching of the various institutions?—I do not quite understand.

25,353. You yourself mentioned the medical schools. Without going into invidious suggestions everybody seems to agree that a good deal of co-ordination might be advantageously introduced among them?—Yes.

25,354. Supposing the question to arise in the University Council of whether there should be at a particular institution a professorship recognised, another at a second institution, and another at a third, all in the same line, and they were to come to a conclusion, as you have suggested, that it would be better to have one professor appointed to the three, the University could then practically effect a co-ordination in that direction?—Do you not think it would give rise to a great deal of friction?

25,355. Every change gives rise to some friction. But would not that be in effect a power of considerable value and efficiency?—I suppose you would contemplate something of this sort: that when a hospital appointed, say a lecturerer on pathology, it would submit the names of persons whom it regarded as suitable, for the University to choose one. The University might choose none, and say "We will not appoint." I do not see any objection to that.

25,356. You think that might be advantageous?—Yes.

25,357. They might say, "You really cannot teach "chemistry, and we will not appoint a professor to "preside over no apparatus"?—Yes.

25,358. And the effect of that might be that they would have to unite with another school?—Yes.

25,359. So that without any violent revolutionary means or "deglutition," as it has been called, the University Court, or Council of the Court, or whether it was, would possess considerable power of co-ordinating the various institutions giving higher instruction?—Yes, it certainly would.

25,360. You have answered Professor Ramsay that if University College could be treated by itself that might be a University?—It certainly is a small University in all but the name.

25,361. Although in one department we have been told it was not properly equipped. You do appreciate the fact that the difficulty which this Commission has to face is that University College is not in fact the only institution that has to be considered?—Yes.

25,362. And that whatever we do we must make such provision as to include the just claims of the public upon these institutions, as well as the claims of the institutions, and not only University College but various other institutions?—Yes.

25,363. You would not deny that that is a point which we are to give effect to if we are to have a University of London which is worthy of its name?—That is so; but I think it might be pointed out in that connexion that the population of London is quite exceptional.

25,364. Still London is a unit?—Is it? Well, it has one name.

25,365. It is a centre. You cannot have two centres?—There is ample room for a great many institutions at one time.

25,366. A great many Universities?—A great many branches of the University.

25,367. But not a great many Universities?—I do not even say that there is not room for two Universities in London.

25,368. If two, why not three?—Granted.

25,369. That is hardly a practical way of looking at the question, is it?—I do not know that it is not. In Scotland, with a population of four millions, there are four Universities.

25,370. But London is a unit?—Yes, but the distances are so great that if there were ever to be a University in the East End there would be no rapid communication between the east and the west.

25,371. Are you prepared to present to the Commission now at this stage of the proceedings an entirely new scheme by which a series of Universities should be formed in London?—No. I should prefer one University with one centre of government.

25,372. (*Professor Ramsay.*) You said "institutions," and Mr. Anstie took you up as if you had said "Universities"?—Yes. I merely pointed out in passing that Scotland, with a less population than that of London, has four Universities.

25,373. (*Mr. Rendall.*) You favour on the whole the institution of the new University upon the Gresham Charter lines of federation of colleges as the most practical?—Yes, I think there would be the least friction.

25,374. What I missed on the whole of your evidence was any idea, or provision, or suggestion for enlarging the scope of the University particularly in the administration of University endowments independently of school or college endowments. Upon the plan of the federated University of colleges, the provision would be that all endowments, whether given by Parliament or not, would pass practically into the hands of the federated colleges or schools for an independent administration?—Yes.

25,375. In your conception of a University in London would you make no distinction with regard to endowments for collegiate and University purposes?—I do not think it is possible to distinguish between collegiate and University purposes in that sense. The endowments would be in trust in the hands of the Council, and they would apply them as they thought best. If it was necessary to establish a totally new college they would be able to do so.

25,376. Do you think there would be at all likely to be given Imperial endowments to two practically federated colleges rather than to a University which would embrace those colleges, but the scheme of which would be a University rather than a college scheme?—I do not think there would be any difference. It is the same thing in another, name, is it not?

25,377. There is a great deal of difference when you come to denominationalism?—You mean the denominationalism of King's College?

25,378. Yes?—I cannot touch that. Personally I do not approve of the denominationalism of King's College.

25,379. Do you not think that would a hindrance to a Parliamentary grant?—No doubt it would.

25,380. And that, at all events, might be got over by putting the University on larger lines, which would enable it to embrace any institutions that the University thought proper?—Yes; but I should be sorry to see the Commission recommend the absorption of institutions like the Birkbeck, the Polytechnic, and institutions of that kind.

25,381. You have spoken of your desire to see further incorporation of certain institutions, and I think you said that the other bodies had shown no inclination to come into the University scheme?—That is to say, the South Kensington School.

25,382. Of course, it is quite natural to think that they should suspend judgment until they know what fashion of scheme it is, but taking the Gresham Charter as it stands, could you fancy the City and Guilds, South Kensington, the British Museum, the Inns of Court, or any of these important bodies thinking for an instant of coming in and casting in their lot?—I always understood that some members of the Inns of Court were anxious to do so. I do not know the history of the question, but I understood that the negotiations had made a certain amount of progress.

25,383. You feel that a more attractive scheme might be made, which would allow University recognition of institutions without definite inclusion of those institutions as part of the University?—I do not see the distinction.

25,384. One would adopt college representation as the basis of the administration of the University, and the other would take rather the basis of Faculties and teachers, and of election by University teachers, or by teachers *qua* members of the University?—I think it would come to precisely the same thing in the long run. You would be obliged to select the same people, and you would select them under a different name.

25,385. Quite so, but you would select them not as representatives of federated institutions but on their merits as men of influence in the collective body of teachers?—I think if you get the same men together it is a matter of indifference how they are selected, I do not see any reason to select in one way more than in another.

25,386. In one way they come to represent institutions, and in the other way they come individually. It makes a difference in their attitude, and also it gives a wider range, because it allows you to admit individuals rather than to admit colleges?—There are institutions which would be bound to exist, and which would be bound to govern themselves more or less. There are several institutions with trust funds.

25,387. And you would make the sacrifice of leaving out such bodies as the South Kensington School?—I should think it would be impracticable to bring them in. General Donnelly's evidence appears to me to show that it would be a very difficult thing indeed.

25,388. (*Professor Sidgwick.*) In General Donnelly's evidence, as you may have observed, he said there would be no objection to the University selecting certain teachers in South Kensington, and letting their lecturers give University lectures, he thought that would be a good thing. I did not quite understand from your answer to Mr. Rendall whether, in the case of an institution like South Kensington, you saw an objection to selecting certain distinguished teachers, who were doing University work, and saying they should be members of the Faculty, and that they should be treated exactly as University teachers, although the institution remained outside?—No, I see no objection whatever to that.

25,389. (*Professor Sanderson.*) May we assume that you are of opinion that if University College could be erected into a University, that is to say, if it could have the power of granting degrees and had sufficient funds, it would be a perfectly efficient teaching University for London?—Certainly, although it would not be large enough. It would be difficult to make it a University for all London, simply because of its position in one quarter of London.

25,390. But the addition of funds would make a difference in that respect?—If there is to be a teaching University for London, it would hardly be sufficient to make University College that teaching University.

25,391. Its position would not be suitable for teaching law, for example?—No.

25,392. Or possibly some other subjects?—And, moreover, it is in the north-west of London.

25,393. But admitting that on the whole you would have there a complete University, do you think you could say the same if University and King's Colleges were united together?—I think there would be a distinct gain by uniting with King's College, because King's College occupies a different geographical position in London. It is to a great extent a case of locality.

25,394. With that exception you would regard it as possible, by combining those two Colleges to have an efficient teaching University?—It would be better than either singly. I confess I should like to see South Kensington brought in, but it appears to me to be impossible.

25,395. You would think it impossible to bring South Kensington into a body of that kind?—Yes. And I should say also that I think there must be some development in the east. There is an enormous eastern population.

25,396. Is it one of your objections to creating an independent University body in London that the control that such a newly constituted body would exercise over King's College and University College would be injurious to their development?—Yes.

25,397. Then admitting that, it seems to me that you admit that as regards the other bodies which you propose to introduce into you scheme you must have that control. I am speaking only of science. You clearly say, do you not, that it would be necessary that the University should exercise a complete, and not merely an occasional, control, over the teaching of science in medical schools?—It depends upon what sort of control you imagine. I can imagine no better control than the appointment of suitable persons as professors. If the University is the final body which has the appointment of professors, it appears to me that it has that control very largely. I am not speaking of the present condition of affairs, but if the University

W. Ramsay, Esq., Ph.D., F.R.S.

24 Mar. 1893.

—that is, ultimately on the recommendation of a committee of the faculty,—made the appointment it would practically possess that control.

25,398. And that you think is the sort of control which would be beneficial?—Yes.

25,399. Then why would it not be beneficial over University College and King's College?—It would be. My position is that it does not matter who has that appointment.

25,400. If you say that that control is of a beneficial character, why should you object to the existence of an independent University body? Why should University College object?—I do not think University College does object. The position is this: the appointments to Chairs should be made according to our method, and if that is done I do not think it matters in the least who appoints to Chairs. The recommendation of the Faculty will be taken.

25,401. Then, in point of fact, you entirely approve of the proposal to erect an independent University—a body independent of King's College and University College?—No. I think it is a possible scheme which has a good deal to recommend it, but it appears to me that there are more difficulties to be met with than in the Gresham Scheme. That is my only objection.

25,402. (*Professor Sidgwick.*) I should like to get quite clearly your view with regard to the examination of external students, and the relation of that to the examination of internal students; because I am not able quite to reconcile the answers you have given to Professor Ramsay and Mr. Anstie, with the evidence you gave in answer to Lord Cowper. It may be my misapprehension. If I understood you, though up to what you may call the intermediate examination in science you thought the same examinations would do for students whenever they were taught, you hold that for the final examination in science an examination adapted in a peculiar way to the student, which would be under the care of the professors and conducted by the professors, would be desirable?—Yes.

25,403. It would be, I understood you to say, an examination in which, in deciding on the degree, the professor would be influenced not merely by any work done at the time, but by his whole knowledge of the previous work of the student?—Yes.

25,404. Do you think it possible that an examination of that kind would be adapted to meet the needs of external students. Do you think it could be used at all for them?—I think if it were applied to the external students, the disadvantage would be to the external students.

25,405. If you were conducting an examination in the interests of the external students, would you not conduct a different kind of examination?—Yes, I should set different papers.

25,406. And, I suppose, as regards the practical work, if you had to decide upon the performance of an external student solely on what he did in the examination, you would give him a different kind of practical work from that which you would give to the internal student?—I think he would require a great deal more.

25,407. And in his case you would judge entirely by the examination at the time?—Yes.

25,408. Which would be constructed—or it would be desirable that it should be constructed—on a different plan?—To be perfectly fair to the external student, it would require to be constructed on a different plan.

25,409. Then if we are speaking of what would be best, do you think it would be desirable that the examination of the external students should be placed in the hands of the same persons who rre connected with examining the internal students, or would it not be better to have an independent body to some extent who are solely concerned with the interests of the internal students?—That is what I stated in my evidence—that the best solution of the question was to have two independent bodies.

25,410. Now with regard to the organisation of the University; I understand it to be your view that, quite apart from any of the existing conditions with which we have to deal, in a place like London it is in itself desirable that there should be a number of institutions organised, with a certain amount of independence, each having, for instance, its own laboratories and its own staff, in order to meet the needs of the metropolis?—Yes.

25,411. And even if we had a *tabula rasa*, you would prefer to construct the University, as far as its organisation went, on that plan rather than on the plan of having one big central institution?—For this reason; so much time is lost by students coming and going. I do not think one has an idea how much time is lost. I have some students on the south side of London who spend an hour and a quarter in coming and an hour and a quarter going.

25,412. You alluded to the difficulty of attending to such a large number of students in one laboratory. In an efficiently working University it would be desirable to have additional laboratories?—Yes.

25,413. So that it is not merely because of the existence of University College, but because you think it is the best plan that you urge this scheme?—Yes I think you have senior and junior professorships, it will be difficult to get the same class of men. Men would have considerable doubts in taking a junior position.

25,414. You think on the whole that London would get a higher average of teaching, and better teachers on the whole, by having these different institutions, and, say in chemistry, a number of teachers of co-ordinate rank rather than having one professor?—Yes.

25,415. And that the posts would be on the whole more desirable than if it were organised on the other plan?—Yes. Of course occasionally it happens that an extremely eminent man turns up. In France they make provision for such an eminent man—a man who may not be a good teacher, but who may have some special line of his own. They make provision for him, but they do not continue the position after he dies.

25,416. With regard to the appointment of these professors, though they should be in different positions and independently organised, I think you said to Professor Sanderson that you see advantages in giving the University some control over the appointment, by which in the case of an inferior school it might mark its sense of the appointment of that school not being up to the mark, and it might refuse to give a title which it would have given otherwise. If I understand you, you think that degree of control would be on the whole a gain?—Yes; it might be on the whole a gain.

25,417. It might lead to some friction, but we must bear with the friction because of the gain?—Yes. For one thing it would make the Committee of the Faculty exceedingly careful in making recommendations.

25,418. You see no difficulty likely to arise between the college and the University about the appointments as, I understand on the plan as you conceive it ought to work. I am not now speaking of the existing state of things, but of our University with a number of semi-independent institutions. You think that the Governing Body of a particular institution should make its own appointment on the plan you suggest, by a Committee of professors, and that then a further appointment to a University Chair, or a confirmation by the University should be required, and would be desirable?—I am not prepared quite to answer that question. I could conceive the Committee of the Faculty recommending to the central body first, and then give the Council the option of refusing the man they recommended, but I think that in practice it is almost invariably the case that the man recommended by the Committee is chosen.

25,419. But there would be a danger of a very serious deadlock if in any particular case the Governing Body of the college took one view, and the Governing Body of the University took the other view. In what position would the professor be? I do not quite

understand how you conceive the scheme to work?—It would be exceedingly troublesome to work at all.

25,420. But would there not be less danger of the deadlock if the appointment were made in the first instance by the college and confirmed by the University, because then if the University refused confirmation, the professor would still hold his post in the college, though he would have received a severe snub, and, of course, he might resign?—I think the thing would be unlikely to occur, but one might have the double confirmation.

25,421. That degree of control, although it might lead to a certain number of teachers in the colleges remaining outside the University staff, would still, you think, be a desirable thing, and it would be an improvement on the Gresham Scheme?—It would tend to unification.

25,388. (*Professor Sidgwick.* In General Donnelly's evidence, as you may have observed, he said there would be no objection to the University selecting certain teachers in South Kensington, and letting their lecturers give University lectures, he thought that would be a good thing. I did not quite understand from your answer to Mr. Rendall whether, in the case of an institution like South Kensington, you saw an objection to selecting certain distinguished teachers, who were doing University work, and saying they the schools?—The teachers are good enough, but they give too short a time to the place. They have other work to do, which causes them to act more or less as crammers.

25,424. Then, I suppose under the Gresham Charter, without any change, the University having power to regulate the courses of study in the schools would be able to correct that defect?—It would be able to remedy that defect.

25,425. The schools would be obliged to conform?—Yes.

25,426. By the regulations for the duration and nature of the studies to be required, the University might bring the Medical Schools up to the mark?—Yes, it could be done.

25,427. And if that were done you do not think that any further coercion would be required?—I think not. There would always be the possibility of delaying coercion until the next appointment was made, and not interfering with the present holder of a lectureship. The screw can be applied at the next vacancy.

25,428. I understand your view to be that if this power of confirmation were given to the University, though we may hope it might never be exercised, the fact that it was there might tend to prevent any lapse into inferiority on the part of the schools?—I think so.

25,429. They would be aware that they were in this danger?—Yes, I think that would be the effect.

25,430. So that on the whole you think that would be advantageous?—Yes.

25,431. (*Mr. Anstie.*) Does not this paragraph in the Calendar indicate what may be required of University students: "Candidates will be required at "the time of the examination to submit the MS. "book containing the record of their laboratory work "in quantitative chemical analyses, the result of each "analytical exercise being signed by the teacher, if "any, whose course the candidate may have attended, "as evidence that they have been made under his "direction and supervision"?—Yes, that is the best feature of the University of London. This regulation of the Universty of London has been strongly opposed in Convocation, on the ground that it places students who have had no systematic instruction at a disadvantage.

25,432. (*Lord Reay.*) If I may be allowed to summarise your evidence with regard to the appointment of professors, it comes to this: that the governing body of the University can attain its object in two ways. It can say, as it might truly say in the case of University College, "We are perfectly "satisfied with the guarantees which the organisation "of University College gives for the appointment of "University professors, and therefore we do not "interfere"; and then it might admit other institutions on the same basis if it was satisfied that they gave the same guarantees as those which are given by University College. Then there might be another order of institutions in the case of which the University might deem it desirable and necessary to require further guarantees. You are prepared for the University to have and to exercise those powers?—Yes. My difficulty is in knowing precisely which other institutions you prefer.

25,433. I am leaving that quite open. What your evidence has clearly pointed out has been that the main point is the guarantees given by institutions the for the appointment of the best men on the teaching staff?—Yes, that is the most important point on the whole.

25,434. That is the most important point that has been brought out in your evidence to-day?—Yes.

25,435. The next important point is that with regard to the teaching not only of the senior department but of the junior department, the greatest liberty must be left to the professors?—Yes.

25,436. They must not be hampered either by a syllabus or books prescribed by the governing body?—That is so.

25,437. And in the third place with regard to the examinations, with every guarantee as to impartiality you think that if they do not hamper, the independence of the teacher there can be no objection to secure a very high standard for both teaching and examination?—No.

25,438. (*Professor Sidgwick.*) The examinations of the University of Dublin have been referred to, and you said that Professor Fitzgerald held decided views?—He is very much dissatisfied with the external students. I suppose the Commissioners know that the fees paid for external examination are equal to those paid for teaching. It appears that the University of Dublin degrees to external students are very largely given to Welshmen, who go over for the purpose. Not having a University of their own it is a comparatively cheap way.

25,439. We were told that the cases in which the external students compete for honours are extremely rare. Are you aware of that?—No.

25,440. (*Professor Ramsay.*) You spoke about the great difficulty of people going and coming from a distance, and you mentioned an hour and a quarter spent in travelling as being some great thing?—Yes.

25,441. You know that nothing is thought of such distances at the University of Glasgow?—I walked six miles a day.

25,442. You know that the University of Glasgow deals with a district quite as large as London?—Yes.

25,443. And draws students from the surrounding towns who frequently have to spend an hour and a half in travelling?—Yes, but then they have not to go from the University of Glasgow to some other building.

25,444. No; but the majority of our students come from long distances?—Yes.

25,445. (*Professor Sidgwick.*) Your view with regard to the desirability of a number of independent schools is not based only on the difficulty with regard to distance, but also on the superiority of the teaching in a number of moderate-sized institutions?—Yes; there is more efficient teaching given in moderate-sized institutions.

The witness withdrew.

Adjourned to Monday, March 27, 1893.

Sixty-eighth Day.

Monday, March 27th, 1893.

PRESENT:

THE LORD REAY, G.C.S.I., LL.D., IN THE CHAIR.

Sir GEORGE M. HUMPHRY, M.D., F.R.S.
Professor H. SIDGWICK, Litt.D.
The Rev. Canon BROWNE, B.D.
JAMES ANSTIE, Esq., Q.C., B.A.

J. LEYBOURN GODDARD, Esq., M.A., LL.B., *Secretary.*

Rev. H. Wace, D.D.

27 Mar. 1893.

The Rev. H. WACE, D.D., further examined.

25,446. (*Lord Reay.*) Perhaps you will tell us what modifications of the Gresham Charter you would propose?—I wish to say that I do not think it is necessary for me to trouble the Commission much upon that subject, because Sir George Young was good enough to consult me about the modifications which he has explained to the Commission, and I am quite satisfied with them in substance, and desire them in the main. There are some details which might be matters of difference, but generally, with respect to the whole question of the modifications of the Gresham Charter, I am quite content to leave all those points in the hands of the Commissioners, especially after what Sir George Young has explained to them. I do not think that such questions of detail are at all vital to the matter. If, for example, it should be thought advisable to have, as has been suggested on the model of the Victoria University, a general Board of all the Faculties, though I do not consider it a good thing, I should not think it worth while to trouble the Commission with much argument against it; and on the whole I feel we are perfectly safe in leaving all such details to a Commission like this. The first thing I should like to explain with respect to the Gresham Charter is that it appears to me still, so far as I can see from the evidence, to be very much, I do say misunderstood, but not understood at all. The attack upon it, repeated again and again, is that it is nothing but a provision for enabling the two colleges to examine. In my conception of the charter that is the least and smallest part of it. The great thing that it does is to bring together the two great University colleges of London into consultation for the purposes of organising, first of all their own teaching, and, in the second place, any other teaching which it may be desirable to undertake—teaching, for example, such as that of the University extension type. Or further, such teaching as that which I see Mr. Barnett, of Whitechapel, expressly desired to have. I observe that he says (15,462–3) he is not satisfied with University Extension teaching; it is not enough for his purposes, and he would like to have some instruction which is more under the authority of the University, and under its direct management. Well, here are the instruments for such work in the Council of the Gresham University. As I mentioned before, again and again, our idea always was (and I wrote to Mr. Goschen to that effect while the matter was under discussion in Parliament) that there should be a distinct committee of the Council of the Gresham University, appointed for the express purpose of organising and directing University extension work; and I earnestly hoped that we might have had the support of the University Extension Society in that proposal, and that some of their representatives might have been on the Council, so that the work might have been carried on in harmony with them. But the main point that has been so much overlooked is that the Charter unites the University teachers of London into an organised body for the purpose of teaching the direction of both within the Colleges themselves and outside them. And I venture to think that it is dangerous to do more; that it is dangerous to attempt to lay down by Charter any hard and fast, or any approach to a hard and fast, line for future development in that direction. It is very much better that the work should grow as it has grown at Cambridge, and as it has been growing at Oxford. There is nothing that I am aware of in the constitution of the Universities of Oxford and Cambridge to make special provision for this University extension work. So little is that the case that, when Cambridge wanted to give a certain value to courses taken at University extension centres, they actually had to go to the Queen in Council to get leave for it, and their proposals had to be laid before the Houses of Parliament. Under the Gresham Charter it would have been perfectly possible for us to have done that of our own motion. I know it has been a disputed point whether we had exactly that power, but my belief is that it was there; and, as I said, "If it is not there, please put it in." It was intended to be there. So that it appears to me that the Council under the Gresham Charter has as at least as large powers for the development and the spread of University education in the City and County of London as the Universities of Oxford and Cambridge have for its spread over the country. If that is not so, I should feel it a great favour if the absence of it might be pointed out. But to get all the chief teachers of University College and King's College, with examiners and other lecturers, into an organised body, to direct education for the purposes which are indicated by the degrees of the University, is the central purpose of the Gresham Charter; and, therefore, to say that it merely gives degrees is to overlook what is its very marrow. I do not think it can be fairly and reasonably supposed that such a body of gentlemen as you have, both at University College and King's College, would meet together to deliberate on questions of education without the highest possible advantage, both to themselves and to the education of London, and that they ought at all events to be able to develop a thoroughly good system. I do not know whether, before I pass on, any question will be asked me on this point. My object is to explain our views to the Commission, and if I at all fail to do so I trust the Commissioners will tell me where I fail, and allow me an opportunity of amending the defect.

25,447. (*Professor Sidgwick.*) I think you said you had seen the amendments proposed by Sir George Young?—Yes.

25,448. With regard to what you have said of University extension you are aware that he did propose the addition of further words?—Yes.

25,449. I have not got them all written down but I think they were to the extent that the University might grant certificates of proficiency and attach to

such certificates privileges in the way of exemption from residence, such as the University may determine. Also in the last clause I think it was to be expressly said that the instruction may be given in the morning or the evening, within or without the buildings of the Colleges. You would agree to those?—Substantially.

25,450. Not merely leaving the University free but, if one may say so, indicating the part it would have to carry out?—Certainly. That is what my impression was.

25,451. (*Rev. Canon Browne.*) With regard to the last paragraph but two of Chapter III. "or who have "attended University lectures." Are you prepared to give some broad meaning to "University lectures" in the charter, because at present University lectures are not defined and would mean solely lectures given by the newly-created University. Those words could only mean those who have attended lectures at the University, and yet I think you could hardly mean that. Does "University lectures" mean lectures which the Council may consider of a University type, or is it really limited to your own lectures?—I think you mean, should I understand to be included under "University lectures" lectures like those of the University Extension Society.

25,452. I would not say exactly like them, but lectures which the Gresham Council would consider to be of a University type?—Yes, certainly. It is certainly not intended to restrict those lectures within the walls of the two Colleges.

25,453. Or given by the two Colleges?—No, certainly not.

25,454. (*Professor Sidgwick.*) As the chapter stands it would at any rate include the lectures delivered by the lecturers mentioned in the last clause?—Yes, precisely so.

25,455. (*Rev. Canon Browne.*) The University appoint those lecturers?—Yes, independently of the colleges.

25,455*a*. I do not know whether this will be a suitable time to mention this, if not you will postpone it. The preamble to the charter says, "There exists at present "in London an urgent demand for the extension of "the benefits of University education." The question is just this: How does the Gresham Charter meet that urgent demand for the extension of the benefits of University education? Your remarks (and they are extremely in point) refer to the extreme advantages of co-ordinating the work which is now going on; but the preamble refers to an urgent demand for the wide extension of the benefits of University education?—In the future it would grow.

25,456. How does this charter indicate an extension of the benefits?—The preamble indicates it. The preamble is part of the charter, and if you constitute the University and the Council of the University working under this charter, I should take it that it is a distinct instruction to the Council to work for that object.

25,457. My question is how?—By constituting the Colleges into a University with a competent Council. The great difficulty of working the University extension scheme is that there is no such body entrusted with that duty, and capable of performing it.

25,458. There is nothing in the charter which expresses it?—Excepting the preamble itself.

25,459. (*Lord Reay.*) Therefore we may take it that you entirely concur in the amendments of the charter as submitted to the Commission by Sir George Young?—Yes, I accept them; and some of them are very desirable, particularly that one about drafting the second clause by an arrangement of schools of various Faculties.

25,460. What do you think is the main object which should be kept in view?—That is a vital point. I have looked through the whole of this evidence, so far as it has come into my hands. The last that I have received is that which was given on the 24th of February. Of course it has been impossible to read through some of the later evidence with the care that one would desire, but I am under the impression that the question of what should be the main object to be kept in view in founding a University lies at the root of a great deal of this discussion. The Gresham Charter according to the views which I wish to represent, has a different object in view from that which is mainly put forward in this evidence. The general impression that I gather from those who have attacked the Gresham Charter is that the main idea in their minds have is to set up some great laboratories, some great institutions for research, for extending the boundaries of science; and as long as that is done, they do not much care what else happens. If you read the evidence, for example, of Sir Henry Roscoe, that seems to be his great point, and the ground of the attack directed against King's College and University College is to a large extent that they are not primarily designed for that purpose; and it is urged by some witnesses that their means, their laboratories, and so on, are not adequate to what is desirable in the present day, that they cannot compete with the new laboratories, for example, established at Strasbourg, and so on. Now, the point I wish to urge upon the Commission is that the starting point should be the establishment of institutions for the education of young men; that is the first and main thing to be done, and nothing which does not provide for that can answer the purpose to which Canon Browne has called attention, of the extension of the benefits of University education. I would venture, in illustration of this, to remind the Commissioners (they have doubtless had their attention called to it somehow or other, though not, I think, in this evidence), of the remarkable observations and statements on that subject in the well-known book of Mr. Matthew Arnold on "Higher Schools and Universities in Germany." The point from which the German Universities, which are now held up to us as a model, started, may well be regarded a good starting point for the foundation of other Universities. At all events, if the Germans are a model to us now, the mode in which they have grown up must be worth consideration. Mr. Matthew Arnold states this to us, on page 21 of that book, (I am quoting from its republication in the year 1882) as to the basis laid down in the common law of Prussia for the establishment of Universities:—"Schools and Universities are State "institutions, having for their object the instruction "of youth in useful information and scientific know-"ledge." That is the point from which they all began, and if so, it is obvious that the first question you have to consider is whether any organisation which you are setting on foot is calculated for that purpose. Now King's College and University College were founded immediately for that purpose, and for the development of all learning in perpetual association for that purpose, but not apart from it; and on the other hand, suggestions like that of the Professorial Association, or like the scheme of Sir Henry Roscoe, are schemes which it appears to me, speaking as a man who has to deal with the practical management of young men, would be not merely valueless for the purpose, but positively mischievous. For instance, one of the most common suggestions of those who advocate such schemes is that you might have one branch of science concentrated in one place; chemistry in one place, physics in another, biology, we will say, in another, and arts in another; those sciences of course being scattered in different parts of London. In that case, how are you to keep young students under your eye? How are you to keep young men under a systematic course of general education if they are to go from one to the other of those places? One gentleman (2234) said very plainly and candidly that you must have a sort of central advertising office to which students might go to be told where they are to attend for some particular purpose. Well, first of all, that is leaving the matter entirely to the student as to where he shall go, and, in the next place, the student would for the most part be unfit to decide between the opportunities offered him. I think it is forgotten by those who speak upon that subject that the young men you have to deal with, in the main, are not students who want to be made great chemists, nor

Rev. H. Wace, D.D.

27 Mar. 1893.

students who want to be made great biologists, nor students who want to be made great physicists, but students who want a good general education which will fit them for that path in life for which they are afterwards intended; and the great practical problem, which I find that we have to solve as best we can at King's College, is to see how you can co-ordinate and combine the various subjects which students must be made acquainted with. For that purpose I do not know how the thing is to be managed at all, unless the instructors are together in one institution. Take our Applied Science Division—the Engineering Division of our Science Faculty. It has been a constant problem ever since I was at King's College, and it is a problem which is constantly requiring new solutions, how the various elements of an engineer's education are to be adequately combined. There are so many of them that are important; you can hardly leave out one of them. If you do, you immediately have a protest, not only from the students, and not only from the professor whose subject is left out, but from the parents of the students. They must have their mathematics as the basis of all, and a certain amount, for instance, of the principles of mechanical engineering and civil engineering, a certain amount of building construction, and a certain amount of knowledge of metallurgy, and the only way in which we can do it is by utilising almost every hour of the day, as long as the college can usefully be kept open. It is really a great difficulty in training them that the hours are too long; I heartily wish that they could be shortened. They stay some days at King's College from 10, not only to 4, but to 5: yet it is not quite enough. I saw that it had been mentioned here by one of the scientific witnesses that French and German were very important subjects of study for engineers. I have no doubt that they are, and from the distinguished father of one of our students I had once a specific suggestion, made in a kindly spirit, to provide the teaching of German for his son. It was brought before our engineering board, but it was felt at once that the teaching of German, to be of use for the reading of German scientific books, must take up a great deal of time, and that there was no possibility of introducing it into the engineering course. Just imagine how this difficulty would be aggravated if part of the work was to be done at King's College and then the student had to go off to University College and to South Kensington, and so on. Then, besides that, you would not have the total impression which is produced upon the mind of the student. You would not have the balance of the studies. At a college like King's College our professors meet together in their boards. We have a general board meeting every term, and we have boards of particular Faculties meeting oftener in the course of the term, and one of the subjects which we have most frequently to consider is how the various studies are to be balanced, one against the other, how far, for example, mathematics are to be carried for a student who needs them for the practical work of engineering, and so on. And, of course, there is the same question in respect to medicine. That, of course, is all the more important when you look at the ages of the men whom you are dealing with. If you were mainly concerned in dealing with young men who were wealthy enough — and not merely wealthy enough, but independent enough of practical life—to prolong their education till the age of 23, 24, or 25, it might be a different question. But the London colleges have mainly to deal, and I hope they always will have mainly to deal, with men younger than that. Their purpose is not—it never can be—to serve the class of men who go to Oxford and Cambridge. The class of men who go to Oxford and Cambridge are, as I have said, those who can afford the time as well as the money to prolong their education. If a man can do that, he had much better go to Oxford or Cambridge. The expenses of his work in London would be really much the same, counting the fees and the residence together. But the students who really fill our day classes at King's College are students between the ages of 16 and 21 who are obliged to get to work—engineers who, if they are to do any good at all in their profession, must get to workshops, and so on, somewhere about that age. Our medical students come to us about the age of 16 or 17 because the great majority of them must be prepared to do something for themselves about the age of 22, or something of that kind. Well, young men of that age, and who are studying for that purpose, must be under some authority which can keep them together—keep their studies together—and which can keep a steady eye over their discipline. That is done by these two institutions—University College and King's College; they were founded for that purpose. But any system which would break them up would destroy this invaluable power of organising and controlling young men's education. Their moral discipline is not a thing for a moment to be neglected. At King's College, for example, we have a report of the work of every student in every subject at the end of every term, which is signed by every professor, sent up to me, examined by me, and sent on to his parents. That is a very important part of the whole education of the place. I venture to say that I think that is the real answer to some of the observations which were made by Canon Browne about University Extension lectures, and the advantage of classes after them, which he said we were without. The answer to that is, that we do precisely the same thing, but you cannot manage an institution upon the basis of doing it every week, and it would not be a good thing if you could. It is much better for these young men to be left with a certain amount of independence, and let them work on for a term and then have their work and progress examined by the Professor, the Board, and by me, and then they can be checked. That is the best way of doing it. One difficulty in the way of doing that every week would be that you would just double the time for every subject and you could not possibly get through the necessary work. We want all the time we can get, and the student, if he is to do his work, must go from his mathematics to his mecha nical engineering, and from mechanical engineering he must go to his building construction and architecture. All that can be done is what is carefully done in King's College—to see term by term how the student is getting on, and to report that to his parents. All these schemes for scattering education over different institutions entirely overlook that. There are other points in this book of Matthew Arnold's which bear both upon this subject, and upon the next point to which I wish to go. He brings up very strongly and incessantly in this book that the examination system in Germany is entirely directed not to test the knowledge which a student has, but to see whether he has steadily attended courses of instruction. He reiterates that over and over again. For example on page 42 he says of the leaving examination, "Its object undoubtedly is not the illusory one of an "examination test as in our public service it is "employed, but the sound one of ensuring as far as "possible that a youth shall pass a certain number of "years under the best school teaching of his country. "This really trains him, which the mere application "of an examination test does not; but an examination "test is widely used in connection with this training, "to take care that a youth has really profited by it." Then again on page 56: "That a boy shall have "been for a certain number of years under good "training, is what, in Prussia, the State wants to "secure; and it uses the examination test to help it "to secure this. We leave his training to take its "chance, and we put the examination test to a use "for which it is quite inadequate." Then again on page 57:—"I mention a detail of this kind, to show "the English reader how entirely it is the boy's "school and training which the Prussian Government "thinks the great matter, and not his examination." So with respect to degrees he says on page 147: "Certificates of having followed certain courses of "lectures are required both for the University degree

" and for the subsequent examination for a public " career."

25,461. (*Professor Sidgwick*). May I ask if that is now the case at the Prussian Universities. I am under the impression that the system has been altered in respect to the requirements of science. I only speak because I was informed some years ago when I was on a visit to Germany that the great difficulty of securing a knowledge of who attended at the large professorial classes at the German Universities had led in the first place to a too easy signing of certificates, and that that had led to a relaxation of the conditions?—I was not aware of it. I am under the impression that I have read something in the evidence to the contrary, but at all events what I have said will hold good until within the last 10 years. It shows that that was the object with which the system was started. The development of great cities may have led to the difficulty which you have mentioned.

25,462. According to my information the condition still remains that the student has to put his name down to lectures, but there is no machinery for finding out whether he has been there?—Then the principle remains, but they have failed to work it out in practice. There is one more quotation which I should like to read from Matthew Arnold's book at page 151: " As I have again and again begged the English reader " to remark, the examination test is never used in " Prussia as sufficient in itself; it is only used to " make the assurrance of a really good education " doubly sure; the really good education is regarded " as the main assurance, and no one who has not had " this may present himself for the *Staatsprüfung*." Therefore, on a principle of that sort, the thing to be done, if you are organising a University for London, is to take care that you have institutions in which students go through a regular and systematic course of instruction. I cannot help adding (I do not think it can be irrelevant to the matter) that his life in such an institution is very vital for the general education of the student, that the moral and social influences that he obtains by such means are of quite incalculable value. I am sure that that influence is felt very largely at King's College by the students of all departments. There is the most clear and distinct type of thought and feeling among King's College men, in all its departments; they mix together and are friendly with one another and share some general characteristics. I suppose I may be allowed to press also from the King's College point of view the importance of general moral influences upon students. Of course such influences exist at University College also, but the very idea with which we were founded is that they should be very diligently cultivated. I should like to refer briefly, although I do not wish to press the point if it is not raised, to the value to be attached to our Divinity instruction to the students. Of course that might very easily be made into a mere arbitrary piece of dogmatic learning which would not be of much value to them; but from my experience I attach the highest possible value to the opportunities afforded by our weekly Divinity Lectures of addressing, for instance, our engineering students by themselves and the medical students by themselves. They are taken in separate classes partly because it is generally necessary to choose different times for them, and also because I feel it is better to teach small classes than large ones, so I lecture to each department of the college independently. But I believe that it is, and it certainly ought to be, always of great value to get these young men together, and to talk to them about serious subjects once a week. My course of instruction is this: For the first year I give them a general explanation of the Creed; the next two years I take the Gospels; and taking the Gospels and talking to the students about them, I venture to think they can be brought into contact with the general moral problems of life, and the realities which lie behind it, in a way which does them permanent good. I venture to think that it does help to sober young men, and make them realise that that they are permanently concerned with something beyond the mere professional work that they have to do. And this may be said also as some evidence of that. I saw it suggested, by the question of one of the Commissioners, that this three-quarters-of-an-hour a week during which I talk to these young men is a waste of their time. Well, it has been my experience, and it was the experience of my predecessor, that all the men who do best in their professional subjects are the men who do best in the Divinity examinations. I do not know a single case of a really first-rate man, a man in the first rank at all of our engineering or medical students, who has ever found his general work injured by the short time devoted to this subject, or who has failed to do well in it. If you found, as a matter of experience, that the men who were most earnest in their engineering work neglected or disliked, or did not do well in, their Divinity examinations, though that would not show that they were not desirable, it might give some foundation for objection. But I do not know an instance. On the other hand, I believe it might be made a very valuable element in the discipline of their characters. But all this general training, all this mutual influence of man upon man, and teacher upon teacher, would be lost if you once broke up the institution in the way suggested. I do not think I need dwell very much upon the scheme of the Professorial Association, but as to the scheme suggested, for example, by Convocation, there is one remarkable piece of evidence bearing upon this subject that struck me. It is in the evidence of Professor Max Müller at Question No. 13,724. Professor Max Müller knows, for example, the German Universities much better than most people in England. He is asked the question: "You would not be able to " encourage anything like close personal acquaintance " and intimacy between the teachers and pupils, which " is very useful?" He says: " That is a very " important point, and that is a weak point in the " German Universities. There is very little inter- " course between the professors and students, except " the cleverest students; a clever student is sure " to come near to the professor and get his advice, but " the greater majority of students go to the German " Universities, and get no guidance whatever. That " is a great misfortune, and it causes much waste of " time and energy. A young man goes and hears " a number of lectures, and often misses those he " ought to hear. The result is that he wastes a year " or two, simply because he has not the advice of a " professor." I would point out, therefore, that the main point to be kept in view is to ensure that you have institutions which give that general education. Of course you will not have institutions giving that general education in a liberal sense unless they are also institutions which are devoted to all liberal studies, and which, consequently, for that purpose have a body of men who are engaged in the perpetual advancement of learning. You cannot have a thorough liberal education unless you have that; without it a student does not feel that his education is liberal; students are the most sensitive race in the world; and a student knows very well that he is not having a liberal education if his teacher is not engaged more or less in research. The moment it is felt that a man is simply giving lectures up to a certain point solely for a professional purpose, the interest of the student goes at once. What he wants is to feel that he is being led by the hand by a man who is learning himself. I take it to be the first condition of a good teacher that he shall himself be a learner. I have never known an exception to that rule. All the great teachers that I have ever come across are teachers who are always themselves learning, and therefore any institution which is designed to give a real liberal education must, by the nature of the case, be an institution in which research is perpetually developed. That is a point which I will refer to presently, when I come to speak of the class of institutions which have a claim to be admitted as in some way constituent colleges in a University of this kind. I would only refer to it now so far as to say that, by the mere virtue of the fact that these

Rev. H. Wace, D.D.
27 Mar. 1893.

colleges are devoted to the purpose of a perfectly open, general, and liberal education you have the guarantee of a perpetual stimulus in them to research. Students would not come, for instance, to the medical department of King's College if they did not know that we had medical men there who are perpetually advancing the domains of medical science. They come there specially for that purpose, and so it is with the science side also.

25,463. (*Lord Reay.*) Therefore you lay great stress on the value of the colleges with reference to general education?—That is the primary point. Destroy the colleges and you destroy University education in London. The first thing in my mind that I care for is to develop and improve those colleges. Develop and improve the colleges and you do everything else you want. Research will come, and the funds will come. I hear it said in reference to this subject: "If you want to get more funds you must make one huge institution." As a matter of policy I entirely disbelieve it. What people like to give funds for are particular institutions, things in which they can take a special interest and which have a special individual life of their own. We undoubtedly need larger funds for the development of King's College. We have been trying for them for years, and I believe that one of our great difficulties has been that we have not been placed in the position that is due to us as a University College, and that consequently there is a certain indefiniteness about our position and our aims which would in that way be removed. But I have the fullest confidence that if that was done we should be able to obtain funds. University College would obtain funds from persons who are interested in one class of education, and we should obtain funds from persons who are interested in another class of education. As you, my Lord, have observed once or twice, we have made that appeal in friendly rivalry, and we should no doubt do it again. Also I may say that the possibilities of the development of the two colleges to that extent are far greater than appears to be supposed. I am very sorry that none of the Commissioners have been able to accept the invitation which I sent to the Chairman, that they would be good enough to come to King's College and see it for themselves. One Commissioner did do me the favour of galloping through the whole place with me in about half an hour, and another, I am told, came, but I did not know that he was coming, and I am quite sure that he did not see the place fully. I have heard it said that there is no room for development in King's College. I am quite sure that anybody who says that now would have said the same thing when I became Principal, ten years ago; but since then we have spent 30,000*l.* in laboratories at King's College for bacteriology, electricity, and so on, and there is room for a good deal of further development both there and at the hospital. We have some valuable vacant ground at the hospital, which we have been keeping vacant at a dead loss for years, simply because we thought the time had not come for utilising it with advantage. It may be a point of interest to the Commission to know how far the Hospital is united with the College. It is indissolubly united with it. All the teachers in the Hospital are appointed by the Council of the College, and the whole of the invested funds of the hospital are vested in the college, so that not a hundred pounds can be sold out of any funds the hospital may possess without the consent of the Council of the college; and therefore the Hospital is as much a part of the College for all practical purposes as if it were built on the same ground. Its daily affairs are administered by a committee of management, who are good enough to give up their time to that charitable purpose, but they have not the appointments at the hospital, except the appointment of the nurses, which is quite a distinct matter, and they have not the control of the invested funds of the hospital.

25,464. (*Sir George Humphry.*) In "teachers" you include the medical staff of physicians and surgeons?—Yes, the whole of the medical staff. So that I believe that there are abundant opportunities at King's College for any further development in the way of laboratories that may be reasonably desired, at all events within a generation, which is as much, I suppose, as is worth considering for this immediate purpose.

25,465. (*Lord Reay.*) The next point is, the value of a degree as a test of education?—Yes. There has been a good deal said, I see, in the evidence about not many students in King's College taking degrees at the London University, as though that afforded some kind of presumption that the college was not, so to say, doing University work. It is with some reluctance that I occupy the time of the Commission on the point, because King's College has stood the fire of practically three Commissions on that point. There was the Duke of Devonshire's Commission, which reported that it and University College were doing that work, and deserved the support of the State; then there was the previous Commission on the present subject, and finally, there was the Judgment of the Privy Council. But, perhaps, as something has been said of the question, I ought to take some notice of it. First of all I may say that there has been very great misapprehension—I think I might use stronger language considering what was due to ourselves—on that point. Sir Henry Roscoe, in particular, has made statements which we think may be said, at all events, to put him out of court in dealing with such a matter. At Question No. 17,895, he says:—"I believe the number of "women going up for degrees from Bedford College "is equal to, if not more than, the number of men "going up both from King's College and University "College. In fact, from King's College nobody goes "up for London University degrees." The paper of corrections of mistakes in evidence, put in by University College, through Sir George Young, has sufficiently disposed of that statement. The years 1889–91 were, I understand, taken because they are the only years for which complete figures could at the time be obtained. From hence it appears that the Bachelor of Arts and Bachelor of Science degrees taken in University College were 97; in King's College, 22; and in Bedford College, 15; so that Sir Henry Roscoe's allegation is an absolute mis-statement. But those are only degrees of Bachelor of Arts and Bachelor of Science. I have here a statement of the degrees in Medicine which vary a good deal. In 1889 King's College took two M.B. degrees in the University of London; in 1890, four degrees; in 1891, one degree; and in 1892, seven; which is quite enough to show that our students can take the degree when they are pleased to take it. So, again, at Question No. 17,922, Sir Henry Roscoe is asked:—"Then that "would deprive the other colleges, which might form "part of the University, of having the same means of "conducting the higher teaching; you would take it "away from King's College?" to which he answers: "I do not think they have it. It is not there." I think in the face of these facts I may say, as I said before, that a person who talks of King's College like that is out of court in the matter. I must correct one other extraordinary mistake into which Sir Henry Roscoe falls; that is in answer to Question No. 17,838. He says: "The Government of King's College is, I "understand, entirely in the hands of the Church, "that is to say that, only excepting a few members of "the governing body who are, as it were, *ex-officio* "members, such as dignitaries, political and otherwise, "all the other members of the governing body are "appointed by the Archbishop of Canterbury." The fact is that the Archbishop of Canterbury has only the power of appointing the life governors of the college, who are a small minority of the Council. There are nine official governors and eight life governors, and there are 25 members of the Council besides. Those life governors the Archbishop of Canterbury is bound to select from among the existing members of the Council, and the Council are appointed, as is the case at University College I believe, by the members

of the Court, who meet every year, and some of whom go out of office every year, subject to re-election.

25,466. (*Rev. Canon Browne.*) Will you read the names of the life governors?—The Duke of Cambridge, the Marquess of Salisbury, Lord Grimthorpe, the Bishop of Gloucester and Bristol, Bishop Barry, Mr. Gladstone, Sir John Mowbray, and the Dean of Llandaff.

25,467. They must be selected from those who have been selected by the Court?—Yes.

25,468. (*Mr. Anstie.*) They must all be members of the Church of England?—Yes.

25,469. (*Lord Reay*). Who are the members of the Court?—The Court consists of the Members of the College, who are the Governors, the original Proprietors, Donors of not less than 25*l.*, and the Fellows. In course of time, it seems probable that the Fellows will form the great majority of the Court. The Court, I suppose, was originally composed of the proprietors who founded the College, and who at first had a pecuniary interest in it, but that pecuniary interest was entirely abandoned, and now under its Act of Parliament nobody has a pecuniary interest in the College. The body growing in importance is that of the Fellows, of whom we elect half a dozen or so every year, and who become *ipso facto* members of the Court of the College.

25,470. (*Rev. Canon Browne.*) From first to last it is distinctly a Church of England College?—Yes, using that term, of course, in its widest sense.

25,471. Must all the students also be members of the Church of England?—No.

25,472. There is an impression that it is so?—It is not so.

25,473. And is there no disadvantage attaching to students who are not members of the Church of England?—Except in the case of foreigners, they cannot obtain the Associateship. In the case of foreigners we do not require them to attend the Divinity lectures. Many foreigners have come to us, especially from South America, and some from Siam and Japan, as engineering students, and so on. But otherwise the students are of all creeds and all classes. The inspector of day training colleges made his annual visit the other day, and mentioned that we are the only day training college in all England which includes Jews. We have two Jews now, and I have hardly known the College without Jews in it.

25,474. Then I understand that this at least is quite clear: supposing that under the Gresham Charter, or any other Charter, there were a power of conferring degrees on a general education, King's College is quite as free as University College to instruct persons who are not members of the Church of England, and those persons on that instruction could proceed to the degree of the University and obtain it?—Yes.

25,475. (*Lord Reay.*) Without any necessity of attending the Divinity lectures?—Certainly.

25,476. (*Professor Sidgwick.*) How is membership of the Church of England ascertained?—We take it if a man says so.

25,477. Has the question ever been raised as to what the meaning of that declaration is?—It has never been formally raised.

25,478. I only raise the question because before the abolition, in the old Universities, there used to be a continued controversy as to what the meaning involved in that statement was, and I did not know whether any declaration of any kind, or any agreement had been arrived at as to what was implied in it?—None whatever. It is left entirely to every man's own judgment, and I think it is very important that it should be so. I do not know what the state of things you refer to is at Cambridge. I know that when I went up to Oxford I was made to sign the Thirty-nine Articles.

25,479. I have heard persons seriously maintain that it meant no more than that a man had been baptised, and had not formally seceded. That was the extreme view?—Yes, that was the extreme view.

25,480. It is admitted there has been no attempt made in any way to exclude that view?—No, there has been no attempt made to exclude it at all. I do not think a gentleman would be likely to join the College if that was all that it meant. I have no doubt that practically a man means that he is in general sympathy with the Church of England. It certainly does not mean what it did mean when I went to Oxford and signed the Thirty-nine Articles, and I am always careful to explain to gentlemen applying for posts on the staff that that is what it does not mean, because I deem it of the highest importance that the utmost reasonable liberty on this point should be maintained in the College, which is identified with the whole Church of England. I think I have explained before that we should not like to have a man teaching in one room who was known to be entirely in disagreement with what I was teaching in the next room.

25,481. (*Rev. Canon Browne.*) The student is the most important. As far as the student is concerned is the question put, "are you a member of the Church of England"?—No.

25,482. Never?—No, it is never put.

25,483. (*Lord Reay.*) It is put before he is made a Fellow?—No.

25,484. Are many science students Fellows?—Yes.

25,485. (*Sir George Humphry.*) Is it not when he enters the college?—No.

25,486. (*Rev. Canon Browne.*) It is not necessary to find out until it comes to a question of attending or abstaining from attending Divinity lectures?—That is all; and there are many parents, I have no doubt, who might not call themselves members of the Church of England, who are rather glad than otherwise that their sons should go to Divinity lectures. Of course if I were to give Divinity lectures of a very pronounced and dogmatic type, and go into controversial matter, very likely some question might be raised, but it may reasonably be presumed that a person whom the Council trusts with the office of Principal will avoid that.

25,487. (*Lord Reay.*) The rule is that the students attend?—The rule is that the matriculated students attend. If the objection is raised their parents must raise it, and they come to me. If there is very good cause I have sometimes released them.

25,488. (*Rev. Canon Browne.*) Can the Associateship of King's College except in Divinity be obtained except by a member of the Church of England?—No, except in the case of foreigners. Take the case of a man coming from Brazil to study engineering; he naturally wants to go back to Brazil with something that everybody can understand to show that he has been educated in King's College; for that purpose he wants the Assoicateship, and considering that he has been brought up in a country in which it would not be reasonable to expect him to be a member of the Church of England, the Council exempt him from the rule.

25,489. But in the case of a Englishman he must be a member of the Church of England in order to obtain an Associateship?—Yes.

25,490. Supposing there was a power of conferring degrees, would that one disability be removed?—No, I should be sorry to see it so, because the possession of an Associateship would be of no advantage to a man in getting a degree. We wish the Associateship to mean that he has received all the general influences of the College.

25,491. I do not mean that your Associateship would be altered at all, but that you would pass a man on for his degree, although he is not a member of the Church of England?—Certainly. It has nothing whatever to do with the degree.

25,492. (*Sir George Humphry.*) So far as I understand, any student may enter the College but all students are required to attend the Divinity lectures?—If they desire the Associateship.

25,493. They can continue their work at the college whether they attend the Divinity lectures or not?—Yes.

Rev. H. Wace, D.D.
27 Mar. 1893.

25,494. There is no restriction on that ground?—None whatever. It is only that they are debarred from the final stamp of the college work, but they can attend every single class of any kind in the College as long as they please without it.

25,495. And continue the whole course without being members of the Church of England and without attending the Divinity lectures?—Yes.

25,496. (*Rev. Canon Browne.*) And would you pass them on eventually to their degree if you had degree-giving power?—Yes.

25,497. (*Lord Reay.*) The foreigner is made an Associate but could not be made a Fellow?—Well I do not know. I would not answer that off hand. There might be some exceptions made.

25,498. And Scotchmen?—We should regard them as Englishmen.

25,499. Would Scotchmen be obliged to attend the Divinity lectures?—If they wanted the Associateship they would, but I never knew of their raising any difficulty.

25,500. (*Rev. Canon Browne.*) And they do proceed to the Associateship?—Yes. No questions are asked at all. There is the discipline of the College; if they want to be matriculated that is what they have to do; if they do not want to be matriculated students and do not want the Associateship, they leave it off.

25,501. (*Sir George Humphry.*) But they are not matriculated students unless they have attended those lectures?—No, subject to the special exemptions that I have mentioned. As I say, Jews and Roman Catholics are generally exempted from Divinity lectures, but are allowed to be matriculated students. There is a reasonable exempting power left in the hands of the Principal.

25,502. (*Rev. Canon Browne.*) Then where exactly does the question come in: "Are you a member of the Church of England?"—It does not come in at all unless the student raises it.

25,503. So that a man can go straight on and attain the Associateship without the question being put to him?—Yes.

25,504. (*Lord Reay.*) Does Dr. Wace state that it is taken for granted that a student is a member of the Church of England?—Yes.

25,505. (*Rev. Canon Browne.*) Unless he says he is not?—Yes.

25,506. But he is not put on his honour?—No, nothing is said to him.

25,507. That is very much broader than I had any idea of. I thought there must be some time at which the question was put?—No. When the student applies for his Associateship, he has to bring up a paper signed by the professors, whom he has been attending, saying that he has attended certain lectures and made certain progress, and one of those subjects is Divinity.

25,508. (*Lord Reay.*) If he attends the Divinity class regularly and gets a certificate, no further questions would be asked?—No. He is also expected to attend chapel.

25,509. There is no further test?—No.

25,510. (*Professor Sidgwick.*) You say he is also expected to attend chapel. Is he expected to go to Communion?—No: only we begin the day always by a quarter of an hour's chapel—some short prayers.

25,511. (*Rev. Canon Browne.*) Practically the domestic prayers you showed me?—Yes.

25,512. Have we had anything of this in evidence before?

(*Sir George Humphry.*) Not quite so clearly.

25,513. (*Professor Sidgwick.*) With respect to teachers, have they to sign anything?—Their attention is called, on applying for appointment, to the fact that, by our Act of Parliament, candidates for all offices in King's College, London, except for professorships of Oriental literature and modern languages, must be members of the Church of England, and must make a declaration to that effect. That is all.

25,514. (*Rev. Canon Browne.*) There are no qualifying or intensifying phrases such as complete believer, and so on?—No.

25,515. Merely a member?—That is all.

25,516. (*Lord Reay.*) Hitherto you have explained that some of your students do take the degrees of the existing University of London. Now perhaps you will proceed to explain what is the value of the degree as contemplated by the Charter?—I was going first of all to say that, although we do take degrees, I must challenge directly the idea that taking degrees in the University of London is an adequate test of the value of a University College. I have referred to Matthew Arnold, and perhaps the Commissioners will forgive me for applying to the subject a witty saying of his on another point, and observing it really seems as if a good deal of the argument with regard to the University of London had been conducted on the supposition that at the beginning of the first chapter of the Book of Genesis, after the words, "Let there be light," or perhaps before them, were the words, "Let there be the University of London." It appears to me that the degrees of the University of London, particularly their Arts degree, are of no such value. I may be wrong in the following observation, as I have been pressed for time in reading through the evidence, but I have been surprised to see nothing, or next to nothing, about the singular institution which exists in London and at Cambridge called "The University Correspondence College."

25,517. *Rev. Canon Browne*). It has no address in Cambridge?—In its calendar it has.

25,518. They undertook not to give Cambridge as their address?—Here is an extract from the calendar 1892–3, which says that the Science Section, Laboratories, and Oral Department of the University Tutorial College are at Red Lion Square, but the Resident Branch is at Burlington House, Cambridge. Also they give the telegraphic address as "Burlington House, Cambridge." This extract from the calendar states that in the year 1892 this institution passed 115 students for the January Matriculation in Arts; 111 students for the June Matriculation in Arts; 71 for Intermediate Arts, being one-fourth of the whole list; 123 students for the Bachelor of Arts, 7 for the Master of Arts, including the first place in three out of the four branches; for the Preliminary Science they passed 81; Intermediate Science 59; Bachelor of Science 25; and Laws 9. This beats the record of all the other University Colleges in the Kingdom that I know of. The Birkbeck Institution, which does very well, is nothing to this, and even University College would not venture to compete with such a record. I am disposed to discount these figures a good deal. They probably include those who have done a part of their work there. But allowing for a good deal of discounting, it remains a very formidable illustration of the unsatisfactory manner in which the Arts degree of the University of London can be obtained, and to some extent also its Science degree. In this extract from the calendar, which was put into the hands of one of our Professors, after the last examination at the University of London, they gave a number of illustrations as to the methods by which they prepare for the degrees, the most characteristic passage, I think, being this, "The "amount of Greek and Latin that need be read before "a student is able to pass an examination in classics "such as the London M.A., is not so great as is "commonly supposed; by a judicious selection of "important classics and careful attention to note-"worthy points, the necessary work may be reduced "to a minimum." That illustrates the whole of the work of the institution; its object is to reduce the amount of work that is required for obtaining degrees to a minimum, and I believe that that is inseparable from any arrangement such as now prevails at the University of London.

25,519. You said that this showed the unsatisfactory way in which these degrees could be obtained. I am not sure what you mean by that?—That is what I do mean.

25,520. Their minimum may not mean an unworthy minimum?—Yes, but the object here is to reduce the study to a minimum.

25,521. Nevertheless the degree may be a worthy degree?—What I mean to say is that if an institution which teaches on that sort of lines, attains so great a success in its preparation for degrees, it is very disparaging to the degrees as a whole.

25,522. (*Professor Sidgwick.*) Do they obtain honours?—Yes.

25,523. Then if they obtain honours it is a good deal beyond a minimum. The minimum would be obtained by those who only passed?—It remains the case that the avowed object is to reduce the study for honours, no less than for a pass, to a minimum. But, apart from that, this is an institution which has been growing. It was barely in existence ten years ago, but it has been growing very rapidly, and it appears to be growing more rapidly. Five years ago its only London home was in Holywell Street, but it has since moved to Red Lion Square, where it is setting up small laboratories for the purpose of coaching students, and an increasing number of students seem going to it. Its importance has been somewhat obscured by the action taken by the Senate of the University of London. You will find that up to, I think it was January, 1889, the University Correspondence College students are mentioned in the lists of those who succeeded at the University of London, but after that date they are omitted. The reason is that the meeting of the Senate of November 13th, 1889, according to their minutes, a resolution was passed "that students pre- "pared for examination by correspondence be entered "under the general head of 'Private Study.'" They have consequently disappeared from the visible lists of the University of London, but they still exist. This extract from the calendar of the Correspondence College is a very curious document, and the calendar, which I will hand in for the information of the Commission, is rather more curious still. I have shown you the number of degrees that King's College obtains, and I think it may be instructive to compare with it the number of degrees that are obtained in other colleges of University rank, particularly in those of the Victoria University. Here is the calendar of University College, Liverpool, for the current year, and I find that only two students of the Liverpool University College took honours in classics in the examination of Victoria University; only one took honours in mathematics in that University; only one took honours in engineering; and four in chemistry. In the final examination for the ordinary degree, only nine students took degrees. At the entrance examination in arts in October 1891, only two students passed, and in June 1892 only two. Take again Owens College, which was originally established as a University by itself, and now, after some 10 years' work, I find that the number of ordinary B.A. degrees taken by Owens College students, in its own University, was only seven, and two of those at least are by women. Six students took honours in arts, four students only in the ordinary Bachelor of Science course, and six in honours. I omitted one thing about about the Liverpool University College. I gave you the number of its students who took degrees in the Victoria University. In the London University only two of its students took degrees in the final B.A. and only two took degrees in the final B.Sc. and only two in the final M.B. I do not quote this to disparage University College, Liverpool, or Owens College either, but I only say that the more they are treated, and claim to be treated, as University colleges, the less reason they have to disparage an institution like King's College which, as you will see from the figures I have given you, is taking, to put it at the lowest, about the same number of degrees. We took seven M.B. degrees in the last year. I think, therefore, that that line of argument, which has been very much pressed by the persons who are hostile (I can only call it so) to King's College, like Sir Henry Roscoe and one or two other persons, is a line of argument that can be in no way relied upon. From that I would pass on to say that there cannot be a greater misrepresentation, or in the case of the great majority of persons I would use the word misunderstanding, of the purposes of the Gresham Charter, and of the two colleges, than to suppose that we want to lower the standard of degrees. Our object is precisely the reverse; we want to raise the standard of degrees by making them mean something—a vast deal more than they mean now. A vital distinction must be drawn, with respect to the University of London degrees, between the medical degrees and all the others. The medical degrees involve a guarantee of that which to us is essential, systematic training in recognised institutions. They involve, so far as students are concerned, exactly that which the Gresham Charter desires for every other Faculty, and if a man holds a medical degree of the University of London it shows that he has had just that systematic instruction which he has had when he has obtained the diploma of the Conjoint Board. But with regard to the other degrees the case which I have quoted of the Correspondence College is enough to show that it is no guarantee of it whatever. But if the condition of the Bachelor of Arts degree and the Bachelor of Science degree was that a man should have gone through this systematic training for three years also, then the degree would really mean something worth having, and I would point out that it would mean this independent of the particular standard of examination. There is a very great confusion in the whole subject, as it appears to me, from treating the standard of examination as equivalent to the standard of a degree. I am quite sure that you may have an examination which it is very difficult to pass, yet which is no adequate guarantee of the thorough training of a man. I venture to think it is a weakness with respect even to the medical degrees of the University of London. They have that great value that I have mentioned, that they do involve systematic study in recognised institutions; but partly in consequence of the examiners being to so large an extent exteranal to the teaching, there is a certain amount of what one might almost call gymnastic exercises of the mind in obtaining degrees in the University of London, even in medicine. They are tests, undoubtedly (the medical ones at least), of a man being a very clever man. But that is a very different thing from being a test of his being a well-trained man. With regard to much of the additional work which is required by the University of London for its medical degrees, beyond that which is required for the Conjoint Board, whether it is not too much in the nature of a gymnastic exercise is a point upon which I have great doubt. I speak with reserve as far as medical degrees go, because although they necessarily come under my observation a good deal, I cannot claim to speak with medical knowledge. But I do see among the Medical students at King's College some of the ablest and most useful men who have a sort of mental aversion from the particular kind of what Sir Andrew Clark called abstract work, which is required for the London University degree. Now, I believe that the Gresham Charter, by requiring systematic attendance at courses in Arts and Science, would produce a far more thoroughly trained man, and it would do so partly because the examination would not be what I have called a gymnastic exercise. You want the examination to be, as Matthew Arnold says the German examination were intended to be, an adequate test that a man has gone properly through the teaching of his own teachers. Of course it will be understood that I do not mean, gone through any teaching that anybody may choose to give him in our colleges. We have provided in the Charter that the professors should work together; that there should be a regular order and system in the nature of their studies; and that they shall consult together and examine together. Our purpose is to make the degree more valuable. I believe myself that the effect of establishing a teaching University in that sense, while it might be to compete with the London University,

Rev. H. Wace, D.D.

27 Mar. 1893.

would do so not by making the degree cheaper, but by making it better, and that there would be a tendency in that way for the better men to gravitate to the better general system of development. It is only for that purpose that we are promoting this Charter, and therefore I hope I have said enough to explain that, in our intention and view, at all events, any suggestion of our cheapening degrees is an entire mistake. If anyone will argue and will show that our system would not give adequate guarantees for that systematic training, and fair and reasonable examination upon such training, that is an argument to the point, but the mere fact that our system would be different, that our examinations might be not so abstract, not so difficult in themselves, as those of the University of London, is no argument whatever that we are diminishing the value of degrees. It is rather the contrary.

25,524. (*Lord Reay.*) What is your opinion of the combination which has been suggested between the teaching and the examining systems?—If I have explained at all to the Commission what our idea of a degree is, I think it is not necessary for me to dwell very much upon that point. An attempt to combine the two in one degree, if it was given by the same body, would be inherently illusive. Supposing that there was a University of London which gave both, a man would call himself a graduate of the University of London by virtue of his having obtained this cheap B.A. degree which is given by the University of London, or he might call himself a graduate of the University of London, by virtue of his having gone through that strict and regular systematic training which we mean. I do not see how that confusion is to be avoided. I observe that one of the witnesses for the University of Dublin expressly mentioned that they felt that a grievance at Dublin; that, as they had this system of non-resident students, a large number of men carried the diploma of the University of Dublin without carrying any of the University of Dublin's real teaching, and without, in fact, carrying its real stamp. At any rate both Dr. Ingram and Dr. Stoney expressed their sense of the great disadvantage to the University of Dublin of the combination of the two systems. The evidence of Dr. Ingram and Dr. Stoney on that point seems to me to be of very great consequence, and if I might refer more particularly to the matter I should be glad. It is Question No. 19,595. The Chairman says: "You "can hardly call it a University education merely "to come up for examination every four months." Upon that question put by the Chairman I would ask this: If you can hardly call it a University education merely to come up for examinations every four months, which is required at the University at Dublin, how can you call it University education for a man to be required, as he is at the University of London to come up at longer intervals? "No doubt," says Dr. Ingram, "there is a great deal to "be said against it, and we feel the objections very "strongly. The principal objections which occur to "everyone are that in the first place the student loses "the sort of intellectual friction with his contem-"poraries which would exist in the colleges; there is "a good deal of discussion and play of intellect which "he misses by not residing; then he is not brought "into contact with the able men who teach. Those "are the two evils. They are great evils no doubt, "but at the same time we find it impossible to insist "upon students residing." There is one other point in that answer of Dr. Ingram's which I would call attention to in respect to the Dublin system, as I believe that system has been put forward as one which might be a model for London, and that is that in the professional schools in the Dublin University a man must reside. He says, "We have four professional "schools, Divinity, Law, Medicine and Engineering, "and in those schools residence is absolutely neces-"sary." So that, whatever the effect of the Dublin parallel, it applies simply to the graduates in Arts, and in respect to them Dr. Ingram says he considers it mischievous. There is another point of difference between this Dublin system and the contemplated London system which seems to me very remarkable. I cannot say that I altogether understand the difference, but the fact there appears to be no doubt of. He says that all the men who desire to take honours in Dublin University reside. "Any man who looks forward to becoming a dis-"tinguished University student comes to reside." Somehow, therefore, the students who take simply the non-resident degrees of the University of Dublin are the inferior students altogether. I am quite sure that, however that is managed, it is the very reverse of what is desired by those who wish to maintain this system of giving degrees solely by examination in the University of London. Of course there are no other students but external students in the University of London, and if it were proposed that the secret of Dublin should in some way be discovered, and the examinations of the University of London could be so conducted that all the students who are not trained in colleges should be a second-rate class, you would entirely defeat the object which the promoters of the Convocation scheme have in view, and the object of the promoters of the Senate's scheme also. Just as I left home, I received the Appendix to Dr. Stoney's evidence, which contains the statement upon which he laid stress, from the evidence of Dr. Lloyd, who said that the chief point of improvement which he desired in the system of the University of Dublin was that they should get rid of the system of non-resident students. His words are: "I would earnestly press—as the most "urgent of all academic reforms—the importance "of some provisions by which residence should be "more directly encouraged, if it cannot be enforced." Again, Dr. Stoney, at Question No. 18,890, says: "That, I think, is of special incidence upon the "business of this Commission, because he deals with "what he in his evidence looks upon as the chief "defect of the University of Dublin amid its many "important excellencies, which arises from the fact "that it has to provide for, or does provide for, "students who are *bonâ fide* University students, and "at the same time for other students who obtain a "University degree by merely passing examinations." I will call the attention of the Commission to this fact. So far as I know that is the only example that can be produced of a University attempting to combine the two plans; attempting to combine what he calls here *bonâ fide* University students and non-resident students, and the witnesses who have come before you say that that is the chief difficulty in their system, and that they all desire to get rid of it. They say that the existence of this examination for non-resident students has a value; Dr. Stoney, I think, said in answer to Sir George Humphry, that the system has a value, and is useful to these external students. That may be so, but it is mischievous to the University, and that is my point. Whatever value the system of examinations may have for external students, and for other bodies throughout the country, that would be provided for, and is provided for at this moment, by the London University as it at present exists. But if you are to start from the point of view which I have been urging, and which is the foundation of everything I desire to say, if you are to have a system of colleges for the purposes of systematic education, then, according to the experience of Dublin, which is the only experience you have got, you will spoil that system by attaching non-resident students to it. Whatever the advantages for external students which the University of London has offered in the past, it will be able to offer in the future, and that is sufficient for them. On the other hand, just as the only experience that is available to you proves that combination of the two would spoil the college system, so you have a very strong protest in the evidence to say that the introduction of the college system would spoil the other. The tone, and not only the tone, but the positive statement, of those who support the Convocation scheme, is that they must have it absolutely

independent. You have that from witness after witness, and you have it laid down by Lord Justice Fry, who, as the last word of his evidence, said that "if a predominant power were given to the teachers, "it would be fatal. I think," he said, "we must "maintain at any price perfect independence as "regards our degree to outside students." The Commission have heard the evidence, and the strong way in which Mr. Busk, not only in his first evidence, but even more so in his second evidence, dwells upon the absolute importance of having all examinations open to students from everywhere. I would venture to dwell upon that point in reference to another consideration which I see has been mentioned by one or two of the Commissioners. They have said that the Senate of the University of London, and Convocation, are both willing, and indeed desirous, to adopt teaching. Certainly they are, but not teaching in the sense that we mean it. They are willing to appoint professors in connexion with Burlington House, and peripatetic professors, and pick out a professor here and a professor there. But they have not expressed their willingness—Convocation has positively indicated its unwillingness—to establish a system of examinations which are in direct and immediate touch with teaching—with the teaching, that is, of colleges. "With teaching" they say, but that is another thing. They say they want to improve the connexion of teachers on the Senate with the whole system of examinations. I believe they have power under the existing Charter, and they could have a good deal of such improvement if they desired. But let them do so. It does not meet our point. We want examinations to be in connexion, not merely with teaching in general, but with the particular teaching which is given in the colleges, and accordingly the reason why we in the year 1890 accepted the proposal of the first scheme of the Senate was, that, although we thought it treated us unworthily in excluding us from honour degrees, yet it did contain clauses which allowed the degrees of the University of London to be given upon the teaching in the colleges, and upon that only. Degrees in Arts and Science could be obtained under that first scheme in that way. There were some points which were still in reserve when the subsequent break came, such as the Preliminary Science examination. The one consideration which induced the Councils of the two colleges, in deference to the previous Commission, to come into the scheme of 1890 was that it established separate examinations from those for the open students. When the scheme of 1890 was modified afterwards in the autumn, by the introduction of the provincial colleges, what led King's College and University College to decline it was because the arrangements for their representation on the Senate, and the whole organisation of the examinations, necessitated by the introduction of the provincial colleges and the Royal Colleges, made it practically impossible to maintain genuinely separate examinations on the college teaching. As far as I can see, it appears that the Senate still adheres to that portion. You have received one or two letters from the Senate of the University of London within the last two or three months, and from those letters it might have been supposed that the Senate had some new scheme or some new idea to suggest, which might have got over the cardinal difficulty which the colleges feel. To my great surprise, what they finally sent down to you was nothing in the world but the scheme of 1891, and that scheme supported by the very same explanation, not even reprinted; it is the old thing. So that we must assume, and we are bound to assume, that within a few weeks of this date—almost at this moment—the Senate is back at the scheme of 1891. [*Mr. Anstie explained to the Commission that the revised scheme of* 1891 *does not now represent the opinion of the Senate, and that the reference to that scheme in the letter of December* 14*th*, 1892, *was intended to have a merely historical import.*] I think the discussion that has just passed has shown that I was quite justified in putting the interpretation I did upon the document that I received; but, of course, I accept Mr. Anstie's statement. It leaves us, however, in the position that we have no suggestion of a scheme from the Senate before us; and that is another consideration which seems to me to be of equal importance. Here you are proposing what I think will be at least admitted—I believe the Senate does not admit it, but I think this Commission will admit it—to be an extremely difficult thing, a thing which has been tried, and in one important aspect has failed—that of combining imperial examination and general examination with the encouragement of teaching in particular colleges. And we are told on behalf of the Senate at this stage of the proceedings that they have no scheme whatever to suggest to us for doing that.

25,525. (*Professor Sidgwick.*) I suppose that we may say that those clauses from A to E indicate the outlines on which they would go, and the Senate have indicated nothing more than that?—No more. But the whole question stands, how are you going to provide for this? How unite these things together? Therefore, I say, we have no scheme whatever before us. It seems to me that raises a very strong presumption against it. The Senate did make proposals for that purpose, and now we have it that both those proposals are withdrawn, and not one of them represents the mind of the Senate. Well, what does? The other scheme you have before you is the scheme of Convocation. I was going to argue that you were in this position, that you had two schemes before you, one, that of Convocation, and the other, that of the Senate, and that they are mutually inconsistent, because the Senate proposes to recognise the work in the colleges and Convocation refuses to recognise the work in the colleges. However, now we have nothing but the scheme of Convocation, and what does that propose? It says, first of all, that the Imperial character of the University is to be retained, and its examinations are to remain open to all candidates who have complied with the regulations, irrespective of the place or manner of their education. That excludes, I take it, absolutely, any attention whatever being paid to the courses of instruction given in the colleges.

25,526. (*Mr. Anstie.*) Or the Medical Schools?—Or the Medical Schools either, in consistency; but the Medical Schools and their necessities are too strong to be thus overridden. Then it says: "The standard "of attainment for matriculation and the various exa- "minations in all the Faculties to be maintained at as "high a level as at present." So that no alteration whatever is to be made in the style of examination. But there is also this: "Restrictive regulations as to "compulsory intervals of time, between Matriculation "and the Preliminary Scientific Examination, and the "Intermediate Examination in Medicine and M.B. "Examination to be abolished." That is to say, the one guarantee that you really might have, and the one slight guarantee which you do have in the University of London, that people do not gallop over examinations, and on which Dr. Stoney or Dr. Ingram laid stress as one advantage of the Dublin University—namely, that you have examinations at regular intervals—is to be abolished. I think, therefore, as far as the Convocation scheme goes, I can see no possibility whatever of useful communication being entered into with the colleges. I gather from what the Commissioners have said, that it will not be proposed to recall the Vice-Chancellor of the University of London, to give any further evidence on this point, and if so, I have nothing more to say. But I do ask very urgently, that if the Vice-Chancellor of the University of London should be called to make any further statement of the schemes of the Senate before this Commission, Sir George Young, or I, or both of us, may be allowed to have information of it, and to have the opportunity of presenting to the Commission our views respecting it. At present we have both come here under the supposition that the last word by Convocation and by the Senate has been said. Now, my Lord, I must ask leave to say a little more about this question of collegiate examination. It is perfectly evident from

Rev. H. Wace, D.D.

27 Mar. 1893.

the schemes of Convocation that they would take no notice of it at all, and also that the teachers of the colleges would be in a decided minority in arranging syllabuses. Then you would inevitably get into the difficulty that you would have syllabuses imposed on the colleges without their due consent. At all events we should be liable to that, and the great probability is that the examinations would be independent of them. Under the Gresham Charter they would meet together, they would consult, and have the control of those syllabuses, and although each particular college would not have control over its own syllabus, that does but introduce the reasonable measure of compromise and qualification of any system which is desirable. It has been said by one or two witnesses that the Gresham Charter does not carry out in its strictness what is called the teacher examiner system. I think it is no recommendation to any scheme that it carries any system out to an extreme; the system receives reasonable modification under the Gresham scheme; that is the whole principle and the whole spirit of the arrangement, whereas the Convocation scheme, or any other scheme before us is hostile to it. I believe it has been said once or twice that we must not talk about what the London University is now, but what the London University may be; it is supposed you will entirely change the system of the University of London, and that you may have a Senate managing these things, which is practically in harmony with the principle of teaching colleges which we have in view. Of course an Act of Parliament may do a great deal. It is conceivable that you might carry an Act of Parliament which would revolutionise the University of London in the face of Convocation. It would be a strong measure. Convocation, I fancy, is a strong body: the 200 or 300 members who came up to vote, as they did the other day, about a particular scheme, do not represent anything like the force of voting power that you would get if it were a matter of these cardinal ideas, for which men like Mr. Busk and Dr. Collins show this enthusiastic, I would have almost said fanatical, attachment. You would have men coming up from all parts of the country, and their spokesmen in the House of Commons saying: "We have developed this system; it is "our ideal; whether it is a good or bad one is another "thing; it is our ideal, and we object to its being "extinguished as you propose to extinguish it." If the college system is to be made the basis of a new University that ideal must be extinguished. But there is a further question: Supposing you can do it and carry it against all this opposition, is it worth while trying to force together in one room two sets of people with such diametrically opposed convictions as to what education means as those for whom I am now speaking on the one hand, and those for whom Mr. Busk and Dr. Collins speak on the other. I confess that I do not quite see how we are ever to work together. I do not mean that there is any personal misunderstanding, or any such sense of unhandsome treatment as I cannot but entertain with respect to the action of the Victoria University. The Senate of the University of London have treated us throughout these negotiations in a straightforward and handsome manner, and have done their best to meet our views according to their understanding of them. But the point is that they do not understand them; and I confess I think I am justified still more in saying that when I remember a passage in that final letter of theirs of March 7th. I do not see the possibility of working with gentlemen who can say what they have said in that letter. If they had said that, upon the balance of the evidence which is before them, they believe that, notwithstanding the difficulties in question can be overcome, there would be something in it; but they offer no argument or concession at all, and no evidence which has been adduced on the other side is noticed. If I may venture on an illustration, I confess that the case seems to me to lie very much in this way; that we were living in a fairly happy union with the University of London until in the year 1858 they divorced us. They now wish to resume more sociable relations, and they are coming before you with a suit for the restitution of conjugal rights. If you pass a decree to that effect it would produce the same result that such decrees generally do produce. You would bring together two bodies who, with the best intentions on both sides, do not at all understand each other, and by the very constitution of their minds and way of dealing with these matters, could understand each other. I know it is quite true that a thing may be neither one thing nor the other, but yet better than either; but that assumes that you may produce an amalgamation between the two, and that, I confess, seems to me impracticable. Upon this point of having examinations in close and direct touch with the teaching, as the vital point of our scheme, I would venture to trouble the Commission with another piece of experience. Canon Browne will know the existence and importance of the examination called the Preliminary Examination for Holy Orders. It was instituted at Cambridge with reference to Cambridge students, but it has grown gradually into an agency which performs functions for candidates for Holy Orders throughout the country, very much like what the University of London does for other students. We have an important theological department in King's College, the students in which, I think Canon Browne will bear me out in saying, hold their own with students who have had other theological training; but we have found it impossible at King's College to work in harmony with that theological examination, and al though we have large numbers of students, and although they do very well in the Bishops' examinations, you will hardly ever see a King's College man in that list; and that is simply for this reason. We tried it at first, but we found that it fatally disturbed all the theological studies of our students if they attempted it while they were with us, and, moreover, if we get very good men in our theological Chairs we cannot get them—we cannot get real theologians and students—to devote the whole of their time to this purpose. If theological students are to be prepared for this examination they will not attend the best teaching of the theological professors; they will always have that external examinations in their minds.

25,527. (*Mr. Anstie.*) Are not your professors on that Board?—Yes, I am on it myself, and there are others. That illustrates the difficulty, and enforces the argument I mean: although as we are represented, and very strongly represented, on the Board of the Preliminary Examination for Holy Orders we are unable to work the two things together. So much is that the case that at the last Conference of candidates for Holy Orders which represents the theological Faculties of the three Universities, Oxford, Cambridge, and Durham, with King's College, all other theological colleges of the Church of England, and the examining chaplains of the bishops, this resolution was carried unanimously: "That it is desirable "that the preliminary examination should be con- "ducted in closer connection with the work of theo- "logical colleges, and that the Council of Manage- "ment of that examination be requested to consider "how this can best be done." That, as I say, was carried unanimously in January 1891, and the Council of the preliminary examination, of which I am a member, and the Council of the Conference itself have met and considered that several times with, as I say, thorough goodwill on all sides, but the result is that we have found it impracticable and the attempt has been abandoned, and we remain doing the work of our own theological Faculty.

25,528. You have your own examination?—Yes.

25,529. And the Bishops accept this examination?—The great majority of the Bishops. Some Bishops will not generally accept students from King's College, because they have not been continuously resident within the walls of the college. They prefer to have students who have been living in a theological college. But the Archbishop of Canterbury, the Archbishop of York, and most of the Bishops, receive students from King's College.

25,530. (*Rev. Canon Browne.*) It is fair to say that most of the Bishops do accept the preliminary examination you speak of?—Yes, I think that is a strong case in point, because you will see at once that it would have been very desirable if we could have worked for it.

25,531. (*Professor Sidgwick.*) What was the obstacle? Why was it found impracticable?—Because if you get a good man teaching a subject like theology—you yourself have put the case of moral philosophy—in which men necessary cross different lines of country in respect of certain questions in it, and if there is an external examination at the end, a student will always say of a professor, if he goes the least out of the line, "That will not pay;" and he will not attempt it.

25,532. What I meant was, was there any idea in suggesting that the examination might be partly adapted to the college, that in each college the professor might examine?—Yes.

25,533. Why was that suggested?—One difficulty was that examiners would have to be detached to so many colleges in that case.

25,534. That is what I was rather coming to. The reason why, in your view, the Gresham University could adjust the examinations and this board could not, would be owing to the fact that there would be only two colleges in that case. If the University had a number of colleges the adaptation would be harder?—It would be impracticable.

25,535. But with two you think it might be managed?—Yes.

25,536. (*Rev. Canon Browne.*) But does not your parallel entirely cease when it is said that there is no reason why the external examination should be the same as the examination for the different colleges?—Who says that? Convocation refused it.

25,537. The parallel is in great force so long as it is assumed that there is to be only one examination for internal and external students?—Yes. I only mention this matter because it has a bearing upon the subject of the theological Faculty which it has been proposed to establish in the University. If you have a theological Faculty in the University the examinations for which were managed by a Senate constituted in any such way as is proposed, either by Convocation, or in any scheme of the Senate that has been seen, or in any way that I have seen suggested on behalf of the University of London, then I think a theological Faculty would be absolutely impossible, because you would have this external body not in touch with these particular colleges. But if you admit, as is contemplated under the Gresham Charter, the few theological colleges that are there mentioned, I should feel that we could meet together and discuss these arrangements, and arrange courses of study and examination in harmony with them. We should have a very strong guarantee. But under a system which leaves theological examinations open to everyone, I do not think we should attempt to train King's College students for it.

25,538. What do you refer to in your Charter?—I am referring to the proposals that are made, not in the Charter itself, but in the negotiations with the theological colleges at the end of last summer.

25,539. (*Mr. Anstie.*) You mean in the supplementary document which you submitted to the Commission?—Yes. With respect to that whole question of the University of London examinations, there is one point I omitted which has a bearing upon this question. I have shown you that we do send up students for those examinations. If students want to go on account of their pecuniary interests, as some of them do, they can go. It is not, however, by accident, but by the most deliberate choice that the work of King's College is not directed to the University of London. It is by far the most difficult and most anxious question that I have had to consider since I was Principal. When I had been Principal some time, I felt the disadvantage under which the college lay in not being an organic part of a University; I felt that this involved a certain amount of disorganisation and weakness in its studies, and I felt it necessary to consider very carefully if I should invite the professors to consider whether the college system should not be reorganised with specific reference to the University of London. Well, while I was thinking of that, there arose this question of the founding of the new University, and I vividly remember the anxious and somewhat sharp discussion—I mean sharp in the sense of being earnest—when we decided that we would go for a new University. Of course the moment it had been decided that we would go for a new University, it was impossible to attempt to reorganise the courses at King's College. It might have been misleading. But then the scheme seemed to break down, and then I asked the Council to reconsider the matter, and told them they must make up their minds; that if they, on the balance of the whole, thought it would be better to make the best of a bad business, (if Mr. Anstie will forgive me for using those words for the purposes of illustration), that is, make the best of the University of London, I would do so. The Council deliberately, and by the advice of some of its most experienced members would not do it; they felt that it would be permanently degrading to the best idea of the college, and taking away from it the general liberal character which it had previously had. Therefore, in so far as there is apparent—not an impossibility or a difficulty in King's College in preparing men for the University of London—but a reluctance, it must be understood that that is a reluctance on principle, just as there is a reluctance in our theological department for preparing men for the Preliminary Examination. And I confess that if there should be a Senate reconstituted in any such form as we have hitherto had, especially if there should be one set of examinations, I should myself despair of any satisfactory result as far as much of the higher work of King's College is concerned. We have a great engineering school—we have at this moment, I am informed after special inquiry, the largest engineering school that there is in the United Kingdom. I am not, indeed, sure how many students there are at the City and Guilds Institute, and I do not know exactly how large the engineering school at University College, Liverpool, is, but at all events with those exceptions we have at King's College the largest engineering school in the Kingdom. Then we have our Hospital. Thus we carry on independently University work. But I do not see how good Arts work is to be done in London unless you get the system established of examinations in direct connexion with teaching, with the assistance of external examiners. It is not a matter of life and death to institutions like King's College, but it is a matter of life and death to liberal education in London. If it is not done, you will get nothing but such study in arts as may be promoted by the University of London, the value of which has been illustrated by the University Correspondence College.

25,540. (*Professor Sidgwick.*) Your objection to the plans that have been proposed of having two distinct sets of examinations in one University is that then the same degree would mean two distinct things?—Absolutely incompatible things.

25,541. It would be unmeaning as a degree?—Yes.

25,542. Have you any other objection?—Yes, I think there is more than that. As I said, I do not think you will get the body of men who want one set of things, and the body of men who want another set of things to work together in a satisfactory manner upon the same Board.

25,543. Supposing there were two Boards with only a Council over them. Supposing there was a standing committee to manage the examination of the teaching side, would that still seem to you to be open to strong objection?—That is a scheme which has been contemplated. That which, under great pressure, we did agree to in 1890, was something of that sort. I can conceive something like that that might be put up with. If we had two institutions, each institution would work out its own line, but if you bring them together within the same court, there could not fail to be some amount of friction between them.

Rev. H. Wace, D.D.
27 Mar. 1893.

25,544. (*Rev. Canon Browne.*) There would be the same difficulty of the friction of the two degrees?—No; for there would not be two "Universities of London." It may be the Privy Council decided unavoidably in leaving out the word "London" and making it the Gresham University, or the Albert University, or whatever it might be. That leads me to say that if the Gresham College insists upon going back from the agreement it entered into with us, I should be quite content to fall back upon the title of the Albert University, and I think Prince Albert deserves a better memorial than he has yet had.

25,545. (*Lord Reay.*) Then you wish to go to the question of what institutions should be associated?—Yes. Having said that, I will now proceed to argue on the supposition that there is a separate University established; that there is a University established of which the main point is to develop collegiate education. I will just add one thing to what I said before, that another objection to the system just mentioned would be, that if you had a University admitting to the same degrees by two doors—one door open by examination and another door open by the collegiate system—there would be a great discouragement to the collegiate system, because a man would be able to get the degree in an easier manner than by passing through it. But now let me assume that we have something like the Gresham Charter, modified as the Commission may think fit. The question is, what institutions should be associated with it. One of the questions which you have had to consider very much is, where the line should be drawn.

25,546. Before you proceed let me ask some explanation of the answer that one door would be easier than the other?—Because my contention is that the examination door is a door for which people could be crammed, and in the other case it is not so.

25,547. That would be the case under any system because the existing examination of the University of London would be open to all comers?—Yes, but the two degrees would be of different value. One would be known for what it was and the other would be known for what it was.

25,548. Would not that be the case under any system?—No, you would have a University with clearly distinguished degrees and a character of its own.

25,549. Your contention is that there should be two degrees which should be absolutely differentiated; the one as the result of teaching and the other as the result of mere examination?—Yes.

25,550. That is all you want?—Yes. Now how are you to decide what institutions are to be admitted. The true principle appears to me to be that you can only admit institutions the work of which is of that thorough teaching type which I have been considering, that is to say, of a thorough University type. A great deal has been said with regard to what is meant by a thorough University type. What do you mean by a thorough University type? How do you get at the idea? The idea of teaching of a University type did not arise merely from teaching more cleverly, or teaching in a more advanced way, than others. The University type has been created by people setting themselves down for life to study and the influences of study. That there are a certain number of students at Oxford and Cambridge who do not study and who merely get the character and colour of the study, does not affect what I mean. The idea of University learning is entirely produced by the men who give, first of all, three or four of the best years of their lives to it, and then by those who go on giving the best of their lives to it; that is to say, teaching of a University type is produced by absolute devotion to University study. When you once get that, you may have radiations, and reflections from it such as University extension; but if Cambridge is elevating the style of culture and general knowledge throughout the country, why is it? Because Cambridge has been first of all a great furnace for creating this University type in the persons of the professors and the students who have been living together for that object, and for that object alone. Consequently if you want to have University work diffused by London by certain influences you must first of all create what I have called the University furnace in London itself, within the walls of these institutions where men are doing nothing else from morning till night, for three or four years, or for a lifetime, but studying and teaching. If the institution is of the character that a man is giving the best hours of the day to some profession or occupation or other, and then giving, with no doubt admirable devotion, three or four hours of the evening to study, it is in the nature of the case that that study cannot be study of the highest University type. It cannot generate the characteristics of the higher learning, and that amount of concentrated and deliberate thought and observation which is produced in Universities like Oxford and Cambridge. Therefore, from that point of view, it seems to me that the only institutions which ought to be associated with the University, in the rank of colleges of the University, are Institutions which are doing that systematic University work all day long, making it their one sole business to do so; not institutions which are doing that only partially or secondarily, or which are taking students who are giving only part of their time. Certainly let other institutions, and that other work, receive the help, the guidance, and the assistance of the University, but do not let them be parts of the creative body so to say, of the University. I may say that I wish to avoid discussing the merits of particular institutions such as Bedford College or Queen's College; they have stated their case before the Commission, and I much prefer that the Commission should judge of their claims for themselves without any remarks in disparagement of those claims on my part. But, without speaking of particular institutions, I have very great doubts from the point of view I am now mentioning whether bodies like the Training Colleges should be admitted. In those Training Colleges the students are not there for the simple purpose of liberal study; they are there for the specific professional, technical, purpose of receiving just so much teaching, and no more, as is requisite for being made elementary schoolmasters. No doubt the standard for elementary schoolmasters is rising, but I take it that it never can rise beyond a certain point; there must be some limit, and consequently these residential colleges must, to fulfil their functions, have all their teachers directing their work, and practically restricting their work, within the limits that are requisite for the purposes of elementary schoolmasters. That, to my mind, is inconsistent with the idea of a College for a thoroughly open and liberal education. I know that they do good work, but I do not think it is compatible with this higher and larger ideal. What I have said with respect to them applies of course to other institutions. The University of London, as it appears to me, would still have a very large function to discharge in respect of these external institutions, and it may be always desirable that University extension students should have two avenues to degrees open to them; that they should be either able to have two or three years of their work taken as counting for a year of their residence, or that they should do what they can do perfectly well now, that is, go straight to the degrees of the University of London. If the degrees of the University of London are all that is desired, and if the University extension work is all that we are told it is, why do they not go to the degrees of the University of London? They are open to them, and I think it is desirable that they should be open to them.

25,551. (*Professor Sidgwick.*) You have not said anything about the Royal College of Science, or the City and Guilds Institute?—The City and Guilds Institute, rather falls under the observation I made, that I had rather not appear as disparaging the claims of any institutions. It is a question of its merits. It may perhaps be dealt with under Sir George Young's amendment of "schools," but I

am quite content to leave it to the Commissioners, But with respect to the Royal College of Science, I think the difficulty I have just mentioned arises, because it is maintained generally for the training of elementary teachers throughout the country, and General Donnelly has told you that it is not an establishment under the management of its own governing body ; that the Education Department will insist upon keeping a strong hand and control over it. Therefore it appears to me, in the sense that I have mentioned, not to be a place for a large and liberal education, and its introduction into a University governing body would be inconsistent with the character of a University.

25,552. (*Rev. Canon Browne.*) Would you associate with your University the evening classes at King's College?—The evening classes at King's College would be under the general influence of the University just as the University extension classes would be.

25,553. But only to that extent, because their idea was that they had better prepare for the examining University and not the resident University?—I think they could do both. As I said just now, if it were felt that a certain amount of study in the University extension classes is to save a man a year of residence for his degree it would be reasonable that a proper amount of study in the King's College evening classes should save a man a certain amount of collegiate study for his degree. So in our Theological Classes, two years' evening classes of theological study exempt a man from one year of his morning classes.

25,554. I thought in your definition of what should and what should not be associated with the University you carefully excluded the evening classes at King's College, for which you give your Associateship?—I was not speaking of classes which should be associated with the University, or helped by the University, but institutions which should be on the Governing Body of the University, which, under Sir George Young's form would be "schools" of the University.

25,555. Institutions where teaching of the Uni versity type was given. Your definition of teaching of the University type excluded, to my mind at least, teaching like that at the evening classes at King's College where there are people only coming three or four hours in the evening to their work?—It is excluding them in the sense that the evening department at King's College is not one of the Faculties of the College.

25,556. The question is, would they be entitled to present themselves for the degree of the resident University or not?—Not unless they have spent their final two years in the day classes.

25,557. Then your position would be different from what it is now. They can get their Associateship now without going into the day classes?—Yes.

25,558. That will be altered?—I do not know whether it will be altered, but they will not get their degree that way.

25,559. (*Professor Sidgwick.*) I rather thought that the words which Sir George Young introduced would leave it open to the University. They are the words introduced in Chapter III. that the University shall have power to grant certificates of proficiency. I thought it was entirely leaving it open to the University to give any scope it chose?—That is so.

25,560. Then it need not require the two years?—No.

25,561. (*Rev. Canon Browne.*) But would you put them and the University extension people so far on the same footing?—On a similar footing. We might argue that a shorter time at the evening classes at King's College might be allowed.

25,561*a*. (*Professor Sidgwick.*) Would you have any objection to including in the Faculty some of the distinguished teachers of the sciences at the Royal College even if the whole institution did not come in. That is a suggestion which has been made which you may have seen in General Donnelly's evidence. He thought that the whole institution could hardly form a part of the University, but he thought it would be an advantage if the University recognised some of the teachers, included them in the Faculty, and allowed their lecture to count for the degree. Does that arrangement seem to you one that might be adopted?—You mean to say that some of the work of the Royal College of Science might be accepted by the University as work for a degree.

25,562. Yes. The argument for it would be as has been urged upon us by one or two of those teachers that they have in some respects exceptional advantages in the way of apparatus, and they are likely to have?—I think it is a fine point rather. I think it would be better if they could be put on in the form of lecturers appointed by the University rather than as lecturers of the schools, because the University is not recognising external schools as such.

25,563. I suppose the question which would be practically important would be whether their lectures should be among the lectures which were a part of the course for the degree of the teaching University. You see the first Clause of Chapter III. says the University shall have power to confer degrees on all who have pursued a regular course of study. Then Sir George Young proposes the words instead of " in a College in " the University "—" under the regulations of the " University." I think that the changed clause taken in connection with the concluding clause would give the Gresham University power to make the lectures of the lecturers appointed independently of the college a part of the course of study?—They would have to be sure that the lecturers had adequate means for teaching.

25,564. But you would agree to leave the University free in that respect, free to admit lecturers as capable for the University?—I see no objection to it at present.

25,565. And as I understand you, you see no objection to schools in one Faculty only, and no objection to having a law school on the same terms?—No. What I care for is to have the governing force of the University Collegiate. With regard to the question of professors, it seems to me that nothing could be more injurious to the collegiate life I am speaking of, than for there to be an external authority coming down and saying, " This man is a University profesor " and " This man is not." They might come down to King's College and pick out half a dozen men and say " You are University professors, and the others are of a different class." That would entirely destroy the discipline of the college. It would be practically introducing an authority superseding that of the Council itself. It has occurred to me that there may be one, and only one way of escape with regard to that question of University professors. I have hesitation upon the matter because I have not discussed it very much of late with Sir George Young, and although we are almost always in agreement, I am not quite sure whether he goes as far as I am half inclined to go. But I think there is great force in what one of the witnesses says; that it is a disadvantage when a man has no career in London as a professor beyond that of a regular teacher in a College, and that there are advantages in a limited number of men being confined to the very highest work and the very highest lecturing. For instance, to take the case of a man like Professor Silvester, at Oxford. I do not suppose there are half a dozen students who could possibly attend him, or get any advantage from going to him, and yet there can be no doubt that his position is a very great advantage to the University. That might have been done to my mind if we had still the co-operation of the Gresham College, and if you could have some men at some centre like Gresham College expressly required to give only half a dozen lectures a year, and expressly required to differentiate their work in that way. You have courses of lectures at the Royal College of Physicians and at the Royal College of Surgeons in which a very few distinguished men investigate their subjects with a thoroughness only capable of being appreciated by the

Rev. H. Wace, D.D.
27 Mar. 1893.

more advanced members of the profession itself. If you thought it at all fit to add a small number of professors of that kind whose work was expressly confined to giving, as I say, something like half a dozen lectures a year on the more advanced portions of their subject at some institution, some central place, like the Gresham University, I am disposed to think that would be an advantage. I think it has been suggested by some one or other, on the part of Gresham College itself, that instead of giving merely popular lectures as they do now, their funds should be restricted to giving a limited course of higher lectures.

25,566. Do you think it necessary to limit the number of lectures that the professor gives, provided you do not limit his income. My impression is that the professor would not be likely to deliver more than the prescribed number?—I do not stop to go into any particular detail if you can take care that the work those men do is the work of that particular type.

25,567. This will be the advanced teaching that goes along with research?—Yes, provided you can do that without making it apparent that the professors in the colleges are not also doing the highest work. It might be difficult to express, but if it could be done, it might be advantageous. Anything which disparaged the work of the colleges would be absolutely disastrous to the work of the students.

25,568. Are you at all acquainted with the working of the present system of the University of Cambridge. We have had for some years an institution by which certain lecturers in the college are made University lecturers while retaining their college work and the objections you have urged, that it tends to disorganise the college teaching or depreciate those who are not college lecturers, is not one which has ever been brought forward at Cambridge?—You see there is the great difference that a college at Cambridge is not what these colleges in London would be, because the colleges in London would be entirely composed of men doing University work would you therefore not be simply giving a man a University standing. It would be different from that. It would be putting a special and extra University stamp upon men who are by the force of their position already, in effect, University professors.

25,569. (*Lord Reay.*) In your view the colleges are the University?—Yes, the colleges are the University.

25,570. (*Rev. Canon Browne.*) We have these men giving these half-a-dozen lectures in the year. I do do not know why you should prefer their giving other lectures. For instance, one or two of your King's College men might be exactly the men giving the half dozen lectures?—Then you should restrict them for five years or something of that sort, as is done in the case of a good many University professorships; but I had it rather in my mind, I confess, that you might have a certain number of men retiring entirely to their own higher work.

25,571. (*Lord Reay.*) What you mean is that a distinguished man like Mr. Huxley, who has retired, might be invited to give five or six lectures on some very special subject. The same request might be made to professors of other Universities?—Yes.

25,572. (*Rev. Canon Browne.*) Or these people who are not absolutely debarred from acting as professors in other capacities?—I hope I have explained my difficulties about it. It seems to me, I cannot help hoping, that the two things might be in some way reconciled, and if the Commission could draft some scheme by which, as his Lordship has put it, the colleges remained practically the University, and the professors of the colleges acted as professors of the University, as is the case with the Victoria University, then you still might have a sort of special body guard of science and learning—half a dozen men of extraordinary rank, who might give lectures at the Colleges or at the central seat of the University.

25,573. (*Professor Sidgwick.*) You say that the professors in the colleges are professors of the University, but do you conceive that the professors of a denominational college could be made the professors in the University without violating the University Test Act. I always understood that the reason why they were not so made in the Charter was some reason of that kind?—If the University Tests Act is in the way and you can avoid designations which would be inconsistent with it, well and good, but the past history of King's College is quite enough to show that there is nothing in its constitution to restrict men of the very highest ability from serving on its staff.

25,574. My suggestion was rather that it is not desirable to avoid any law of the land, only it is a conceivable way of avoiding it if you have the appointment of University professors. I am now trying to put the argument I have heard used in favour of what you seem to object to. It would remove the denominational difficulty if the college teachers, if I may say so, were appointed by the college, but the selection among them of University professors was made by some other body. You seem to hold that that would have a disorganising and depressing effect?—Entirely so. If you like to avoid the term "University professors" I do not attach any importance to that. All I care for is that you should not have any external authority coming down into the college and saying: "This man in that College stands on a higher rank than the other men in the college." If you like to restrict the formal designation of "University professor" to these half dozen entirely exceptional men, with exceptional duties, I should not see very much objection to it. I was speaking loosely, and I am much obliged to you for correcting me. Then something has been said about a Statutory Commission. I am not at all learned in the law about such things, but I should have thought that such a Statutory Commission as was appointed at Oxford and Cambridge had duties very different from those which have been suggested for a Statutory Commission here. When you had a Statutory Commission at Oxford and Cambridge, you had the main principles decided; you were not going to create a University; and you were not going to turn an old University inside out by giving it entirely new functions. I fancy I should not be putting it far wrong if I said that the main business of a Statutory Commission was to redistribute the funds of the old University; and if it had not been a question of the funds of the old University, it would have been an entirely different question. But to refer to a Statutory Commission the question of the whole policy of a University, seems to me to be using that agency for a purpose for which it was never yet used and for which it is not qualified. I only wish we had large enough funds to justify a Statutory Commission, but I am afraid that, although we are handsomely endowed as things go, the funds are not enough for that purpose. Then lastly I would say, with respect to this Gresham University, that I would ask the Commission to consider the balance of experience that there is in its favour. In the first place, it is the result of five years hard work and hard fighting. We had all those negotiations—very anxious negotiations they were—with the Senate of the University of London, and then we went to the Privy Council, and had the thing worked out very thoroughly there; and as the result of that, we did what no other scheme has ever done; we did unite all the bodies that were interested except the Royal College of Physicians and the Royal College of Surgeons, and a place was left for them to come in. There has been no other scheme whatever that I know of in which all the colleges in London have united. Since then they have fallen apart.

25,575. (*Mr. Anstie.*) All the Medical Schools accepted the revised scheme of the Senate?—Not King's College and University College, I think.

22,576. That appears by the proceedings before the Privy Council?—Not King's and University Colleges. But King's College and University College were united with the Medical Schools in the Gresham Charter. St. Bartholomew's and Guy's both preferred it, and with regard to St. Thomas's and St. Mary's there was obviously no general opposition to it? That appears

to me to be a matter of very great weight. Then what was the nature of the opposition to it? There was only one University in the Kingdom which objected. Neither Oxford, Cambridge, Edinburgh, Glasgow, Dublin, nor any one of the old Universities came forward. It was only the Victoria University which objected, and that upon what I think the evidence has shown to be a very secondary point, of the organisation of the Medical Faculty—a point upon which, if they had come before us on the application to the Privy Council, we should have been only too willing to meet them, and upon which we should be willing to meet them now. I do not think that secondary matters of organisation are of such great consequence. The opposition of some bodies in London was, as I have endeavoured to show, founded to a large extent on misapprehension, and partly because they were in the unfortunate position that they failed to appear before the Privy Council. Now they appear, and I think all that they legitimately desire can be met, not by a modification, but by an explication of some points that there are in the Charter. There are a good many more things that I noted as I went along but I do not think I need trouble the Commission with them in detail.

25,577. (*Rev. Canon Browne.*) Sir George Young spoke about a theological Faculty for University College, and he expected and desired the theological Faculty, because he went so far as to say that they desired that the Cheshunt College and the Wesleyan College, Richmond, should be included?—My apprehension of Sir George Young's position was that University College would not take part in the matter, but that they were willing that it should be done.

25,578. And in that case, if there was a Faculty, those should be included?—Yes.

25,579. Are you on the part of King's College willing that there should be a theological Faculty?—We have had several conferences with the Nonconformist Colleges, and you have before you a printed document which states the amendments in the Charter which are recommended for that purpose.

25,580. I thought that to-day you said something about the impossibility of a theological Faculty being founded; but perhaps that was with regard to the scheme of the Senate?—Yes, I am all in favour of a theological Faculty in the Gresham University. In an independent University, founded substantially on the Gresham Charter, I am in favour of a theological Faculty.

25,581. Which would not be a Church of England Faculty?—No. But if you do not give us that University, all that we have said drops, and on the part of King's College I should advise withdrawal; and I believe that would be the feeling of the Council.

25,582. The Council in one case and the Senate in the other?—Yes. If you get a governing body such as the Gresham Charter provides, then we are agreed, but otherwise not; that is to say, if the examinations of the theological Faculty are worked by the Professors of the Faculty, then well and good.

25,583. But if they are worked over your heads you would have nothing to do with them?—No, I may just say one thing more on the point of organisation, as to whether the proefssors or other persons shall be dominant. There are two ideas: one is that of the Senate of the University of London, which, on any scheme that has been proposed, keeps the professors in a subordinate position. We place them in a not dominant position on the Council, but we make them supreme over the examinations. It appears to me that the best form of organisation is to make the ultimate governing body a mixed body, in which the professors are not dominant, for purposes of appointment and so on; but, when you have appointed your professors, then trust them absolutely with the teaching and with the examinations of the University. Do not control them in that. That is the mischief of the London University system. If you are inclined to think that the argument of King's College and University College is the right one on the whole, you should have a mixed body for the ultimate Government; but do not let that body interfere, except in extreme cases, with the management of the teaching and examining.

25,584. (*Professor Sidgwick.*) But we have been informed that in University College at least the Council almost never interferes with the appointments; that the appointments are always recommended by the professors, and in every case except two that have occurred there the recommendations have been accepted?—And those two exceptions were very important ones.

25,585. Your view would then be that the supreme body should interfere only rarely even with the appointments?—I think it is good for it to have the control.

25,586. (*Lord Reay.*) When professors are appointed in King's College, are any recommendations made by the professors?—No, there is a Committee of the Council which takes opinions. At King's College, of course, they are in communication with the Boards of the College through the Principal, who can always inquire and ascertain.

25,587. Then what you have just said would entail a departure from the existing state of things in King's College. You contemplate a Senate composed entirely of the professors of King's College and University College who would have under their control and in their power the organisation of teaching and of examining?—Yes, if you mean by a "Senate," as at University College, a body which acts by way of delegation and entirely under the control of the Council as a whole.

25,588. And you would strictly limit it to the professors of the two colleges and of such colleges as might eventually be connected or affiliated with the University?—Yes.

25,589. And those professors who would give this limited number of lectures on specific subjects would of course not be members of the Senate?—I do not know why not.

25,590. I thought you would leave them outside the Senate of the University?—No, I think not.

25,591. And you would call them University professors. Then you would accept an alteration of the charter where the word "lecturer" is now used, and, subject to the limitations you have indicated, you would allow the word "professors" to be uesd?—Yes, certainly, subject to that qualification.

25,592. (*Mr. Anstie.*) What I understand you to desire is that there should be what I may call only a power of appeal in fact to the Council, the practical administration of the University in an educational sense being in the hands of the professors?—Yes. Except that the professors would not be acting on their own authority, with simply an appeal to the Council, but would be acting under the general direction of the Council.

25,593. (*Professor Sidgwick.*) If in a charter you gave the University the right of appointing professors with what words would you limit the power? What sort of phrase would you use? Or would you leave it to the University?—No, it would be dangerous to do that, I think, without some qualification.

25,594. What clause would restrict the power of the University? Perhaps you have not thought of forming a clause?—That would be for the Commission. I have only to add that to show the nature of the work done in the laboratories of King's College, I have had a statement prepared which I should like to hand in. (*See Appendix No.* 57.)

The witness withdrew.

GRESHAM UNIVERSITY COMMISSION.

APPENDIX AND ANALYTICAL INDEX

TO

MINUTES OF EVIDENCE

TAKEN BY THE

ROYAL COMMISSIONERS

APPOINTED TO CONSIDER THE

DRAFT CHARTER FOR THE PROPOSED GRESHAM UNIVERSITY IN LONDON.

Presented to both Houses of Parliament by Command of Her Majesty.
1894.

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TABLE OF CONTENTS.

Page

1. APPENDIX - - - - - - - - - - - - 3

(*a.*) PAPERS HANDED IN BY WITNESSES - - - - - - 3

(*b.*) SUNDRY COMMUNICATIONS SUBMITTED TO THE COMMISSION OTHERWISE THAN BY WITNESSES IN THE COURSE OF THEIR EVIDENCE - 105

2. ANALYTICAL INDEX - - - - - - - - - - 137

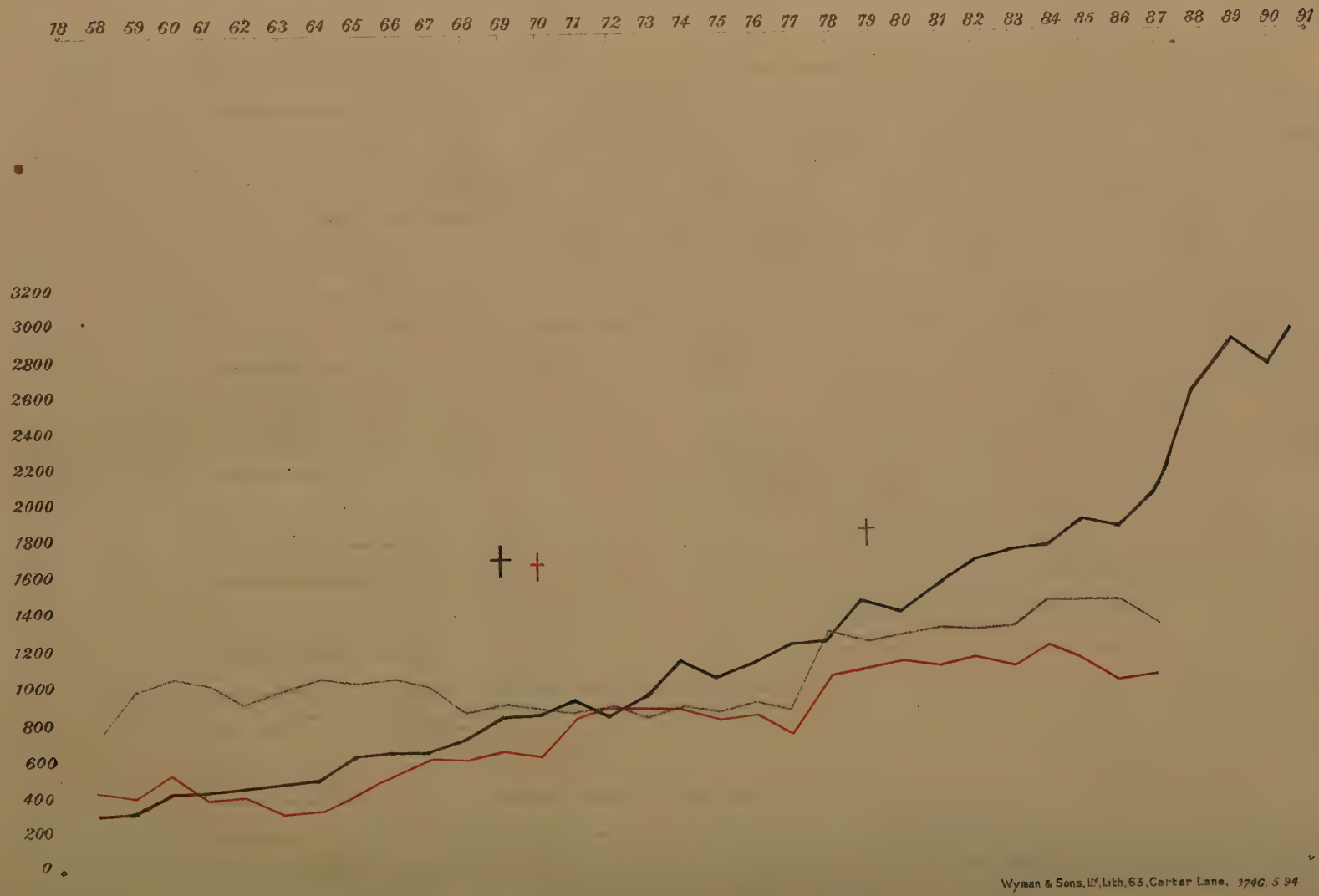
(*a.*) TABLE A. - - - - - - - - - - - 137

(*b.*) TABLE B. - - - - - - - - - - - 140

APPENDIX Nº 3. *See Question 1061.*

PAPER HANDED IN BY WILLIAM JOB COLLINS ESQ., M.D M.S., B.SC F.R.C.S. JUNE 9TH, 1892.

DIAGRAM *showing (a) Nº of Candidates for Matriculation at London University in each year from 1858 – 1891.*
„ (b) „ „ Students attending University College „ „ „ 1858 – 1888.
„ (c) „ „ „ „ „ „ „ „ „ „ „ „ 1858 – 1888.



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Candidates for Matriculation London University, (Minutes of Senate 1891.)
Total number of Students at University College, (p 216 R. C. Report.)
„ „ „ „ Kings College, (p 231 R. C. Report.)
Opened to Women.

APPENDIX TO EVIDENCE.

APPENDIX No. 1.

PAPER *handed in by* WILLIAM JOB COLLINS, *Esq., M.D., June 9th*, 1892. *See Question* 1035.

RETURN showing the number of primary registrable Medical Qualifications (*i.e.* M.B.) granted by English Universities during the period 1877–1891.

University.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	Total.
Oxford -	8	5	6	7	4	8	10	7	11	5	11	14	11	11	9	130
Cambridge	11	7	14	26	19	35	28	27	26	38	44	43	65	71	76	530
Durham -	2	7	9	19	17	12	37	28	37	61	52	38	38	30	49	436
London -	22	25	34	39	49	41	53	44	51	36	61	71	64	61	75	726
Victoria -	—	—	—	—	—	—	—	—	—	—	—	7	21	14	16	58

APPENDIX No. 2.

PAPER *handed in by* WILLIAM JOB COLLINS, *Esq., M.D., June 9th*, 1892. *See Question* 1042.

RETURN showing the number of M.D. degrees returned as registrable from each of the English Universities, 1877–1891.

University.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	Total.
Oxford -	1	1	2	2	—	5	5	—	1	2	2	6	5	2	6	
Cambridge	4	4	7	10	4	5	2	—*	—*	23	8	9*	5*	17*	22*	
Durham -	2	3	1	12	14	21	11	12	18	28	22	20	46	38	31	
London -	8	6	12	18	19	28	24	16	27	31	30	41	32	33	49	
Victoria -	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	

* No returns received, though degrees were conferred. Figures for 1888-91 approximate.

APPENDIX No. 4.

PAPER *handed in by Professor* WM. STIRLING, *M.D., June 9th*, 1892. *See Question* 1473.

1. Victoria University disclaims taking any part in opposition to the foundation of a Teaching University fr London. On the contrary, it is in hearty sympathy with a movement for this purpose.

2. Victoria University, however, objects most strongly to a Charter being granted to any university which permits of any one faculty having numerically a commanding influence. There should be a proper balance of faculties, so that the power of arranging the subjects. extent, and method of examination, and that of granting degrees in any faculty, should not practically rest with that faculty.

The proportion of medical members on the council or general governing body of the new university seems in itself unduly large, and it is perfectly clear that they will all be persons resident in London, and likely to be regular attendants. Thus on the Council, which is the only university authority comprehending all the faculties, the influence of this solid body of medical opinion, as against that of the other faculties, and even as against that of combinations amongst them, will be practically irresistible.

A medical faculty should not have a numerical representation on the Council or other corresponding board which would enable it to outvote the representatives of the faculties of arts and science. Such an arrangement would be specially objectionable, where the weight of medical influence, as indicated by the number of medical colleges, lecturers, and students, was largely in excess of that of any other faculty.

The Victoria University is of opinion that on the governing body of the proposed new university there is undue representation of medical colleges pure and simple.

3. By the Medical Act (1886) § 3 (1) (*a*), universities and certain medical corporations have the right of granting a diploma or diplomas entitling to registration under the Medical Act. In § 3 (1) (*a*) of this Act it is stated that among others the following possess this right:

> "(*a*) Any university in the United Kingdom, or any medical corporation, legally qualified at the passing of this Act to grant such diploma or diplomas in respect of medicine and surgery.

The introduction of the words "at the passing of this Act" rendered necessary the insertion of the following clause in the Charter of the Gresham University, p. 3, § III.

> "Provided that no medical degree shall be conferred on any person who shall not previously have obtained a qualification for registration under the Medical Acts for the time being in force."

The Victoria University takes strong exception to the provisions of the above clause. That a candidate intending to graduate in medicine in the proposed new university should be required to obtain a registrable qualification before he can so graduate, is a condition unknown in any British University, and would place the new university in a perfectly anomalous position in regard to other universities.

The necessity for the introduction of such a clause in a university charter would be obviated by an alteration of the Medical Act (1886), so that the medical degrees of the new university, or any other university hereafter founded in the United Kingdom, should, as heretofore, entitle to register under the Medical Act. This would have the effect of adding an additional "portal" or portals by which graduates could be placed on the Medical Register. The number of bodies in the United Kingdom granting diplomas or degrees being already so numerous, this does not seem to constitute an insuperable objection.

If the Medical Act of 1886 were so amended, medical students entering the new university might commence degree courses *ab initio*, and would pass preliminary and professional examinations of a kind qualifying for a degree. Whereas, if a registrable qualification is demanded before a student can graduate in medicine and surgery in the new university, it is to be feared

Appendix Nos. 5 and 6.

that university standards could only be maintained at the expense of duplicating courses and examinations.

Under the existing Medical Act (1886) any new university would be under great and continuous pressure to lower the scientific requirements towards the standard necessary for a qualification, and for this reason the Victoria University deprecates the absence from the Gresham Charter of any safeguard for maintaining sufficient standards in such subjects.

It has been objected that no such safeguard exists in the Victoria University Charter. No such safeguard is necessary, seeing that the Medical Charter of the Victoria University was obtained in 1883, *i.e.*, prior to the passing of the existing Medical Act.

The Victoria University is strongly of opinion that such a lowering of the standard in science would to all intents and purposes obliterate the distinction between a qualification and a degree, and protests strongly against the possibility of a degree in medicine being given to a qualified person on condition of passing higher examinations in medical subjects only.

In sum and substance the Victoria University objects to medical students (whether in London or the provinces) being able to obtain a degree on what would amount to little more than the training and examination necessary for an ordinary qualification. It desires to see maintained the distinction between a qualification and a degree—a distinction resting largely on the greater demands made by the Universities upon students in the scientific subjects ancillary to medicine.

APPENDIX No. 5.

PAPER *handed in by Professor* WELDON *on Wednesday, 15th June* 1892. *See Question* 2080, *and referred to by* KARL PEARSON, *Esq., M.A., on June 29th,* 1892. *See Question* 5366.

ASSOCIATION FOR PROMOTING A PROFESSORIAL UNIVERSITY FOR LONDON.

Proposals adopted by the Association at a Meeting held on June 14th, 1892.

(1.) It is desirable that there should, if possible, be one University in London.

(2.) The objects of the University should be to organise and improve higher education and also to promote the advancement of science and learning.

It is desirable that the University be constituted on the following lines:—

(3.) Subject to Clauses (9) and (12) the University to be governed by a Senate, which shall ultimately consist of the Professors and a certain number of Crown nominees.

(4.) The Professors to be nominated in the first instance by some independent authority, such as the Crown or the Commission contemplated in Clause (14), afterwards in such manner as the Senate may determine.

(5.) The University to have power to absorb institutions of academic rank in London, which may be willing to be absorbed, due provision being made for protecting the interests of the teachers in such institutions, and for preserving the character of special trust-funds.

(6.) The University to have the power of appointing readers and lecturers, either to supplement the teaching of the Professors, or to deliver graduation or other courses of lectures within the metropolitan area at such places as may be determined by the Senate.*

(7.) The University to have power to grant degrees and to institute degree examinations. These examinations, may, if found necessary, be different for those who have followed prescribed courses and for those who have not. Each Professor of the University to be *ex officio* an examiner in the subject of his chair, but not necessarily to take part in every examination in that subject. Examiners, who shall not be Professors in the University, to be appointed by the Senate to take part in all degree examinations.

(8.) The Professors, readers, lecturers and other teachers of the University to be grouped into Faculties, which shall have such consultative and administrative powers as shall be determined by the Senate.

(9.) The body of graduates in Convocation assembled to have the power of appealing to the Privy Council, but to have no veto upon the action of the Senate. The Chairman of Convocation to be *ex officio* a member of the Senate.

The Medical Schools will probably require special treatment. Though they might advantageously hand over the teaching of pure science to the University, each school might retain control over its own teaching of medicine and surgery and over the funds devoted thereto.

(10.) The Medical Faculty to consist of representatives elected by the teachers in recognised London Medical Schools.

(11.) The recognised Medical Schools to be determined in the first instance by the Commission referred to in Clause (14) but afterwards from time to time by the Senate subject to appeal to the Privy Council.

(12.) A certain number of the members of the Medical Faculty to be nominated University Professors in accordance with the provisions of Clause (4). The number of medical Professors on the Senate not to exceed one fourth of the total number of University Professors on the Senate.

(13.) A teacher of pure science in a recognised Medical School to become a member of the Faculty of Science, whenever the appointment to his post is entrusted permanently or *pro hac vice* to the Senate of the University.

(14.) To facilitate in the first instance the organisation of the University, it is suggested that a small and independent commission of legal and educational authorities be appointed by Act of Parliament with full powers:—

(*a.*) To investigate and determine upon the claims of existing institutions wishing to be absorbed under Clause (5).

(*b.*) To arrange for the proper disposal of the trust-funds of those institutions which may be absorbed, and to determine the conditions under which their property shall be vested in the Governing Body of the University.

(*c.*) To arbitrate on all matters concerning the interests of existing teachers as affected by the action of Clause (5).

(*d.*) Generally to make such arrangements as may be necessary for the establishment of the University on the foregoing lines.

Signed by the Executive Committee for the Association:

F. V. DICKINS.
G. CAREY FOSTER.
R. S. HEATH.
E. RAY LANKESTER.
KARL PEARSON.
H. E. ROSCOE.
A. W. RÜCKER.
T. E. THORPE.
W. C. UNWIN.
W. F. R. WELDON.

* This side of the University work would probably include teaching of the following kinds:—

(*a.*) Teaching, conducted in the University buildings, supplementary to that of the Professors.

(*b.*) Courses of instruction of a special or advanced character recognised by the University, *e.g.*, of the type given by the German *Privat-Docenten*.

(*c.*) Teaching of a more or less academic character conducted by lecturers appointed by the University at institutions and colleges, the objects or the standing of which render complete absorption into the University undesirable.

(*d.*) Lectures at various local centres of the type known as "University Extension" lectures.

(*e.*) Courses of lectures or occasional lectures by members of the University staff, or by other persons recognised by the University, for which a convenient centre might with the co-operation of the Corporation of London and of the Mercers' Company be found at Gresham College.

APPENDIX No. 6.

PAPER *handed in by* WILLIAM JAMES RUSSELL, *Esq., Ph.D., F.R.S., June 22nd,* 1892. *See Question* 3345.

BEDFORD COLLEGE, LONDON (FOR WOMEN), AND THE TEACHING UNIVERSITY FOR LONDON.

During the last year two proposed Charters for a teaching University for London have failed to secure the general approval which was essential for their success. Last May the scheme drawn up by the Senate of the University of London, after much thought and prolonged negotiation with the chief existing colleges in London, was decisively rejected by Convocation; and only a few weeks since the "Gresham University Charter" was laid aside amid a storm of adverse criticism.

These unsuccessful essays in University-making have not been without good results; for the conviction is, we believe, growing among those interested in the organisation of higher teaching in London, that any attempt to build up a University in this city must be

upon a radically different basis from that hitherto adopted by the various promoters.

When so many schemes have failed, and so many cries are in the air, with so little that is clear or practical in the suggestions of those who have opposed the late Gresham University Charter, it has seemed to us neither presumptuous nor ill-timed to draw up the following statement of the general lines along which, in our opinion, the attempt to found a teaching University in and for London should progress.

We are convinced that any attempt to build up a teaching University from below on the foundation of the existing colleges—that any sort of University in which the colleges are merely federated—is useless. Any successful scheme must provide for the creation of a University independent of existing collegiate corporations, which will, by acting from above, absorb, or tend to absorb, into itself all that is worthy of preservation in these various institutions.

The possibility of such a University presupposes an unselfish and public spirit in those most interested in this important question; but it is to be hoped that this is no exorbitant expectation, and it cannot be possible that the great colleges which are in the front rank of education in London will be slow to lead the way at this crisis. Let them heartily support this scheme and we believe that success is assured.

The first necessities for a teaching University, if it is to deserve the name, are: (*a*) complete control over the professors and lecturers; and (*b*) the greatest control possible over teaching equipment, *i.e.*, buildings, apparatus, &c. How can any University teach, and be responsible for the kind of teaching given within its jurisdiction (and this is surely the meaning of a teaching University), unless it have full control over the teachers? And how can any University have full control over its teachers unless it also have control over the tools with which the teacher works—the lecture rooms, laboratories, apparatus, libraries, and all that forms the equipment of a teaching University?

Such a University should exist in London; indeed, the nucleus is already found in the present University of London, and we believe that there would be great advantages in a development of that institution along the lines suggested below.

If the University is to exercise the double control mentioned above in an efficient way, it is imperative that the first step should be the creation of a "Supreme Council" of unquestioned authority in the educational world. Such a body could be formed by modifying the existing Senate of the University of London. It might consist of Crown nominees and of representatives both of the professoriate and of some of the learned societies. In the first instance, at all events, some of the Crown nominees should be members of the governing bodies of such colleges as might, before a given date, signify their desire to form a part of the University, and so be admitted to union with it by some temporary authority created for that purpose. In like manner the University professors and lecturers would at first be, or would be chosen from among, the members of the teaching staffs of such colleges. It would, however, be distinctly understood that they were in no sense so appointed as representatives of their colleges, but as men of mark in their respective branches of study, and that thenceforward they would be directly employed by the University.

It is impossible to deny that such a change would be attended with difficulties; but we believe they could be overcome if those immediately concerned were in agreement as to the end to be ultimately attained. We therefore notice only one of the numerous questions which would require careful consideration.

If no college were willing to be united to the University in one or other of the ways described below, the Government might either accept this fact as a final proof that a teaching University for London is impracticable, or might proceed to develop the latent teaching powers of the existing University of London, authorising it to absorb other bodies, in the belief that such absorption would soon follow. This latter, stronger policy we should advocate; but for the moment we will assume that in one way or another the initial difficulties have been overcome.

The Supreme Council once in existence, it should be the object of the Charter to ensure the final concentration in the hands of the Supreme Council (1) of the power to elect all professors, lecturers, and officers in the University; (2) of the administration of all funds at present at the disposal of the various colleges, and of such funds as may in the future be acquired either by the University or colleges; and (3) of power, under the advice of the various Boards of Studies, Faculties, &c., to lay down the curriculum for students and the conditions under which degrees should be granted. This complete centralisation could only be accomplished by the final absorption of all existing corporations of university rank in the University; their respective buildings and funds becoming University property, while the various teaching staffs already existing would be taken over by the University. We recognise, however, that this complete absorption would necessarily be a matter of time, and that there would be many initial difficulties connected with the handing over of trust funds, the position of the medical schools, and that of colleges with a theological faculty, &c. It would seem, therefore, advisable to arrange for two grades of absorption:—(*a.*) That of complete absorption; in which case the college would cease to be a separate corporation, though it might, for some purposes, be governed by a committee or syndicate with delegated authority. Its buildings would belong to the University, as the Bodleian Library belongs to the University of Oxford. The word "college" might, for the sake of old associations, be used as a title, but, if so, it must not be taken to indicate a distinct and semi-independent corporate existence.* (*b.*) That of partial absorption; in which case the college would retain its title as a college in the ordinary sense, and the governing body would keep financial control over part of its resources, and be responsible for a part of its teaching, whilst agreeing to hand over the rest to the University. The University would appoint the professors and lecturers in the subjects thus taken over, would pay them, would have full control over lecture rooms, laboratories, &c., used in the teaching of these subjects, and would recognise systematic study under such University teachers only, as qualifying for the special degree granted to those who have pursued their studies under the direction of the University itself.† In return for this the college in question would make a contribution, to be agreed upon, to the University chest. This arrangement would facilitate the formation of closer ties with the University, as the initial difficulties disappeared, whilst it would enable the Supreme Council to grapple successfully with some of the greatest difficulties besetting the formation of a teaching University. Such a college as King's, for instance, might retain complete autonomy in the departments of theology and medicine, but become absorbed in those of arts and science. The various medical schools might give over their purely scientific teaching to the newly-constituted University, while retaining their control over that in medicine and surgery. This arrangement, moreover, would enable the Supreme Council to avoid taking over any section of a college which was below University rank either in teaching or equipment—a power which it would be very necessary to exercise in the case of smaller corporations—and at the same time it would enable the Council to recognise the claims of such colleges as the Birkbeck Institution and the Working Men's College, or, indeed, of any educational body if they could show that their teaching was of University rank. In the subjects where this condition was satisfied, the students would be recognised and their teachers appointed and paid by the University; in return, of course, for an annual subvention from the college. In the remaining subjects the colleges would remain independent until such time as they showed themselves worthy and willing to effect a closer union with the University. As there would probably be a uniform fee for any subject controlled by the University, no matter in what building or by what lecturer it was taught, the student would thus be free to attend the classes necessary to his curriculum at whichever college he preferred. Thus, in so far as the various colleges were absorbed, there would be an absence of pecuniary competition between them, but an intellectual competition would be maintained which could not fail to be stimulating to the individual teacher. Whichever lecturer the student heard, his fees would reach the common chest; but the best lecturer would have the most students, and might well be paid—partly, at least—upon results. The University lecturers obtained at first in the manner sug-

Appendix.

* If such complete absorption were, *e.g.*, to take place in the case of University College, that group of buildings might be described as University College Buildings. The personnel of the existing councils, governing bodies, &c., of colleges which had been completely absorbed might, under the form of committees of management, continue to exist and perform their present functions, with the exception of control over finance and election to professorships, lectureships, &c.

† If the new University included the existing University of London the open degree for private students and for all the world would remain untouched, at least, in the Faculties of Arts and Science.

Appendix.

gested, but as vacancies occurred appointed by the Supreme Council, might be divided into faculties, which would make recommendations to the Supreme Council upon educational questions. Ultimately the Crown would nominate a regius professor in each chief subject; but at the first foundation of the University special and temporary arrangements might be desirable. The duties of a regius professor would be to give teaching in honours and post-graduate subjects, and to conduct and encourage original work. The professors and lecturers of existing colleges taken over by the University might be allowed to retain their titles and present status on their distinct understanding that the Supreme Council should have full power to arrange the amount and nature of their work and to alter, modify, or abolish such professorships and lectureships in such manner as might seem good to them on these posts next falling vacant.

As regards the details of the conditions under which the degrees of the University are to be granted, we do not think that any serious difficulty will arise in a matter—which is after all of secondary importance—if the fundamental principles we advocate are accepted. We therefore refrain, for the present, from any further discussion of the subject.

Being, however, convinced that these or very similar principles must form the basis of the only kind of University which could adequately supply the manifold needs and fulfil the peculiar conditions of a great metropolis like London, we, the Council and Staff of Bedford College (for Women), London, at a joint meeting held at the college on April 2, 1892, passed the following resolution:—

The Council and Staff of the Bedford College would view with favour the establishment of a University, consisting of a Supreme Governing Body on which the teaching staff should be largely represented, together with Faculties composed, in each case, of a regius professor, and of other professors and lecturers appointed by the University. The teaching might, at first, be carried on in the laboratories and lecture rooms of the existing London colleges. The Council would be prepared to surrender many of its rights of control over the teaching and funds of the Bedford College to a central body constituted on such lines, provided that other institutions were willing to act in the same spirit.

In conclusion, we appeal to all who are interested in this question, but above all to the University of London, and to those colleges that are larger and more influential than our own, to rise to the height of a great occasion, and to act in an unselfish, public-spirited way worthy of their high traditions.

Signed on behalf of the Council and Staff of the Bedford College, London.*

W. J. Russell,
Chairman of the Council.
Percy J. Harding,
Chairman of the Staff.

* There are five dissentients to the principles of this pamphlet.

APPENDIX No. 7.

Paper *handed in by* N. C. Macnamara, *Esq., F.R.S., June 23rd*, 1892. *See Question* 4018.

Table I.—Numbers of Registered Practitioners possessing Degrees in Medicine, M.D. and M.B., in the United Kingdom, in the Army and Navy, Indian and Merchant Services, and resident Abroad, according to the Medical Directory of 1892.

—	Number of Practitioners.	Number of Practitioners possessing M.D. or M.B. Degrees.	Per-centage of Practitioners possessing Degrees.
London	5,313	2,220	41·7
Provinces, England	14,041	5,361	38·1
Total for England	19,354	7,581	38·6
Scotland	2,852	2,314	81·1
Ireland	2,451	996	40·6
Army, Navy, India, &c.	2,410	1,071	44·4
Practitioners resident abroad	2,968	1,276	42·9
Total	30,035	12,258	40·8

Table III.—Showing in Per-Centages the Sources of the M.D. and M.B. Degrees held in England, Scotland, and Ireland. These figures signify the per-centages of English, Scotch, Irish, and Foreign Degrees respectively as compared with all the Degrees in each Country, and in the Army, Navy, and Abroad. *See* Tables I. and II.

—	London University Degrees.	Other English Degrees.	Scotch Degrees.	Irish Degrees.	Foreign Degrees.
London	20·1	19·0	42·4	7·4	10·0
Provinces, England	9·6	14·4	59·8	11·0	4·9
England, All	11·6	15·7	54·9	10·1	6·4
Scotland	0·8	0·2	98·7	0·4	0·3
Ireland	0·4	0·4	15·3	82·9	0·8
Army and Navy, &c.	2·9	3·9	47·4	43·2	1·4
Practitioners abroad	5·2	4·1	59·7	16·3	14·3
Total	8·8	10·5	64·1	18·5	5·6

Table II.—Totals of Degrees, M.D. and M.B., held in England, Scotland, and Ireland, the Services, and Abroad, according to the "Medical Directory" of 1892.

—	London University Degrees.	Other English Degrees.	Scotch Degrees.	Irish Degrees.	Foreign Degrees.	Total of all Degrees.
London	446	422	952	176	224	2,220
Provinces, England	515	772	3,212	595	267	5,361
England (all)	961	1,194	4,164	771	491	7,581
Scotland	7	6	2,283	10	8	2,314
Ireland	4	4	153	826	9	996
Army, Navy, &c.	42	42	508	463	16	1,071
Practitioners Resident abroad	67	53	764	209	183	1,276
Total	1,081	1,299	7,872	2,279	707	13,238

TABLE IV.—NUMBER of GRADUATES in MEDICINE admitted during the Five Years 1887–1891 in England.

University.	Total Degrees in Medicine.	Average per Annum Degrees in Medicine.
Oxford	65	13·
Cambridge	298	59·6
London	339	67·8
Durham	296	59·2
Victoria	58	11·6
Total	1,056	211·5

N.B.—The figures in this and the three following tables have been obtained from the "Medical Directory." They are probably not strictly accurate, as they represent only those graduates who were in practice at the end of the period referred to, but they may be taken as sufficiently correct for practical purposes.

TABLE V.—NUMBER of GRADUATES in MEDICINE admitted during the Five Years 1887–1891 in Scotland.

University.	Total Degrees in Medicine.	Average per Annum.
Edinburgh	1,116	223·2
Glasgow	573	114·6
Aberdeen	317	79·5
St. Andrews	41	8·5
Total	2,047	409·4

TABLE VI.—NUMBER of GRADUATES in MEDICINE admitted during the Five Years 1887–1891 in Ireland.

University.	Total Degrees in Medicine.	Average per Annum.
Dublin	230	46·
Queen's and Royal University of Ireland	238	47·6
Total	468	93·6

TABLE VII.—NUMBER of GRADUATES in MEDICINE admitted during the Five Years 1887–1891 in the United Kingdom.

——	Total Degrees in Medicine.	Average per Annum.
Total English Universities	1,056	211 2
Total Scotch Universities	2,047	409·4
Total Irish Universities	468	93·6
Total United Kingdom	3,571	714·2

TABLE VIII.—SHOWING the PER-CENTAGE of MEDICAL MEN obtaining DEGREES in MEDICINE to the total number of those admitted the Register as qualified during the Five Years 1887–1891.

——	Number Qualified.	Number of Degrees.	Per-centage of Degrees.
England	3,387	1,056	31·1
Scotland	2,277	2,047	89·0
Ireland	967	468	48·2
Total for United Kingdom	6,631	3,571	53·8

TABLE IX.—SHOWING the PER-CENTAGE of STUDENTS that obtain DEGREES in MEDICINE in each of the three Kingdoms.

——	Number of Students, 1882–1886.	Number of Degrees, 1887–1891.	Per-centage.
England	4,931	1,056	24·0
Scotland	3,063	2,047	66·8
Ireland	1,940	468	24·1
Total	9,394	3,571	38·0

(Corresponding to Table X.)

SHOWING the SOURCE as regards COUNTRY of the QUALIFICATIONS of the Successful, and the Per-centage of Unsuccessful Candidates at the Examination for Commissions in the Medical Departments of the Army (August 1890, February and August 1891) and Navy (February and November 1891) and the Indian Medical Service (August 1890, February 1891).

Source of Qualification as regards Country.	Total Number of Candidates.	Passed for Vacancies.	Qualified but Unsuccessful for Vacancies.	Rejected.	Per-centage of Unsuccessful and Rejected.
England	118	62	55	1	47·4
Scotland	78	27	47	4	65·2
Ireland	88	30	48	10	65·9
Total	284	119	158	15	58·1

N.B.—It should be noted that of the 118 candidates possessing English qualifications, no fewer than 92, or 77·9 per cent., had no University degree.

SHOWING RESULTS (as in Table X.) of EXAMINATIONS for Indian Service taken alone.

Source of Qualification as regards Country.	Total Number of Candidates.	Passed for Vacancies.	Qualified but Unsuccessful for Vacancies.	Rejected.	Per-centage of Unsuccessful and Rejected.
England	43	14	28	1	67·4
Scotland	32	7	24	1	78·1
Ireland	13	6	10	0	62·5
Total	91	27	62	2	70·3

Appendix No. 8.

APPENDIX No. 8.

PAPER *handed in by Professor* KARL PEARSON, *M.A., on June* 29, 1892. *See Question* 5366.

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The Rev. J. Strauss, Ph.D., M.A., Lecturer on Semitic Languages in the Yorkshire College, Leeds.
A. W. Schüddekopf, M.A., Ph.D., Lecturer on German Language and Literature in the Yorkshire College, Leeds.
P. L. Sclater, Ph.D., F.R.S., Secretary of the Zoological Society of London.
James Sully, M.A.
J. J. H. Teale, M.A., F.R.S., Geological Museum, Jermyn Street.
John Tyndall, D.C.L., LL.D., F.R.S.
W. A. Tilden, D.Sc., F.R.S., Professor of Chemistry in the Mason Science College, Birmingham.
T. E. Thorpe, F.R.S., Professor of Chemistry in the Royal College of Science.
W. C. Unwin, F.R.S., Professor of Engineering in the City and Guilds Central Institution.
Augustus D. Waller, M.D., F.R.S., Lecturer on Physiology, St. Mary's Hospital Medical School.
H. Marshall Ward, Sc.D., F.R.S., late Fellow of Christ's College, Cambridge; Professor of Botany in the Forestry School, Royal Indian Engineering College, Cooper's Hill.
James Ward, Sc.D., LL.D., Fellow and Assistant Tutor of Trinity College, Cambridge.
W. F. R. Weldon, M.A., F.R.S., Fellow of St. John's College, Cambridge; Jodrell Professor of Zoology in University College, London.
F. E. Weiss, B.Sc., Professor of Botany in the Owen's College, Manchester.
B. C. A. Windle, M.A., M.D., D.Sc., Professor of Anatomy and Dean of the Medical Faculty, Queen's College, Birmingham.
Joseph Wright, Ph.D., Deputy Professor of Comparative Philology in the University of Oxford.
Sidney Young, D.Sc., Professor of Chemistry in University College, Bristol.

Names received since the above was handed in :—

Arthur Berry, M.A., Fellow and Lecturer of King's College, Cambridge, Fellow of University College, London.
R. B. Clifton, F.R.S., Professor of Experimental Physics in the University of Oxford.
M. H. N. Storey Maskelyne, F.R.S., Professor of Mineralogy in the University of Oxford.
Robert Adamson, M.A., Professor of Logic and Philosophy in the Owen's College, Manchester.
Edward Clodd.
W. P. Wynne, D.Sc.
Henry Sweet, M.A.
Dawson Williams, M.D., B.S.
A. H. Sayce, M.A., Professor of Assyriology and Fellow of Queen's College, Oxford.
The Rev. Richard Morris, LL.D., Past President of the Philological Society.
Robert H. Smith, M.I.M.E., Assoc. M.I.C.E., Professor of Engineering in the Mason College, Birmingham.
A. A. Macdonell, M.A., Professor of Sanskrit in the University of Oxford.
H. H. Hoffert, D.Sc. (Lond.), Associate of the Royal School of Mines, Demonstrator of Physics in the Royal College of Science.
Ludwig Mond, F.R.S.
H. Courthorpe Bowen, M.A.
The Rev. H. N. Grimley, M.A., Rector of Norton, and formerly Professor of Mathematics in the University College of Wales.
G. L. Gomme, President of the Folklore Society.
George Fiedler, Ph.D., Professor of the German Language and Literature in the Mason College, Birmingham.
J. J. Bottomley, M.A., D.Sc., F.R.S., Glasgow University.
T. F. Tout, M.A., Professor of History in the Owens College, Manchester.
A. S. Napier, Ph.D., Professor of English Language and Literature in the University of Oxford.
W. H. Perkin, Jun., Ph.F., F.R.S. (L. & E.), Professor of Chemistry in the Heriot Watt College, Edinburgh.
J. D. Everett, M.A., F.R.S., Professor of Physics in Queen's College, Belfast.
Kuno Meyer, M.A., Ph.D., Lecturer in the Teutonic Languages, University College, Liverpool.
Walter Baily, M.A., late Fellow of St. John's College, Cambridge.

Appendix No. 9.

APPENDIX No. 9.

PAPER *handed in by* PROFESSOR KARL PEARSON, *M.A., on June 29th*, 1892:—*See Questions* 5398 *and* 5418.

THE PROPOSED GRESHAM UNIVERSITY.

SIR,

THE following list gives the names of those members of the corporation and teaching staff of University College, London, who have signed the protest against the granting of the Gresham Charter, of which a copy was sent to you on Monday, and which is here reprinted. The signatures are arranged alphabetically.

We are, &c.
F. W. OLIVER.
W. F. R. WELDON.

PROTEST:

WE the undersigned governors, life governors, fellows and members of the teaching staff of University College, London, desire to express our dissatisfaction with the provisions of a Charter for a teaching University for London at present before Parliament, and we trust that the granting of this Charter may be suspended until its provisions have been modified, or until it has been referred to the Royal Commissioners of 1888–89 for further consideration.

Sir F. Abel, K.C.B., D.C.L., F.R.S., &c.
The Rev. H. N. Adler, Ph.D., Chief Rabbi.
Tempest Anderson, M.D., B.S., B.Sc.
F. de Courcy Atkins.
I. B. Balfour, M.A., F.R.S., &c., Professor of Botany, in the University of Edinburgh.
Surgeon-Major J. S. Bostock, C.B.
Mrs. Bruce.
E. H. Busk, M.A., LL.B.
Rev. J. E. Carpenter, M.A.
H. S. Carter, F.R.S.
E. Rider Cook.
H. Astley Darbishire.
Sir J. N. Douglass, C.E., F.R.S.
W. T. Thistleton Dyer, C.M.G., M.A., F.R.S., Director of the Royal Gardens, Kew.
Talfourd Ely, M.A., late secretary to University College.
Sir T. H. Farrer, Bart.
E. Filliter, C.E.
F. Fletcher.
Professor W. H. Flower, C.B., LL.D., F.R.S., Director of the British Museum of Natural History.
H. Fordham.
E. Frankland, D.C.L., LL.D., F.R.S., &c.
Sir Julian Goldsmid, Bart., M.P.
A. B. Penn Gaskell.
M. Gurney.
The Rev. R. P. Graves.
F. Haines.
T. D. Hall.
George Harley, M.D., F.R.S.
A. S. Harvey, B.A.
R. B. Hayward, M.A., F.R.S.
The Right Hon. Lord Herschell.
F. Hepburn.
The Right Hon. Lord Hobhouse, K.C.S.I.
R. Lee Holland.
H. Hudleston, F.R.S., President of the Geological Society.
R. Holt Hutton.
T. H. Huxley, LL.D., ex-President of the Royal Society.
S. J. Johnson, town clerk of Nottingham, on behalf of the Corporation.
J. N. Keynes, M.A., B.Sc.
E. Ray Lankester, M.A., LL.D., F.R.S., Linacre Professor of Human and Comparative Anatomy, Oxford; late Jodrell Professor of Zoology in University College, London.
W. S. Lean, M.A.
J. Norman Lockyer, F.R.S., Professor of Astronomy in the Royal College of Science.
O. J. Lodge, D.Sc., F.R.S., Professor of Physics in University College, Liverpool.
Sir Philip Magnus.
The Rev. James Martineau, D.D., LL.D.
Russell Martineau, M.A.
J. C. C. McCaul.
The Right Hon. J. W. Mellor, Q.C.
The Right Hon. A. J. Mundella, M.P.
Daniel Oliver, LL.D., F.R.S., Emeritus Professor of Botany, in University College, London.
F. W. Oliver, M.A., D.Sc., Professor of Botany in University College, London.
W. Paice, M.A.
Karl Pearson, M.A., Professor of Applied Mathematics, University College, London.
A. J. Pepper, M.S., B.A., Surgeon to St. Mary's Hospital.
W. Piper.
The Rev. C. Platts, M.A., Fellow of Trinity College, Cambridge.
Joseph Prestwich, D.C.L., F.R.S., late Professor of Geology in the University of Oxford.
W. H. Ransom, M.D., F.R.S.
S. Rideal, D.Sc.
The Most Hon. the Marquis of Ripon, K.G., D.C.L., F.R.S.
R. D. Roberts, D.Sc.
H. Roby, M.P.
G. J. Romanes, LL.D., F.R.S.
C. S. Roundell.
J. Burdon Sanderson, M.D., F.R.S., Waynflete Professor of Physiology in the University of Oxford; late Professor in University College, London.
E. M. Skerritt, M.D., B.S., B.A.
The Rev. Henry Solly.
J. M. Solomon, M.A.
G. Scharf, C.B., Director of the National Portrait Gallery.
T. Starkey Smith, M.B.
J. J. Sylvester, M.A., F.R.S., Savilian Professor of Geometry in the University of Oxford.
E. Wynne Thomas, M.D.
W. Cave Thomas.
Fielden Thorp.
H. R. Tomkinson.
J. H. Trouncer.
J. J. Tweed, F.R.C.S.
E. B. Tylor, LL.D., F.R.S.
J. Warren, LL.B.
W. F. R. Weldon, M.A., F.R.S., Jodrell Professor of Zoology in University College, London.
E. West.
R. F. Weymouth, D. Lit.
A. S. Wilkins, LL.D., Professor of Latin in the Owens College, Manchester.
T. Wilson.
W. H. Winterbotham.
R. Wormell, D.Sc.
Sir Rutherford Alcock, K.C.B.
G. G. Blake, M.D.
H. T. Cohen.
T. W. Rays Davids, Ph.D.
P. T. Duncan, M.D.
J. G. Fitch, M.A.
James Fletcher.
Theodore Fry, M.P.
Rev. Martin Lewis.
Sir John Lubbock, M.P., F.R.S.
Sir Henry Bessemer, F.R.S.
J. Wilson Swan.
The Right Hon. Lord Monkswell.
F. Nettlefold.
Rev. J. E. Odgers.
J. A. Russell, Q.C.
Sir Henry Roscoe, M.P., F.R.S.
The Hon. Frederick Strutt.

APPENDIX No. 10.

PAPER *handed in by* J. L. CLIFFORD SMITH, *Esq., on July 15th*, 1892. *See Question* 7505.

ROYAL HOLLOWAY COLLEGE.

The College opened in October 1887. There were then 28 students on the roll. In the year ending July 1892 there were 75 on the roll.

LONDON UNIVERSITY EXAMINATIONS.

1888.

In January 1888 two students were presented for Matriculation.
In June 1888 eight students were presented for Matriculation.
In July 1888 six students were presented for Inter. B.A.
In July 1888 three students were presented for Inter. B.Sc.
In October 1888 one student was presented for B.A. degree.

1889.

In January 1889 three students were presented for Matriculation.
In June 1889 one student was presented for Matriculation.
In July 1889 ten students were presented for Inter. B.A.
In July 1889 one student was presented for Inter. B.Sc.
In October 1889 three students were presented for B.A. degree.

1890.

In January 1890 two students were presented for Matriculation.
In June 1890 seven students were presented for Matriculation.
In July 1890 five students were presented for Inter. B.A.
In October 1890 nine students were presented for B.A. degree.
In October 1890 two students were presented for B.Sc. degree.

1891.

In January 1891 four students were presented for Matriculation.
In June 1891 six students were presented for Matriculation.
In July 1891 six students were presented for Inter. B.A.
In July 1891 six students were presented for Inter. B.Sc.
In October 1891 twelve students were presented for B.A. degree.
In October 1891 one student was presented for B.Sc. degree.

1892.

In January 1892 three students were presented for Matriculation.
In June 1892 two students were presented for Matriculation.
In July 1892 eleven students are to be presented for Inter. B.A.
In July 1892 six students are to be presented for Inter. B.Sc.
In October 1892 seven students are to be presented for B.A. degree.

Since the College opened :—
Twenty-seven students have passed the Matriculation Examinations of the University of London.
Eighteen students have passed the Intermediate Arts Examination.
Four students have passed the Intermediate Science Examination.
Seventeen students have taken their B.A. degree.
One student has taken her B.Sc. degree.

LONDON HONOURS.

Matriculation.

Four students have been placed in the Honours Division.
One was placed 1st in Honours Division.
" " " 10th " "
" " " 50th " "
" " " 100th " "

Intermediate Arts.

French Honours.

One student was placed 1st in Class I.
" " " " 1st in Class II.
" " " " 2nd in Class II.
" " " " 2nd in Class III.

German Honours.

One student was placed 2nd in Class I.
" " " " 1st in Class II.
" " " " 1st in Class III.
" " " " 2nd in Class III.

Examination for degree of B.A.

French Honours.

One student was placed 2nd in Class I.

German Honours.

One student was placed 3rd in Class I.
" " " " 3rd in Class I.
" " " " 1st in Class II.

English Honours.

One student was placed 10th in Class II.

Classical Honours.

Two students were bracketed 1st in Class I.
One student was placed 7th in Class II.
" " " " 4th in Class III.

OXFORD HONOURS.

1891.

Honour Moderations (Mathematics).

Two students in Class II.
One student in Class III.

1892.

Honour Moderations (Mathematics).

One student in Class II.

Honour Moderations (Classics).

Two students in Class II.
One student in Class III.

Final Honours (English).

One student in Class I.
Two students in Class II.

APPENDIX No. 11.

PAPER *handed in by* W. H. ALLCHIN, *Esq., M.B., F.R.C.P., M.R.C.S., on July 15th*, 1892. *See note after Question* 8015.

OUTLINE SCHEME of a NEW UNIVERSITY for LONDON, having special reference to the constitution of the Medical Faculty, and the place therein of the Royal Colleges of Physicians and Surgeons.

I REGARD it as *essential* in the formation of a new University for London that—

1. There be only one University in London.
2. That such University grant separately both Pass and Honours degrees in the subjects of Arts, Science, Medicine, and Laws, and such others as may from time to time be thought to be desirable.

Appendix No. 11.

3. That the Pass degrees—certainly in Medicine—be primarily designed to meet the requirements of students educated wholly or in great part in Metropolitan Schools and Hospitals.

4. That a degree in Medicine be a License to Practise, and the Pass Examinations in the professiona subjects shall be carried out, under the supreme control of the Senate, by the Royal Colleges of Physicians and Surgeons, associated for that purpose.

5. That Teachers should be represented on the Senate of the University, elected by teachers in the several Faculties, but that Teaching Institutions as such should not be represented on the Senate.

6. Bodies such as the Royal Colleges of Physicians and Surgeons, the Council of Legal Education, and the Incorporated Law Society—and if there should come to be constituted any analogous bodies in respect to the subjects of Arts and Sciences—should be represented on the Senate.

I further think it *desirable* (i.) that the constitution, regulations, and conditions of graduation in the several Faculties be made as uniform as circumstances permit, and that no one Faculty—Medicine, for instance—be placed in an exceptional position.

(ii.) That the same Matriculation Examination be passed by all candidates whether for Pass or Honours degrees, and in all Faculties, and that this Examination should not, as at present, be of such a character as to be practically equivalent to an Arts degree in some Universities.

(iii.) That, speaking generally, and more especially in reference to the Pass degrees, that such degrees should be granted on evidence of education, for at least some period, at places of instruction recognised by the University, as well as of knowledge, as tested by University Examiners, and that such places should be within the Metropolitan area. A greater laxity in this respect might be permitted for the Honours degrees where the examinations, being essentially of a competitive character (candidates being placed in order of merit), the candidates would be fewer and the examinations more prolonged and searching than those for the Pass degree, all which might be taken to compensate for a possibly diminished period of study at recognised places of study, and such recognised places of study for Honours degrees need not necessarily be in London.

In order to meet the case of students who should have obtained their information by private study, attendance at evening classes, or at University extension, or other casual methods of instruction, the Senate should be empowered to hold examinations for such persons, who, on giving evidence of fitness, might receive some title, as Associate of the University in Arts and Science, but such arrangement should not apply to Medicine or Law.

(iv.) That subsequent to passing the Matriculation Examination, the candidate shall declare his intention, before presenting himself for further examination, of taking either Pass or Honours degree, but whilst the taking of a Pass degree be not a requisite preliminary to taking an Honours degree, yet having taken a Pass degree shall not prevent the subsequent taking of an Honours degree, provided the candidate shall have passed all the Honours Examinations for the degree; and it shall be permissible for a candidate who may have passed any of the Honours Degree Examinations to transfer to the corresponding Pass Degree Examination, if he think fit.

(v.) That the examinations for a Degree in Medicine, both Pass and Honours, subsequent to the Matriculation Examination, be as at present:—

1. An Examination in Natural and Physical Science.
2. ,, ,, ,, the Subjects of the Intermediate M.B.
3. ,, ,, ,, the Subjects of the Final M.B.
4. ,, ,, ,, ,, ,, M.D.

(vi). That the Royal College should be allowed to retain their power of granting the diplomas of L.R.C.P. and M.R.C.S., as at present, on their own conditions, in order to supply a lower grade of general practitioners which experience shows it is needful to provide. It is worthy of consideration how far the Society of Apothecaries may be combined in this arrangement in view of the great desirability of reducing the number of licensing bodies.

(vii.) That the Senate of the University should be constituted as follows:—

Elected by Crown:		
Chancellor and Vice-Chancellor		2
Other Crown Elected Members:		
Arts	6	
Science	6	= 17
Law	3	
Medicine	2	
Elected by these bodies respectively:		
Representatives of R.C.P.	2	
,, R.C.S.	2	
,, ,, Council of Legal Education, Incorporated Law Society	3	= 7
Elected by each Faculty, Representatives of four Faculties, three for each		= 12
Elected by Convocation after University has existed, say 10 years, Representatives of Convocation, one for each Faculty		= 4
		42

Should there come to be formed, as mentioned above, in the subjects of Arts or Science, bodies analogous to the Royal College of Physicians and Surgeons, or the Council of Legal Education, such bodies might be represented on the Senate, as are the Royal Colleges, but with a corresponding diminution in the number of Crown members in that subject. And should other Faculties than the four mentioned be constituted, they should be represented in a similar manner to the four thus provided for.

(viii.) That the members of the Senate representing the separate subjects of the four Faculties should, with the Vice-Chancellor, form Standing Grand Committees, where the matters concerning their respective Faculties should first receive consideration.

(ix.) That the Standing Grand Committee in Medicine (consisting of the Vice-Chancellor, two Crown members in Medicine, the four representatives of the Royal Colleges of Physicians and Surgeons, the three representatives of the Faculty of Medicine, and in time the Medical representative of Convocation, eleven in all) have power to confer with the Royal Colleges of Physicians and Surgeons, either directly or through the representatives of those Colleges on the Committee, and also with the Board of Studies in the Faculty of Medicine, in the preparation of a scheme of examination and curriculum of education for the professional subjects of the Pass degrees in Medicine, viz., the Intermediate and Final M.B. Examinations, and the B.S., M.S., and M.D. Examinations, it being understood that the arrangements laid down, and subsequent modifications thereof, if any, shall be with the consent of the Royal Colleges, in whom shall be vested the entire conduct of the examinations mentioned, a certain minority of the Examiners in each subject to be appointed by the Senate, and who shall be in all respects equal in position to those appointed by the Royal Colleges, but who shall, if so required by the Senate, report separately to the Senate's Standing Grand Committee in Medicine on any examination, it being understood that such Examiners shall be selected from the Metropolitan Hospitals and Schools. Under this arrangement, the University and Royal College Examiners shall be paid alike out of the fees received from candidates, and that a small capitation fee be paid to the University chest out of the fees paid by each candidate who shall pass.

(x.) That candidates who shall pass the examinations under this arrangement shall, on completing the Pass M.B. degree, receive the diplomas of the Royal Colleges, as well as the M.B. degree, so far as the regulations of the Royal Colleges permit.

(xi.) That Honour degrees in Medicine shall be arranged for by the Standing Grand Committee in Medicine (in which the Royal College and teachers through its Faculty representatives will have a predominant voice in determining), but without reference to the Royal College for assent as in the case of the Pass degrees, and the Examiners for the Honours Examinations be entirely appointed by the Senate.

(xii.) Candidates, so far as the regulations of the Royal Colleges permit, who shall have passed the Honours M.B. degree shall be admitted to the L.R.C.P. or M.R.C.S. (or both) on payment of such fees as each Royal College shall determine, without further examination. But it would seem probable that Honours

graduates would more likely proceed to the M.R.C.P. or F.R.C.S. (or both), the conditions for granting which are to remain as heretofore, entirely in the hands of the respective Colleges, without reference to each other or to the new University.

(xiii.) That places of education, recognised by the University, shall be of two kinds, viz., Colleges of the University and recognised institutions, and such places shall be admitted to their positions on application, and after consideration of the claim by the Standing Committee of the Senate in the Faculty or Faculties to which the institution professes to belong. In granting admission of any place of education to either grade, the Standing Committee shall invite an expression of opinion from the Board or Boards of Studies interested, and shall be satisfied of the adequate fitness of the place in all respects to give instruction in the subjects for degrees in the Faculty or Faculties concerned, and shall consider the place applying from the points of view enumerated in the late revised scheme of the Senate of the University of London, viz., character of teaching and educational appliances; character of foundation; age of students; relation of the College to any other University. The distinction between the two grades of associated teaching institutions would be that, whilst all would have to prove their efficiency and be subject to inspection, and, if need be, removed from their position when inefficient, subject to appeal to Her Majesty in Council, the Colleges of the University would allow to the Senate a voice by representatives nominated by the Senate in the management of the said Colleges, and especially in the appointment of Professors, the teachers in the recognised institutions being quite independent of the Senate as regards their appointment. It shall be entirely at the discretion of the Senate whether it will by its participation in the management of an institution confer collegiate rank on such place, however willing and desirous the said institution be to obtain the position. In the case of the Colleges, all the recognised teachers shall be members of the Faculty or Faculties concerned, whilst much smaller representation thereon shall be accorded to the other institutions, such number to be determined by the Senate in conference with the Board or Boards of Studies concerned.

(xiv.) That the Senate have power to appoint University Professors in any subject (who may be attached to certain of the Colleges), who are to be paid by the University. Attendance at a course or courses of instruction delivered by such Professors may be imposed by the Senate as "a requisite condition for admission to the Honours Examination." Such Professors should be members of the Boards of Studies in their respective Faculties.

(xv.) That the constitution and powers of the Faculties and Boards of Studies, with the view of affording the fullest representation to teaching, be, consistently with what applies to them in the foregoing, on similar lines to those indicated in the Revised Scheme of the University of London or in the Gresham Charter.

W. H. ALLCHIN.

May 1892.

APPENDIX No. 12.

PAPER *handed in by the Rev.* H. WACE, *D.D., July 20th*, 1892. *See Question* 8811.

For the purpose of establishing a Faculty of Theological Science in the Gresham University, the following amendments in the Charter are jointly recommended by the Councils of the various colleges mentioned below, and by the Council of King's College:—

In Clause II., p. 2, after Paragraph I., insert:—

"The following Theological Colleges shall be and are "hereby constituted Colleges of Theological Science "in the University":—

Cheshunt College.
Hackney College, New West End.
New College, South Hampstead.
Presbyterian College, Guildford Street.
Regent's Park College.
Wesleyan College, Richmond.

In Clause III., p. 3, after the word "Arts," in line 2, insert the words, "Theological Science."

In Clause IX., p. 6, after line 9, insert:—"Three "members nominated by the above-named Colleges of "Theological Science."

In the same clause, line 14, after the words "Arts" insert the words "Theological Science."

To be added at the end of Clause X.:—

Nor shall the Council appoint any Lecturer in any subject included in the Faculty of Theological Science except on the recommendation of the Board of Study of that Faculty.

To be added at the end of Clause XXV.:—

The Council shall not require it as a condition of a degree that the student shall have attended the lectures of any particular Professor or Lecturer.

For Clause XXVII. substitute:—

"The London District for the purposes of the Uni-"versity shall be a circle of 15 miles' radius from the "Guildhall."

H. R. REYNOLDS, D.D.,
Principal of Cheshunt College.
HENRY WACE, D.D.,
Principal of King's College.

Appendix Nos. 12 and 13.

APPENDIX No. 13.

PAPER *handed in by the Rev.* H. WACE, *D.D., July 20th*, 1892. *See Question* 9169.

EXAMPLES of some of the ORIGINAL INVESTIGATIONS of the SCIENTIFIC STAFF of KING'S COLLEGE.

A few are given as illustrations.

In Anatomy:—
- "Notes of some muscular abnormalities and nerve "irregularities."
- "Variations in the arrangement of the extensor "muscles of the forearm."

In Bacteriology:—
- "On flagellated protozoa in the blood of diseased "and apparently healthy animals."
- "Anthrax in swine."
- "Tubercular mammitis."
- "History and pathology of Actinomycosis."
- "Remarks on the cholera bacillus of Koch."
- "On madura foot."
- "On the products of the growth of tubercle bacillus."

In Chemistry:—
- On the composition and optical properties of certain double salts of nickel and cobalt.
- The action of nuclei in determining the crystallisation of supersaturated solutions.
- The action of constituent salts in determining the crystallisation of supersaturated solutions of compound and mixed salts.
- On certain compounds of albumen with acids.
- On potassium triiodide.
- On picric acid as a test for albumen and sugar in the urine.
- On kreatinius.
- On the bases (organic) in the juice of flesh.
- On certain sources of error in organic analysis.
- On the use of sodium cleate in determining the hardness of waters rich in magnesium salts.
- Volumetric estimation of antimony in presence of tin.
- On the formation and constitution of glyceryl arsenite.

The Daniell scholarship for original research has been taken 12 times since 1870. Most of the papers containing the record of the work for the scholarship have been published in the Journal of the Chemical Society. Among the investigations may be mentioned the following:—
- On the constitution of the hyponitrites.
- On the composition of some of the salts of albumen.
- On the hyponitrites of silver and sodium conditions of the formation of the oxides of nitrogen under the influence of the electric discharge.
- On the products of the decomposition of bromides and iodides by sulphuric acid under different conditions.

Appendix Nos. 13 and 14.

On the nature and cause of explosion in so-called explosive pyrites.
On the synthetical production of urea from benzene, ammonia, and air by the action of heated platinum.
And others.

In Geology and Physical Geography:—
Researches on the structure, organisation and classification of the fossil reptilia.
On the parts of the skeleton of a mammal from triassic rocks of Kliptonfein, Frasenberg, South Africa, illustrating the reptilian inheritance in the mammalian head.
On associated bones of a small anomodont reptile showing the relative dimensions of the anterior parts of the skeleton and structure of the fore limb and shoulder girdle.
On the anomodont reptilia and their allies.
Further observations on Pareiasaurus.
Handbook of the London Geographical Field Class.
On the nature and limits of reptilian character in mammalian teeth.
Note on the pelvis of ornithopsis.
On Agrosaurus Macgillurągi, a Saurischian reptile from north-east of Australia.
On the ornithosaurian pelvis.
On the shoulder girdle in cretaceous ornithosauria.
On the os pubis of Polocanthus Foxii.
On Delphinognathus conocephalus from the Middle Kavoo Beds, Cape Colony, preserved in the South African Museum, Cape Town.
And numerous other original papers.

In Physics:—
Communications on the comparison of simultaneous magnetic disturbances at several observations.
Improvements in the measuring polariscope.
Many publications on researches into the influence of stress and strain upon the physical properties of matter.
On the electro-motive force of certain tin cells.
On the divergence of electro-motive forces from thermo-chemical data.
And many others.

In Physiology:—
On the latent period of the contraction of the skeletal muscle.
Significance of the latent period.
On the cause of the first sound in the heart.
Results of experiments on the motor areas of the cortex cerebri.
On the composition of human bile obtained from a fistula.
On the sound accompanying the single contraction of skeletal muscle.
The minimal interval at which the summation of two maximal stimuli occurs in striated muscle.
On the audibility of single sound waves.
Pathological effusions.
The proteids of milk.
Mucus in myxœdema.
Communications on liver, kidney, urine, and nervous structures.
Physiology of asphyxia.
Fibres of retiform tissue.
The pigment of the retinal cells.
On lacto-globulin.
On fractional heat coagulations of proteids.
A new venous manometer.
Elasticity of muscle.
Histological method.
And others.

In Neuro-pathology and Physiology:—
Researches in cerebral physiology and pathology.
Note on the motor roots of the brachial plexus and on the dilator nerve of the iris.
Celebral localisation.
The functional relations of the motor roots of the brachial and limbo sacral plexus.
The localisation of functions in the brain.
And many other original papers.

In medicine, surgery, the microscope, &c., &c., many communications of numerous researches.
Fifty-four original papers in the Royal Society's catalogue under the name of one member of the present staff.

APPENDIX No. 14.

PAPER *handed in by* SIR JAMES PAGET, *Bart., on July 22nd*, 1892. *See Question* 9771.

UNIVERSITY OF LONDON.

REVISED SCHEME.

[N.B.—*The clauses are re-numbered: to each clause is appended the number of the corresponding clause in the former draft.*]

I.—*Objects of Incorporation.*

1. The purposes of the incorporation of the University to be so defined as to include, in addition to the existing purposes, the promotion of regular and liberal education throughout Her Majesty's dominions, and especially in the metropolis and its neighbourhood. (1.)

II.—*Constitution, &c.*

2. The University to consist of—
i. Senate,
ii. Convocation,
iii. Constituent Colleges,
iv. Faculties,
v. Boards of Studies,
with the Queen as Visitor. (2.)

III.—*Senate.*

Constitution of the Senate.

3. The Senate shall consist (in its final form) of the Chancellor and 51 Fellows to be appointed as follows:—

i.	The Chancellor and nine Fellows to be nominated by the Crown - -	10
ii.	The Chairman of Convocation (*ex officio*) and nine other Fellows to be elected by Convocation, as follows:	
	By the Graduates in Arts - 2	
	By the Graduates in Science - 2	
	By the Graduates in Medicine 2	
	By the Graduates in Law - 2	
	In rotation by (1) the Graduates in Arts, and (2) the Graduates in Medicine - 1	
	Members of Convocation only to vote, and each member to be entitled to vote in respect of each of the said four subjects in which he holds a degree - - -	10
iii.	The President of University College, London (*ex officio*), the Principal of King's College, London (*ex officio*); and four other Fellows, two to be elected by each of those Colleges -	6
iv.	The Presidents of the Royal College of Physicians of London and the Royal College of Surgeons of England (*ex officio*); and two other Fellows, one to be elected by each of those Colleges - - - -	4
v.	The President or Chairman of each of the following bodies, viz.: the Council of Legal Education and the Incorporated Law Society (*ex officio*) - - - -	2
vi.	To be elected by the Principals or Chief Officers of the Provincial Constituent Colleges - -	4
vii.	To be elected by the London Faculties as follows:—	
	By the Faculty of Arts - 3	
	By the Faculty of Science - 3	
	By the Faculty of Medicine - 3	
	By the Faculty of Law - 1	
	—	12
viii.	To be elected by the Provincial Faculties acting conjointly - -	4
		—
		52

(3, 6, 7, 8, 8*a*, 9, part of 44.)

Retirement of Members.

4. The Fellows, other than the existing Fellows and Fellows ex officio, shall retire as follows:—

In every year there shall retire one in each of the following groups—

(1.) Fellows nominated by the Crown.
(2.) Fellows elected by Convocation.
(3.) Fellows elected by University College.
(4.) Fellows elected by King's College.

The other elected Fellows shall retire so as to ultimately to give to each of such Fellows a three years' tenure of office.

The retirement of Fellows shall follow in each group the rule of seniority, or failing seniority shall be determined by lot, and any question as to the order of retirement shall be determined by the Vice-Chancellor, whose decision in writing shall be final. (10, 11, 17, 18.)

5. Any Fellow, other than the existing Fellows and Fellows ex officio, who shall not have attended any meeting of the Senate or of a Committee thereof during a consecutive period of two years shall thereupon retire. (10.)

6. Power to the Crown and electing bodies to fill up casual vacancies occurring by death, resignation, or otherwise; but any person so appointed shall retain his office so long only as the vacating Fellow would have retained the same if no casual vacancy had occurred. (12.)

7. Power to re-nominate and re-elect. (13.)

Temporary Provisions.

8. The existing members of the Senate shall continue as at present. (14.)

9. No new Fellow shall be nominated by the Crown until the number of present Fellows appointed by the Crown not on the nomination of Convocation has fallen below nine, and then only so as to bring the number up to nine. (14.)

10. No new Fellow shall be elected by Convocation until the number of present Fellows appointed by the Crown on the nomination of Convocation has fallen below nine, and then only so as to bring the number up to nine.

Until Convocation shall be in exercise of its powers to elect the whole nine Convocation Fellows, the election of Fellows shall be by the Graduates as follows:—the first shall be elected by Graduates in Arts, the second by Graduates in Laws, the third by Graduates in Science, and the fourth by Graduates in Medicine, and so on in succession. (14, 15.)

11. The power of all other bodies to elect Fellows and the power of the Fellows ex-officio to take their places as such shall take effect at once, or so soon as such bodies are constituted respectively. (16.)

12. The Senate shall have power to act though not fully constituted.

Standing Committees.

13. There shall be a Standing Committee of the Senate for the Faculties of Arts and Science in connexion with the London Constituent Colleges in those Faculties. This Committee shall consist of the President and Principal of University and King's Colleges, of the Fellows elected by these Colleges, of the six Fellows elected by the London Faculties of Arts and Science, and of ten other Fellows to be elected by the Senate annually. The business of the Committee shall be to promote the organisation, improvement, and extension of University teaching in Arts and Science in and for London, including the establishment of professorships and teacherships in London, and to discharge such functions in relation to the said Constituent Colleges, and the examination of students therefrom in Arts and Science, as the Senate may from time to time delegate to them. (25.)

14. There shall be a Standing Committee of the Senate for the Faculties of Arts and Science in connexion with the Provincial Constituent Colleges, which shall discharge such functions in relation to the Provincial Constituent Colleges and the examination of students therefrom in Arts and Science, as the Senate may from time to time delegate to them. (27.)

15. There shall be a Standing Committee of the Senate in relation to the Examinations in Arts and Science other than the Examinations conducted under arrangements with the Constituent Colleges.

16. There shall be a Standing Committee of the Senate for the Faculty of Medicine. This Committee shall consist of the Presidents of the two Royal Colleges, the two Fellows elected by the said Colleges, the five Fellows elected by the London Faculty of Medicine, and one Fellow, holding a chair in a Provincial Constituent College of Medicine, to be chosen by the Fellows elected by the Principals or Chief Officers of the Provincial Constituent Colleges, and the Fellows elected by the Provincial Faculties acting conjointly, and nine members to be elected by the Senate.

The business of the Committee shall be to discharge such functions in relation to the Medical Constituent Colleges and the examination of students in Medicine as the Senate may from time to time delegate to them. (27*a*.)

17. There shall be a Standing Committee of the Senate for the Faculty of Laws. This Committee shall consist of the President or Chairman of the Council of Legal Education and of the Incorporated Law Society respectively, of the Fellow elected by the London Faculty of Laws, and of four other members to be elected by the Senate annually. (27*b*.)

18. The Chancellor and Vice-Chancellor shall be ex-officio members of all Standing Committees. (28.)

19. The Standing Committees shall in all respects be subject to the control and direction of the Senate. (29.)

IV.—*Convocation.*

20. All elections by Convocation under this Scheme shall be conducted in such manner as Convocation may from time to time determine. (31.)

V.—*Constituent Colleges.*

London Constituent Colleges.

21. The London Constituent Colleges shall be—

In all the Faculties:

University College, London.
King's College, London.

In the Faculty of Medicine:

The Medical Schools of—
Charing Cross Hospital,
Guy's Hospital,
London Hospital,
Middlesex Hospital,
St. Bartholomew's Hospital,
St. George's Hospital,
St. Mary's Hospital,
St. Thomas's Hospital,
Westminster Hospital,

and the London School of Medicine for Women. (33.)

22. There shall be determined by agreement between the Senate and each Constituent College, or, failing agreement, by the decision of the Lord President of the Council, the number and qualifications of the Faculty or Faculties for the College.

23. The Senate shall have power from time to time to admit as London Constituent Colleges such other Colleges, in or near London, as (1) give academical instruction upon a complete system and an adequate scale in all the Faculties, and prepare, or are intended to prepare, students for Degrees in the University, or (2) give instruction upon an adequate scale in one or more, even though not in all, the Faculties, and prepare, or are intended to prepare, students for Degrees in the University; but shall previously invite an expression of opinion from the Board or Boards of Studies interested. The Senate shall consider in respect of every Institution seeking admission the following points:—

(*a*) The character of the teaching and of the educational appliances.
(*b*) The character of the foundation.
(*c*) The average age of the students.
(*d*) The number of students proceeding from the College to the University.
(*e*) The relation of the College to any other University. (32, 35.)

Appendix No. 14.

24. On the admission of a Constituent College the following matters shall be determined by the Senate, viz.:—

(a) The Faculty or Faculties to which the College shall belong.
(b) The number and qualifications of the Faculty or Faculties for the College.

25. The Senate shall have power, after consultation with the Board or Boards of Studies interested,—

(a) To increase or diminish the number of the Members of any Faculty or Faculties representing any Constituent College.
(b) To remove any institution from being a Constituent College, subject to an appeal to Her Majesty in Council. (37.)

Provincial Constituent Colleges.

26. The Provincial Constituent Colleges shall in the first instance be such Institutions situated in England or Wales, but not in or near London, as shall be determined by the Senate having regard to the conditions and matters contained in clause 23, and the determination to admit any Institution as a Provincial Constituent College shall include the matters specified in clause 24. In the case of any Institution whose claim to admission as a Provincial Constituent College is not allowed by the Senate the determination of the Senate shall be subject to an appeal to the Lord President of the Council. (37*a*.)

27. The Senate shall have power hereafter to admit as Provincial Constituent Colleges other Institutions situated as described in clause 26, and to remove any Institution from the number of Provincial Constituent Colleges; such powers to be exercised under the like conditions and limitations as are contained in clauses 23, 24, and 25 respectively. (37*b*.)

Present affiliated Colleges.

28. The affiliation of Colleges to the University as now existing shall cease. (38.)

Recognised Medical Institutions.

29. The Institutions from which the University receives Certificates for Degrees in Medicine shall retain their right of giving such Certificates, whether they be or be not Constituent Colleges. But the Senate shall have power, after consultation with the Board of Studies of the Faculty of Medicine from time to time to revise or to add to the list of such institutions, and to determine in what branches of medical education the Certificates of each of the said Institutions shall be received. (39, 40.)

VI.—*Faculties.*

London Faculties.

30. There shall be in connexion with the London Constituent Colleges four Faculties, viz.:—

(1.) Arts.
(2.) Science.
(3.) Medicine.
(4.) Laws.

All departments of knowledge in which examinations may be held by the University and which are not included in any other of the Faculties shall be included in the Faculty of Arts. (41, 42.)

31. Each Faculty shall consist of the Teachers of London Constituent Colleges as determined under the foregoing clauses 22 and 24. (43.)

32. The London Faculties shall elect members of the Senate as provided in clause 3. (44.)

33. Each Faculty shall elect members of a Board of Studies. (44*a*.)

34. The Chairman for the time being of the Board of Studies shall be the Chairman of the Faculty. (45.)

Provincial Faculties.

35. There shall be also in connexion with the Provincial Constituent Colleges Faculties in all subjects in respect of which such Colleges are respectively admitted.

The provisions of the foregoing clauses 30 to 34 shall apply to the Provincial Faculties, substituting the word Provincial for the word London in such clauses. (45*a*).

VII.—*Boards of Studies.*

London Boards of Studies.

36. There shall be for the London Faculties a Board of Studies in each Faculty. (46.)

37. Each Board of Studies shall consist of—

(a) Such a number of Members elected by the Faculty, being 4, 8, 12, or 16, as the Faculty shall from time to time determine.
(b) Two Members of Convocation elected by the Members of Convocation who are Graduates in the subject with which the Board of Studies is conversant.
(c) An Examiner in each subject in the Faculty in which examinations are for the time being held in the University.
(d) If the Board of Studies shall so think fit, such persons, whether Members of the University or not, eminent in the subject of the Faculty, not exceeding two in number, as may be from time to time elected by the Board. (47.)

38. One fourth of the Members of the Board elected by the Faculty shall retire each year. (48.)

39. Any casual vacancy among the Members elected by the Faculty occurring by death, resignation, or otherwise, shall be supplied by the Members of the Board; but any person so appointed shall retain his office so long only as the vacating Member would have retained the same if no casual vacancy had occurred. (49.)

40. The Members of the Board elected by Convocation and the co-opted Members shall retire every four years. (50.)

41. Retiring members of the Board shall be re-eligible. (51.)

42. The Examiners in each subject may, if more than one, agree upon one of themselves to be the Member of the Board of Studies. In case they fail to agree, the Examiner shall be nominated by the Vice-Chancellor in writing. (53.)

43. Each Board of Studies shall have the following powers and duties:—

(a) To elect a Chairman every year.
(b) To consider and report to the Senate upon any matter referred to it by the Senate.
(c) To represent to the Senate its opinion on any matter connected with the Degrees and Examinations and teaching of the subjects of its Faculty.
(d) To deliberate, if so requested, in conjunction with the Senate or any Committee thereof. (54.)

Provincial Boards of Studies.

44. There shall also be Boards of Studies for the Provincial Faculties so far as constituted, and the provisions of the foregoing clauses 37 to 43 shall apply to such Boards of Studies.

But it shall be in the power of the Senate, if they see fit, to constitute a separate Board of Studies for the Faculties belonging to any group of the Provincial Constituent Colleges. (46.)

General.

45. Boards of Studies shall, if so from time to time requested by the Senate, and may, if they shall from time to time think it desirable, meet and act concurrently on particular subjects. This provision shall apply to meetings of the London and Provincial Boards of Studies as well as to the meetings between Boards of Studies in different Faculties. (55.)

VIII.—*Matriculation and Degrees.*

Matriculation and Degrees in Arts and Science.

46. The Senate shall have power to enter into arrangements with the Constituent Colleges in Arts and Science jointly or any of them separately upon the following basis:—

(1) The approval by the Senate of syllabuses of courses of instruction proposed to be given in

the Colleges to Candidates for Matriculation and for the Pass Examinations for the Degrees of B.A. and B.Sc.;

(2) Production of evidence satisfactory to the Senate of diligent attendance at such College lectures, and for such times as may from time to time be prescribed by the Senate;

(3) Examinations of students, being Candidates for Matriculation and the Pass Examinations for the Degrees of B.A. and B.Sc., by a College professor or teacher in the subject, or other person appointed by the College, and an Examiner to be appointed by the Senate, with power to the Senate to make Regulations or Bye-Laws from time to time for dealing with any cases in which the Examiners may be unable to agree upon their Report.

(4) The conferring of the Degree on the foregoing conditions. (56.)

Degrees in Medicine.

47. The Senate shall have power to enter into arrangements with the Royal Colleges for conducting the Examinations in Anatomy, Physiology, Medicine, Surgery, and Midwifery for the Pass M.B. Degrees by a Board of Examiners, consisting of the Examiners appointed by the University and Examiners to be appointed by the Royal Colleges, who shall join in the reports to the Senate on such Examinations. The Examiners appointed by the University may be called upon, if the Senate so think fit, to make in addition separate reports. These Examinations may, if so agreed on, be conducted in combination with Examinations for the Royal Colleges. The arrangements for giving effect to this clause shall be carried out under the direction of a Committee to be appointed in equal numbers by the Standing Committee for the Faculty of Medicine and a Committee to be appointed by the two Royal Colleges. Such arrangements to be subject to the approval of the Senate and of the two Royal Colleges. This arrangement for joint Examinations shall not lessen or interfere with the duty of the Senate to be satisfied as to the adequacy of the Examinations in all respects. (59.)

48. Candidates for Degrees in the Faculty of Medicine to show that they have passed through the required courses of instruction in one or more of the Constituent Colleges in that Faculty or of the recognized Medical Institutions. (58.)

General.

49. With the exception of Examinations for Degrees in the Faculty of Medicine and of Examinations to be held under arrangements with Colleges under the powers herein-before contained, Candidates shall be admitted to all Examinations without regard to their place of education. (57.)

Honorary Degrees.

50. Power to be given to the Senate with the consent of the Chancellor and Vice-Chancellor to confer Honorary Degrees. (60.)

IX.—*Professors.*

51. Power to hold real property, and to accept grants, gifts, devises, and legacies for the purposes of the University including the establishment of Professorships and Lectureships, whether attached or not to any particular college, and the furtherance of regular and liberal education and of original research. (61.)

52. Power to the Senate in the event of the establishment of Professorships or Lectureships to assign to the Professors or Lecturers a representation on the Faculties. (62.)

APPENDIX No. 15.

Appendix Nos. 14 and 15.

PAPER *handed in by* SIR JAMES PAGET, *Bart., on July 22nd*, 1892. *See Question* 9771.

UNIVERSITY OF LONDON.

DRAFT OF SUPPLEMENTAL CHARTER.

March 1891.

VICTORIA by the grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, to all to whom these presents shall come, greeting.

1. Whereas by our Letters Patent, under the Great Seal of our said United Kingdom, bearing date at Westminster the fifth day of December in the first year of our reign, We did grant, declare, and constitute certain persons therein mentioned, and all the persons who might thereafter be appointed to be Chancellor or Fellows as therein-after mentioned, one body politic and corporate by the name of the University of London: And We did by our said Charter further will and ordain, that the said Chancellor, Vice-Chancellor, and Fellows should have power after examination to confer the several Degrees of Bachelor of Arts, Master of Arts, Bachelor of Laws, Doctor of Laws, Bachelor of Medicine, Doctor of Medicine: And whereas by our Letters Patent, under the Great Seal of our said United Kingdom, bearing date at Westminster the seventh day of July in the thirteenth year of our reign, We did enlarge the powers of the said Chancellor, Vice-Chancellor, and Fellows: And whereas by our Letters Patent under the Great Seal of our said United Kingdom, bearing date at Westminster the ninth day of April in the twenty-first year of our reign, We did revoke and determine the said Letters Patent herein-before recited: And We did will, grant, declare, and constitute certain persons therein mentioned, and all the persons who might thereafter be appointed to be Chancellor or Fellows as therein-after mentioned, and all the persons on whom respectively the University created by our said Letters Patent of the fifth day of December in the first year of our reign had conferred any of the Degrees of Doctor of Laws, Doctor of Medicine, Master of Arts, Bachelor of Laws, Bachelor of Medicine, or Bachelor of Arts, and all the persons on whom respectively the University created by that our Royal Charter might thereafter confer any of the said Degrees, one body politic and corporate by the name of the University of London: And We did further will and ordain that the said Chancellor, Vice-Chancellor, and Fellows should have power after examination to confer the several Degrees of Bachelor, Master, and Doctor in Arts, Laws, Science, Medicine, Music, and also in such other departments of knowledge, except Theology, as the said Chancellor, Vice-Chancellor, and Fellows, by regulations in that behalf, should from time to time determine:

2. And whereas by our Letters Patent under the Great Seal of our said United Kingdom bearing date at Westminster the sixth day of January in the twenty-sixth year of our reign, We did revoke and determine the said Letters Patent of the ninth day of April in the twenty-first year of our reign: And we did will, grant, and declare and constitute certain persons therein mentioned, and all the persons who might thereafter be appointed to be Chancellor or Fellows, as therein mentioned, and all the persons on whom respectively the University created by our said Letters Patent of the fifth day of December in the first year of our reign had conferred any of the Degrees of Doctor of Laws, Doctor of Medicine, Master of Arts, Bachelor of Laws, Bachelor of Medicine, or Bachelor of Arts, and all the persons on whom respectively the University created by our said Letters Patent of the ninth day of April in the twenty-first year of our reign had conferred any of the said Degrees or the Degree of Doctor of Science or Bachelor of Science, and all the persons on whom respectively the University created by that our Royal Charter might thereafter confer any of the said Degrees, or any other Degree, one body politic and corporate, by the name of the University of London: And whereas by our Letters Patent under the Great Seal of our United Kingdom bearing date at Westminster the fourth day of May in the forty-first year of our reign, We did will, grant, and ordain that the powers and provisions relating to the granting of Degrees and

Appendix No. 15.

Certificates of Proficiency contained in our said last-recited Letters Patent should be read and construed as applying to Women as well as to Men:

3. And whereas We did by our said Letters Patent of the sixth day of January in the twenty-sixth year of our reign will and ordain divers regulations touching the said University, and the purposes, constitution, and powers thereof: And whereas it is expedient that the regulations now in force in relation to the said University should be altered in manner herein-after appearing, and that for that purpose certain clauses and parts of clauses of our said Letters Patent or some of them, and the regulations contained in, and the powers conferred by, the said clauses and parts of clauses should be revoked:

4. Now know ye, that We do by virtue of our prerogative royal, and of our special grace, certain knowledge, and mere motion, by these presents, for Us, our Heirs and Successors, will, grant, ordain, and declare as follows:—

5. And first with respect to the purposes of the said University, We do will and ordain as follows:—

(1.) The purposes of the University shall, in addition to the purposes as defined in the third clause of our Letters Patent of the sixth day of January in the twenty-sixth year of our reign, include the promotion of regular and liberal education throughout our dominions, and especially in the metropolis and the neighbourhood thereof.

(2.) For the purpose of carrying into effect the purposes of the University, the Senate shall have power to establish or concur with any other body or bodies in establishing in or near London Professorships or Lectureships in connexion with the University, and to provide or concur in providing in or near London means for the furtherance of regular and liberal education and original research, and to apply to the purposes aforesaid a competent part of the revenue of such property as the said body politic of the University of London is or may be empowered to take, purchase, and hold, and upon the establishment of any such Professorship or Lectureship the Senate may assign to such Professor or Lecturer a place upon the Faculty as herein-after described to which the subject of such Professorship or Lectureship belongs.

6. And with respect to the Constitution of the Senate of the said University, We do by these presents (but not so as to alter or in any way affect the right of the existing Fellows of the University to be such Fellows, or to exercise any of the powers by our said Letters Patent of the sixth day of January of the twenty-sixth year of our reign, or by any other Letters Patent conferred on or to be exercised by Fellows of the University, so far as such powers are not otherwise revoked) revoke and determine so much of the fifth clause of our said Letters Patent as ordained that there should be thirty-six Fellows, exclusive of the Chancellor and Vice-Chancellor for the time being, and so much of the said clause as relates to the appointment of Fellows, and also the whole of the eleventh, twelfth, thirteenth, and fourteenth clauses of our said Letters Patent. And We do hereby will and ordain as follows:—

(1.) When the number of the now existing Fellows appointed by Us, other than the Chancellor, and other than the Fellows appointed by Us on the nomination of Convocation, shall by retirement or otherwise have been reduced below nine, and when at any time thereafter the number of Fellows appointed by Us, other than the Chancellor, and other than the Fellows appointed by Us on the nomination of Convocation, shall be less than nine, We, our Heirs or Successors, will appoint a new Fellow or new Fellows, so that the number of Fellows so appointed, other than the Chancellor, shall always be made up to nine: Provided that when there shall be nine Fellows other than the Chancellor who shall have been appointed by Us after the date of this our Charter, then upon the expiration of one year from the date of appointment of the Fellow last so appointed and of every subsequent year one of such Fellows, being the one who shall have been longest in office, or such one of those (if more than one) who have been longest in office as shall be determined by lot by the Vice-Chancellor, shall retire.

(2.) The Chairman of Convocation for the time being shall be a Fellow ex officio.

(3.) When the number of now existing Fellows appointed by Us on the nomination of Convocation shall by retirement or otherwise have been reduced below nine, and whenever at any time thereafter a vacancy shall occur among the Fellows appointed by Us on the nomination of Convocation, Convocation shall have power to elect a Fellow until the number of Fellows appointed by the election of Convocation shall by such election be made up to nine, and such election by Convocation shall be as follows: Upon the occurrence of the first, the fifth, and the ninth vacancies in the number of the now existing Fellows so appointed by Us as last aforesaid in respect of which a Fellow may be elected by Convocation the Members of Convocation who are Graduates in Arts shall elect a Fellow; upon the second and the sixth of such vacancies the Members of Convocation who are Graduates in Laws shall elect a Fellow; upon the third and the seventh of such vacancies the Members of Convocation who are Graduates in Medicine shall elect a Fellow; and upon the fourth and the eighth of such vacancies the Members of Convocation who are Graduates in Science shall elect a Fellow. Whenever a vacancy shall occur in the number of Fellows elected by any one of the said classes of Graduates the vacancy shall be filled by election by the same class of Graduates; save that where by a vacancy occurring among the Fellows elected by the Graduates in Arts the number of Fellows appointed by their election shall be reduced from three to two, such vacancy shall be filled by election by the Graduates in Medicine, and that when by a vacancy occurring among the Fellows elected by the Graduates in Medicine the number of Fellows appointed by their election shall be reduced from three to two, the vacancy shall be filled by election by the Graduates in Arts: Provided that when there shall be nine Fellows appointed by the election of Convocation, then upon the expiration of one year from the date of appointment of the Fellow last so appointed and of every subsequent year one of such Fellows, being the one who has been longest in office, or such one of those (if more than one) who have been longest in office as shall be determined by lot by the Vice-Chancellor, shall retire. The holder of any Degree not included in the departments of Medicine, Science, or Laws shall be deemed to be a Graduate in Arts, and the holder of more than one Degree shall be entitled to vote in each class in which he holds a Degree.

(4.) The President for the time being of University College London and the Principal for the time being of King's College London shall respectively be Fellows ex-officio, and the Council of each of the said Colleges shall be at liberty to elect two other Fellows, and from time to time to fill up vacancies in the number of Fellows appointed by them respectively. At the expiration of one year from the date of this our Charter and of every subsequent year one of the two Fellows appointed by each of the said Councils, being the one of the two who shall have been longest in office, or in default of seniority such one of them as shall be determined by lot by the Vice-Chancellor, shall retire.

(5.) The President for the time of the Royal College of Physicians of London and the President for the time being of the Royal College of Surgeons of England shall respectively be Fellows ex-officio, and each of the said Colleges shall be at liberty to appoint one other Fellow, and from time to time to fill up any vacancy occurring in the office of the Fellow appointed by them respectively, and every Fellow so appointed shall hold office for three years.

(6.) The Chairman for the time being of the Council of Legal Education established by the Four Inns of Court, if and when it shall be arranged between the four Inns of Court and the Senate, and the President for the time being of the Incorporated Law Society of the United Kingdom shall respectively be Fellows ex-officio.

(7.) The London Faculties as herein-after defined shall be at liberty to elect twelve Fellows, as follows: The Faculty of Arts shall elect three Fellows, the Faculty of Science shall elect three Fellows, the Faculty of Medicine shall elect five Fellows, and the Faculty of Laws shall elect one Fellow, and every vacancy occurring in the number of such Fellows shall from time to time be filled by election by the Faculty which elected the outgoing Fellow. Every Fellow so elected shall hold office for three years, save that in each group of the Fellows first elected by the Faculties of Arts and Science respectively one Fellow to be chosen by lot by the Vice-Chancellor shall retire at the end of one year from the date of this our Charter, and one Fellow to be chosen in like manner shall retire at the end of two years from the like date, and that of the Fellows first elected by the Faculty of Medicine one to be chosen in like manner shall retire at the end of one year from the like date, and two to be chosen in like manner shall retire at the end of two years from the like date.

(8.) The Principals of Provincial Constituent Colleges as herein-after defined shall be at liberty jointly to elect such number of Fellows, not exceeding four, as may be determined in manner herein-after expressed, and the Provincial Faculties as herein-after defined shall be at liberty to elect a number of Fellows equal to the number for the time being elected by the Principals of the said Colleges. Every member so elected by the Principals of the Provincial Colleges or by the Provincial Faculties shall hold office for three years subject to such regulations as to the Fellows first elected as may be made by the Senate for the purpose of securing a rotation in the election of such Fellows, and every vacancy occurring in the number of such Fellows shall be filled by the election of the body which elected the outgoing Fellow.

(9.) If any vacancy shall occur in the number of Fellows otherwise than in the ordinary course of retirement the Fellow appointed or elected to fill the vacancy shall be deemed to occupy the same position as to seniority as the outgoing Fellow, and shall hold office for the same time only as such outgoing Fellow would have continued to hold the same.

(10.) Any Fellow, other than the existing Fellows and Fellows ex-officio, who shall not have attended any Meeting of the Senate or of any Committee thereof during an entire period of two years, shall be deemed to have retired at the expiration of such period.

(11.) Any outgoing Fellow may be re-appointed or re-elected.

(12.) It shall be lawful for the Senate to exercise all the powers conferred upon them by this our Charter, although they may not for the time being be fully constituted in accordance with the provisions thereof.

7. And with respect to the election of Fellows by Convocation, We do further will and ordain that in lieu of the power given by the twenty-first clause of our Letters Patent of the sixth day of January in the twenty-sixth year of our Reign of nominating three persons for every Fellow to be appointed in manner therein mentioned, Convocation shall hereafter have such power of electing Fellows as is by the foregoing sixth clause of our present Charter provided in that behalf, and all powers by the said Letters Patent given to Convocation in respect of the nominations therein provided for shall be read and construed as applying to the election of Fellows under this our Charter; and further, that the twenty-sixth clause of our said Letters Patent shall hereafter be read as follows: Notice of the Meetings of Convocation shall be given by advertisement, or in such other manner as the Senate shall from time to time determine. Whenever a vacancy shall occur in the number of the Fellows appointed by Us on the nomination of Convocation in respect of which a Fellow may be elected by Convocation, or in the number of Fellows to be hereafter elected by Convocation as provided by these presents, the Senate shall notify the same to the Chairman of Convocation, who shall as soon thereafter as conveniently may be convene a meeting of the Members of Convocation who are entitled to vote in respect of such vacancy, or take such other steps for the purpose of enabling an election to be held to fill such vacancy as may be prescribed by any Standing Order for the time being in force regulating the proceedings of Convocation in that behalf.

8. And with respect to the conduct by the Senate of the business of the University We do will and ordain as follows:—

(1.) There shall be a Standing Committee of the Senate for the Departments of Arts and Science in connexion with the London Constituent Colleges in those Departments. This Committee shall consist of the President of University College and the Principal of King's College, of the Fellows elected by these Colleges, of the six Fellows elected by the London Faculties of Arts and Science, and of ten other Fellows to be elected by the Senate annually. The business of the Committee shall be to promote the organization, improvement, and extension of University teaching in Arts and Science in and for London, including the establishment of professorships and teacherships in London, and to discharge such functions in relation to the said Constituent Colleges, and the examination of students therefrom in Arts and Science, as the Senate may from time to time delegate to them.

(2.) There shall be a Standing Committee of the Senate for the Departments of Arts and Science in connexion with the Provincial Constituent Colleges, which shall discharge such functions in relation to the said Constituent Colleges and the examination of students therefrom in Arts and Science, as the Senate may from time to time delegate to them.

(3.) There shall be a Standing Committee of the Senate in relation to the Examinations in Arts and Science other than Examinations conducted under arrangements with the Constituent Colleges.

(4.) There shall be a Standing Committee of the Senate for the Department of Medicine. This Committee shall consist of the President of the Royal College of Physicians of London and the President of the Royal College of Surgeons of England, the two Fellows elected by the said Colleges, the five Fellows elected by the London Faculty of Medicine, and (in the event of any institution becoming a Provincial Constituent College in the Department of Medicine) one Fellow holding a Chair in a Provincial Constituent College of Medicine, to be chosen by the Fellows elected by the Principals or Chief Officers of the Provincial Constituent Colleges, and the Fellows elected by the Provincial Faculties acting conjointly, and nine members to be elected by the Senate.

The business of the Committee shall be to discharge such functions in relation to the Medical Constituent Colleges and the examination of students in Medicine as the Senate may from time to time delegate to them.

(5.) There shall be a Standing Committee of the Senate for the Department of Laws. This Committee shall consist of the Chairman of the Council of Legal Education, when a Fellow, and the President of the Incorporated Law Society, of the Fellows elected by the London Faculty of Laws, and of four other members to be elected by the Senate annually.

(6.) The Chancellor and Vice-Chancellor shall be ex-officio members of all Standing Committees.

(7.) The Standing Committees shall in all respects be subject to the control and direction of the Senate.

9. And with respect to Constituent Colleges We do will and ordain as follows:—

(1.) There shall be Constituent Colleges in connexion with the University, which Colleges shall be deemed to be Constituent Colleges in respect of all or of some one or more of the Departments of Arts, Science, Medicine, and Laws; and all departments of knowledge, in which examinations may be held by the University, and which are not included in any other department, shall be deemed to be included in the Department of Arts.

(2.) Constituent Colleges situated in or near London shall be deemed to be London Constituent Colleges, and the following institutions shall,

Appendix No. 15.

in the first instance, be such Colleges, that is to say, in the Departments of Arts, Science Medicine, and Laws, University College, London, and King's College, London; in the Department of Medicine, the Medical Schools of Charing Cross Horpital, Guy's Hospital, London Hospital, Middlesex Hospital, St. Bartholomew's Hospital, St. George's Hospital, St. Mary's Hospital, St. Thomas's Hospital, Westminster Hospital, and the London School of Medicine for Women.

(3.) There shall be in each of the said Departments a Faculty which shall consist of Teachers in the London Constituent Colleges, and may (in the event of its being so agreed between the Senate and the bodies concernced respectively) include also in the Department of Laws Teachers appointed by the Council of Legal Education and by the Incorporated Law Society respectively, and such Faculties are herein-after described as the London Faculties.

(4.) There shall be determined by agreement between the Senate and each Consituent College, and in the Department of Laws by agreement also between the Senate and the Council of Legal Education and the Council of the Incorporated Law Society respectively, or failing agreement in either case, by the decision of the Lord President of our Council, the number and qualifications of the Teachers of the College, or of the Teachers appointed by the Council of Legal Education and the Incorporated Law Society, who shall belong to such Faculty or Faculties.

(5.) The Senate shall have power from time to time to admit as London Constituent Colleges such other Colleges, in or near London, as (1) give academical instruction upon a complete system and an adequate scale in all the Departments, and prepare, or are intended to prepare, students for Degrees in the University, or (2) give instruction upon an adequate scale in one or more, even though not in all, the Departments, and prepare, or are intended to prepare, students for degrees in the University; but shall previously invite an expression of opinion from the Board or Boards of Studies interested. The Senate shall consider in respect of every Institution seeking admission the following points:—

(*a.*) The character of the teaching and of the educational appliances.
(*b.*) The character of the foundation.
(*c.*) The average age of the students.
(*d.*) The number of students proceeding from from the College to the University.
(*e.*) The relation of the College to any other University.

(6.) On the admission of a London Constituent College the following matters shall be determined by the Senate, that is to say:—

(*a.*) The Department or Departments in respect of which the College is admitted.
(*b.*) The number and qualifications of the Teachers of the College who are to belong to the Faculty or Faculties of such Department or Departments.

(7.) The Senate shall have power, after consultation with the London Board or Boards of Studies interested,—

(*a.*) To increase or diminish the number of the Teachers in any London Constituent College who shall belong to any Faculty or Faculties.
(*b.*) To remove any institution from being a London Constituent College, but such removal shall be subject to an appeal by the College to the Lord President of our Council.

(8.) The Provincial Constituent Colleges shall in the first instance be such institutions situate in England or Wales, but not in or near London, as shall within six months from the date of this our Charter apply to the Senate for admission as Constituent Colleges in the University, and whose claim to admission shall be allowed by the Senate, or shall be allowed on such appeal as is herein-after provided, and the Senate shall, in determining upon such claim, have regard to the conditions and matters contained in the foregoing fifth sub-clause, and shall, in the case of admission, determine the matters contained in the sixth sub-clause, and the Teachers so determined of such Constituent Colleges shall form the Provincial Faculties.

(9.) In the case of any institution whose claim to admission as a Provincial Constituent College is not allowed by the Senate, the determination of the Senate shall, within one month of notice of disallowance being given by the Senate to the institution, be subject to an appeal on the part of such institution to the Lord President of our Council.

(10.) The list of such first Provincial Constituent Colleges shall be finally settled by the Senate within one year from the date of this our Charter; but in the event of any such appeal as aforesaid to the Lord President the list shall be deemed to be finally settled only when the determination of any such appeal or appeals is notified by the Lord President to the Senate.

(11.) Upon the final settlement as herein-before provided of the list of institutions which shall in the first instance be admitted as Provincial Constituent Colleges, the Senate shall, having regard to the number of Colleges so admitted, and to all other circumstances of the case, determine and shall notify to the said Provincial Constituent Colleges what number of Fellows, not exceeding four, the Principals of the said Colleges shall be at liberty to elect. Such last-mentioned determination shall, within one month of the notification thereof by the Senate to the said Colleges, be subject to an appeal to the Lord President of our Council on the joint application of the Colleges so admitted, and upon such appeal the said Lord President shall determine and shall notify to the Senate the number of the Fellows, not exceeding four, whom the said Principals shall be at liberty to elect. The number of Fellows to be so elected shall be deemed to be finally settled when the determination of the Senate in that behalf is notified to the said Colleges, or in the event of such an appeal to the Lord President as last aforesaid, when the determination of the said Lord President thereupon is notified by the Senate to the said Colleges.

(12.) The Senate shall have power at any time after the final settlement of such list of first Provincial Colleges to admit as Provincial Constituent Colleges other institutions situated in England or Wales, but not in or near London, and also to remove any institution from the number Provincial Constituent Colleges; and in exercising such powers the Senate shall have regard to the like conditions and determine the like matters, and their determination shall be subject to the like appeal as herein-before provided in the case of the London Constituent Colleges.

(13.) Save as aforesaid, We do hereby revoke the thirty-fourth and thirty-fifth clauses of our Letters Patent of the sixth day of January of the twenty-sixth year of our reign, and all rights and privileges therein or thereby created or conferred.

10. And with respect to the meetings of the Faculties and to Boards of Studies, We do hereby will and ordain as follows:—

(1.) The Senate shall make such regulations as they see fit for the first meetings of the respective Faculties, and shall name some person to be Chairman of each of such first meetings. At the first meeting of each Faculty, the Faculty shall appoint a Committee with power to frame regulations, subject to the approval of the Senate, for the subsequent meetings thereof, and for the conduct of elections of Fellows and of members of the Board of Studies for the Faculty; and thereafter the Faculty shall have power from time to time, subject to the like approval, to alter and amend such regulations; provided that when a Board of Studies for any Faculty shall have been constituted,

the Chairman of the Board of Studies for the time being shall be a Chairman of the meetings of that Faculty.

(2.) There shall be Board of Studies for each of the London Faculties.

Each Board of Studies shall consist of—

(*a.*) Such a number of Members elected by the Faculty, being four, eight, twelve, or sixteen, as the Faculty shall from time to time determine.

(*b.*) Two Members of Convocation elected in such mode as Convocation may from time to time provide by the Members of Convocation who are Graduates in the Department to which the Faculty belongs.

(*c.*) An Examiner in each subject in the Department to which the Faculty belongs in which examinations are for the time being held in the University.

(*d.*) If the Board of Studies shall so think fit, such persons, whether Members of the University or not, eminent in the subject of the Faculty, not exceeding two in number, as may be from time to time elected by the Board.

(3.) One fourth of the Members of the Board elected by the Faculty, to be determined if necessary by lot, shall retire each year.

(4.) Any vacancy occuring otherwise than as aforesaid among the Members elected by the Faculty shall be filled by the election of the remaining Members so elected; but any person so appointed shall retain his office so long only as the outgoing Member would have retained the same if no such vacancy had occurred.

(5.) The Members of the Board elected by Convocation and the Members elected by the Board shall hold office for four years.

(6.) Any vacancy occuring otherwise than by effluxion of time among the Members elected by any class of the Members of Convocation shall be filled by election by the same class.

(7.) The period of office of the first Members of any Board of Studies shall be deemed to commence at the first meeting of the Board.

(8.) Outgoing members of the Board shall be re-eligible.

(9.) The Examiners in each subject may, if more than one, agree upon one of themselves to be the Member of the Board of Studies. In case they fail to agree, the Examiner shall be nominated by the Vice-Chancellor in writing.

(10.) The Senate shall make such regulations as they see fit for the first meeting of each Board of Studies, and shall name some person to be Chairman of such first meeting; and thereafter each Board of Studies shall be at liberty from time to time to frame such regulations as they see fit for the conduct of their business.

(11.) Each Board of Studies shall have the following powers and duties :—

(*a.*) To elect a Chairman every year.

(*b.*) To consider and report to the Senate upon any matter referred to it by the Senate.

(*c.*) To represent to the Senate its opinion on any matter connected with the Degrees and Examinations and teaching of the subjects of its Faculty.

(*d.*) To deliberate, if so requested, in conjunction with the Senate or any Committee thereof.

(12.) There shall also be Boards of Studies for the Provincial Faculties so far as constituted, and the provisions of the foregoing clauses shall apply to such Boards of Studies.

But it shall be in the power of the Senate to constitute a separate Board or separate Boards of Studies for any group of the Provincial Constituent Colleges which may apply to them for that purpose, and to make such regulations for the constitution and business of such separate Boards as they may see fit.

(13.) Boards of Studies shall, if so from time to time requested by the Senate, and may, if they shall from time to time think it desirable, meet and act concurrently on particular subjects. This provision shall apply to Meetings of the London and Provincial Boards of Studies as well as to the Meetings between the Boards of Studies of different Faculties.

11. And with respect to the Examinations for Matriculation and for the Degrees of Bachelor of Arts and Bachelor of Science, exclusive of the Examinations for Honours, We will do and ordain as follows :—

The Senate shall have power to enter into arrangements with the London Constituent Colleges in Arts and Science jointly or any of them separately and in like manner with all or any one or more of the Provincial Constituent Colleges in Arts or Science upon the following basis :—

(1.) The approval by the Senate of syllabuses of courses of instruction proposed to be given in the Colleges to Candidates for Matriculation and for the Examinations for the Degrees of Bachelor of Arts and Bachelor of Science;

(2.) The production of evidence satisfactory to the Senate of diligent attendance at such College lectures, and for such times as may from time to time be prescribed by the Senate;

(3.) The examination of students, being Candidates for Matriculation or for the Examinations for the Degrees of Bachelor of Arts or Bachelor of Science, by a College professor or teacher in the subject, or other person appointed by the College or Colleges, and an Examiner to be appointed by the Senate, with power to the Senate to make Regulations or By-Laws from time to time for dealing with any cases in which the Examiners may be unable to agree upon their Report;

(4.) The conferring of the Degree on the foregoing conditions.

12. And with respect to the Examination for the Degree of Bachelor of Medicine exclusive of the Examinations for Honours, We do will and ordain as follows :—

The Senate shall have power to enter into arrangements with the Royal College of Physicians of London and the Royal College of Surgeons of England for conducting the Examinations in Anatomy, Physiology, Medicine, Surgery, and Mid-wifery for the Degree of Bachelor of Medicine by a Board of Examiners, consisting of the Examiners appointed by the University and Examiners to be appointed by the said Colleges, who shall join in the reports to the Senate on such Examinations. The Examiners appointed by the University may be called upon, if the Senate so think fit, to make in addition separate reports. These Examinations may if so agreed on, be conducted in combination with Examinations for the said Colleges. The arrangements for giving effect to this clause shall be carried out under the direction of a Committee to be appointed in equal numbers by the Standing Committee for the Department of Medicine and a Committee to be appointed by the two said Colleges, and shall be subject to the approval of the Senate and of the two said Colleges. This arrangement for joint Examination shall not lessen or interfere with the duty of the Senate to be satisfied as to the adequacy of the Examinations in all respects.

13. And with respect to Candidates for Degrees, We do will and ordain as follows :

(1.) Candidates for Degrees in the Department of Medicine shall produce evidence satisfactory to the Senate that they have fulfilled the conditions required by the thirty-seventh clause of our Letters Patent of the sixth day of January in the twenty-sixth year of our Reign. But it shall be lawful for the Senate from time to time, after consultation with the Board of Studies for the Faculty of Medicine, to revise or to add to the list of Medical Institutions and Schools from which either singly or jointly with other Medical Institutions and Schools in this Country or in Foreign Parts Candidates for Medical Degrees shall be admitted, and to determine in respect of what branch or branches of Medical Education Candidates for Medical Degrees shall be admitted from any such Institution or School.

(2.) With the exception of Examinations for Degrees in the Department of Medicine and of Examinations to be held under arrangements with Colleges under the powers herein-before contained, Candidates shall be admitted to all Examinations without regard to their place of education,

Appendix Nos. 15 and 16.

14. And We do further will and ordain that the fortieth clause of our Letters Patent of the sixth day of January in the twenty-sixth year of our Reign shall be read and construed as if the words or Honorary Degrees were inserted after the words *ad eundem* Degrees.

15. And save as aforesaid We do hereby will and ordain that all such clauses or parts of clauses of our said Letters Patent of the sixth day of January in the twenty-sixth year of our Reign as are inconsistent with the provisions of this our Charter shall be and the same are hereby revoked, and save as aforesaid we do hereby confirm our said Letters Patent and also our Letters Patent of the fourth day of May in the forty-first year of our Reign, and We do will and ordain that such last-mentioned Letters Patent shall be read and construed as applying to the powers and provisions contained in this our Charter.

16. And lastly, We do hereby, for Us, our Heirs and Successors, grant and declare that these our Letters Patent, or the enrolment or exemplification thereof, shall be in and by all things valid and effectual in law according to the true intent and meaning of the same, and shall be construed and adjudged in the most favourable and beneficial sense for the best advantage of the said University, as well in all our Courts as elsewhere, notwithstanding any non-recital misrecital, uncertainty, or imperfection in these our Letters Patent.

In witness whereof We have caused these our Letters to be made Patent.

Witness Ourself at our Palace of Westminster this day of in the year of our Reign.

APPENDIX No. 16.

PAPER *handed in by Professor* EMMOTT, *on Tuesday, July 26th*, 1892. See *Question No.* 10,360.

JOHNS HOPKINS UNIVERSITY CIRCULARS, PUBLISHED WITH THE APPROBATION OF THE BOARD OF TRUSTEES.

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PROGRAMMES FOR 1892-93.

The following courses in Literature and Science are offered for the academic year which begins October 1, 1892. They are open to properly qualified young men, according to conditions varying somewhat in each department. The Annual Register, giving full statements as to the regulations and work of the University, will be sent on application.

D. C. GILMAN,
President of the
Johns Hopkins University.

H. B. ADAMS, Professor of American and Institutional History,
(*a*) will conduct the Seminary of History and Politics.
(*b*) Early Germanic History and Institutional History.
(*c*) will direct, with assistance, undergraduate courses in History and Politics.

M. BLOOMFIELD, Professor of Sanskrit and Comparative Philology,
(*a*) Linguistic Science and Comparative Grammar.
(*b*) Indo-Iranian Languages.
(*c*) Ethnological History of the Indo-European Peoples.

W. K. BROOKS, Professor of Animal Morphology,
(*a*) will direct the Laboratory work in Morphology.
(*b*) will lecture on Animal Morphology and Osteology.

T. CRAIG, Professor of Pure Mathematics,
(*a*) Mathematical Seminary, Theory of Functions, and Linear Differential Equations.
(*b*) Partial Differential Equations, Elliptic and Abelian Functions.
(*c*) Differential Equations.

A. M. ELLIOTT, Professor of Romance Languages, will give advanced courses in the Romance Languages, including Linguistic Ethnography, Popular Latin, Dante, French Dialects, and Seminary Work.

G. H. EMMOTT, Professor of Roman Law and Comparative Jurisprudence,
(*a*) English Common and Statute Law, Constitutional Law, Sources of English History.
(*b*) undergraduate course in the English Constitution.

FABIAN FRANKLIN, Professor of Mathematics,
(*a*) Modern Mathematics, Theory of Invariants, Theory of Surfaces.
(*b*) Differential and Integral Calculus, Determinants, Analytic Geometry, etc.

B. L. GILDERSLEEVE, Professor of Greek,
(*a*) will direct the Greek Seminary (The Attic Orators).
(*b*) will conduct a course of Practical Exercises in Greek.
(*c*) will lecture on Greek Syntax.
(*d*) will lecture on Greek Lyric Poetry.

E. H. GRIFFIN, Professor of the History of Philosophy,
(*a*) advanced courses in Modern Philosophy and Ethics.
(*b*) undergraduate courses in Logic, Psychology and Ethics.

P. HAUPT, Professor of the Semitic Languages,
(*a*) will conduct the Assyrian Seminary.
(*b*) Biblical Philology, Hebrew, Syriac, and Arabic.

W. S. HALSTED, Professor of Surgery, will lecture to physicians in the Johns Hopkins Hospital.

H. M. HURD, Professor of Psychiatry, will lecture to physicians in the Johns Hopkins Hospital.

H. A. KELLY, Professor of Gynecology, will lecture to physicians in the Johns Hopkins Hospital.

H. N. MARTIN, Professor of Biology,
(*a*) will direct the Laboratory work in Biology.
(*b*) Physiology of the Sense Organs and Methods of Physiological Research, for advanced students.
(*c*) General Biology, Animal Physiology and Histology.
(*d*) Special course in Normal Histology.

H. N. MORSE, Professor of Analytical Chemistry,
(*a*) will assist in directing the Laboratory work in Chemistry.
(*b*) Analytical Methods, Mineralogy and Crystallography, and Chemistry of Carbon Compounds.

SIMON NEWCOMB, Professor of Mathematics and Astronomy,
(*a*) will have general direction of the courses in Mathematics and Astronomy.
(*b*) Spherical and Theoretical Astronomy and Celestial Mechanics.

WM. OSLER, Professor of Medicine, will lecture to physicians in the Johns Hopkins Hospital.

IRA REMSEN, Professor of Chemistry,
(*a*) will direct the Laboratory work in Chemistry.
(*b*) Special Topics in Advanced Chemistry.
(*c*) General Chemistry, Chemistry of Carbon Compounds, etc.

EDWARD RENOUF, Collegiate Professor of Chemistry,
(*a*) will assist in the Laboratory work in Chemistry.
(*b*) will lecture on Inorganic Chemistry.

H. A. ROWLAND, Professor of Physics,
(*a*) will direct the work of the Physical Laboratory.
(*b*) will lecture on Electricity and Magnetism.

MINTON WARREN, Professor of Latin,
(*a*) will conduct the Latin Seminary (Plautus and Terence).
(*b*) Roman Comedy, Roman Epigraphy, Latin Syntax, and Historical Latin Grammar.
(*c*) Aulus Gellius, Horace.

W. H. WELCH, Professor of Pathology,
(*a*) will direct the work of the Pathological Laboratory.
(*b*) Pathology and Bacteriology.

G. H. WILLIAMS, Professor of Inorganic Geology,
(*a*) will direct the Laboratory work in Mineralogy and Petrography.
(*b*) General Mineralogy and Microscopical Petrography.

HENRY WOOD, Professor of German,
(*a*) will direct the German Seminary.
(*b*) Old High German, Middle High German, Gothic, Teutonic Philology, German Literature, etc.
(*c*) will direct, with assistance, undergraduate courses in German.

E. A. ANDREWS, Associate Professor of Biology,
(*a*) will assist in the Laboratory work in Biology.
(*b*) General Biology, Embryology, Mammalian Anatomy, Zoölogy.

J. W. BRIGHT, Associate Professor of English Philology,
(*a*) English Seminary.
(*b*) English Philology, Phonetics, Selected Texts, Anglo-Saxon.

WM. HAND BROWNE, Associate Professor of English Literature,
(*a*) English Literature, Middle English, Early Scottish Poets.
(*b*) Lectures on the Early History of Maryland.

W. B. CLARK, Associate Professor of Organic Geology,
(*a*) will direct the Laboratory work in Palæontology.
(*b*) General Geology, Palæontology, and Physical Geography.

L. DUNCAN, Associate Professor of Electricity, will conduct courses in Electrical Engineering.

E. H. SPIEKER, Associate Professor of Greek and Latin,
(*a*) Lysias, Homer, Euripides.
(*b*) Thukydides, Aischylos, Sophokles.
(*c*) Greek Literature and Composition.

C. ADLER, Associate in Semitic Languages,
(*a*) Biblical Philology, Hebrew, and Ethiopic.
(*b*) Biblical History and Archæology.

W. S. ALDRICH, Associate in Mechanical Engineering, Kinematics and Drawing.

J. S. AMES, Associate in Physics,
(*a*) undergraduate courses in General Physics.
(*b*) Mechanics, Hydrodynamics, and Sound.
(*c*) Physical Seminary for advanced students.

G. P. DREYER, Associate in Biology,
(*a*) will assist in the Laboratory work in Biology.
(*b*) Physiological Chemistry, Normal Histology.

S. FLEXNER, Associate in Pathology, will assist in the work of the Pathological Laboratory.

HERMANN S. HERING, Associate in Electrical Engineering, courses in Electrical Engineering.

M. D. LEARNED, Associate in German,
(*a*) Middle High German, Nibelungenlied, etc.
(*b*) undergraduate courses in German.

J. E. MATZKE, Associate in Romance Languages,
(*a*) Italian Literature, Spanish Literature, Old French Philology, French Texts.
(*b*) special courses in Italian and Spanish.

C. W. E. MILLER, Associate in Greek, courses in Greek.

G. H. F. NUTTALL, Associate in Bacteriology and Hygiene, will assist in the work of the Pathological Laboratory.

C. L. POOR, Associate in Astronomy, courses in Astronomy.

SIDNEY SHERWOOD, Associate in Political Economy.
(*a*) twenty-five lectures on Money and Banking.
(*b*) undergraduate courses in Political Economy.

K. W. SMITH, Associate in Latin,
(*a*) Livy, Lucretius, Cicero.
(*b*) Plautus, Terence, Tacitus.

J. M. VINCENT, Associate in History,
(*a*) Sources of History and Historical Methods.
(*b*) undergraduate courses in History.

W. M. ARNOLT, Instructor in New Testament Greek, courses on the Septuagint, the New Testament, etc.

B. W. BARTON, Instructor in Botany, Plant Analysis and the Elements of Botany.

A. GUDEMAN, Fellow by Courtesy, History of Classical Philology, Alexandrian Literature, Plutarch's Cicero, Tacitus.

L. S. HULBURT, Instructor in Mathematics,
(*a*) Synthetic Geometry, Plane Algebraic Curves, Theory of Substitutions Icosahedron Theory, etc.
(*b*) Determinants, Analytic Geometry, Calculus.

C. JOHNSTON, JR., Instructor in Semitic Languages, Biblical Philology and History, Assyrian, and Arabic.

J. D. PRINCE, Instructor in Semitic Languages, courses in Turkish.

W. W. RANDALL, Instructor in Chemistry, will assist in the work of the Chemical Laboratory.

H. SCHOENFELD, Instructor in German, undergraduate courses in German.

C. A. SMITH, Assistant in English, undergraduate courses in Rhetoric and English Composition.

S. E. WHITEMAN, Instructor in Drawing, courses in Drawing.

PROFESSOR H. C. ADAMS, of the University of Michigan, twenty lectures on Finance.

DR. FREDERIC BANCROFT, of Washington, will lecture on American Diplomatic History.

PROFESSOR J. B. CLARK, of Smith College, twenty-five lectures on the Economic Theory of Distribution.

DR. E. R. L. GOULD, of the U. S. Department of Labour, fifty lectures on Social Problems.

DR. W. T. HARRIS, U. S. Commissioner of Education, five lectures on the Philosophy of Education.

HON. JOHN A. KASSON, of Washington, D.C., ten lectures on European Diplomacy.

DR. JAMES MACALISTER, of Philadelphia, five lectures on the History and Institutes of Education.

DR. JAMES SCHOULER, of Boston, twenty-five lectures on American Constitutional Law.

DR. ALBERT SHAW, of New York, ten lectures on Municipal Government and Civic Training.

DR. A. G. WARNER, of Washington, ten lectures on Charities.

PROFESSOR WOODROW WILSON, of Princeton College, twenty-five lectures on Administration.

MATHEMATICS.

GRADUATE COURSES.

Professor NEWCOMB's courses are announced under the heading of Astronomy, to which the student is referred.

Professor CRAIG offers the following courses:
1. Theory of functions of one or two variables.
   Twice weekly through the year.
2. Mathematical Seminary.
   Weekly through the year.
3. Partial differential equations.
   Twice weekly, first half year.
4. Linear differential equations.
   Three times weekly, first half-year.
5. Elliptic and Abelian functions.
   Twice weekly through the year.

Professor FRANKLIN offers the following courses:
1. A general course for graduate students on the elements of modern mathematics.
   Five times weekly, first half-year.
2. Theory of Invariants.
   Twice weekly, second half-year.
3. Metrical theory of surfaces.
   Three times weekly, second half-year.

Mr. HULBURT offers the following courses:—
1. Synthetic Geometry.
   Twice weekly, first half year.
2. General theory of Plane Algebraic Curves.
   Twice weekly, second year.
3. Theory of substitutions with applications to Algebraic Equations.
   Three times weekly, first half-year.
4. Keiln's Icosahedron Theory.
   Three times weekly, second half-year.

Appendix No. 16.

UNDERGRADUATE COURSES.

First Year.

Determinants.
Daily till October 15. Mr. HULBERT.

Analytic Geometry.
Daily till December 23. Mr. HULBERT.

Differential and Integral Calculus.
Daily January 1 to end of year. Mr. HULBERT.

Second Year.

Differential and Integral Calculus (Special Topics).
Twice weekly till December 23. Professor FRANKLIN.

Differential Equations.
Twice weekly, January 1 to end of year. Professor CRAIG.

Determinants and Elementary Theory of Equations.
Three times weekly, till December 1, Professor FRANKLIN.

Modern Analytic Geometry of Two Dimensions.
Three times weekly, Dec. 1 to Feb. 1. Professor FRANKLIN.

Analytic Geometry of Three Dimensions.
Three times weekly, Feb. 1 to end of year. Professor FRANKLIN.

Trigonometry and Elementary Analytic Geometry.
Three times weekly, through the year.

ASTRONOMY.

The instruction in Astronomy is given by Professor SIMON NEWCOMB and by an associate working under his direction. The courses include a study of the various branches of the science, illustrated and enforced by practical exercises, and by original work so far as the time at the disposal of the student will permit it. The work taken by a student depends very largely on whether he is pursuing Astronomy as a principal or as a subsidiary subject. As a general rule those who pursue it with the latter object take up but a single branch; spherical and practical astronomy, when their work lies in the direction of physical or other research requiring the use of instruments; celestial mechanics, when it lies in the direction of mathematics; historical and discriptive astronomy, when only the teaching of general astronomy is in view.

For training students in the use of instruments the University has erected a small students' working observatory and supplied it with the following instruments:—

An equatorial telescope of 9½ inches aperture, with clock-work and filar micrometer;

A meridian circle of 3 inches aperture, with circles 2 feet in diameter reading to seconds;

A small meridian transit instrument;

A reflecting circle by Pistor and Martins;

An astronomical theodolite, and several other small instruments.

During the year 1892–1893, the courses are intended to cover a wider range of individual subjects than heretofore, with especial reference to the needs of the first year students, as well as of the advanced students engaged in completing and reviewing their work. The details of the advanced courses are subject to modification according to the number and needs of the students, but are expected to conform closely to the following outline:—

1. Elementary Course in Theoretical and Practical Astronomy.
Three times weekly, through the year. Dr. POOR.
This course is intended for students commening the subject and will embrace the elements of Spherical Astronomy, the theory and use of astronomical instruments, the use of the Ephemeris, elementary Gravitational Astronomy, the History of Astronomy, and the first principles of the method of least squares.

2. Advanced Spherical Astronomy and Theory of Instruments.
Three times weekly, first half-year. Professor NEWCOMB and Dr. POOR.
This subject is preliminary to the following one and embraces the general theory of precession and nutation and methods of instrumental research generally.

3. Advanced Theoretical Astronomy.
Three times weekly, second half-year. Professor NEWCOMB and Dr. POOR.
This course will include the computation of Orbits, Special Perturbations, and Ephemerides.

4. Celestial Mechanics.
Twice weekly till April. Professor NEWCOMB.
This course includes the general dynamical theory of the celestial motions, the secular variations of the planetary orbits, and the general perturbations of the planets and of the moon.

5. Astronomical Seminary, especially exercises in Astronomical Computation.
Once weekly, Monday afternoons. Dr. POOR.

6. Practical Work with the instruments.
Daily at 8 p.m., when the weather permits. Dr. POOR.

7. A course in Descriptive Astronomy for undergraduates is expected to be given, if circumstances permit.

Attention is called to the necessity that students taking the courses in astronomy should be well prepared in the subjects preliminary to such courses. These are principally mathematics and elementary astronomy. In the former the student should be master of the usual college course, including the elements of solid analytic geometry, and of the differential and integral calculus. He should be especially familar with spherical trigonometry and with logarithmic computation. In astronomy he is expected to have mastered the elements of the subject before commencing the university course. These include an outline of the doctrine of the sphere, of the relation of mean and sidereal time, and of descriptive astronomy generally. What is most essential may be found in so much of Chapters I., III., and IV. of Newcomb and Holden's Astronomy (large edition) as is printed in large type; but it is expected that every candidate for a degree shall be well acquainted with general astronomy.

PHYSICS (INCLUDING ELECTRICAL ENGINEERING.)

The courses in physics are designed (1) for those students prepared for advanced work who wish to make physics a speciality; (2) for graduate and special students who wish to extend their knowledge of physics, and for all who take it as a part of their regular undergraduate course; (3) for those who wish to make electricity a specialty.

Graduates and others who wish to pursue the advanced courses and who have not already had the equivalent of the collegiate courses, will take as much of them as may appear desirable.

ADVANCED COURSES.

Lectures.

Professor ROWLAND:
Electricity and Magnetism.
Four times weekly, through the year.
These lectures constitute one-half of a complete course, extending through two years. The other half consists of lectures on thermodynamics, heat, conduction and physical optics. The lectures develop fully the mathematical treatment of the subjects, and to follow them the student should have sufficient mathematical knowledge to read such authors as Maxwell, Thomson, Stokes, Green and Fourier.

Dr. AMES:
Mechanics.
Twice weekly, first half-year.

Hydrodynamics and sound.
Twice weekly, second half-year.

Physical seminary.
Weekly through the year.

Laboratory Work.

Advanced students are expected to give as much of their time as possible to laboratory work. This consists at first in carrying out experiments which familiarize the student with the use of instruments for exact measurement and with experimental methods. When sufficient experience of this kind has been acquired, the student undertakes, under the guidance of the instructors, some research designed to be of permanent value.

Journal Meetings.

All advanced students are expected to meet with the instructors once a week for the reading and discussion of the current physical journals.

The following journals are regularly reported upon in this way: the London, Edinburgh, and Dublin Philosophical Magazine, the American Journal of Science, Wiedemann's Annalen and Beiblätter Zeitschrift für physikalische Chemie, Journal de Physique, Annales de Chimie et de Physique, Exner's Repertorium, Nature, Engineering, Comptes Rendus, London Electrician, Electrical World, Journal of Franklin Institute, Cambridge Philosophical Transactions; also the proceedings and transactions of various societies.

COLLEGIATE COURSES.

These courses are adapted to undergraduates and to those graduate students who wish to extend their knowledge of physics, but are not prepared for more advanced work.

Two years' work is required of those undergraduates who take physics as one of their elective studies, while only one year is necessary for those who take it as a subsidiary subject for the degree of Bachelor of Arts.

Laboratory work accompanies the lectures and recitations throughout the course, the design of this work being to illustrate the subject as it is studied, to impress its principles, and to give clear ideas, rather than to be merely an exercise in manipulation.

But some knowledge of methods is so attained, so that in the second year problems requiring more experimental skill are given.

First Year (Minor) Course.

This course does not assume that the student has had any previous acquaintance with physics, but a knowledge of plane trigonometry and the use of logarithms is required.

1. Elementary Mechanics, Heat, Electricity, and Magnetism, Sound, and Light.

Lectures and recitations daily, through the year. Dr. AMES.

2. Laboratory work, consisting of simple experimental problems supplementing the class-room work.

Three hours weekly, through the year.

Second Year (Major) Course.

This course is designed to meet the wants of both graduates and undergraduates who have already taken either the first year's course or its equivalent, and who wish to pursue further their physical studies. A working knowledge of analytic geometry and calculus is required for admission to this course. The year's work consists of:—

1. Lectures and recitations on the following subjects:

Dynamics, beginning with the study of the particle and extending to some of the simpler problems in the motion of a rigid body.

Elementary Thermodynamics, based on Maxwell's Theory of Heat.

Electricity and Magnetism.

Sound.

Wave Theory of Light, as treated in Preston's Theory of Light.

Daily through the year. Dr. AMES.

2. Laboratory work.

Five hours weekly, through the year.

The laboratory work includes problems that present more experimental difficulties than those undertaken during the first year, or that involve more mathematical knowledge for their complete discussion, written reports being required as in the first year's course. During the year special problems are assigned to the students, which they are expected to work out in a complete manner, taking necessarily more time than is required for the ordinary problems of the course.

ELECTRICAL ENGINEERING.

The course extends through two years and includes instruction in theoretical and applied electricity, steam and hydraulic engineering, machine design, mechanics of engineering, and mechanical drawing. An important feature is laboratory work, to which much attention is paid, and original investigation is especially encouraged.

The instruction is given by Associate Professor LOUIS DUNCAN, Ph.D., Mr. HERMANN S. HERING, M.E., and Mr. WM. S. ALDRICH, M.E.

The course is primarily intended for graduate students. Students who have received the degree of Bachelor of Arts on completing the Mathematical-Physical group in this University, are well prepared to take up the special studies of electrical engineering. Other students will be examined in mathematics and physics.

Special students who are not ready for the work in electrical engineering, must follow the first year undergraduate courses in mathematics (plane analytic geometry and differential and integral calculus), physics, chemistry, and drawing.

These students must pass an entrance examination covering the matriculation requirements in mathematics, French or German (first division), English, United States history, and science.

First Year.

Applied Electricity.

Three times weekly, through the year. Dr. DUNCAN.

Lectures and examples on so much of the physical and mathematical theory of electricity as is considered useful for application.

Laboratory Methods.

Weekly, through the year. Mr. HERING.

Lectures and recitations on methods of performing experiments and conducting tests.

Applied Kinematics.

Twice weekly, first half-year. Mr. ALDRICH.

Machine design, kinematics of machinery, mechanism of prime movers, and power transmission.

Mechanics of Engineering.

Twice weekly, second half-year. Mr. ALDRICH.

Materials, strength, and proportions of details in structural and machine designs, statics and dynamics of machinery.

Mechanical Drawing.

Six hours weekly. Mr. ALDRICH.

Descriptive geometry; machine sketching, designing, technicalities, and graphical methods in kinematics.

Laboratory Work.

Nine hours weekly. Dr. DUNCAN and Mr. HERING.

Exercises are given in fundamental experiments.

Second Year.

Applied Electricity.

Twice weekly, through the year. Dr. DUNCAN.

Theory and design of dynamos and motors, transmission of energy, electric traction, telephone and telegraph, alternating current apparatus, etc.

Steam and Hydraulic Engineering.

Three hours weekly, through the year. Mr. HERING.

Steam boilers, steam engines, and turbines are considered, with especial reference to the requirements of central station work and in accordance with the best modern practice. Steam engine and boiler trials and tests of large stations, as well as the design of central stations for light or power, form important features of the course.

Applied Kinematics.

Twice weekly, first half-year. Mr. ALDRICH.

Kinematics and mechanics of machinery, designing mechanisms and valve gears, the machinery of power transmission.

Mechanical Drawing.

Six hours weekly, through the year. Mr. ALDRICH.

Graphical methods in kinematics and mechanics and central station planning.

Appendix No. 16.

Laboratory Work.

Mr. DUNCAN, Mr. HERING, and Mr. ALDRICH.

Second year students are expected to give as much time as possible to laboratory work, which will consist of more advanced work, than in the first year's course. They will be given every encouragement for the undertaking of original research.

Near the close of the year the class will conduct a test of a central station and electric railroad and prepare a complete report on the same.

CHEMISTRY.

The courses in Chemistry are intended to meet the wants (1) of graduate students who make Chemistry their specialty, or who select it as one of their subordinate subjects for the degree of Doctor of Philosophy; (2) of undergraduate students who study Chemistry for general training; (3) of special students, who, for good reasons, have neither received a bachelor's degree nor matriculated at this University. The first and second years' courses cover the ground of General Chemistry, as far as it is possible to do so in the time occupied. Together they form the full course designed for undergraduates. Graduates and special students who have not done an equivalent amount of work will follow such parts of these courses as may seem desirable.

The Chemical Laboratory, recently enlarged, is well equipped and will conveniently accommodate about two hundred students.

ADVANCED WORK.

Laboratory.

Under the direction of Professor REMSEN and Professor MORSE. Daily, except Saturday, from 9 a.m. to 5 p.m.

The work will consist in a thorough study of analytical methods, making difficult and typical preparations especially of compounds of carbon, and in carrying on investigations on assigned topics.

Lectures.

(*a*) Selected Tops in Advanced Chemistry, by Professor REMSEN. Twice weekly, first half-year.

(*b*) Compounds of Carbon, by Professor REMSEN. Five times weekly, second half-year.

(*c*) Select Analytical Methods, by Professor MORSE.

(*d*) Special Topics, under the direction of the Professor of Chemistry, by the Fellows and other advanced workers.—From fifteen to twenty lectures, second half-year.

This work, while serving to familiarize students with chemical literature, is intended to aid them in acquiring the art of presenting subjects in the form of lectures before audiences. All those who intend to become teachers of Chemistry are expected to take active part in the work.

(*e*) Journal Meeting.—The instructors and advanced students will meet twice weekly for the purpose of hearing reports on the principal articles contained in the journals of Chemistry.

The reports are furnished in turn by all who attend the meetings. The journals read and regularly reported on are: Annalen der Chemie; Berichte der deutschen chemischen Gesellschaft; Journal of the Chemical Society (London); Journal für praktische Chemie; Zeitschrift für analytische Chemie; Zeitschrift für physikalische Chemie; American Chemical Journal of the Society for Chemical Industry; Bulletin de la Société chimique; Annales de Chimie et de Physique; and occasionally others.

INTRODUCTORY AND COLLEGIATE COURSES.

First Year (Minor) Course.

(*a*) Introduction to General Chemistry.

Lectures and examinations five times weekly through the year by Professor REMSEN and Professor RENOUF.

(*b*) Laboratory Work.

Five to six hours weekly through the year under the direction of Professor REMSEN, Professor RENOUF, and Dr. RANDALL.

Second Year (Major) Course.

(*a*) Mineralogy and Crystallography.

Twice weekly, first half-year by Professor MORSE.

(*b*) Chemistry of the Compounds of Carbon.

Three to five times weekly, second half-year by Professor MORSE.

(*c*) Advanced Inorganic Chemistry.

Three times weekly, first half-year, and twice weekly for part of the second half-year by Professor RENOUF.

(*d*) Laboratory Work.

Five to six hours weekly through the year under the direction of Professor REMSEN and Professor RENOUF.

GEOLOGY AND MINERALOGY.

The work at present offered in Geology, including Mineralogy and Palæontology, is designed exclusively for graduate students. It is arranged to meet the wants (1) of those who desire to make these their principal subjects for the degree of Doctor of Philosophy; (2) of those who wish to make one or more of them subordinate subjects. Special arrangements may also be made for graduate students whose time is limited or who desire to devote their attention to particular subjects, without reference to a degree.

The laboratory for Inorganic Geology, including Mineralogy and Petrography, is open daily from 9 a.m. to 5 p.m., under the direction of Professor GEORGE H. WILLIAMS. The work includes crystallography (measuring, calculation, and crystal drawing), physical and general determinative mineralogy, and the microscopical study of the crystalline rocks.

The laboratory for Organic Geology, including Stratigraphy and Palæontology, is open daily from 9 a.m. to 5 p.m., under the supervision of Associate Professor WILLIAM B. CLARK. The work includes a study of selected materials designed to illustrate the general principles of structural and stratigraphical geology, and the more characteristic fossils chosen with reference to their stratigraphical importance and classification.

In addition to the regular laboratory work required in Geology, students have ample opportunity to do field work, for which the State of Maryland presents unusual advantages.

The rocks of the region west of Baltimore offer many interesting problems relative to both eruptive rocks and the crystalline schists; while the mountains still farther west contain nearly the whole sequence of palæozoic strata, and the Chesapeake section exposes the richly fossiliferous cretaceous and tertiary beds. Frequent excursions for the examination of these formations will be regarded as an integral part of the required work. Points of interest in the immediate vicinity of Baltimore will be visited on short Saturday excursions, while a trip of several days' duration will be undertaken, upon the close of the lectures in May, for the purpose of examining the structure and formations of the Appalachians.

Courses of lectures will be given as follows:

(*a*) On General Mineralogy, by Professor WILLIAMS. Four times weekly through the year, at 12 m.

This course embraces crystallography, crystal drawing and projection, physical (especially optical) and general descriptive mineralogy.

It is intended to meet the wants of chemists and also to serve as an introduction to more special work in mineralogy and petrography. There is assumed on the part of the student an elementary knowledge of geometry, optics, chemistry, and blow-pipe analysis.

This course is supplemented by examinations and practical work in crystal drawing and determinative mineralogy during three hours of each week.

(*b*) On Microscopical Petrography, by Professor WILLIAMS. Three times weekly between December 1 and April 1, at 10 a.m.

This course is not intended to cover the entire subject each year, but to deal successively with different phases of it. Last year the petrography of igneous rocks was considered. For the coming year the subjects proposed are the microscopical character of rock-forming minerals and the petrography of the crystalline schists.

(*c*) On General Geology, by Dr. CLARK, with lectures on certain subjects by Professor WILLIAMS. Three times weekly through the year, at 9 a.m.

This course embraces dynamical, stratigraphical, and historical geology, together with an outline of palæontology.

It is intended to meet the wants of students of other departments who desire to take geology as a subordinate subject, and also to serve as an introduction to more special work in petrography and palæontology.

The course will be supplemented by examinations and laboratory work in the determination of rocks and fossils. Frequent excursions will be made, upon which reports, illustrated by maps and sections, will be required.

(*d*) On Palæontology, by Dr. CLARK. Twice weekly after Christmas, at 2 p.m.

(*e*) On Physical Geography, by Dr. CLARK. Three times weekly until Christmas, at 12 m.

This course is required of undergraduates of the first year, and is illustrated by suitable maps, charts, and models.

(*f*) Geological Conferences. Weekly through the year.

At these meetings students are expected to give carefully prepared and illustrated talks on selected geological topics.

(*g*) Evening readings in Geology. Weekly through the winter.

BIOLOGY.

The courses in Biology are designed (1) for students who desire to make Animal Physiology or Animal Morphology a subject of advanced study and research; (2) for students who take Animal Physiology and Animal Morphology as principal or subordinate subjects for the degree of Doctor of Philosophy; (3) for graduates in medicine who desire a laboratory course in Normal Histology or Physiology as preparatory to laboratory courses in Pathology or Pathological Histology; (4) for undergraduates who desire some knowledge of the biological sciences for the sake of general culture; (5) of undergraduates who desire to prepare themselves for the study of medicine.

The biological laboratory is well equipped for research and teaching in the above subjects: it contains rooms specially designed for advanced work in chemical physiology, physiological optics, vivisections, histology, and embryology. The marine laboratory, open during part of the summer, has no definite location; each year a place likely to provide abundant research material is selected, and the necessary equipment provided by the University.

ADVANCED WORK.

Laboratories.

The Biological Laboratory will be open daily during the session, except on Saturdays, from 9 a.m. to 5 p.m., under the direction of Professors MARTIN and BROOKS. The site of the Marine Laboratory for the summer of 1893 has not been selected; the laboratory will probably be open during July and August for students engaged in research under the direction of Professor BROOKS.

Lectures.

1. Physiology of the Sense Organs. Professor MARTIN. Weekly.
2. Physiological Chemistry. Dr. DREYER. Weekly.
3. The Methods and the Apparatus of Physiological Research.

Professor MARTIN, with the co-operation of several members of the staff of the Johns Hopkins Hospital; fellows and advanced students will also be required to deliver some of the lectures in this course. Weekly.

4. Animal Morphology. Professor BROOKS.

Professor BROOKS will lecture once a week to the special students in Animal Morphology on the structure, development, and phylogeny of Echinoderms, Arthropods and Tunicates.

In connection with this course of lectures there will also be two meetings of the Morphological Seminary each week to read, in course, selected memoirs and text books on the subject of the lectures.

5. A Journal Club.

Composed of the instructors and advanced students, will meet weekly for the reading and discussion of recent biological publications.

6. Library facilities.

The laboratory contains a library supplied with standard biological works and complete sets of the more important journals.

The general library of the University receives all the chief journals of general science, and the transactions of the leading learned socities of the world.

The library of the Peabody Institute, within five minutes' walk of the University, contains complete sets of many of the chief biological journals, of the proceedings of learned societies, and other works of reference.

In the libraries of the Medical and Chirurgical Faculty of Maryland and the Johns Hopkins Hospital a large number of medical periodicals are accessible to members of the University.

Collegiate Instruction.

This is designed especially for undergraduate students; but graduate students who have not had a thorough preliminary training will be required to follow the instruction in those subjects of the undergraduate course in which they may be deficient.

Special students, who are not graduates or matriculates, may be received on giving satisfactory evidence that they are likely to be benefited by the course.

The regular undergraduate instruction in normal biology extends over two years, following one year's training in Physics and Chemistry: those who take Biology as a subsidiary subject for the B.A. degree, are required to do only the first year's work in that subject.

First Year (Minor) Course.

This has been planned to meet the needs (1) of those who intend later to take up some one branch of Biology for special study; (2) of students, graduate or undergraduate, who expect to study medicine but meanwhile desire, as a valuable preparation, some general knowledge of the phenomena, laws, and conditions of life; (3) of those who desire as a part of their general college training some acquaintance with the methods of modern experimental and observational science, and select Biology as a study with that end in view.

The course consists of five lectures or recitations weekly, with laboratory work. The following subjects are included in the year's work:

1. General Biology.

Three lectures or recitations weekly from the commencement of the session until the end of March. Professor MARTIN and Dr. ANDREWS.

Attention is directed to the broad characteristic phenomena of life and living things rather than to the minutiæ of descriptive botany or zoology, or to the characters of orders, genera, and species. In the laboratory the student learns how to observe, how to verify and describe what he observes, how to dissect, and how to use a microscope; he examines selected vegetable and animal types from unicellular organisms, such as the yeast plant and Amœba, to the fern and the flowering plant on one side and to the crayfish and a bird on the other. In the lecture room attention is mainly given to the fundamental biological facts and laws which the particular plant or animal under consideration is fitted to illustrate, the object being rather to give the student an idea of what is meant by the terms living things, plant, animal, tissue differentiation, life history, organ, function, natural classification, evolution, development, &c., than to teach him the elements of Botany and Zoology as frequently understood.

2. The Elements of Embryology.

Three lectures or recitations weekly from the beginning of April until the close of the session, with practical study of the development of the frog and the chicken. Dr. ANDREWS.

3. Osteology, Human and Comparative.

Two lectures or recitations weekly until the end of March, with practical study of selected skeletons. Professor BROOKS.

Appendix No. 16.

4. Plant Analysis and the Elements of Systematic Botany.
Lectures and practical instruction twice weekly from the beginning of April until the close of the session. Dr. BARTON.

Second Year (Major) Course.

This is designed for those who, having completed the above minor course, desire to continue biological studies. Ultimately the second year's work in biology will be, at the choice of the student, one of three courses: in the first of these Animal Physiology will be the dominant study; in the second, Animal Morphology; in the third, Botany. For the present a choice can be offered only between the first and second of the three.

1. Mammalian Anatomy.
Five lectures weekly for one month, with five hours laboratory work each week. Dr. ANDREWS.
In connexion with this course the student dissects one of the higher mammals.

2. Animal Physiology and Histology.
Three times a week from early in November until the close of the session. Professor MARTIN.
In this course the microscope structure of the organs is considered in connexion with their functions. The student is instructed in the use of staining and embedding reagents, and in the technique of section-cutting and mounting. He also studies in the laboratory the chemical composition of the more important constituents of the body; the physiological properties of muscle and nerve; the chemistry of digestion and of the secretions; the phenomena of the circulation; reflex actions: the properties of the sense organs, and so forth. Most of the laboratory work the student is required to do himself, but demonstrations of important physiological phenomena requiring special skill or the use of delicate apparatus are given weekly.

3. General Zoology.
Twice weekly, from early in November until the close of the session. Dr. ANDREWS.
This course, based on the work of the minor course, is designed to give the student a knowledge of the structure of the chief groups of animals.

SPECIAL COURSE.

A course of practical instruction in Normal Histology will be given by Professor MARTIN and Dr. DREYER during October and November.
This course is designed for graduates in medicine who desire to prepare themselves for the practical study of Pathological Histology, and will occupy two hours on three afternoons in each week. If there be sufficient demand it will be repeated in the spring of 1893. The fee for the course is 15 dollars.

GREEK.

Greek Seminary.

Professor GILDERSLEEVE will conduct the Greek Seminary, the plan of which is based on the continuous study of some leading author or some special department of literature.
The Seminary consists of the Director, Fellows, and Scholars, and such advanced students as shall satisfy the Director of their fitness for an active participation in the work by an essay, a critical exercise, or some similar tests of attainments and capacity. All graduate students, however, may have the privilege of attending the course.
During the next academic year the study of *The Attic Orators* will constitute the chief occupation of the members. There will be two meetings a week during the entire session. Especial attention will be paid to the development of language and style, and to the antique canons of æsthetic criticism. The rhetorical works of Dionysios of Halikarnassos will be studied in connexion with this course.
The student should possess the text of the orators (Teubner ed.), and the rhetorical works of Dionysios of Halikarnassos, Vols. V. and VI. of the Tauchnitz (Holtze ed.). Blass's Geschichte der Attischen Beredsamkeit is an indispensable auxiliary.

Advanced and Graduate Courses.

1. Professor Gildersleeve will also conduct a course of practical exercises in Greek, consisting chiefly in translation and dictation from Greek into English and English into Greek, two meetings a week, from the beginning of the session to the first of January.
2. He will lecture on Greek Lyric Poetry, with illustrative readings, once a week after January 1.
3. He will also lecture on the Hypotactic Sentence, in continuation of the course on Greek Syntax in its relation to style. In connexion with this course special points in Greek Syntax will be assigned for investigation and discussion.
4. Arrangements will be made under Professor Gildersleeve's general superintendence for competent guidance of the private reading of advanced students.
Notice of other courses is reserved.
Dr. ALFRED GUDEMAN will conduct the following courses:
5. History of Classical Philology, during the first half-year.
6. History of Alexandrian Literature, during the first half-year.
7. Plutarch's Life of Cicero, with special reference to the sources, during the second half-year.
Dr. W. M. ARNOLT will conduct the following courses:
8. Origin and History of the Septuagint, and the other Greek Versions of the Old Testament (including the Apocrypha).
9. Textual Criticism and Hermeneutics of the New Testament.
10. St. Paul's Epistle to the Galatians—critical introduction and exegesis.

Undergraduate Courses.

Associate Professor SPIEKER will conduct the undergraduate courses in Greek as follows:

1. Lysias, Select Orations.
Four times weekly, first half-year.
Private Reading: Xenophon, Hellenica, books i., ii.

2. Homer, Iliad, three books; Euripides, one play.
Four times weekly, second half-year.
Private Reading: Herodotus, one book.

3. Thukydides, one book.
Three time weekly, first half-year.
Private Reading: Plato, Gorgias.

4. Aischylos, one play; Sophokles, one play.
Three times weekly, second half-year.
Private Reading: Aristophanes, one play.

5. Prose Composition.
Weekly exercises in connexion with each of the above courses.

6. Conferences on Greek Literature, with select readings from the elegiac, iambic, and lyric poets.
Weekly, through the year.

7. Sight Reading.
A voluntary course weekly through the year.

LATIN.

I. LATIN SEMINARY.

Professor WARREN will conduct the Latin Seminary. During the next academic year the centre of work will be the plays of Plautus and Terence. There will be two meetings a week during the entire session, devoted to the critical interpretation of these authors, to various auxiliary studies, and to the presentation of papers prepared by members of the Seminary.
Students are advised to provide themselves in advance with Umpfenbach's critical edition of Terence (Berlin, 1870), or Dziatzko's complete text edition (Tauchnitz, Leipzig, 1884). The annotated editions of the Andria and Adelphoe by Spengel, and of the Phormio and Adelphoe by Dziatzko will also be found useful, as well as the edition of Terence by Klotz (2 vols., 1838-40, Leipzig), which contains the commentaries of Donatus and Eugraphius. For Plautus the annotated editions by Brix of the Trinummus, Captivi, and Menaechmi, and by Lorenz of the Miles Gloriosus, Pseudolus, and Mostellaria, and the critical

edition of the Miles Gloriosus by Goetz (Leipzig, Teubner, 1890), are recommended.

II. Advanced and Graduate Courses.

1. During the first half-year Professor Warren will give a course of weekly lectures on subjects intimately connected with the work of the Seminary, such as the history of Roman Comedy, the metres of Plautus and Terence, and the peculiarities of early Latin Syntax.

2. He will also lecture on Roman Epigraphy, and conduct a series of weekly exercises in the interpretation of Latin inscriptions, especially those of an early period.

E. Schneider's "Dialectorum Italicarum Aevi Vetustioris Exempla Selecta" (Leipzig, Teubner, 1886) will be used as a basis.

3. Throughout the year he will lecture once a week on Historical Latin Grammar.

4. During the second half-year he will read Aulus Gellius with a class, once a week.

5. A journal club will meet regularly to report on the current philological periodicals containing articles of interest to Latinists.

6. Dr. Alfred Gudeman will conduct a course in Tacitus, Dialogus, with introductory lectures on the "Dialogus Controversy," during the second half-year.

III. Undergraduate Courses.

1. Livy, two books.
   Four times weekly, first half-year. Dr. K. W. Smith.
   Private reading: Cicero, pro Roscio Amerino; Quintus Curtius, book iv.

2. Horace, Select Odes, Satires, and Epistles.
   Four times weekly, second half-year. Professor Warren.
   Private reading: Horace, Epodes; Ovid, Fasti, books i. and ii.

3. Plautus, Captivi; Terence, Andria.
   Three times weekly, first half-year. Dr. K. W. Smith.
   Reading at sight.
   One hour weekly.
   Private reading: Plautus, Menaechmi; Terence, Heautontimorumenos.

4. Lucretius, books i. and iii.; Cicero, de Natura Deorum, book i.
   Three times weekly, second half-year. Dr. K. W. Smith.
   Reading at sight.
   One hour weekly.
   Private reading: Cicero, de Natura Deorum, book iii; Lucretius, v.

5. Prose Composition.
   Weekly exercises in connexion with each of the above courses.

6. Tacitus, Agricola, Germania, and one book of the Annals.
   Four times weekly, second half-year. Dr. K. W. Smith.

SANSKRIT AND COMPARATIVE PHILOLOGY.

The following courses will be given by Professor Maurice Bloomfield:

A. Linguistic Science, Ethnological History, and Comparative Grammar.

1. The Elements of Linguistic Science, together with an exposition and criticism of methods in scientific grammar.
   Weekly, through the year.

2. Elementary Comparative Grammar of Greek and Latin:
   The history of the vowels and the vowel-systems (ablaut) with special reference to the vocalic system of the Germanic languages.
   Weekly, through the year.
   Note.—No knowledge of Sanskrit is required for either of the two courses indicated above. The first course sketches briefly the history of the Science of Language; presents a short analysis of the principal Indo-European languages; and deals with the fundamental questions of change in language and the origin of language. It is designed to outline the general principles involved in the historical study of language in general. The second course is intended as an introduction into the most elementary methods and results of the comparative grammar of the classical languages by treating carefully and simply one chapter of the subject.

3. Introduction to the Ethnological History of the Indo-European peoples, with especial reference to the ethnic character of modern European States.
   Twelve lectures, one hour weekly, beginning in October 1892.
   The themes treated will be as follows: The relation of ethnology to history; the Aryan people, its primitive home and common character; India, the Vedas, Brahmanism, Buddhism; the Zorastrian religion and literature; classical Persian literature; the Aryan peoples on the boundary between Asia and Europe; Greece and the Hellenic tribes; the Italic tribes (Oscans, Umbrians, Etruscans), and the spread of the Latin race through Southern Europe; the Celts, with especial reference to their influence upon civilisation in mediæval Europe; the Germanic people, Germanic mythology, early Germanic literature; the blending of Germanic nationality with surrounding peoples; the Baltic nations; ancient Prussia; the Slavic peoples; retrospective survey of the individual nations of Europe with reference to their ethnical composition; the non-Aryan peoples of Europe.

B. Indo-Iranian Languages.

4. Vedic seminary: Critical study of the Rig-Veda and the Atharva-Veda with reference to the remaining Vedic literature.
   Weekly, through the year.
   Note.—In the study of the Vedic hymns the accessory literature of the Brāhmanas and Sūtras is consulted in accordance with the methods which have been elaborated in the seminary within recent years. The Vedic seminary will also take part in the composition of a concordance of the hymns and sacrificial formulas of the literature of the Vedas which was begun last year.

5. Introduction to Zend and the Zend-Avesta.
   Weekly, through the year

6. Readings in the Hitopadeça, Kathāsaritsāgara, and Manu. (Second year's course.)
   Twice weekly, first half-year.

7. Introduction to the Elements of Vedic study. (Second year's course.)
   Twice weekly, second half-year.

8. Elementary course in Sanskrit: grammar; prose writing; interpretation of easy texts.
   Twice weekly, through the year.

ORIENTAL SEMINARY.

The various courses offered in the Oriental seminary are adapted to the requirements of four classes of students:

(*a*) Students of theology wishing to obtain a thorough acquaintance with the sacred tongue and its sister idioms as a means of elucidating Scripture and problems of the comparative history of religion.

(*b*) Students of linguistics intending to make comparative grammar of the Semitic languages their specialty.

(*c*) Students of Oriental history and archæology desirous of drawing directly from the original sources.

(*d*) Persons looking for instruction in the living Oriental languages (as Modern Arabic or Turkish) for practical purposes.

Most of the teaching is not given by formal lectures, but under seminary organisation, the student being from the first brought face to face with the several idioms, without long theoretical introduction. Special stress is laid on a thorough grammatical training, imparted in connexion with the minute philological analysis of some selected text in the respective languages, printed grammars serving only for occasional reference.

The centre of the work is the Old Testament, particular attention being paid to the critical study of Biblical texts and the cuneiform inscriptions bearing on the Scriptures.

Appendix No. 16.

A special room has been set apart containing a well equipped working library of all the branches of Oriental research.

The following courses will be given by Professor HAUPT, assisted by Dr. ADLER, DR. JOHNSTON, Dr. PRINCE, and Dr. ARNOLT.

Biblical History and Archæology.

1. History of the Ancient East.
(Egypt, Babylonia, Assyria, Media, Persia.) Dr. JOHNSTON. Weekly.

2. History of Israel with special reference to the period of the Exile.
Dr. ADLER. Weekly.

3. Biblical Antiquities:
Manners, customs, and institutions of the Ancient Hebrews. Dr. ADLER. Weekly.

Biblical Philology.

4. Elementary Hebrew.
Gesenius-Mitchell's Grammar, and reading of the Pentateuch. Dr. ADLER. Weekly.

5. Hebrew Exercises.
Reading at sight selected chapters of the historical books. Dr. ADLER. Weekly.

6. Hebrew Prose Composition.
Practical exercises in translating from English into Hebrew. Professor HAUPT. Bi-weekly, Monday, 5 p.m.

7. Critical interpretation of the Prophets Haggai and Zechariah.
Professor HAUPT. Monday, 3 p.m.

8. Messianic Psalms.
Professor HAUPT. Monday, 4 p.m., during the first half-year.

9. Post-Biblical Hebrew.
The Mishuic Tract Aboda-Zara (ed. Strack, Berlin, 1888). Dr. ADLER. Weekly.

10. The Targumic Version of the Psalms.
Dr. ALDER. Weekly.

11. The Septuagintal Version of the Psalms.
Dr. JOHNSTON. Weekly.

12. Origin and History of the Septuagint, and the other Greek Versions of the Old Testament (including the Apocrypha).
Dr. ARNOLT. Weekly.

13. Textual Criticism and Hermeneutics of the New Testament.
Dr. ARNOLT. Weekly.

14. St. Paul's Epistle to the Galatians.
Critical introduction and exegesis. Dr. ARNOLT. Weekly.

Assyriology.

15. Assyrian Seminary.
Cursory reading of Rawlinson's Inscriptions, vol. IV. Professor HAUPT. Two hours weekly. Thursday, 10 a.m. to 12 p.m.

16. Assyrian (second year's course).
Interpretation of selected historical texts. Dr. JOHNSTON.

17. Assyrian for beginners.
Dr. JOHNSTON. Twice weekly.

Syriac.

18. Syriac grammar, and reading of the Peshitâ version of the New Testament.
Professor HAUPT. Thursday, 12 p.m.

Ethiopic.

19. Dillman's Chrestomathia Aethiopica.
Dr. ADLER. Weekly.

Arabic.

20. Arabic for beginners.
Dr. JOHNSTON. Weekly.

21. Arabic Prose Composition.
Professor HAUPT. Bi-weekly. Monday, 4 p.m.

Turkish.

22. Turkish (Osmanli), for beginners.
Dr. PRINCE. Weekly.

GERMAN.

GRADUATE COURSES.

Professor WOOD will conduct the following courses:—

1. Old High German.
Twice weekly, first half-year.
The chief object of the course is the comparative study of the phonology and dialectology of Old High German, as supplying a basis for the history of the German language. Some knowledge of the principles of Old High German grammar is desirable as a preparation. (Braune, Althochdeutsche Grammatik, 2 Auflage, 1891.) A series of the less extended monuments, representing all the varieties of Old High German, will be interpreted and compared in their language relations. The texts will be taken from Müllenhoff and Scherer's Denkmäler, 3 Ausgabe, hrsg. Steinmeyer, 2 Bände, 1892.

2. Middle High German.
Weekly, first half-year; three times weekly, second half-year.
The works of Walther von der Vogelweide will be studied, with the second edition of Wilmanns (Halle, 1883) as a basis. Some previous study of Middle High German grammar is essential for this course. It is desirable, though not necessary, that the members of the class should have read at least part of the poems in "Minnesangsfrühling," as Walther will be compared with his predecessors, both as to literary art and poetical technic.
Note.—Courses 1 and 2 will form the work of the German Seminary during the year 1892–93. There will be an additional meeting of the seminary, once in two weeks, at which the members will be expected to present, in turn, papers upon subjects to be determined on after consultation.

3. Gothic.
Twice weekly, through the year.
The study of both German and English Philology properly begins with this course. The Gothic inflections are first learned, after which the chief linguistic relations of Gothic to the other members of the Teutonic group of languages are explained, and the texts in Braune's Gotische Grammatik (3 Auflage, 1887) are read. For Gothic Syntax, the following works are used as a basis: T. Le Marchant Douse's Introduction to the Gothic of Ulfilas (London, 1886), and G. H. Balg's First Germanic Bible, 1891. For etymological study, each member of the class should provide himself with Kluge, Etymologisches Wörterbuch der deutschen Sprache.

4. Outlines of Teutonic Philology.
Weekly, through the year.
This study is an extension of the course in Gothic. The Teutonic dialects will be considered, as a group, in their more primitive relations, the special object of the course being to impart a knowledge of the most essential changes by which the different languages of the group were differentiated from the primitive speech type and from each other. The steps by which the forms of the German language were involved will then receive attention.

5. The period of "Sturm und Drang" in German Literature.
Lectures and Readings.
Twice weekly, first half-year.
The object of the course is to supply a basis for the study of Goethe's first period (1770–1775). The treatment on the part of the "Stürmer und Dränger" of their most characteristic themes (Faust, Prometheus, etc.) will accordingly be considered, and the Faust-versions and Faust-fragments of Lessing, Lenz, Maler Müller, and Klinger will form the chief subjects for the readings.

6. The Swabian School of Poetry.
Weekly, second half-year.
The period from Uhland to Mörike will be considered in its chief representatives. Special attention will be given to the relation of the Swabians to the Austrian

poets (Lenau, etc.), as well as to "Young Germany" and Heine.

Dr. LEARNED will give the following courses:

7. Middle High German.
Weekly, through the year.
The inflections will be studied in Paul's Grammatik, 3 Auflage, 1889, with constant reference to Brandt's Grammar for the historical development of Middle High German forms. Hartman's Armer Heinrich (ed. Wackernagel-Toischer, Basel, 1885) will then be read.

8. Nibelungenlied.
Twice weekly, first half-year.
In this course the Nibelungenlied will be interpreted with reference to the origin and growth of the Popular Epic. Among the questions to be discussed are the historical and mythical elements of the epic, the origin of epic lays, the form of the Popular Epic, compared with the Court Epic, the transmission of the Nibelungenlied, the relations of the manuscripts and the influence of the poem upon the later epics of the thirteenth century.

9. History of Middle High German Speech.
Twice weekly, second half-year. Lectures.
The period from the eleventh to the fourteenth will be embraced in this course. The following subjects will be treated: the development of court poetry as influencing the language of literature; the influence of French; the attitude of court poetry towards popular speech; the political and literary relations of Upper and Lower Germany; the Middle High German literary language and the dialects; the use of German in place of Latin in official documents; the development of Middle High German prose, and the rise of the "Kanzleisprache."

UNDERGRADUATE COURSES.

Major Course.

1. Classics.
Goethe, Hermann und Dorothea, Faust. Twice weekly. Professor WOOD and Dr. LEARNED.

2. Prose Readings.
Freytag, Aus dem Mittelalter. Weekly. Dr. LEARNED.

3. History of German Literature.
Kluge, Geschichte der deutschen Nationallitteratur. Weekly. Dr. SCHOENFELD.

4. Prose Composition.
Buchheim, with Wilmanns' Deutsche Schulgrammatik, 2 Theil. Weekly. Dr. LEARNED.

5. Private Readings.
Voss, Luise; Schiller, Wallenstein.

Minor Course A.

1. Classics.
Schiller, Wilhelm Tell; Goethe, Egmont: Heine, Harzreise. Twice weekly. Dr. LEARNED.

2. Prose Readings.
Briefwechsel zwischen Schiller und Goethe. Weekly. Professor WOOD.
Freytag, Aus dem Staat Friedrichs des Grossen. Weekly. Dr. SCHOENFELD.

3. Prose Composition.
Whitney's Grammar, Exercises, 2nd Series. Dr. LEARNED.

4. Private Readings.
Schiller, Des Grafen Lamoral Egmont Leben und Tod (in Schiller's Historische Skizzen, ed. Buchheim, Clarendon Press), Die Jungfrau von Orleans.

Minor Course B.

Class-work.
1. Otis' Elementary German; Buchheim's Modern German Reader, Part I.; Schiller, Wilhelm Tell; Goethe, Egmont. Four hours weekly. Dr. SCHOENFELD.
2. Prose Composition: Whitney's Grammar, Exercises, 1st Series. Weekly. Dr. LEARNED.

Special Courses.

1. Historical German.
Three times fortnightly. Dr. SCHOENFELD.
Freytag, Aus dem Staat Friedrichs des Grossen; Mehlis, Der Rhein im Mittelalter; other selected works.

2. Scientific German.
Three times fortnightly. Dr. SCHOENFELD.
Helmholtz, Ueber Goethe's Naturwissenschaftliche Arbeiten (ed. Seidensticker); Cohn, Ueber, Bakterien, (ed. Seidensticker; Alex. v. Humboldt, Auswahl aus seinen Werken. Stuttgart (Cotta).
Classes 1 and 2 are intended for graduate students in any department of study, who possess an elementary knowledge of German and wish to acquire fluency in reading.

3. German Conversation.
Twice weekly. Dr. SCHOENFELD.
This course is open to graduate and undergraduate students in any department, who show their fitness for it. Graduate students in German will be expected to enter this class, unless their command of German is already satisfactory.

4. Lectures on Germany.
Dr. SCHOENFELD will deliver five class lectures on subjects connected with German History and culture.

ENGLISH.

Dr. JAMES W. BRIGHT will conduct the following courses:

1. The English Seminary.
Three central themes will be successively studied. The first third of the year will be given to an investigation of the Benedictine Reform and to the Literature of Ælfric's Period. The Beowulf will occupy the second third of the year, and the last topic will embrace the works of Chaucer, Langland, and Wyclif.
Four hours weekly.

2. Lectures on the History of English Philology, and on special chapters in English Philology.
Weekly, through the year.

3. Lectures on the Elements of Phonetics.
Weekly, second half-year.

4. The Interpretation of Selected Texts.
Twice weekly, through the year.

5. Journal Meetings.
Weekly (or once in two weeks), through the year.

6. Anglo-Saxon.
Bright's Anglo-Saxon Reader, and Sievers' Anglo-Saxon Grammar (translated by Cook).
Twice weekly, through the year.

Dr. WM. HAND BROWNE will conduct the following courses:

7. The "Classical" Period of English Literature.
Weekly, through the year.

8. Early Scottish Poets.
Early Scottish Poetry from Barbour (1350) to Lindsay (1550) will be studied with the aid of a chrestomathy especially prepared for this class. The readings will be supplemented by a concurrent course of historical and critical lectures.
Weekly, through the year.

9. Lectures on Selected Periods of English Literature.
(*a*) Elizabethan Literature.
(*b*) The Revolutionary Movement of the nineteenth century.
Twice weekly, through the year.

10. Middle English.
Morris and Skeat's "Specimens of Early English" will be used as the text-book.
Twice weekly, through the year.

11. Lectures on the History of the Middle English Period.
Alternate weeks, through the year.

12. English Literature (General).
The Morley-Tyler "First Sketch of English Literature" will be used as the text-book.
Twice weekly, through the year.

13. Essays.
Essays by the students on subjects connected with their studies will be read and commented on in class.
Alternate week, through the year.

Mr. C. A. SMITH will give instructions to undergraduates in Rhetoric and English Composition.
Twice weekly, through the year.
[*Note.*—Numbers 6, 8, and 9 constitute the Major Course in English; 10 to 13, the Minor Course.]

Appendix No. 16.

Lectures on Literature.

An announcement will be made later of the third course of the Percy Turnbull Memorial Lectures on Poetry. Lectures on English Literature will also be given on the Caroline Donovan Foundation.

ROMANCE LANGUAGES.

Advanced Courses in Romance Philology.

Professor Elliot.

(*a*) Seminary.
The Fables of Marie de France; Work on Manuscripts. Three hours weekly.
(*b*) Popular Latin. Weekly.
(*c*) Lectures on Dante. Weekly, first half-year.
(*d*) Linguistic Ethnography of France and Italy. Weekly, second half-year.
(*e*) French Dialects. Weekly.

Dr. Matzke.
Italian Literature. Weekly.
The Romanzo Cavallersco.
Spanish Literature. Weekly.
The Beginnings of the Spanish Drama.
With first year students.

1. Old French Philology.
(*a*) Lectures on Old French Phonology and Morphology; Schwan, Grammatik des Altfranzösischen; Suchier, Le Français et le Provençal, tradnit par P. Monet. Two hours weekly.
(*b*) Practical exercises based on Aucassin et Nicolete, ed. Suchier. Weekly.

2. Interpretation of Old French Texts.
Constans, Chrestomathie de l'Ancien Français. 2nd edition. Cligès, Foerster's edition. Two hours weekly.

Special Courses in Italian and Spanish.

Dr. Matzke.

1. Italian.
Grandgent's Italian Grammar and Composition; Goldoni, Gl' Innamorati; Grossi, Marco Visconti; Dante, Divina, Commedia. Three hours weekly.

2. Spanish.
Knapp's Spanish Grammar and readings; Caballero, La Familia de Alvareda; Calderon, La Vida es Sueño. Two hours weekly.

The combined courses in Italian and Spanish may be pursued as a major course by undergraduates, who have taken the minor course in French.

Undergraduate Courses in French.

I. First Year (Minor) Course.

Class A.

1. Contes; Novels; Drama.
Historiettes Modernes, II., ed. Fontaine; Choix d'Extraits de Daudet; Sand, La Mare au Diable: Balzac, Eugénie Grandet; Corneille, Polyeucte; Hugo, Hernani. Two hours weekly.

2. Modern French Comedy.
Labiche, Le voyage de M. Perrichon; Augier, Le gendre de M. Poirier; Pailleron, Le monde où l'on s'ennuie; Coppée, Le Luthier de Crémone. Weekly.

3. History of French Literature (xvii.–xix. centuries). Weekly.

4. Prose Composition and Idioms.
Whitney's Grammar, Part II., and Exercises based on L'Abbé Constantin, ed. Grandgent. Weekly.

Class B.

For undergraduates who have matriculated in Greek, and for graduates beginning French. Five hours weekly.

II. Second Year (Major) Course.

1.—(*a*). Classical Tragedy.
Rapid reading of Corneille, Racine, and Voltaire. Weekly, first half-year.
(*b*). Classical Comedy.
Rapid reading of Molière, Regnard, and Piron. Weekly, second half-year.

2. The study of the Romantic Movement.
Hugo, Notre Dame de Paris, Ruy Blas; Modern French Lyrics. Two hours weekly.

3. History of French Literature from the beginning to the xvii. century. Weekly.

4. Prose Composition.
Critical study of idioms. Weekly, first half-year.
Original essays. Weekly, second half-year.

HISTORY AND POLITICS.

Advanced Instruction.

Professor Herbert B. Adams has general direction of the work in History and Politics. He gives each year two courses, one representing some field of ancient politics and the other some field of modern politics. The three years' curriculum may be entered at the beginning of any half-year's course. The lectures are accompanied by prescribed courses of private reading and by written examinations at stated intervals.

History.

For 1892–93 the following courses are announced:
Professor H. B. Adams offers:

1. History and Politics.
Two hours fortnightly, throughout the year.
The Seminary of History and Politics is a co-operative society composed of the instructors, associates, fellows, scholars, and graduate students in this department, for the encouragement and promotion of original investigation in American, institutional, educational, economic, and social history. Subjects are assigned by the director to individuals for private research and public report in the Seminary. These reports of progress are discussed, criticised, and often referred to committees for further report. The results finally attained may be embodied either in these submitted for the degree of Doctor of Philosophy, or in other papers, and published in the Historical Studies or elsewhere.

2. Early Germanic History and Sources.
Two hours weekly, first half-year.
This course treats of Germanic ethnology, the migrations of peoples, relations between Rome and the Northern nations, and the foundation of Germanic state life, together with Germanic institutions, federations, and survivals. Special consideration will be given to the sources of early European history.

3. English and American Institutional History.
Two hours weekly, second half-year.
The continuity of Germanic life and institutions in England and America will be illustrated, particularly in local and federal forms. Particular attention will be paid to American colonial history and to historical sources.

Note.—In the two following years, Professor Adams expects to discuss the origin of Greek institutions and the history of Roman politics;—and likewise in successive years the history of Prussia, and the modern history of France.

Professor Emmott will give the following courses:

4. The History and Development of the Common and Statute Law of England.
Two hours weekly through the year.
The lecturers on this subject will trace the outlines of the history of the Laws of England, and set forth their leading principles, showing how those laws were until recently administered by distinct tribunals, the Courts of Common Law and the Court of Chancery, and pointing out the limits of their respective jurisdictions.
The course will commence with an examination of the effects of the Teutonic settlement in England, and of the Laws and Customs of the Anglo-Saxons relating to property, together with an account of the judicial institutions of the Anglo-Saxons and of the Anglo-Saxon vassalage. It will then treat of the Sources of the Feudal System, of the origin of Feudal Vassalage, and the effects of the Norman Conquest upon the pre-existing laws and institutions of England, and will comprise a statement of the origin, sources, and leading principles of the Common Law of England. The history of early Criminal Law, of Torts, of Contracts,

and of Successions will also be treated of, and the rise and development of Statute Law in reference to these topics will be carefully traced.

5. English Constitutional Law and History.
Three hours weekly, first half year.

The origin and development of the English Constitution and of the fundamental principles of English constitutional law will be carefully and systematically traced in chronological order from the earliest settlements in Britain down to the present time. Taswell-Langmead's English Constitutional History will be used as containing an outline sketch of the ground to be covered, with frequent references to the works of Freeman, Stubbs, Hallam, May, Gardiner, Dicey, Anson, Hearn, Bagehot, Traill, Spencer Walpole, and other writers. The instruction will be given by means of lectures, by frequent recitations, and by lectures given by the students themselves on assigned topics.

6. Sources of English History and the Early History of Historical Writing in England.
One hour weekly, beginning October, 1892.

A systematic account of the materials from which our knowledge of early English History is drawn and of the general nature and contents of the Year-Books, Court Rolls, and other early records, and of the work accomplished by the Record Commission will be given.

NOTE.—In successive years, Professor EMMOTT proposes to give a course upon Historical and Comparative Jurisprudence, and a course upon the history and principles of the Roman Law and the history of Roman Institutions.

7. Professor WOODROW WILSON, of Princeton College, will give the third series of his lectures on Administration.
Five hours weekly in February and March, 1893.

The lecturers in 1893 will be devoted to local government. They consider the general conditions, principles, and historical development of local government as seen in the growth and experience of leading governments; describe local administrative organization in England, France, Prussia, Italy, and the United States in some detail; and discuss the administrative problems connected with the government of the modern industrial city. The course closes with a brief consideration of administrative justice and the European system of separate administrative courts.

8. Dr. JOHN MARTIN VINCENT, Associate in History, will give a course of lectures on the Sources of History, and on Historical Methods.
One hour weekly, through the year, beginning in October, 1892.

The different classes of historical material will be described, and methods of finding, proving, criticising, and using the same in the study and literary construction of history will be discussed. This introduction will be followed by a systematic study of the sources of the history of leading modern states. The chief historians will be characterized and descriptions given of important bibliographical works, collections of chronicles, annals, memoirs, biographies, publications of societies, collections of treaties, state papers, laws, public documents, and other materials which form the historical records of each country. Practical exercises in the interpretation and criticism of documents and writers will give opportunity to apply the theories brought forward and to cultivate the power of historical judgment.

9. Professor MAURICE BLOOMFIELD will give a course of twelve lectures, introductory to the Ethnological History of the Indo-European Peoples, with especial reference to the ethnic character of modern European States.
One hour weekly, beginning in October, 1892.

The themes treated will be as follows: the relation of ethnology to history; the Aryan people, its primitive home, and common character; India, the Vedas, Brahmanism, Buddhism; Persia, the Zoroastrian religion and literature; classical Persian literature; the Aryan peoples on the boundary between Asia and Europe; Greece and the Hellenic tribes; the Italic tribes (Oscans, Umbrians, Etruscans), and the spread of the Latin race through Southern Europe; the Celts with especial reference to their influence upon civilization in mediæval Europe; the Germanic peoples, Germanic mythology, early Germanic literature, the blending of Germanic nationality with surrounding peoples; the Baltic nations; Ancient Prussia; the Slavic peoples; retrospective survey of the individual nations of Europe with reference to their ethnical composition; the non-Aryan peoples of Europe.

10. Dr. CYRUS ADLER will give a course on the
a. History of Israel with special reference to the period of the Exile.
Weekly.

Ten lectures describing the political condition of Western Asia previous to the Exile, the causes which brought it about, and its influence on the Jewish church and state. The lectures are intended to convey to students of history the results of recent Biblical criticism and of modern archæological discovery.

b. Biblical Antiquities (manners, customs, and institutions of the ancient Hebrews).
Weekly.

A series of eight lectures, four of which will be devoted to a study of the ancient Jewish feasts and their survival and form in the modern synagogue, and four to a discussion of important Biblical monuments.

11. Dr. CHRISTOPHER JOHNSTON will lecture on the History of the Ancient East (Babylonia, Assyria, Persia, Egypt, Israel).

A series to weekly lectures on the Ancient East, with special reference of Biblical History and embodying the results of modern discoveries in this branch of Oriental research.

12. JAMES SCHOULER, LL.D., author of the "History of the United States under the Constitution," will give twenty-five lectures on American Constitutional Law.
Three hours weekly, in February and March, 1893.

This course will embrace a study of Colonial Charters and State Constitutions, of early National Tendencies, the Articles of Confederation, and the Convention of 1787, with an historical and legal commentary upon the Constitution of the United States and its amendments.

In the following year, Mr. Schouler will lecture on American Political History.

13. Hon. JOHN A. KASSON, LL.D., of Washington, D.C. (U. S. Minister to Austria, 1877–81, and Minister to Germany, 1884–85), will give ten lectures on the History of European Diplomacy.

14. Dr. FREDERIC BANCROFT will give a short course of lectures on American Diplomatic History.

15. Dr. WM. HAND BROWNE will give a short course of lectures on the Early History of Maryland.

POLITICAL ECONOMY AND SOCIAL SCIENCE.

1. Professor HENRY CARTER ADAMS, of the University of Michigan, will give twenty lectures on Finance.
Five hours weekly, beginning early in 1893.

He will consider such topics as public expenditures; budgets; financial administration and control; public domain and public industries; taxation; public debts.

2. Professor JOHN B. CLARK, of Smith College, Northampton, will give twenty-five lectures on the Economic Theory of Distribution.
Four hours weekly, for six weeks, beginning in October.

The course will present a theory of distribution that, in its entirely, is new, though parts of it have been published. It will isolate and separately study the static forces of distribution. It will afterwards make a separate study of those dynamic influences that are dependent on changes in the social structure, and that act, in each particular instance, only transiently. It will show that in a social state, production is a synthesis, the elements, of which can be distinguished, and that distribution is an analysis, that tends wherever natural law has its way, to retrace the steps of the synthetic operation, and give to each contributor his separate product. Production itself, as quantitatively apportioned, is identical with normal distribution. It will attain a law of wages-and-interest by an application of the abused Ricardian principle that, as restricted to the field of the rent of land, has blocked the way to the discovery of the law of general distribution. It will reveal the direction of social evolution.

3. Dr. SIDNEY SHERWOOD will give a course of twenty-five lectures on Money and Banking.
Four hours weekly, beginning in November, 1892.

This course will review briefly the history of money and of the origin and development of banks. Monetary theories, and the more important problems of the day connected with the currency will be presented and discussed. Particular attention will be given to the

Appendix No. 16.

principles and working of the great banking systems of England, Continental Europe, and the United States.

In Social Science the following courses may be expected:

4. An introductory course of six lectures by President Gilman.

Weekly, beginning in October.

These lectures will aim to acquaint the student with the scope of modern discussions respecting the principles of public education and philanthropy. Arrangements will be made by which those who desire to do so may visit some of the principal public institutions of Baltimore and its neighbourhood.

5. A course of fifty or sixty lectures on current social problems in Europe, by Dr. E. R. L. Gould, for several years past in the service of the U. S. Department of Labour.

Three hours weekly, beginning in January, 1893.

This course will comprise a comparative review of social legislation in the principal countries of Europe during the past twenty years. An analytical study will also be made of such questions of contemporary importance as the social functions of cities, public assistance, the housing of the working classes, the modern industrial system and its effects upon the family, the liquor traffic in its relation to working men, technical and trade education, labour movements, a shorter working day, arbitration of industrial disputes, social insurance, and other topics of general interest from the social economic point of view. The treatment of these subjects will be comparative and practical. While special prominence will be given to Europe, American needs and experience will receive due attention.

6. A course of ten lectures by Dr. Amos G. Warner, Superintendent of Charities in the District of Columbia, upon Charities and their Administration, especially upon the relief of the unsuccessful and dependent classes.

One hour weekly, beginning in November, 1892.

The course will touch upon the industrial aspects of natural selection, and will describe what is being done to care for the unsuccessful and dependent classes, and to save the incompetent or semi-competent from dependence. American experience as regards public, private, subsidized, and endowed charities will be considered and the ascertained results of various forms of benevolent work, whether satisfactory or not, will be indicated.

7. A course of ten lectures by Dr. Albert Shaw, American Editor of the Review of Reviews, on American Municipal Government and Civic Training.

8. A course of five lectures by Dr. William T. Harris, U. S. Commissioner of Education, on the Philosophy of Education.

9. A course of five lectures by James MacAlister, LL.D., President of the Drexel Institute, Philadelphia, on the History and Institutes of Education.

The following topics will be considered: The Renaissance in its relations to education; Comenius and his application of the Baconian philosophy to educational problems; the English Renaissance and the Humanistic movement in England; Rousseau and the introduction of Naturalism in education; Pestalozzi; Froebel; Outlines of the leading European systems of education; the German system; education in France from the period of the Revolution to the present time; the history of popular education in England; some leading questions in public education in Europe and the United States.

Undergraduate Courses.

History and Politics.

1. Greek and Roman History.

Three hours weekly, from January until June, with Dr. J. M. Vincent.

2. Outlines of European History (substitute for Course 1.)

Three hours weekly, from January to June.

3. History, Minor Course: Herodotus and Thucydides, in translation.

Weekly through the year, with Dr. J. M. Vincent.

4. History, Minor Course: Livy and Tacitus, in the original.

Four times weekly, with classical instructors, Dr. K. W. Smith and Professor Warren.

5. History, Major Course: Church History; Mediæval and Modern Europe.

Daily through the year, with Professor Adams and Dr. J. M. Vincent.

6. Political Science, Minor Course: Elements of Political Economy.

Daily through the year, with Dr. Sidney Sherwood.

Three hours a week will be devoted to class-room drill in the principles of Economic Science, the text-books being Walker's Political Economy and Mill's Principles of Political Economy. One hour a week will be devoted to the history of economic theory. Ingram's History of Political Economy will be the basis of this work. One hour a week will be occupied with the application of economic theory to certain practical problems, including money and banking, the transportation system, municipal public works, taxation, and socialism. Essays will be required.

7. Political Science, Major course: International Law and Diplomatic History; English and American Constitutional History. Daily, with Professor Adams and Professor Emmott.

Note.—Graduates with insufficient college training in History and Politics are recommended to take courses 5 and 6. Ability to read French and German at sight is required of all graduates before they can become candidates for the Doctor's degree. Deficiencies in these languages may be made up in undergraduate classes.

PHILOSOPHY.

The Undergraduate Courses in Philosophy provide five hours weekly of required work for one year, under the direction of Professor E. H. Griffin.

(*a*) Deductive and Inductive Logic.

In this class special attention will be given to the general theories of both Deduction and Induction; to the various forms of thought: notion, judgment, and reasoning: and also to the various methods of scientific investigation and proof, as well as to the application of the rules of the syllogism and the detection of fallacies.

The topics treated of will include the following:

(1). Province and definition of logic.

(2). The forms of thought: notion, judgment, reasoning.

(*a*) Terms and their various kinds.

(*b*) The various kinds of propositions or judgments; opposition and conversion.

(*c*) Mediate inference or syllogism.

(*d*) Aristotle's classification of logical and material fallacies.

(3). Methods of scientific investigation and proof.

(4). Fallacies incident to induction.

The work in this class will consist of short informal lectures, recitations, themes, epitomes, &c.

Text-books: Jevons' Elementary Lessons in Logic, Fowler's Elements of Inductive Logic, with selected passages from the larger works of Jevons, and from the works of Mill, Bain, Venn, Keynes, and other recent writers.

(*b*) Psychology.

The instruction in psychology is intended to give a general view of the results of the new methods of study, the recent investigations in regard to the quality and intensity of sensations, the duration of psychic acts, etc. —in general, the subjects treated in Part II. of Ladd's Physiological Psychology—being presented with sufficient detail to render them intelligible and interesting.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. A text-book is used as the basis of instruction, but this is largely supplemented by informal lectures, and by references to various authorities. One essay on an assigned subject is required from each member of the class.

A series of lectures and demonstrations on the anatomy and physiology of the muscular and nervous systems is given, as a voluntary course, in the Biological Laboratory.

Text Books: Baldwin's Handbook of Psychology, Sully's Outlines of Psychology, James's Psychology, Höffding's Outlines of Psychology, Dewey's Psychology, Hamilton's Lectures on Metaphysics, Porter's Human Intellect, Spencer's Principles of Psychology, Ladd's Physiological Psychology.

(c) Ethics.

The fundamental problems of ethics and the application of moral principles to the guidance of conduct and the formation of a manly character are considered with special reference to the Christian theory of morals. The great historic systems—hedonism, utilitarianism, intuitionism—and the relation to ethical theory of the doctrine of evolution are discussed with the purpose of enabling the student to reach a just and intelligent view of the grounds and nature of moral obligation. But, while keeping to a scientific basis, the aim throughout is to make the instruction of a directly practical nature, and to show the bearing of the problems considered upon questions of practical ethics.

The subject is taught by lectures, recitations from a text-book—Fowler's Principles of Morals, Part II., being used at present—and references to the works of the most important writers. One essay is required from each member of the class.

Text Books: Calderwood's Handbook of Moral Philosophy, Janet's Elements of Morals and Theory of Morals, Martineau's Types of Ethical Theory, Sidgwick's Methods of Ethics, Stephen's Science of Ethics, Martensen's Christian Ethics, Sidgwick's History of Ethics.

An outline of the History of Philosophy is given by Professor Griffin as a voluntary course.

For next year the following advanced courses in Philosophy are offered:

1. Modern Philosophy from Descartes to Kant.
   Weekly, through the year. Professor GRIFFIN.
2. Modern Ethical Theories.
   Fortnightly, two hours. Professor GRIFFIN.

PATHOLOGY AND BACTERIOLOGY.

The instruction in Pathology is given in the Pathological Laboratory of the Johns Hopkins Hospital, by Professor WILLIAM H. WELCH, Dr. SIMON FLEXNER, and Dr. GEORGE H. F. NUTTALL. The courses are open to physicians, medical students, and advanced students of Biology who have had the requisite training in Normal Histology. Those who lack this training are advised to take a course in Normal Histology, for which opportunity is offered in the Biological Laboratory of the University by Professor Martin and his assistants.

1. Advanced and Special Work. Professor WELCH, Dr. FLEXNER, and Dr. NUTTALL.

Opportunity is provided for advanced work and special research in Pathological Histology, Experimental Pathology and Bacteriology.

The Laboratory is equipped with a large material for investigations in Pathological Histology, with the necessary apparatus for work in Experimental Pathology and with cultures and facilities for bacteriological research. Rooms for photo-micrographic work have been fitted up. There is an ample supply of fresh material from the wards of the hospital and from post-mortem examinations. Attention is paid to the pathological study of diseases of animals, for which purpose abundant material has been collected. Some knowledge of vegetable pathology is expected from those who select pathology as the principal subject for the degree of Doctor of Philosophy. Special subjects for research will be assigned to those who wish and are prepared to undertake original investigation.

2. Post-mortem Examinations. Professor WELCH and Dr. FLEXNER.

Frequent opportunity is afforded to witness post-mortem examinations and instruction is given in the methods of conducting such examinations and of recording in proper protocols the results. The autopsy theatre is in the Pathological Laboratory.

3. Pathological Demonstrations. Professor WELCH and Dr. FLEXNER.

Appendix No. 16.

Fresh material from the Hospital and from post-mortem examinations held in the Pathological Laboratory and elsewhere in the city is demonstrated in connexion with the course in pathological histology. Extensive use is made of frozen microscopical sections of these fresh specimens and students are often given portions of morbid specimens to harden and to prepare for microscopical examination. A useful collection of museum specimens is also employed in demonstrating the gross lesions.

4. Pathological Histology. Professor WELCH and Dr. FLEXNER.

Two courses, one beginning in the early part of October and the other the first of February, are given in this subject on three afternoons of the week.

After the study of inflammation and other subjects in general pathology, the pathological histology of the different tissues and organs of the body is taken up in regular order. Microscopical sections are given to be stained, mounted, and carefully studied and drawn. The student is encouraged also to cut sections and to become familiar with the technique of pathological histology, and in general to perform as much independent work as his time will permit. Written examinations, consisting in the diagnosis and description of microscopical sections, are held frequently during this course. Those who wish short courses of a few weeks' duration in pathological and clinical microscopy are not advised to come here.

5. Bacteriology. Professor WELCH and Dr. NUTTALL.

Courses in Bacteriology begin the middle of October and the first of February.

These courses consist in practical work in the bacteriological laboratory, which occupies rooms in the pathological building. The student is taught the preparation of culture media, the principles of disinfection and sterilization, methods of cultivating, staining and studying bacteria, and familiarity with the important species of bacteria, particularly those of a pathogenic nature. This department is fully supplied with the requisite apparatus and cultures for bacteriological work.

6. Lectures. In addition to the informal lectures introducing the study of each new topic in the practical courses in the laboratory, systematic lectures are given by the staff of the Johns Hopkins Hospital and Pathological Laboratory during the months of January, February, and March in the clinical amphitheatre of the Hospital. These lectures, which are upon selected subjects in pathology, bacteriology, medicine, and surgery, are announced in a special programme issued by the Hospital.

7. Societies. The Johns Hopkins Hospital Medical Society, Historical Club, and Journal Club meet in the Library of the Hospital, one upon each Monday evening, and are open to those working in the Laboratory and to others.

8. Library. The library of the Hospital is supplied with an increasing collection of medical books and periodicals. The leading foreign and American medical journals are taken.

Students in the pathological laboratory are permitted also to make use of the general library of the University and of the special library of the Biological Laboratory, which contains the standard biological works and sets of the more important journals pertaining to biology. The library of the Peabody Institute is also available, and is especially rich in proceedings of learned societies, and other works of reference. The library of the Army Medical Museum in Washington by special arrangement permits books from its unrivalled collection to be sent when desired to the Hospital and Laboratory. The proximity of Washington permits the ready consultation of books in the libraries there and the examination of the valuable specimens in the Army Medical Museum.

9. Publications. The Johns Hopkins Hospital Bulletin, issued monthly, and the Johns Hopkins Hospital Reports contain the proceedings of the Hospital societies, articles by the hospital staff and the results of most of the researches conducted in the Hospital and pathological laboratory. These afford a ready means of publication of original work done in the pathological laboratory as well as in the Hospital.

Appendix No. 16.

10. Hospital and Dispensary. The pathological laboratory being upon the same grounds with the Johns Hopkins Hospital and Dispensary, the opportunities are convenient for combining clinical work, attendance upon operations and clinical lectures, and studies in the clinical laboratory with the work in pathology.

Conferring of Degrees, June 14, 1892.

The public ceremony of conferring degrees was held in the Associate Reformed Church, Maryland Avenue and Preston Street, on Tuesday, June 14, at 5 p.m.

The Trustees, Faculty, and Candidates for Degrees assembled in the lecture room adjoining the Church at a quarter before five o'clock and proceeded to seats reserved for them. The Candidates for Degrees wore the cap and gown prescribed by the regulations.

The exercises were opened by prayer by the Rev. Wayland D. Ball, the Pastor of the Church.

Professor Emmott presented the candidates for the degree of Doctor of Philosophy, and the degree was conferred by the President of the University. (See list *infra*.)

An address to the new Doctors of Philosophy was then made by Professor Gildersleeve.

Professor Griffin presented the candidates for the degree of Bachelor of Arts, and the degree was conferred by the President of the University. (See list on page 37.)

An address to the new Bachelors of Arts was made by Mr. Charles Morton Stewart, the President of the Board of Trustees.

Certificates in Electrical Engineering were given to the gentlemen named on page 37.

Professor Adams read the list of the recipients of the Marshall prize and of the other prizes in the department of history and politics. (See page 38.)

The honours and appointments of the year were announced by President Gilman. (See pages 37 and 38.)

Music was rendered by the Beethoven Terrace Amateur Orchestra, Mr. Edwin L. Turnbull, Director.

At the close of the exercises there was a reception of the graduates of the year and their friends in the parlours of the church.

The Board of Trustees having referred the matter of Academic Dress to the Board of University Studies, the latter body has adopted the following resolutions:

Resolved, That every Doctor of Philosophy of the Johns Hopkins University shall be entitled to wear, on all fitting occasions, a gown of the prescribed shape, made of either black silk or black stuff, and a hood made of black silk, lined with scarlet silk and edged with gold.

Resolved, That every Bachelor of Arts of the Johns Hopkins University shall be entitled to wear, on all fitting occasions, a gown of the prescribed shape, made of black stuff, and a hood made of black stuff, lined with white silk and edged with dark blue.

DEGREES CONFERRED, JUNE 14, 1892.

Doctors of Philosophy.

Eugene Thomas Allen, of Athol, Mas., A. B., Amherst College, 1887. Subjects: Chemistry, Mineralogy, and Geology. Thesis: The Reaction between Lead Dioxide and Potassium Permanganate.

William Wilson Baden, of Baltimore, A. B., Johns Hopkins University, 1881. Subjects: Greek, Sanskrit and Roman Law. Thesis: The Principal Figures of Language and Figures of Thought in Isaeus and the Guardianship-Speeches of Demosthenes.

Robert Payne Bigelow, of Washington, D. C., S. B., Harvard University, 1887. Subjects: Morphology, Physiology, and Botany. Thesis: Anatomy and Development of Cassiopea Xamachana.

Edwin Whitfield Bowen, of Ashland, Va., A. B., Randolph Macon College, 1887. Subjects: English, Latin, and German. Thesis: An Historical Study of the *e*-Vowel in Accented Syllables from Anglo-Saxon to Modern English.

Immanuel Moses Casanowicz, of Montclair, N. J., University of Basle. Subjects: Hebrew, Assyrian, and Greek. Thesis: Paronomasia in the Old Testament.

Starr Willard Cutting, of Richmond, Ind., A. B., Williams College, 1887. Subjects: German, French, and History. Thesis: the Subjunctive in the Works of Hartman von Aue.

Albert Bernhardt Faust, of Havre de Grace, A. B., Johns Hopkins University, 1889. Subjects: German, English, and History. Thesis: Charles Sealsfield (Karl Postl): Materials for a Biography; a Study of his Style; his Influence upon American Literature.

George Wilton Field, of Brockton, Mass., A. B., Brown University, 1887. Subjects; Morphology, Physiology, and Botany. Thesis: The Larva of Asterias Vulgaris.

Joseph Elliott Gilpin, of Baltimore, A. B., Johns Hopkins University, 1889. Subjects: Chemistry, Mineralogy, and Geology. Thesis Orcin-sulphonphthaleïns and Trichlorphosphanil.

John Leslie Hall, of Williamsburg, Va., Randolph Macon College. Subjects: English, German, and History. Thesis: Beowulf: An Anglo-Saxon Epic Poem, rythmically translated, with critical annotations.

William Asbury Harris, of Richmond, Va., A. M., Richmond College, 1886. Subjects: Greek, Sanskrit, and Latin. Thesis: Plato as a Narrator: A Study in the Myths.

Frederick Clemson Howe, of Meadville, Pa., A. B., Allegheny College, 1889. Subjects: Political Economy, History, and Jurisprudence. Thesis: A History of the Internal Revenue System.

William Isaac Hull, of Baltimore, A. B., Johns Hopkins University, 1889. Subjects: History, Political Economy, and Jurisprudence. Thesis: Maryland, Independence, and the Confederation.

Harry Clary Jones, of New London, Md., A. B., Johns Hopkins University, 1889. Subjects: Chemistry, Mineralogy, and Geology. Thesis: Determination of the Atomic Weight of Cadmium and the Preparation of certain of its Sub-compounds.

James Lawrence Kellogg, of Kewanee, Ill., S. B., Olivet College, 1888. Subjects: Morphology, Physiology, and Botany. Thesis: Degeneracy in the Lamellibranchiata.

Charles Rollin Keyes, of Des Moines, Iowa, S. B., Iowa State University, 1887. Subjects: Geology, Palæontology, and Biology. Thesis: The Principal Mississippian Section: A Classification of the Lower Carboniferous Rocks of the Mississipi Basin.

Elmer Peter Kohler, of Egypt, Pa., A. B., Muhlenberg College, 1886. Subjects: Chemistry, Geology, and Mineralogy. Thesis: Action of Aniline on the Chlorides of Ortho-sulpho-benzoic Acid.

Paul Erasmus Lauer, of Cleveland, O., A. B., Adelbert College, 1885. Subjects: History, Political Economy, and History of Philosophy. Thesis: Church and State in New England.

Edwin Seelye Lewis, of Indianapolis, Ind., A. B., Wabash College, 1888. Subjects: Romance Languages, Italian, and History. Thesis: The Guernsey Dialect.

David Judson Lingle, of Chicago, Ill., S. B., University of Chicago, 1885. Subjects: Physiology, Zoology, and Geology. Thesis: Vaso-motor Nerves of the heart.

Alvin Frank Linn, of Springfield, O., A. B., Wittenberg College, 1884. Subjects: Chemistry, Mineralogy, and Geology. Thesis: I. Sulphon-Fluorescein and Related Compounds; II. Some Experiments on the Rate of Oxidation of the three Toluic Acids by Potassium Permanganate in Alkaline Solution.

James Alexander Lyman, of Amboy, Ill., A. B., Beloit College, 1888. Subjects: Chemistry, Mineralogy, and Physics. Thesis: The Phthaleïns of Ortho-sulpho-para-toluic Acid.

John Hanson Thomas Main, of Baltimore, A. B., Moore's Hill College, 1880. Subjects: Greek, Sanskrit, and Latin. Thesis: Locative Expressions in the Attic Orators.

Frank Jewett Mather, Jr., of Morristown, N. J., A. B., Williams College, 1889. Subjects: English, German, and History of Philosophy. Thesis: The Conditional Sentence in Anglo-Saxon.

Michael Andrew Mikkelsen, of Sioux Falls, S. D., A. B., Luther College, 1886. Subjects: History, Political Economy, and Jurisprudence. Thesis: The Bishop Hill Colony.

Robert Milton Parks, Jr., of Bedford, Ind., A. B., Indiana University, 1879. Subjects: Chemistry,

Mineralogy, and Geology. Thesis: Action of Methyl Alcohol on Para-diazo-ortho-toluene-sulphonic Acid.

JOHN DYNELEY PRINCE, of New York City, A. B., Columbia College, 1888. Subjects: Assyrian, Hebrew, and German. Thesis: "Mene, Mene, Tekel Upharsin."

CHARLES HUNTER ROSS, of Auburn, Ala., S. B., Alabama Agricultural and Mechanical College, 1886. Subjects: English, German, and French. Thesis: The Absolute Participle in Middle and Modern English.

HARRY LUMAN RUSSELL, of Poynette, Wis., S. B., University of Wisconsin, 1888. Subjects: Pathology, Botany, and Physiology. Thesis: Bacteria in their Relation to Vegetable Tissue.

WILLIAM AMASA SCOTT, of Vermillion, S. D., A. B., University of Rochester, 1886. Subjects: Political Economy, History, and Jurisprudence. Thesis: The Repudiation of State Debts.

WILL BUSH SHOBER, of Baltimore, A. B., St. John's College, 1885. Subjects: Chemistry, Mineralogy, and Physics. Thesis: Action of certain Alcohols on Para-diazo-benzene-sulphonic Acid.

MARTIN BELL STUBBS, of Philadelphia, Pa., A. B., Haverford College, 1888. Subjects: Chemistry, Mineralogy, and Physics. Thesis: Nitro-ortho-sulpho-benzoic Acid and some of its Derivatives.

HARRY MAAS ULLMANN, of Springfield, Mo., A. B., Johns Hopkins University, 1889. Subjects: Chemistry, Mineralogy, and Physics. Thesis: Para-chlor-meta-sulpho-benzoic Acid.

BERT JOHN VOS, of Grand Rapids, Mich., A. B., University of Michigan, 1888. Subjects: German, Greek, and English. Thesis: Diction, Formal-Style, and Rime-Technic of Hartman von Aue.

On Commemoration Day, February 22, 1892, the degree of Doctor of Philosophy was conferred on—

WILLIAM LEVERING DEVRIES, of Baltimore, A. B., Johns Hopkins University, 1888. Subjects: Greek, Latin, and Hebrew. Thesis: Ethopoiia: A Rhetorical Study of the Types of Character in the Orations of Lysias.

CHARLES LANE POOR, of New York City, S. B., College of the City of New York, 1886. Subjects: Astronomy, Mathematics, and Physics. Thesis: The Action of Jupiter upon Comet V, 1889.

JOHN CUNNINGHAM ROBERTSON, of Washington, D. C., A. M., University of Virginia, 1885. Subjects: Greek, Latin, and German. Thesis: The Gorgianic Figures in Early Greek Prose.

BACHELORS OF ARTS.

HARRY ADLER, of Baltimore.
NEWTON DIEHL BAKER, JR., of West Virginia.
CHARLES GAMBRILL BALDWIN, of Baltimore.
EDWIN BERNHARD BEHREND, of Washington, D. C.
LUNSFORD EMORY BENNETT, of Mt. Washington, Md.
ARTHUR FISHER BENTLEY, of Nebraska.
GEORGE EDWARD BOYNTON, of New York.
THOMAS RICHARDSON BROWN, of Baltimore.
ALFRED COOKMAN BRYAN, of Rising Sun, Md.
CHARLES WEATHERS BUMP, of Baltimore.
WILLIAM CALVIN CHESNUT, of Baltimore.
JOHN EDWIN DAVIS, of Baltimore.
HENRY HAYWOOD GLASSIE, of Washington, D. C.
LEON EMANUEL GREENBAUM, of Baltimore.
WILLIAM AUGUST HAUSSMANN, of Pennsylvania.
JOSE LEWIS HIRSH, of Baltimore.
MORRIS JAMES, of Kentucky.
HUGH JUDGE JEWETT, JR., of Glenville, Md.
THEODORE WOOLSEY JOHNSON, of Baltimore.
JOHN HOLLADAY LATANE, of Baltimore.
EDWARD JAQUELIN L'ENGLE, of Florida.
EARL PERKINS LOTHROP, of New York.
CHARLES WHITNEY MIXTER, of Massachusetts.
WALTER ALEXANDER MONTGOMERY, of North Carolina.
JAMES FLACK NORRIS, of Baltimore.
THOMAS DOBBIN PENNIMAN, of St. Denis, Md.
CHARLES WILLIAM PEPPLER, of Baltimore.
ALBERT MOORE REESE, of Baltimore.
WILLIAM MILLER ROBERTS, of Baltimore.
ABRAM BARR SNIVELY, of Pennsylvania.
JOHN SARGENT STEARNS, of Washington, D. C.
CHARLES DANIEL STEENKEN, of Baltimore.
LEOPOLD STERN, of Baltimore.
LESTER LATHAM STEVENS, of Baltimore.
GUSTAV LÜRMAN STEWART, of Baltimore.
JOHN STEWART, JR., of Baltimore.
REDMOND CONYNGHAM STEWART, of Baltimore.
ARTHUR BERTRAM TURNER, of Baltimore.
HAROLD JOHN TURNER, of Baltimore.
RICHARD HENRY WILSON, JR., of Kentucky.

On Commemoration Day, February 22, 1892, the degree of Bachelor of Arts was conferred on—

JAMES WESLEY HARVEY, JR., of Catonsville, Md.

CERTIFICATES OF PROFICIENCY IN ELECTRICAL ENGINEERING.

WILLIAM HAND BROWNE, JR., of Baltimore, A. B., Johns Hopkins University, 1890.
HENRY WAKEFIELD FRYE, of Belfast, Me., A. B., Colby University, 1889.
NORMAN CRAWFORD MCPHERSON, of Gettysburg, Pa., A. B., Pennsylvania College, 1889.
ARTHUR JUDSON WARNER, of Marietta, O., A. B., Marietta, 1889.
EZRA CARL BREITHAUPT, of Berlin, Ont.
HUGH PATTISON, of McDonogh, Md.
GEORGE HENRY HUTTON, JR., of Baltimore.
ROBERT ERNEST HUTTON, of Baltimore.
CHARLES WILLIAM WAIDNER, of Baltimore.

RECENT APPOINTMENTS AND HONORS.

The following promotions and appointments have recently been made in this University:

GEORGE H. EMMOTT, A. M., now Associate Professor, to be Professor of Roman Law and Comparative Jurisprudence.

FABIAN FRANKLIN, Ph. D., now Associate Professor, to be a Professor in the Mathematical Department.

EDWARD RENOUF, Ph. D., now Associate, to be Collegiate Professor of Chemistry.

HENRY WOOD, Ph. D., now Associate Professor, to be Professor of German.

ETHAN A. ANDREWS, Ph. D., now Associate, to be Associate Professor of Biology.

WILLIAM B. CLARK, Ph. D., now Associate, to be Associate Professor of Organic Geology.

GEORGE P. DREYER, Ph. D., now Senior Demonstrator, to be Associate in Biology.

SIMON FLEXNER, M. D., now Fellow, to be Associate in Pathology.

C. W. EMIL MILLER, Ph. D., now Fellow by Courtesy, to be Associate in Greek.

GEORGE H. F. NUTTALL, M. D., Ph. D., now Assistant, to be Associate in Bacteriology and Hygiene.

LORAIN S. HULBURT, A. M., to be Instructor in Mathematics.

FELLOWS BY COURTESY, 1892–93.

JULIUS BLUME, of Münster, Germany, late Fellow.

A. L. BONDURANT, A. B., Professor in the University of Mississippi.

ULYSSES S. GRANT, S. B., of Minnesota, late Fellow.

JOHN P. LOTSEY, Ph. D., of Holland.

FRANK J. MATHER, JR., Ph. D., of New Jersey, late Fellow.

GEORGE O. SQUIER, U. S. A., of Baltimore, late Fellow.

JOSEPH M. WILLARD, A. B., of New Hampshire, late Fellow.

FELLOWS, 1892–93.

BURLEIGH SMART ANNIS, of Wilbraham, Mass., A. B., Colby University, 1885. Astronomy.

LEWELLYS FRANKLIN BARKER, of Baltimore, M. B., University of Toronto, 1890. Pathology.

MELVIN BRANDOW, of Hornellsville, N. Y., A. B., Rutgers College, 1888. Greek.

ALEXANDER MITCHELL CARROLL, of Ashville, N. C., A. M., Richmond College, 1888. Greek.

HARRY MAX FERREN, of Allegheny, Pa., A. B., Western University of Pennsylvania, 1891. German.

DAVID HULL HOLMES, of Delaware, Ohio, A. B., Ohio Wesleyan University, 1885. Sanskrit and Greece.

ARTHUR JOHN HOPKINS, of Fishkill on the Hudson, N. Y., A. B., Amherst College, 1885. Chemistry.

Appendix No. 16.

THEODORE HOUGH, of Baltimore, A. B., Johns Hopkins University, 1886. Animal Physiology.

JAMES ALTON JAMES, of Hazel Green, Wis., B. L., University of Wisconsin, 1888. History.

FRANCIS PLAISTED KING, of Portland, Me., A. B., Colby University, 1890. Geology.

EMORY BAIR LEASE, of Cincinnati, Ohio, A. B., Ohio Wesleyan University, 1885. Latin.

EDWARD PAYSON MANNING, of Taunton, Mass., A. B., Brown University, 1889. Matematics.

LUCIUS SALISBURY MERRIAM of Chattanooga, Tenn. S. B., Vanderbilt University, 1889. Political Economy.

LOUIS EMIL MENGER, of Clinton, Miss., A. B., Mississippi College, 1888. Romance Languages.

MAYNARD MAYO METCALF, of Elyria, Ohio, A. B., Oberlin College, 1889. Animal Morphology.

RENÉ DE POYEN-BELLISLE, of Baltimore, Bach. ès Lettres, University of France 1876. Romance Languages.

ARTHUR PERCY SAUNDERS, of Ottawa, Canada, A. B., University of Toronto, 1890. Chemistry.

DANIEL GURDEN STEVENS, JR., of Baltimore, A. B., Johns Hopkins University, 1891. Semitic languages.

FREDERICK TUPPER, JR., of Charleston, S. C., A. B., Charleston College, 1890. English.

FRANK ALFRED WOLFF, JR., of Baltimore, A. B., Johns Hopkins University, 1890. Physics and Chemistry.

MAYNARD M. METCALF, A. B., to occupy the table allotted to this University at the Laboratory of the U.S. Fish Commission, Woods' Holl.

HONOURS OF THE GRADUATING CLASS.

University Scholars.

THOMAS RICHARDSON BROWN.
LEON EMANUEL GREENBAUM.
CHARLES WILLIAM PEPPLER.
THEODORE WOOLSEY JOHNSON.
ARTHUR FISHER BENTLEY.
WILLIAM CALVIN CHESNUT.
EDWIN BERNHARD BEHREND.
LEOPOLD STERN.
JAMES FLACK NORRIS.
ALFRED COOKMAN BRYAN.

Honourable Mention.

EDWARD JAQUELIN L'ENGLE.
CHARLES WEATHERS BUMP.
NEWTON DIEHL BAKER, JR.
LUNSFORD EMORY BENNETT.
ARTHUR BERTRAM TURNER.
LESTER LATHAM STEVENS.
HENRY HAYWOOD GLASSIE.
JOHN HOLLADAY LATANE.

HOPKINS SCHOLARS, 1892–93.

From Virginia and North Carolina.

Honorary Scholars:

J. S. BASSETT (A. B., Trinity College, N. C.), of North Carolina.
D. C. BRANSON (A. B., Trinity College, N. C.), of North Carolina.
E. R. CARICHOFF (A. M., Washington and Lee University), of Virginia.
J. H. GORRELL (A. M., Washington and Lee University), of Virginia.
W. R. GREY (A. B., Davidson College), of North Carolina.
L. M. HARRIS (A. B., Washington and Lee University), of Virginia.
J. L. LAKE (A. M., Richmond College), of Virginia.
S. R. MCKEE (A. B., Davidson College), of North Carolina.
W. A. MONTGOMERY (A. B., J. H. U.), of North Carolina.
GEORGE SHIPLEY (A. M., Randolph-Macon College), of Virginia.
FRANK SUTER (A. M., Columbian University), of Virginia.

Scholars:

E. T. BYNUM (A. B., Wake Forest College), of North Carolina.
C. R. DUVALL (B. S., West Virginia University), of Virginia.
H. A. GREY (A. B., Davidson College), of North Carolina.
B. C. HINDE (A. M., Central College, Mo.), of North Carolina.
E. V. HOWELL (A. B., Wake Forest College), of North Carolina.
H. R. HUNDLEY (A. B., Richmond College), of Virginia.
J. M. MCBRYDE, Jr., of Virginia.
B. S. MITCHELL (B. S., Wake Forest College), of North Carolina.
J. H. PRIDGEN (A. M., Wake Forest College), of North Carolina.
B. F. SHARPE (A. M., Wesleyan University), of Virginia.
T. L. WATSON (B. S., Va. Agric. and Mech. College), of Virginia.

From Maryland.

I. For proficiency in the studies of the first year:

Honorary Scholars—
HENRY SKINNER WEST.
ELI FRANK.
WALTER COX.
FRANK ROY RUTTER.

Scholars—
MILTON REIZENSTEIN.
SIMON H. STEIN.

II. For proficiency in the studies of the second year:

Honorary Scholars—
SIEGMUND SONNEBORN.
LOUIS PHILIP HAMBURGER.
HOWARD BLAKE DOWELL.

Scholars—
CHARLES CARROLL SCHENCK.
MORRIS AMES SOPER.

HONOURABLE MENTION.

For proficiency in the studies of the second year:
LEO WOLFENSTEIN, of Ohio.

Ineligible to a scholarship, on account of residence, but equal in rank to the holders of Honorary Hopkins Scholarships.

WASHINGTON SCHOLARS.

FRANK ANDREWS.
GEORGE STEVENS MAYNARD.

JOHN MARSHALL PRIZES.

For important contributions to historical and political science published in former years, by graduates of this University, a likeness in bronze of the former Chief Justice of the United States (the gift of a lady in New England), was awarded to each of the persons below named:—

Professor HENRY C. ADAMS, of the University of Michigan, for his book entitled "Public Debts."
Professor CHARLES H. LEVERMORE, of the Massachusetts Institute of Technology, for his history of the "Republic of New Haven."
Professor WOODROW WILSON, of the College of New Jersey, for his book on "Congressional Government."

For an important contribution to historical and political science, published during the current year, by a member of this University:—

Dr. JOHN M. VINCENT, of the Johns Hopkins University, for his work entitled "State and Federal Government in Switzerland."

The prize [$100] given by a lady of Baltimore, and designated at her requested as the Scharf-Birney prize, was awarded to Professor F. W. BLACKMAR, now of the University of Kansas, for his book on "Spanish Institutions of the Southwest."

The prize [$50] given by a member of the Baltimore Bar for a contribution to institutional or legal history was awarded to Professor C. M. ANDREWS, now of Bryn Mawr College, for his book on "The English Manor."

Appendix No. 16.

Calendar, 1892-93.

The seventeenth academic year begins Saturday, October 1, 1892, and continues till June 15, 1893.

The autumn examinations for admission to undergraduate classes will be held on Monday, October 3, Tuesday, October 4, and Wednesday, October 5.

There will be a Christmas recess and a Spring recess.

Commemoration Day falls on Wednesday, February 22, 1893.

Dates of Matriculation Examinations.

Monday, October 3.

9-10.30 a.m—English.
10.30-11.30 a.m.—History.
11.30 a.m.-12.30 p.m.—Science.
3 p.m.—Latin.

Tuesday, October 4.

9 a.m.—Arithmetic and algebra.
3 p.m.—Geometry.

Wednesday, October 5.

9 a.m.—Trigonometry and analytic geometry.
3 p.m.—Greek.
3 p.m.—French and German.

THE JOHNS HOPKINS PRESS.

I. The American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. It is now conducted by Professor Simon Newcomb as Editor, and Professor T. Craig as Associate Editor. Thirteen volumes of about 400 pages each have been issued, and the fourteenth is in progress. It appears quarterly, in the quarto form. Subscription $5 per year. Single numbers $1.50. Complete sets, Vols. I.-XVI., will be furnished at $70.

II. The American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Thirteen volumes have been issued, and the fourteenth is in progress. Eight numbers, of about 72 pages each, are issued yearly. Subscription $4 per year. Single numbers 50 cents. Complete sets, Vols. I.-XI., will be furnished for $56.

III. The American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Twelve volumes of about 570 pages each have been issued, and the thirteenth is in progress. It appears fours times yearly. Subscription $3 per volume. Single numbers $1.00. Complete sets, Vols. I.-XII., will be furnished for $36.

IV. Studies from the Biological Laboratory.

(Including the Chesapeake Zoological Laboratory.)

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor Brooks. Four volumes of about 500 pages, octavo, and 40 plates each, have been issued, and the fifth is in progress. Subscription $5 per volume. The early volumes are out of print.

V. Studies in Historical and Political Science.

The publication of these papers commenced in 1882, under the editorial direction of Professor Adams. Nine series are now completed and the tenth series is in progress. Eleven extra volumes have also been issued Subscription $3 per volume. Complete sets, 20 volumes, will be furnished for $42.

VI. The Johns Hopkins University Circulars.

The University Circulars are published, at convenient intervals during the academic year, for the purpose of communicating intelligence to the various members of the University in respect to work which is here in progress, as well as for the purpose of promulgating official announcements from the governing and teaching bodies. The publication of the Circulars began in December, 1879, and one hundred numbers have since been issued. Subscription $1 per year. Subscribers to the Circulars will also receive the Annual Register and the Annual Report of the University.

VII. The Johns Hopkins Hospital Reports.

Subscription $5 per volume. Volume III. is in progress.

VIII. The Johns Hopkins Hospital Bulletin.

The Hospital Bulletin contains announcements of courses of lectures, programmes of clinical and pathological study, details of hospital and dispensary practice, abstracts of papers read and other proceedings of the Medical Society of the Hospital, and other matters of interest in connexion with the work of the Hospital. Nine numbers will be issued annually. Subscriptions $1 per year. Volume III. is in progress.

IX. Contributions to Assyriology and Comparative Semitic Philology.

Professor Delitzsch, of Leipsic, and Professor Haupt, of Baltimore, editors. Vol. I., Part 1 (368 pp.). Price $8. Volume II. is in progress.

X. Annual Report of the Johns Hopkins University.

Presented by the President to the Board of Trustees, reviewing the operations of the University, during the past academic year.

XI. Annual Register of the Johns Hopkins University.

Giving the list of the officers and students, and containing detailed statements as to the regulations and work of the University.

Announcements of proposed lectures, courses of instruction, etc., appear in the University Circulars, or are separately issued as programmes from time to time.

Description of the Johns Hopkins Hospital. John S. Billings, Editor. 116 pp. and 56 plates. 4to. $7.50.

Rowland's Photograph of the Normal Solar Spectrum. Set of ten plates mounted on cloth, $20.00; single plates, $2.50.

The teaching of the Apostles (complete facsimile text edition). J. Rendel Harris, Editor. 110 pp. and 10 plates. 4to. $5.00, cloth.

Selected Morphological Monographs. W. K. Brooks, Editor. Vol. I. 370 pp. and 51 plates. 4to. $7.50, cloth.

Reproduction in Phototype of a Syriac MS. with the Antilegomena Epistles. Edited by I. H. Hall. $3.00, paper; $4.00, cloth.

Studies in Logic. By members of the Johns Hopkins University. C. S. Peirce, Editor. 123 pp. 12mo. $2.00.

The Oyster. By W. K. Brooks. 240 pp. and 14 plates. 12mo. $1.00.

An Excursion Map to Baltimore and its neighbourhood. Revised by G. H. Williams. 11.00.

The constitution of Japan, with Speeches, etc., illustrating its significance. 48 pp. 16mo. 50 cents.

Essays and Studies. By Basil L. Gildersleeve. 520 pp. small 4to. $3.50, cloth.

Memoir on the Salpa. By W. K. Brooks. 200 pp. and 50 coloured plates. 4to. Price, $5.00.

Bibliographia Hopkinsiensis. Part I.: Philology. 52 pp. 8vo. Price, 50 cents.

A full catalogue of the journals and books on sale by the Johns Hopkins Press will be sent on application.

Appendix No. 17.

APPENDIX No. 17.

PAPER *handed in by* SIR GEORGE YOUNG, *Bart., on 27th July* 1892. *See Questions* 10,668, 24,793, *and* 24,869.

ANSWERS to the OBJECTIONS raised against the CHARTER of the GRESHAM UNIVERSITY, as settled by the Committee of H.M. Privy Council.

The following statement has been drawn up by a Committee of the colleges (designate) in the Gresham University, and is earnestly recommended to the attention of members of both Houses of the Legislature.

DAVID EVANS, Lord Mayor,
Chairman of the Joint Grand Gresham Committee,
High Steward (designate) of the Gresham University.

JOHN ERIC ERICHSEN, President of University College.
HENRY WACE, Principal of King's College.
NORMAN MOORE, Chairman, } of the Committee of Delegates of
STANLEY BOYD, Secretary, } the London Medical Schools.

I.—OBJECTIONS to the ESTABLISHMENT of any TEACHING UNIVERSITY for LONDON.

By members of the Convocation of the University of London, and others.

Objections.	Answers.
1. That no "second University" ought to be established in London.	The existing "University of London" is not a teaching University, with professors, schools, and students. It is an examining board merely, conferring its degrees, as the result of examinations without residence, upon candidates from all quarters, and is without any special connexion with London. University teaching has long been given in London in University College, King's College, and the medical schools attached to the general hospitals, which it is now sought to combine in a local University, possessing the privilege of conferring degrees, a privilege which twelve years ago was granted to Owens College, Manchester, as "the Victoria University," into which colleges at Liverpool and Leeds have since been admitted.
2. That the existing University supplies all that is required.	In the Report of the Royal Commissioners of 1888 on a teaching University for London, they say (paragraph 11) "the educational wants of the largest and "most populous city in the world appear to make "it a proper seat for a great teaching Univer- "sity"; and (paragraph 13) "The general case for a "teaching University . . . is in our opinion made "out." The following are the principal drawbacks of the present system:— Students in the University colleges and medical schools of London cannot obtain degrees except by passing examinations regulated by an external body, which is not in touch with their authorities or with their teachers. Examinations of this kind present difficulties to the student which are not all due to the standard of attainment required, but in part to unsuitable regulations, and in part to the impossibility, on the part of the examiners, of doing justice at the same time to all varieties of system in teaching. In medicine this has led to a great number of the students deserting the London schools in order to reside for a year or two at some other University and qualify for its degrees. This occurs especially in the later years of a medical student's course, which are those of clinical study, for which London affords far better opportunities than any other place. The system of external examinations operates as a fetter upon the best teaching. The examinations do not follow the teaching, but the teaching has to follow the examinations. In this way examinations come to occupy with the student a more important place than they should, and teaching one less important. The colleges and schools suffer in repute by their inferior position as compared with University institutions elsewhere. They fail to attract so many students as they should, and have less power to attract endowment. They have no common organisation, such as would promote economy of teaching and division of labour. In arts and science they have less power to attract and keep the best teachers, who are drawn away by the richer endowments and more unfettered system of Universities elsewhere.

Objections.	Answers.
3. That the existing University can be so modified as to supply what is required, and that this was recommended by the principal report of the Royal Commission.	There was a separate report, signed by three of the six Commissioners, in which the possibility was doubted "of effectually combining the functions of an examining, and of a teaching as well as examining University in the University of London." This doubt was in the result justified; the Senate of the University having spent two years in various endeavours to devise a plan which might meet the requirements of the case, and the plan they finally adopted having been rejected in Convocation by 435 votes to 187. The Senate thereupon withdrew from opposition to the Charter, except only as to some points of detail, which were considered and settled by the committee of council.
4. That to found another University tends to the multiplication of small Universities competing for students, and making a Dutch auction of degrees as in America.	The Gresham University is not open to the objection, for it will be from the outset a large University in medicine ranking with the largest in the world, and in other Faculties larger than many which have a high reputation. It will contain at starting upwards of 400 teachers, and of students, perhaps a majority of the 4,000 who are at present studying in its twelve colleges; and who are paying at the rate of 70,000*l.* a year in fees.

II.—Objections on Grounds of Procedure.

Raised chiefly by Members of some institutions which did not appear before the Privy Council.

5. That the proposal of the Royal Commissioners, to the effect that the whole subject should, in the event which occurred, be referred back to them for further consideration, was not followed by the Lord President of the Council.	It was probably considered that after four years' delay, and the disappearance of all opposition, except on points of detail, to the petition, the time was come when it should be heard before the proper tribunal. The Chairman of the Royal Commission was a member of the committee of the Privy Council to which it was referred.
6. That no sufficient notice was given of the hearing, which ought in consequence to be re-opened.	The hearing commenced 29th June 1891, seven weeks after the meeting of Convocation at which the scheme of the University Senate was rejected. Notice was sent, 26th May, to every institution or person who had communicated with the Privy Council on the subject since the presentation in 1887 of the various petitions. Twenty-three institutions, in London, Dublin, and Edinburgh, presented cases, and were represented by 10 sets of counsel. The cost of the hearing to the institutions which will be colleges in the University exceeded 1,500*l.*
7. That the adoption of the name of "The Gresham University," and the resolution of the Gresham Committee to support the establishment of the University afforded an opportunity and increased the necessity for a revision of the Charter.	The question of name was expressly reserved at the hearing, and is non-contentious. No further amendment was ever in contemplation, or is possible without a re-opening of the whole subject.

III.—Objections to the Constitution of the University as Settled by the Privy Council.

Raised by a Committee presided over by Mr. C. S. Roundell, *and others.*

8. That University College and King's College will be "predominant" in the University.	They will be represented by three members each, or six in all, on a council of at least 40. Their professors, whose interests and views are not by any means always identical with those of their respective councils, will at the outset return the representatives, four each, of the Faculties of Arts and of Science, and may return two, or by possibility four, of that of Laws. In medicine they will be far outnumbered by those of other colleges. In no case, therefore, can the two colleges dispose of a majority of the votes. This same committee objects that the Medical Faculty, with 16 votes at most, will be "paramount."
9. That they are institutions of "character and antecedents" insufficient to justify the position they will hold in the University, or to inspire confidence in their ability to develop it.	That they have suffered from the causes above mentioned is admitted, and is in itself a main argument for the Charter. On the other hand, each of them has a much larger staff, better buildings and equipments, and more students, than the Victoria University had in 1880, when it was founded, with Owens College as its one teaching institution. They employ between them in University work more than 200 teachers, and have upwards of 2,300 students of University age and standing, the majority of whom are receiving a regular course of instruction, while the rest are attendants on particular courses, and more of them would doubtless become regular students, if they could thereby obtain a degree.

Appendix No. 17.

Objections.	Answers.
	In Arts and Science alone (excluding medical students, the students in the School of Fine Art at University College, and the students in the Theological Department at King's College) they have 1,200 students. Of these it is estimated that one third are attending a regular course of study, extending over at least two, generally three or more annual sessions of 33 weeks each. Of the other two thirds many attend a regular course for one year, and many more special lectures for two or more years. They are possessed of endowments, including sites, buildings, and equipments, of a value estimated at over one million sterling. Their receipts from fees (exclusive of fees received in their junior schools) are together more than 50,000*l.* a year. Each has a long and distinguished roll of old students who have attained to eminence in life. Their efficiency has twice been directly attested by the Report of a Royal Commission, viz., in Science, in 1874, by the Fifth Report of the late Duke of Devonshire's Commission on Scientific Instruction and the Advancement of Science (the report which led to the concession of a Charter to Owens College), and in 1889 generally, for the purposes of a University, by Lord Selborne's Commission on a Teaching University for London. The Government grant to University colleges in England, which is given on grounds of quality of teaching, of amount of work done, of income, and of local support, was awarded to them in 1889, alone of London institutions, and on the highest scale of any, Owens College only excepted.
10. That it is rather a "teachers' University" than a teaching University, *i.e.*, that in it teachers will have the control, and will give degrees to their own pupils, and are likely to do so on an insufficient standard of attainment, thus cheapening degrees, and injuring more meritorious Universities.	There will be four representatives of each Faculty, or 16 in all. Among the representatives of teaching institutions, 16 in all, there will doubtless be many teachers; but no single element or interest will have a majority. Provision has been made, on approved lines, against abuses in the direction of lowering the standard, by the presence of external examiners in all subjects, and by placing the examinations under the supervision of a responsible Board of Studies. Why should not the London teachers, under these conditions, be trusted, as the teachers in other Universities are trusted?
By Professor Ray Lankester *and some others.*	
11. That it ought to be, and is not, a teachers' University, *i.e.*, that it ought to be under the control of a committee of professors, selected either as in Scotland, or by the Crown, as in Germany.	The Scottish system, which has led to some professors receiving very large incomes, is now under consideration, with a view to amendment. A German University in London would either require very large subsidies from the State, or entail very high-handed dealing with the endowments, which are of modern foundation, for its establishment; and would need, further, to be recommended to public opinion, a task which it cannot be said has yet been seriously attempted.
12. That there ought to be no "colleges," *i.e.*, institutions within the University, each with a separate staff of teachers, but that they should be either amalgamated, ignored, or suppressed.	The existing colleges are not to be thus lightly set aside. They have their several endowments, principles, and traditions; and variety, within the University, has its own recommendations, and tends to check the monopoly, which a single head professor exercises. The Charter supplies a central organisation, which can extend what is good in these institutions to others, and amend what is deficient; and this organisation it has been possible to make stronger and better than in the Victoria University, where the colleges are scattered. Inter-collegiate arrangements may be established, by common consent; and are desired, within reasonable limits, by all parties. One example of their willingness in this respect has already been given by the University Colleges, namely, their joint School of Oriental Studies, founded under the auspices of the Imperial Institute. The arrangement proposed by the objectors is confessedly inapplicable to the medical colleges, and they have accordingly had to propose that there should be no Medical Faculty in the University.
By the same, and by Mr. Roundell's *Committee.*	
13. That it has no "University professors," but only "collegiate professors," who will be of inferior calibre; and that this was disapproved by the Report of the Oxford University Commissioners of 1852, and by other authorities.	The objection has no force, because Oxford names are used to criticise arrangements with a different nomenclature. University College and King's College are virtually small Universities, and do not at all resemble colleges of the Oxford type. To institute by

Objections.	Answers.	Appendix No. 17.
	Charter a new staff of professors, with the title of University professors, would be unfair to existing interests, and either futile, in the absence of endowment, or wasteful, if the endowment could have been obtained. Past experience shows that the professors will not be of "inferior calibre."	
14. That these professors are not appointed, and will not be dismissible by the University itself.	It is not necessary, or even desirable, that the appointments to professorships should be vested in one governing body. The present system, whereby the councils of the colleges, who are charged with responsibility for their success, appoint, after consultation with their own teaching staff, has worked excellently, and secured a distinguished professoriate, which University privileges will improve. Although the University cannot dismiss at pleasure, it can render the position of a defaulting professor untenable by refusing to recognise attendance on his lectures as a condition in the qualification required for a degree.	
By members of some Teaching Institutions not included in the University.		
15. That no other institutions are included beside University College, King's College, and the medical schools.	No others proved efficiency before the Royal Commission, as was done with great particularity by University College and King's College, and as is officially established for the medical schools by their recognition, in accordance with the regulations of the General Medical Council, for the purposes of examinations for a license by the authorised examining bodies. Other institutions which can prove their efficiency will be admissible under the Charter, and can appeal to the Privy Council if unfairly refused. The conditions of efficiency are those laid down in the Charter of the Victoria University.	
16. That the prayer of University College and King's College for incorporation as a University was "rejected" by the Royal Commissioners, and that by the Charter, substantially granting this prayer, an essential recommendation of the Commissioners, that, namely, in favour (paragraph 12) of "co-ordinating under a University" a variety of institutions "purporting to "give teaching of a high class in the metropolis," was set aside.	These statements are incorrect. The Commissioners reported, indeed (subject to the doubt above noticed, expressed by half their number, on the ground of possibility), that an attempt should first be made by the University of London to devise a Charter under which it might fulfil the double function of an examining University for the Empire and a teaching University for London, and that "in the event of their "applying for and obtaining such a new Charter "... no other University" should "be esta- "blished in London, and that the prayer of the peti- "tion of University College and King's College" should "be not granted." With regard to the institutions in question, classed by the Commissioners as "of a less authoritative character" than the University colleges and some schools of science named, they did not propose that any of these should become "constituent colleges" in the University, with representation on its council, but only that they should be "associated with it" on terms of distinct inferiority. It is noteworthy that not one of the institutions mentioned presented a case or appeared by counsel to ask for co-ordination on these terms. So far from this being "an essential recommendation," the language in which it is suggested is of a studiously tentative character.	
By various Institutions claiming to be included without further inquiry.		
17. That Bedford College for Ladies is not included.	The case of this institution was heard by the Privy Council, and its claims were expressly reserved for the consideration of the council of the University. The only evidence of efficiency as yet submitted is a short letter to the Secretary of the Royal Commission, and a short case, which did not contain the information absolutely necessary for a decision.	
18. That the Birkbeck Institute, the City of London College, and the Working Men's College, are not included.	The information supplied to the Royal Commission was not sufficient to establish efficiency in the sense, for instance, which would qualify for admittance to the Victoria University, or for a share in the Government Grant to University Colleges. They were classed, accordingly, in the report, among "institutions of a less authoritative character." They did not appear before the Privy Council. Since the date of the report of the Commissioners they have received large grants for maintenance, and to pay off debt, from the City Parochial Charities' Fund; and the two first are now united in a single	

Appendix No. 17.

Objections.	Answers.
	organization, together with the Northampton Institute for technical training and recreation, which is called the "City Polytechnic Institution," and is not of a University character.
Not by the Institutions, but by other persons, apparently without authority from them.	
19. That the Normal School of Science of the Government Department of Science and Art, and the schools of the City and Guilds of London Institute, are not included.	In the absence of any claim on the part of these institutions it would be absurd to purport to include them, and almost equally so to delay the Charter, in order to address to them a special invitation. They may, however, be admitted hereafter. It is possible that the special relations in which the Normal School of Science stands to a Government Department, and the local nature of the University, may be found to constitute a difficulty.
By the Association for the Extension of University Education in London.	
20. That the association is not included in the University, with representation, at least temporary, upon the council, and of its lecturers on the Faculties, and admittance of its students, as "members of the University," to the examinations for degrees.	The work of this association is to provide lecturers to a number of local centres, in London and the neighbourhood, and to arrange for the examination of such of the attendants as desire it, in the subjects of the lectures. It has no endowment, buildings, or plant. The list of annual subscriptions amounts to 162*l.*, besides donations from city companies and educational trusts to the amount last year of 910*l.* The fees received by local centres are not under control of the association.
21. That the teaching given is of a University character.	Forty per cent. of the lectures are scientific, but of a popular character; ten per cent. are in history and political economy; fifty per cent. are in subjects connected with literature and the fine arts. No mathematics are taught, no mechanics, and no language or linguistic study of any kind, not even in English.
22. That it amounts, in individual cases at all events, to a regular course of instruction, as worthy of a degree, after seven years of attendance, as that given in a University, after three years.	There is no power in the council of the association to arrange or graduate the courses of lectures, but the subject of each is chosen by vote of the attendants on the previous course. The number of students who obtain certificates in two courses is very small. No prospectus of a seven years' course has ever been adopted by a centre, or put forth by the association.
23. That even if the teaching of the association should become efficient, it cannot be recognised, under the Charter, as leading to a degree, because the "regular course of study" required must be in a "college of the University," and the association has no buildings.	The condition of possessing buildings is required in the colleges, as in those of the Victoria University, in the interest of students. The plant of a University, schools, libraries, museums, and laboratories, absolutely requires permanent buildings, held on a secure tenure, for their development. To break down the well established conditions of efficiency in institutions, in order to admit a few exceptional students, can only end, as is shown by the history of the University of London, in reducing the teaching University to a second examining University.
24. That the Charter does not provide, as the University of Cambridge has provided, for excusing to students from the association one out of the three usual years of residence.	It would be an unprecedented thing to impose such a regulation on a University by its Charter, in favour of an external association of the kind. The University is, however, free to confer such privileges if it should seem desirable.
25. That it is framed in a spirit hostile to "University Extension," and "does nothing" for the classes who are ready to avail themselves of such teaching.	On the contrary, provisions are inserted for the appointment of University lecturers, either in connexion with a college or independently, for this among other purposes; and for giving certificates on the results of their teaching; and a successful lecturer may be added by cooptation to the faculty with which his subjects are connected. Recently University College and King's College have given faculties for laboratory work, of an evening, to selected students recommended by the lecturers of the association. It must be added that teaching by evening lectures, of a more systematic character than those of the association, has for many years been carried on at King's College, with success.

IV.—Objections to the Inclusion of King's College, as a Denominational College of the Church of England.

By Mr. Roundell's *Committee, and others.*

26. That to include a denominational college in an undenominational University is contrary to the recent course of legislation and precedent.	The privileges conferred on King's College by this Charter correspond, for practical purposes, with those of affiliation to the University of London, as originally founded in 1837. University College and King's College were at first the only colleges "affiliated."

Objections.	Answers.
	When the Act passed for the Abolition of Tests at Oxford and Cambridge, in 1871, University offices and degrees (except in divinity), and offices and fellowships in the ancient colleges, were thrown open; but the foundation of modern denominational colleges, and their admittance to University privileges, was not prohibited. Keble College and Hertford College at Oxford, and Selwyn College at Cambridge, are instances of modern denominational colleges admitted to University privileges at Oxford and Cambridge. In the Charter of the Victoria University the provision against tests is the same as in this Charter; and under it King's College could now claim admittance as a college to that University.
27. That it is unfair to Nonconformists.	To exclude denominational colleges would exclude theological colleges, and preclude the establishment of a faculty of theology. This, however, is much desired by many, especially by Nonconformist ministers, who are compelled at present to resort to Scottish or foreign Universities for degrees in divinity. The unfairness, therefore, would lie in excluding them.
28. That King's College has too large a share of power and influence in the University.	It has, as above shown, three members on a council of at least 40. The representatives of the faculties will not be representatives of King's College, and those of them who may be professors in King's College are not likely to exceed five or six in number.
29. That there ought not to be a test at King's College on election to a professorship.	This is not an objection to the Charter, but to the King's College Act of 1882.

V.—Objections in respect of the Faculty of Medicine.

By the Victoria University.

30. That some of the London Medical Schools do not possess complete equipment for all the branches of scientific teaching allied with medicine, and that no such school ought to be a college in the University.	This may be a valid objection in the Victoria University, because a student in a provincial school which was incompletely equipped in science might not be able to get good scientific teaching elsewhere. But it has no force as applied to London, or to the Gresham University, which will have many efficient colleges of science. That the teachers are organized by faculties, not as in the Victoria University by institutions, affords additional security in the interests of science.

By the same, by Provincial Medical Schools at Birmingham, Sheffield, and Bristol, and others.

31. That there is nothing in the Charter to enforce a sufficient standard of attainment, especially in science, for medical degrees; and that the medical authorities will have the power, and intend, to give medical degrees on an insufficient standard of attainment.	It is impossible by Charter to prescribe a standard of attainment, and the attempt is not made in any existing University Charter. The medical authorities will not have the power to prescribe too low a standard, being 14, or 16 at most, on a council of 40 at least. The statement as to their intention is emphatically repudiated. It has been alleged in numerous forms, now of the standard in general knowledge, now of the standard of scientific attainment; or again, that it is intended to require for a degree no more than the minimum required for a qualification by the General Medical Council; or fourthly, by Mr. Roundell, that the mere qualification is also to qualify for the degree. All these statements are without foundation.
32. That to require of students migrating from other Universities that they should reside for at least the final two years before taking a medical degree will injure the clinical teachers in provincial medical schools.	The objectors might with equal plausibility have objected to the first two years, in the interest of their scientific teachers. The requirement of two years' residence, in such cases, is not unreasonable in a teaching University, and the insertion of this requirement was insisted on, in its own interest, by the University of London. A similar regulation exists in the Victoria University, which raises this objection; the only difference being, that the authorities there can fix the two years so as to suit their own convenience.

By an Association of Diplomates and Students of the London Medical Schools.

33. That degrees cannot be conferred upon past or present students in the schools, unless they will go through their course over again.	The power of conferring honorary degrees in medicine, which was asked for in order to meet the case of past students, was struck out by the Privy Council (although it is exercised by the University of Dublin), at the instance of the University of London. For present students it will be possible, under the Charter, to make suitable arrangements, of a transitional character.

APPENDIX No. 18.

PAPER *handed in by* SIR GEORGE YOUNG, BART., *on July 27th*, 1892.—See *Question* 10,676.

RETURN OF EXAMINATIONS FOR BACHELOR'S DEGREES IN THE UNIVERSITY OF LONDON, 1889–91, SHOWING PLACES OF EDUCATION OF GRADUATES.

Places of Education as reported by those who in the three Years 1889-91 passed Examinations for Degrees of B.A., B.Ll., B. Mus., B.Sc., B.M., or B.S. in the University of London. Entered singly (S.), jointly (J.).	Arts.				Laws.				Music.		Science.				Medicine.				Surgery.				Total Passes.			Total Honours.			Total.		
	Pass.		Honours.		Pass.		Honours.		Pass.		Pass.		Honours.		Pass.		Honours.		Pass.		Honours.										
	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	T.	S.	J.	T.	S.	J.	T.
University College, London	9	22	5	7	—	—	—	—	—	—	10	22	7	15	40	1	23	—	12	—	2	—	71	45	116	37	22	59	108	67	175
King's College, London	2	4	2	1	—	1	—	1	—	—	3	5	1	4	10	—	1	—	—	—	—	—	15	10	25	4	6	10	19	16	35
Guy's Hospital Medical School	—	—	—	—	—	—	—	—	—	—	1	3	2	4	34	—	23	3	23	—	3	—	58	3	61	28	7	35	86	10	96
St. Bartholomew's Hospital Medical School	—	—	—	—	—	—	—	—	—	—	6	—	3	—	30	—	29	—	14	—	3	—	50	—	50	35	—	35	85	—	85
St. Thomas's Hospital Medical School	—	—	—	—	—	—	—	—	—	—	2	6	1	4	10	—	5	—	5	—	—	—	17	6	23	6	4	10	23	10	33
London Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	2	9	3	2	1	—	—	16	3	19	9	3	12	25	6	31
St. Mary's Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	1	—	—	3	—	6	—	1	—	—	—	4	1	5	6	—	6	10	1	11
St. George's Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	1
Westminster Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	1	—	—	—	2	1	3	—	1		2	2	4
Charing Cross Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	3	—	—	—	—	—	5	—	5	—	—	—	5	—	5
Middlesex Hospital Medical School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	1
London School of Medicine for Women	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	6	—	2	—	—	—	17	—	17	6	—	6	23	—	23
Inns of Court School of Law	—	—	—	—	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	7	—	—	—	3	4	7
Guildhall School of Music	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	1
Normal College of Science, South Kensington	—	—	—	—	—	—	—	—	—	—	1	16	2	8	—	—	—	—	—	—	—	—	1	16	17	2	8	10	3	24	27
City and Guilds Institute, South Kensington	—	—	—	—	—	—	—	—	—	—	—	3	—	2	—	—	—	—	—	—	—	—	—	3	3	—	2	2	—	5	5
City and Finsbury Technical College	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	2	2
University Tutorial Association	4	12	—	1	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	4	14	18	—	1	1	4	15	19
Birkbeck Institute	1	2	—	1	—	1	—	1	—	—	1	22	—	9	—	—	—	—	—	—	—	—	2	25	27	—	11	11	2	36	38
Pharmaceutical Society	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	—	—	—	3	3	—	3	3	—	6	6
Bedford College for Women	6	6	2	1	—	—	—	—	—	—	1	2	—	2	—	—	—	—	—	—	—	—	7	8	15	2	3	5	9	11	20
Westfield College, Hampstead, for Women	4	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	4	2	6	—	—	—	4	2	6
Queen's College for Women	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	1
University Extension Association	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Hackney College, Finchley Road (Congregational)	—	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	1	1	—	3	3
New College, Hammersmith (Congregational)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	2	2
Wesley College, Richmond	1	6	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	6	7	—	1	1	1	7	8
Church Missionary College, Islington	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	—	1

Regent's Park Theological College (Baptist)	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	1
St. Charles' Theological College, Notting Hill (Roman Catholic).	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—	—	—	2	—	2
Jews' College	1	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	4	—	—	—	1	3	4
Borough Road Training College (British and Foreign)	—	7	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	7	—	1	—	—	8	8
St. John's Training College, Battersea (National Society)	1	5	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	6	7	—	—	—	1	6	7
St. Mark's Training College, Chelsea (National Society)	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	—	—	—	—	4	4
Westminster Training College (Wesleyan)	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	—	—	—	—	4	4
St. Mary's Training College, Hammersmith (Roman Catholic).	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	1
Mercers' School	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	1
Total, London Institutions																							469			209			678
University of Oxford and Women's Colleges	1	3	—	—	—	—	—	—	—	—	2	3	1	2	—	—	—	—	—	—	3	6	9	1	2	3	4	8	12
University of Cambridge and Women's Colleges	2	3	4	4	—	1	—	—	—	—	8	7	5	4	—	—	—	—	—	—	10	11	21	9	8	17	19	19	38
University of Edinburgh	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	—	—	—	2	2	—	3	3	—	5	5
University of Glasgow	1	—	1	—	—	—	—	—	—	—	—	1	—	—	3	—	1	—	1	—	1	—	5	1	6	3	—	3	8	1	9
Victoria University, Owens College	5	8	2	1	—	2	—	—	—	—	7	8	4	7	18	—	22	—	3	—	1	—	33	18	51	29	8	37	62	26	88
Victoria University, Liverpool (University College)	5	2	—	1	—	—	—	—	—	—	2	2	1	1	2	1	—	—	—	—	—	—	9	5	14	1	2	3	10	7	17
Victoria University, Yorkshire College, Leeds	4	3	2	—	—	—	—	—	—	—	2	4	1	3	3	—	1	—	1	—	1	—	10	7	17	5	3	8	15	10	25
Mason's and Queen's Colleges, Birmingham	7	9	1	5	—	—	—	—	—	—	6	3	5	3	3	1	2	—	—	—	—	—	16	13	29	8	8	16	24	21	45
Bristol University College	—	2	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	5	5	—	—	—	—	5	5
Nottingham University College	—	1	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	3	1	4	—	—	—	3	1	4
Firth University College, Sheffield	—	2	—	—	—	—	—	—	—	—	3	1	1	3	—	—	—	—	—	—	—	—	3	3	6	1	3	4	4	6	10
Newcastle College of Science	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—	—	—	—	3	3	—	—	—	—	3	3
Aberystwith University College	33	5	5	—	—	—	—	—	—	—	7	4	2	2	—	—	—	—	—	—	40	9	49	7	2	9	47	11	58
Bangor University College	16	2	3	1	—	—	—	—	—	—	3	1	2	—	—	—	—	—	—	—	19	3	22	5	1	6	24	4	28
Cardiff University College	16	2	2	—	—	—	—	—	—	—	2	1	—	1	—	—	—	—	—	—	18	3	11	2	1	3	20	4	24
Holloway College for Women	16	2	4	2	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	17	2	19	4	2	6	21	4	25
Cheltenham College for Women	17	2	2	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	20	2	22	2	—	2	22	2	24
Stonyhurst College (Roman Catholic)	10	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	10	2	—	2	12	—	12
Ushaw, St. Cuthbert's College (Roman Catholic)	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	10	—	—	—	10	—	10
Flounders College	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	1	5	—	—	—	4	1	5
Kingswood School	4	7	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	8	12	1	1	2	5	9	14
Birmingham Grammar School	2	2	—	—	—	—	—	—	—	—	2	1	—	1	—	—	—	—	—	—	4	3	7	—	1	1	4	4	8
Scattered (three entries and under)	21	16	2	—	—	—	—	—	—	—	—	4	—	5	—	—	—	—	—	—	21	20	41	2	5	7	23	25	48
Total Country Institutions																							385			132			517
Private Study and Tuition	353	112	36	21	41	8	9	2	1	1	30	63	6	30							425	184	609	51	53	104	476	237	713
Total entries																							1,463			445			1,908

Appendix Nos. 18, 19, 20, and 21.

SUMMARY of the foregoing TABLE, distinguishing London and Country Institutions, and Private Students.

	Colleges in the Gresham University.	Other London Institutions.	Total London Institutions.	Other Universities.	Other Country Institutions.	Total Country Institutions.	Private Study and Tuition.	Total.
Arts - - - -	52	86	138	53	240	293	522	953
Science - - -	101	82	183	78	72	150	129	462
Arts, Laws, and Science -	155	177	332	131	316	447	713	1,492

APPENDIX No. 19.

PAPER *handed in by Mr.* STANLEY BOYD, *M.B., 28th July* 1892. (*See Question* 11,069.)

STATEMENT OF POINTS UPON WHICH THE LONDON MEDICAL SCHOOLS ARE AGREED.

With regard to the establishment under Charter of an efficient teaching University for London, the Medical Schools of London are agreed upon the following points, which form part of the Gresham Charter, and which, in their opinion, ought to be included in any University scheme for London.

The provision of degrees for the London students of medicine, *i.e.*, degrees not beyond the reach of the majority of these students.

The Medical Schools believe that the mechanism suggested with a view to this end in the Gresham Charter is suitable: for, by it, the teachers of London would form the Faculty, the Boards of Studies, and the representatives of medicine upon the Council—a constitution which would allow of the curriculum, syllabuses and arrangements for examinations in medical subjects being brought into closer relation with the teaching of the London Schools.

With regard to the preliminary examinations in arts and science, the London teachers of medicine are of opinion that a good general training in arts and science should be required of candidates for a degree in medicine. The arrangements for these examinations should be made after conference between the Boards of Studies for Medicine and those for Arts and Science respectively. The London Medical Schools have no desire to depress the standard of the existing degrees of the University of London, and they fully recognise that these Degrees have had a salutary effect upon the teaching of Medicine.

The London Medical Schools consider that the Gresham Charter is satisfactory in so far as it proposes to institute a purely local University for graduation, in which residence would be essential. Should, however, some modification of the University of London seem the best solution of the question, the London schools are unanimous in the opinion that no modification of the University of London would be satisfactory, which did not provide for the granting of degrees restricted to London students, and under the substantial control of the London teachers. The great majority of the London teachers are strongly in favour of a system of examination in which the candidate is not examined by his own teacher.

The London schools claim recognition and representation as Colleges in the Charter of any new or remodelled University. They demand for medicine a share, equal to that of any other Faculty, in the government of any such University.

APPENDIX No. 20.

PAPER *handed in by Mr.* STANLEY BOYD, *M.B., 28th July,* 1892. (*See Question* 11,308.)

POINTS UPON WHICH EACH SCHOOL WAS ASKED TO EXPRESS ITS OPINION.

1. Should there be one or two Universities?

2. The need for the closer association of teaching with examination.

3. The principle upon which the University should be founded—whether that of the professorial scheme, or that embodied in the scheme of the Senate and the Gresham Charter.

4. The inclusion in, or exclusion from, the University of the Royal Colleges. If their inclusion is preferred, the position the Royal Colleges should occupy in the University, and the functions they should discharge.

5. The claim of medicine to a share in the governing body of the University equal to that of the other Faculties.

6. The claim of the Schools to be represented directly upon any governing body in which other teaching institutions are represented.

7. The structure and powers of the Faculty.

8. The limitation of the new University to London (*a*) in constitution; (*b*) in its sphere of action.

9. Enforced residence of undergraduates.

10. Should the degree be a license?

APPENDIX No. 21.

PAPER *handed in by Dr.* T. W. SHORE, *on 28th July* 1892. (*See Question No.* 11,786.)

ST. BARTHOLOMEW'S HOSPITAL.

1. That the School of St. Bartholomew's Hospital is satisfied with the general arrangements of the Gresham Charter as finally determined.

2. That in the event of the Royal Colleges accepting the position indicated in the Charter, this School should have one representative on the Council, and would not be content with any arrangement that deprived it of such representation.

3. That this School desires to be *directly* represented on the Council or Senate of the University.

4. That indirect representation through the Faculty would not be satisfactory to this School.

5. That no scheme which does not directly connect the new University with London, and require some residence as an essential to graduation, can be satisfactory, since only in this way can the degrees be an indication that the graduate has had the advantage of education in London.

6. That Clause II. of the Gresham Charter should be so amended as to constitute St. Bartholomew's Hospital and College a College in the Faculty of Science as well as in that of Medicine in the University.

7. That the period of residence in London should be not less than two years, and that the particular regulation in the Gresham Charter on this point is satisfactory.

8. That this School would in no circumstances assent to place the appointment of any of its teachers in the hands of an external body.

9. That each Faculty should be represented on the Council in proportion to its completeness of organisation in London.

10. That the Council or Senate might consist of about 50 members, and should not in any case be a small body, so that due representation may be given to the several Colleges of the University.

11. That the Medical Degrees of the new University should possess all the privileges as to licence to practise which attach to the Medical Degrees of the existing Universities of the United Kingdom.

12. That of the schemes already proposed, this School prefers the Gresham Charter, but that if the provisions of that Charter are unattainable it would be willing to take part in a reconstruction of the existing University of London, provided always (*a*) that the University be so modified as to bring it into local relation with the teaching bodies of London; (*b*) that residence in London should be made essential for graduation; and (*c*) that this School have direct representation on the Governing Body.

13. That while deprecating any interference with the constitution or functions of existing teaching institutions, this School would view with satisfaction the endowment in London of professorships in any branch of learning in relation to the new University.

14. That in addition to the considerations drawn from its large number of students, the standing of its teachers, and the efficiency of its teaching in medicine and in science, the power of taxation (cl. xxii of the Gresham Charter) renders it essential that this School should be directly represented on the Governing Body of the University, and that it is willing that every other College should be so represented.

APPENDIX No. 22.

PAPER *handed in by Dr.* T. W. SHORE, *on 28th July* 1892. (*See Question No.* 11,786.)

SCIENTIFIC SUBJECTS TAUGHT AT ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.

The following Sciences are taught, viz.:—

Chemistry; Zoology and Comparative Anatomy; Botany and Vegetable Physiology; Physiology; Physics.

The arrangements for the teaching of these Sciences are:—

I. CHEMISTRY.

(*a.*) *Teachers.*—The Department is in charge of a Lecturer, Dr. W. J. Russell, Ph.D., F.R.S., past President of the Chemical Society.

The Lecturer is assisted in conducting the practical classes and in dealing with special branches of the subject by a *demonstrator*, and two private assistants.

(*b.*) *Class Rooms and Laboratories:*

(1.) A *Lecture Theatre*, well lighted and provided with all the appliances necessary to practically illustrate the lectures, and capable of seating 130 students.

(2.) *Lecturer's Private Laboratory*, adjoining the theatre and opening into it. Here experiments to illustrate the lectures are prepared and brought in when required.

(3.) *Balance Room* adjoins the private Laboratory.

(4.) Below the theatre is a large room used for research and for advanced work of a special kind.

(5.) Upstairs is a large Laboratory, equipped with all the appliances and chemicals, &c. required for the use of practical classes.

The work of the students is individual, and 100 students can work simultaneously under the supervision of the Lecturer and his assistants.

(6.) *Lecturer's* private Room and Laboratory opens into this large practical Class Room.

(*c.*) *Facilities for Higher Work and for Research* are given to such students as may be sufficiently advanced, and research work is continually going on by the Lecturer and his assistants.

Appendix Nos. 21 and 22.

II.—ELEMENTARY BIOLOGY, ZOOLOGY, AND COMPARATIVE ANATOMY.

The Department is in charge of a Lecturer, T. W. Shore, M.D., B.Sc. (Lond.), F.L.S., F.R.M.S., who gives the whole of his time to Biology. He is Examiner in Science for the Army, Navy, and Indian Medical Services, Examiner in Biology to the Royal College of Surgeons, and is author of several original contributions to Zoological Science.

He is assisted with the practical classes by *E. W. Groves*, B.Sc. (Lond.), 1st Class Hon. in Zoology, and *J. W. Pickering*, B.Sc. (Lond.), 1st Class Hon. in Physiology and Hon. in Zoology, both authors of orignal papers on biological subjects.

Class Rooms and Laboratories:

(*a.*) A large *Lecture Theatre*, also used for physiological lectures and capable of seating 200 students.

(*b.*) The *Biological Laboratory*, consisting of two large rooms, well-lighted and fitted with benches, with gas and water laid on and provided with all the necessary apparatus for practical work, and capable of allowing 55 students to work simultaneously. A smaller room for rough and preparatory work adjoins.

(*c.*) *Museum.*—The biological specimens are displayed for purposes of study at one end of the large general Museum, which is on the same floor as the Biological Laboratory.

Research Work by the Lecturer and his assistants and by advanced students is carried on in the Laboratory.

III.—*Botany and Vegetable Physiology.*

This Department is in charge of the Lecturer, Rev. Geo. Henslow, M.A., F.L.S., F.G.S., with whom the Lecturer on Biology co-operates by conducting the elementary instruction in Vegetable Biology in conjunction with the elementary work in Animal Biology.

IV.—*Physiology.*

This Department is in charge of a Lecturer, Dr. E. Klein, M.D., F.R.S. Author of an "Atlas of Histology," and of many original contributions to Physiology.

He is assisted by a Demonstrator, Dr. V. D. Harris, M.D. (Lond.), F.R.C.P. Examiner in physiology at the Royal College of Surgeons, and two Assistant Demonstrators, Dr. E. Cautley, M.D., (Cantab.), M.R.C.P., and Dr. H. M. Fletcher, M.B., M.A. (Cantab.), M.R.C.P.

Appendix No. 22.

Class Rooms and Laboratories:

Lecture Theatre, capable of seating about 200 students.

Laboratory, consisting of a large, well lighted practical class room, amply equipped with apparatus and appliances for practical work in Histology, Experimental Physiology and Physiological Chemistry, and capable of accommodating 75 students working simultaneously.

V.—*Physics.*

The Department is in charge of a Lecturer, Mr. F. Womack, M.B., B.Sc. (Lond.), by whom elementary and advanced instruction in Physics is conducted throughout the whole year.

Class Rooms.

The lectures are carried on in the Chemical Theatre and the practical Laboratory work is carried on in the Chemical Laboratory, where each student is himself employed in making experiments.

"A Physical Room" is set apart for keeping physical apparatus and for the demonstration of delicate physical experiments.

All the Lecturers in scientific subjects devote their lives to scientific work and are not engaged in medical practice.

The nature of the work done in the Scientific Departments of St. Bartholomew's is shown by the results of examinations at the Preliminary Scientific of the University of London as follows:—

Examination.	Per cent. successful.
July 1885	70
Jan. 1886	79
July 1886	76
Jan. 1887	82
July 1887	88·8
Jan. 1888	55·5
July 1888	88·8
Jan. 1889	100
July 1889	60
Jan. 1890	87·5
July 1890	87·29
Jan. 1891	100
July 1891	90
Jan. 1892	87

Average of 14 *examinations*, about 80 per cent.

It is also shown by the number of places in Honours obtained by students of St. Bartholomew's.

Honours in Zoology. Prel. Sci. London.

Year.	St. Barth's.	Univ. Coll.	King's Coll.	Guy's.	St. Thomas's.
1889	3	1	0	0	0
1890	7	1	0	0	0
1891	3	0	0	0	0

The character of the work is also shown by the fact that a few students (6 or 8) per annum take the mathematics of the Int. Sc. Exam. of the University, and that 2 or 3 every year proceed to the degree of B.Sc.

Last October a student obtained a First Class in Honours in Physiology and Honours in Zoology at the Final B.Sc. examination.

The number of students who have passed the Prel. Scientific exam. of the University of London from the five most important of the London Schools is shown in the following table:—

PRELIMINARY SCIENTIFIC EXAMINATION of the UNIVERSITY of LONDON.

Total number of passes during the past three years from the Chief Schools in London.

	Jan. 1889.	July 1889.	Jan. 1890.	July 1890.	Jan. 1891.	July 1891.	Total.
University College	7	29	13	40	12	34	136
St. Bartholomew's	6	9	7	27	12	26	87
Guy's Hospital	3	7	6	19	10	7	52
St. Thomas's Hospital	3	7	1	9	7	5	32
King's College	4	8	3	9	3	5	32

SOME of the ORIGINAL PAPERS, &c., published by teachers and others (*in Science*) connected with St. Bartholomew's Hosp.

BIOLOGY.

Shore, T. W.—"Relations of Mammallia to Ichthyopoida and Sauropoida."—*Journal of Anatomy and Physiology*, 1887.

Shore, T. W.—"Morphology of the Vagus Nerve."—*Journal of Anat. & Phys.*, 1888.

Shore, T. W.—"Minute Anatomy of the Vagus Nerve of Selachious, with remarks on the Segmental Value of the Cranial Nerves."—*Journ. Anat. & Physiol.*, 1889.

Shore, T. W., & Pickering, J. W.—"Proamnion and Amnion of the Chick."—*Journal of Anat. & Phys.*, 1890.

Shore, T. W.—"On the Origin of the Liver."—*Journal of Anat. & Phys.*, 1891.

Russell, W. J., and Lapraik, W.—"A Spectroscopic Study of Chlorophyll."—*Journ. of Chemical Society*, 1882.

Shore, T. W.—"Practical Vegetable Biology."

CHEMISTRY.

Russell, W. J., & West, S.—"On a Simple Process for estimating Urea."—*Journ. of Chem. Society*, 1874.

Russell, W. J.—"Action of Hydrogen on Silver Nitrate."—*Proc. Roy. Soc.*, 1874.

Russell, W. J., and Lapraik, W.—"Experiments on the Decomposition of Nitric Oxide by Pyrogallate of Potash."—*Journ. of Chem. Society*, 1874.

Russell, W. J.—"On the Absorption Spectra of Cobalt Salts."—*Proc. Royal Soc.*, 1880.

Russell, W. J., and West, S.—"On the Relation of Urea to the total Nitrogen in Disease."—*Proc. Royal Soc.*, 1880.

Russell, W. J., & West, S.—"On the Amount of Nitrogen excreted in the Urine by a Man at perfect rest."—*Proc. Roy. Soc.*, 1880.

Russell, W. J., & Lapraik, W.—"On Absorption Bands in the visible Spectrum produced by certain colourless Liquids."—*Journ. Chem. Soc.*, 1881.

Russell, W. J., and Prof. Story Maskelyne.—"An Attempt to form double Salts of Nitrate of Silver and other Nitrates."—*Proc. Roy. Soc.*, 1877.

Russell, W. J., & Orsman, W.—"The Relation of Cobalt to Iron as indicated by Absorption Spectra."—*Proc. Chem. Soc.*, 1889.

Russell, W. J.—Report on London Fog.

,, Report on London Rain.

,, Report on the amount of CO_2 in the London Air.

PHYSIOLOGY.

E. Klein and *Noble Smith*.—"Atlas of Histology."

W. Morrant Baker and *V. D. Harris*.—"Kirkes's Handbook of Physiology."

Brunton, T. Lander and *Cash, J. T.*—"Influence of "Heat and Cold on Muscles poisoned by Veratria." —*Journal of Physiology*, Vol. IV.

E. Klein.—"Report on the Cortical Areas removed "from the Brain of a Dog and from the Brain of "a Monkey."—*Journal of Physiology*, Vol. IV.

Harris, V. D.—"On Staining with Aniline Dyes." —*Quarterly Journ. of Micros. Science*, Vol. XXIII.

Haig, A.—"Variations in the Excretion of Uric Acid, "produced by administration of Acids and Al- "kalis."—*Journal of Physiology*, Vol. VIII.

Harris, V. D. and *Tooth, H. H.*—"On the relation of "Nicro-organisms to Pancreatic (Proteolytic) "Digestion."—*Journal of Physiol.*, Vol. IX.

Shore, T. W. and *Jones, H. L.*—"On the Structure of "the Vertebrate Liver."—*Journ. of Phys.*, Vol. X.

Brunton, T. Lander and *Cash, J. T.*—"Connexion be- "tween Chemical Constitution, Physiological "Action, and Antagonism."—*Proc. Roy. Soc.*, 1883.

Herringham, W. P.—"On Muscular Tremor."—*Journ. of Physiology*, Vol. XI.

Herringham, W. P. and *Davies, H. O.*—"On the Exe- "cretion of Uric Acid and Urea."—*Journal of Physiology*, Vol. XII.

Herringham, W. P. and *Groves, E. W.*—"On the Exe- "cretion of Uric Acid, Urea, and Ammonia." —*Journ. of Physiology*, Vol. XII.

Groves, E. W.—"On the Estimation of Uric Acid in "Human Urine."—*Journ. of Phys.*, Vol. XII.

Haig, A.—"On the quantity of Uric Acid in Blood and "various Organs and Tissues."—*St. Barthol. Hosp. Reports*, 1890.

Shore, T. W.—"Recent advances in Nerve Physiology "considered in relation to Disease."—*St. Barth. Hosp. Repts.*, 1889.

Power, D'Arcy.—"Notes of an Experiment on the In- "troduction of false Albuminuria."—*St. Barth. Hosp. Reports*, 1887.

Tooth, H. H.—"A contribution to the Topographical "Anatomy of the Spinal Cord."—*St. Barth. Hosp. Reports*, 1885.

Haig, A.—"On the Execretion of Uric Acid."—*Journal of Physiology*, Vol. XIII.

ANATOMY.

Lockwood, C. B.—"On the Development of the Arteries "of the Abdomen."—*Proc. Roy. Soc.*, 1885.

Lockwood, C. B.—"On the Development and Transi- "tion of the Testes."—*Hunterian Lectures, Royal College of Surgeons*, 1888.

Lockwood, C. B.—"On the Early Development of the "Percardium, Draphragm, and Great Veins." —*Phil. Trans.*, 1888.

Lockwood, C. B.—"The Anatomy of the Muscles, "Ligaments of the Orbit, &c."—*Journ. Anat. and Phys.*, 1885.

Herringham, W. T.—"The Brachial Plexus."—*Proc. Royal Society*.

PHYSICS.

Womack, T.—"On the rate of Cooling the Body after Death."—*St. Barth. Hosp. Reports*, 1887.

Stevenson, W. E., and *Jones, H. L.*—"Medical Electricity."

BOTANY.

Henslow, Rev. G.—"On the Vascular Systems of floral "Organs and their importance in the interpre- "tation of the Morphology of Flowers."—*Journal Linnean Soc.*, Vol. XXVIII.

Henslow, Rev. G.—"On the Origin of Floral Structures." —*Intern. Science Series*.

HONOURS gained by STUDENTS of St. Bartholomew's in the Degree Examinations of the University of London during the past three years.

M.D.

One gained Marks qualifying for the Gold Medal in Medicine. 1891.

M.S.

One gained the Gold Medal in Surgery. 1891.

B.S.

1889.—*One* gained 1st class Honours and Scholarship and Gold Medal in Surgery.

1890.—*One* gained 1st Class Honours with Gold Medal in Surgery.
One gained a 2nd Class Honours in Surgery.

1891.—*One* gained a 1st Class Honours with Gold Medal in Surgery.
One gained a 1st Class Honours in Surgery.
Three gained 2nd Class Honours in Surgery.

M.B.

1889.—*Five* gained 1st Class Honours in one or other of the subjects (Medicine, Obstetrics, or Forensic Medicine).

Five gained 2nd Class Honours in one or other of the subjects.

Four gained 3rd Class Honours in one or other of the subjects.

One gained a Gold Medal in Medicine.

One gained the Scholarship and Gold Medal in Obstetric Medicine.

One gained the Scholarship and Gold Medal in Forensic Medicine.

1890.—*One* gained 1st Class Honours in Medicine.

Eight gained 2nd Class Honours in one or other of the subjects.

Four gained 3rd Class Honours in one or other of the subjects.

1891.—*One* gained a 1st Class Honours and Gold Medal in Forensic Medicine.

One gained a 1st Class Honours in Obstetric Medicine and Honours in Medicine.

TOTAL NUMBER of STUDENTS from St. Bartholomew's Hospital who have passed Examinations at the University of London for the past seven years.

Year.	Number.
1885	43
1886	69
1887	70
1888	64
1889	53
1890	80
1891	82
Total	461

Or an average of 65 per annum.

Appendix Nos. 22 and 23.

University of London.

Number of Successful Candidates at the Medical Degree Examinations during the past three years.

	1889.	1890.	1891.	Total.
M.D:				
University College	9	8	9	26
King's College	0	1	2	3
Guy's Hospital	5	7	13	25
St. Thomas's Hospital	3	1	3	7
St. Bartholomew's Hospital	4	6	7	17
M.S.:				
University College	1	0	0	1
King's College	0	0	0	0
Guy's Hospital	1	2	0	3
St. Thomas's Hospital	0	1	0	1
St. Bartholomew's Hospital	0	0	2	2
B.S.:				
University College	2	4	4	10
King's College	0	0	0	0
Guy's Hospital	3	8	12	23
St. Thomas's Hospital	0	3	2	5
St. Bartholomew's	2	5	7	14
M.B.:				
University College	9	9	12	30
King's College	1	4	1	6
Guy's Hospital	9	10	10	29
St. Thomas's Hospital	2	2	4	8
St. Bartholomew's	12	10	9	31

Number of Clinical Appointments open to Students at St. Bartholomew's Hospital *every three months.*

In-patient Dresserships	40
In-patient Clerkships	36
Out-patient Dresserships	24
,, Clerkships	36
Ophthalmic Dresserships	10
Gynæcological Clerkships	16
Dresserships in Aural Department	8
,, Orthopœdic ,,	10
,, Laryngeal ,,	16
,, Skin ,,	3
Clerkships in Electrical ,,	8
,, Extern Midwifery Department	21
Post-mortem Clerks	18
Total	246

In addition to the above:—

Eight	House Physicians.
Ten	House Surgeons.
Two	Indoor Midwifery Assistants.
Four	Extern Midwifery Assistants.
Two	Ophthalmic House Surgeons.
Two	Administrators of Anæsthetics.
Two	Assistants in Electrical Department.
30	

are appointed from the most distinguished of the recently qualified students and young graduates.

APPENDIX No. 23.

Paper *handed in by* Fredk. Taylor, *Esq., M.D., on July 28th,* 1892. (*See Question* 11,837.)

Students of Guy's Hospital Medical School passed at the University of London during the last 10 Years.

Preliminary Scientific M.B. Examination.

	Total Passes from all Schools.		Total Passes from Guy's.	
	Pass Exam.	Honours Exam.	Pass Exam.	Honour Exam.
1882	120	20	20	2
1883	116	27	18	6
1884	134	21	12	4
1885	108	22	10	2
1886	120	18	14	—
1887	237	18	28	—
1888	182	13	13	—
1889	197	26	12	6
1890	255	12	25	1
1891	262	9	22	—
	1,731	186	174 10 per cent.	21 11 per cent.

Bachelor of Science Examination.

1881	1
1882	1
1884	2
1886	3
1887	3
1889	2
1890	1
1891	2
	15

Intermediate M.B. Examination.

	Total Passes from all Schools.		Total Passes from Guy's.	
	Pass Exam.	Honours Exam.	Pass Exam.	Honours Exam.
1882	62	30	11	11 (Two Honours in Chemistry.)
1883	69	48	16	13 (Chemical Medal and two Honours in Chemistry.)
1884	77	54	12	10 (Two Honours in Chemistry.)
1885	100	46	22	11 (Medal and three Honours in Chemistry.)
1886	109	42	14	6 (One Honour in Chemistry.)
1887	67	18	8	—
1888	90	20	13	—
1889	106	24	20	6
1890	106	39	12	6 (Medal and three Honours in Chemistry.)
1891	94	37	15	4 (Medal and two Honours in Chemistry.)
	680	358	143 21 per cent.	67 18·7 per cent.

PARTICULARS OF THE TEACHING OF SCIENCE AT GUY'S HOSPITAL.

The following sciences are taught:—

(*a.*) Chemistry.

(*b.*) Biology.

(*c.*) Physics.

(*d.*) Physiology.

In each of the subjects the teaching consists of (*a*) systematic lectures, (*b*) practical demonstration, and, (*c*) tutorial classes. Research work is constantly being carried on in the laboratories by the teachers in each department, and senior students are encouraged to take part in it.

The teachers of these subjects and the accommodation at their disposal are as follows:—

(1.) Chemistry.

Teachers.

(*a.*) Lecturers: Thomas Stevenson, M.D., F.R.C.P., F.C.S., F.I.C., Examiner in Organic Chemistry in the University of Oxford, Scientific Analyst to the Home Office; and Charles E. Groves, F.R.S., F.C.S., Vice-President of the Institute of Chemistry, Membre de la Société Chimique de Paris, Mitglied der Deutschen Chemischen Gesellschaft, Editor of the Journal of the Chemical Society, Examiner in Chemistry and Chemical Physics on the Conjoint Board of the R.C.P. and R.C.S.

(*b.*) Demonstrator: John Wade, B.Sc. (Lond.), F.C.S., F.I.C., and two or more private assistants.

Accommodation.

(*a.*) A lecture theatre specially fitted for demonstrating lecture experiments accommodating 200 students.

(*b.*) Practical chemistry laboratory, with bench accommodation for 90 students. This is in the new school buildings completed this year, and contains every modern requirement for demonstrations in practical chemistry, inorganic and organic.

(*c.*) Balance room adjoining this laboratory.

(*d.*) Toxicological laboratory.

(*e.*) Public health laboratory for water analysis, &c.

(*f.*) Smaller laboratory for research work.

(2.) Biology.

Teachers.

(*a.*) Lecturers: Frank Beddard: M.A. (Oxon.), F.R.S., Prosector of the Zoological Society of London, and late Examiner in Biology at the Royal College of Surgeons; and H. J. Campbell, M.D., M.R.C.P., Hunterian Professor of Comparative Anatomy and Physiology to the Royal College of Surgeons, England.

(*b.*) Demonstrators: J. H. Targett, M.S., and John Fawcett, M.D.

Accommodation.

(*a.*) Biological laboratory specially fitted for dissection and microscopical work, and open every day for the students preparing for the higher examinations. The elementary biology demonstrations being given in one of the other laboratories.

(*b.*) Comparative anatomy museum.

(*c.*) Lecture theatre.

(3.) Physics.

Teachers.

(*a.*) Lecturer: A. W. Reinold, M.A. Oxon., F.R.S., Professor of Physics at the Royal Naval College, Past President of the Physical Society of London, Examiner for the Natural Science Tripos at Cambridge, formerly Examiner at the Universities of Oxford and London.

(*b.*) Demonstrator: John Wade, B.Sc.

Accommodation.

(*a.*) Lecture theatre specially fitted for demonstrating lecture experiments in physics, seating 100 students.

(*b.*) Physical laboratory furnished with necessary apparatus for practical demonstrations.

(*c.*) Lecturer's laboratory for advanced students and for research work.

(4.) Physiology.

Teachers.

(*a*). Lecturers: C. H. Golding-Bird, M.B., Examiner in Physiology at the Conjoint Examining Board, London; E. H. Starling, M.D., M.R.C.P., Assessor in Physiology at the University of Durham, Research Scholar of the Grocers' Company; and J. W. Washbourn, M.D., M.R.C.P., Examiner in Physiology at the Apothecaries' Hall.

(*b.*) Demonstrators: A. H. Tubby, M.S.; H. J. Campbell, M.D.; and J. Fawcett, M.D.

Accommodation.

(*a.*) Lecture theatre seated for 200 students.

(*b.*) Physiological class-rooms fitted for practical work in histology, experimental physiology, and physiological chemistry, accommodating 80 students working simultaneously.

(*c.*) Three physiological laboratories for research work and for students preparing for higher examinations.

Literature.

Titles of some of the books written or edited, and of papers written, upon scientific subjects by present teachers in the Medical School of Guy's Hospital.

Chemistry.

Groves, C. E.	Miller's Elements of Chemistry.
,,	Dyeing and Calico Printing.
,,	Fresenius qualitative Analysis.
,,	Fresenius quantitative Analysis.
,,	Technology vol. 1, Fuel.
,,	Note on the Action of Chloride of Ethyl on Ammonia; On Tetrabromide of Carbon; Formation of Naphthaquinone by the direct Oxidation of Naphthalene; Action of Chlorine on Pyrogallol; Dinitroso-orcin and Dinitro-orcin; Picrorocellin; On Gardenin; Contributions to the History of the Naphthalene Series. B. Naphthaquinone, &c. (published in Journ Chem. Soc.). Vorlaufige Mittheilung uber die Einwirkung der Schwelfelsaure auf Naphthalin; Stickstoffbestimmung in organischen Substanzen, &c. (published in Deut. Chem. Ges. Ber.).
Stevenson, T.	On the Application of Physiological Tests for certain Poisons. Proc. Royal Soc.
,,	A Treatise on Alcohol.
,,	The Detection and Estimation of the poisonous Alkaloids. In Watts' Dictionary of Chemistry.

Biology.

Beddard, F. E.	Anatomy of Anthropoid Apes. Trans. Zool. Soc. 1893.
,,	Remarks on the Ovary of Echidna. Proc. Roy. Phys. Soc., 1884.
,,	Anatomy of Podica. Proc. Zool. Soc., 1890.
Beddard, F. E.	On structural Characters and Classification of Cuckoo. Proc. Zool. Soc., 1885.
,,	On the occurrence of numerous nephridia in the same segment in certain Earthworms. Quart. Journ. Micros. Soc, 1890.
,,	On a New Type of Excretory Organ in Annelids. Proc. Roy. Soc., 1890.
,,	Report on the Isipoda collected during the voyage of H.M.S. Challenger. Ref. Zool. Chall. Exp., 1884 and 1886.
,,	The Minute Structure of the Eye in certain Cymothoidæ. Trans. Roy. Soc. Edin., 1889.
,,	On a new Sporozoon. Zool. Jahrbuch., 1888.
Campbell, H. J.	Elementary Text Book of Biology. 1893.

Appendix Nos. 23, 24, and 25.

PHYSICS.

Reinold, A. W.	Joint author of Papers on the Thickness and Electrical and other properties of Liquid Films published in the Transactions and Proceedings of the Royal Society and in the Proceedings of the Physical Society.
Stevenson, T.	Thermometric Scales. Guy's Hosp. Reps.

PHYSIOLOGY.

Starling, E. H.	Elements of Human Physiology.
,,	Electro-motive Phenomena of the Mammalian Heart. Proc. Roy. Soc.
,,	Note on a form of Blood-pressure Manometer. Guy's Hosp. Reps.
,,	On somePoints in the Innervation of the Mamalian Heart. Journal of Physiology, vol. 13.
,,	On the Fate of Peptone in the Blood and Lymph. Internat. Phys. Cong. 92.
,,	Contribution to the Physiology of Lymph Secretion. Journ. Phys., vol. 1.
Hale-White, W.	The Effects upon the bodily Temperature of Lesions of the Corpus Stratum and Optic Thalamos; A method of obtaining the Specific Heat of certain warm-blooded Animals; The Functions of the superior and cervical and semi-lunar Ganglia (published in the Journal of Physiology).
,,	The Functions of the Gasserian and Lenticular Ganglia. Brain, Part. 51.
,,	A Theory to explain the Evolution warm-blooded Vertebrates. Journ. Anat. and Phys.
Tubby, A. H.	The Qualities of pure Human Succus entericus, with some Observations on Intra-Intestinal Pressure. Guy's Hosp. Reps.

SPECIAL HOSPITALS.

	Number of Beds.
Hospital for Consumption, &c., Brompton	321
City of London Hospital for Diseases of the Chest	164
Ophthalmic Hospital, Moorfields	100
Hospital for Children, Ormond Street	175
East London Hospital for Children	102
Hospital for Paralysed and Epileptic	175
Hospitals for Women and eight lying-in hospitals.	241
Seven fever hospitals.	
The number of beds in these hospitals varies in different years. At present they contain about 4,000 patients.	

In addition to the above there is a vast number of special hospitals and dispensaries, many of which are available for clinical study and instruction, in which the patients, from the nature of their cases, are treated out of doors in most instances.

ASYLUMS FOR THE INSANE AND FOR IDIOTS.

	Number of Beds.
Bethlam Hospital	300
St. Luke's Hospital	209
Five London county asylums, containing an aggregate of	12,705
Five asylums for idiots and imbeciles, containing an aggregate of	6,750

POOR LAW INFIRMARIES.

There are 27 in number, and contain an aggregate of	13,285

The practice of these infirmaries might be utilised under proper organisation.

APPENDIX No. 24.

PAPER *sent to the Commission by* J. ERIC ERICHSEN, *Esq., subsequently to giving his Evidence.* (*See Question* 11,872.

STATEMENT showing the number of Beds available for Clinical Instruction in the Hospitals, Infirmaries, and Asylums in or near London.

GENERAL HOSPITALS.

	Number of Beds.
St. Bartholomew's	750
Charing Cross	180
St. George's	351
Guy's	695
King's College	220
London	786
St. Mary's	281
Middlesex	300
St. Thomas'	572
University College	207
Westminster	200
Total	4,542

This does not include the number of beds in the Royal Free Hospital, which being connected with the School of Medicine for Women, is not available for clinical purposes by the ordinary medical student.

Nor does it include the smaller general hospitals to which no schools of medicine are attached.

APPENDIX No. 25.

PAPER *handed in by* J. ERIC ERICHSEN, *Esq., on July 29th,* 1892. (*See Question* 11,920.)

University College, London,
Gower Street, W.C.

FINANCIAL STATEMENT OF COLLEGE.

Session 1890–91.

1. The entire number of pupils during the session was 1,540.

Students in the college		968
Pupils in the school		572
		1,540

	£	£
2. Income of college from students' fees and pupils in the school		26,756
3. Of this, school fees	11,701	
,, college	15,055	
4. Clinical fees at hospital, an additional	1,873	
5. The college trust funds amount to, annually		7,543
6. Government grant to college		1,700
So that total income of college is		35,999

		£
7. Capital of trust funds of college including the Edwards's bequest of about 5,000*l.*)		254,669
Capital of trust funds of hospital		116,265
9. Property of college in available securities		22,000
10. Rebuilding fund of hospital now amounts to about		27,000
11. Property of college, viz.:— Seven acres of land; Buildings; Libraries; Museums; Laboratories; Equipment and furniture	Estimated value about	250,000

July 1892.

APPENDIX No. 26.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October* 21*st*, 1892. (*See Question* 12,861.)

January 1892.

CONSOLIDATED REGULATIONS of the several Societies of Lincoln's Inn, the Middle Temple, the Inner Temple, and Gray's Inn (herein-after described as the four Inns of Court) as to the admission of Students, the mode of keeping terms, the education and examination of Students, the calling of Students to the Bar, and the taking out of certificates to practise under the Bar.

ADMISSION OF STUDENTS.

1. Every person, not otherwise disqualified, who shall have passed a public Public Examination at any University within the British dominions, or for a Commission in the Army or Navy, or for the Indian Civil Service, or for the Consular Service, or for Cadetships in the three Eastern Colonies of Ceylon, Hong Kong, and the Straits Settlements, shall be entitled to be admitted as a Student, without passing a preliminary Examination, but subject to Rule 7.

2. Every other person, except such as come under Rule 15, applying to be admitted as a Student, shall, before such admission, have satisfactorily passed an Examination in the following subjects, viz.:—

(*a.*) The English Language,
(*b.*) The Latin Language, and
(*c.*) English History;

Provided that the Board of Examiners mentioned in Rule 3 shall have power to report any special circumstances to the Masters of the Bench of the Inn of Court of which any person may desire to be admitted as a Student, and that the Masters of the Bench of such Inn shall have power, with or without such report, to relax or dispense with this regulation, in whole or in part, in any case in which they may think special circumstances so reported, or otherwise ascertained by the Bench, justify a departure from this regulation. In the case of a Student who is a native of India, that fact shall be a special circumstance sufficient to justify an Examination in the Latin Language being dispensed with, upon application to the Masters of the Bench.

3. Such Examination shall be conducted by a joint Board, to be appointed by the four Inns of Court.

4. For constituting such Board, each of the four Inns of Court shall appoint four Examiners, and the Council of Legal Education shall have power to allot such remuneration as the Council shall think fit to such Examiners.

5. The Examiners shall attend according to a Rota to be fixed by themselves, and two shall be a quorum.

6. Meetings of the Examiners shall be held at least once in every week during each Term, as herein-after defined, and once in the week next preceding each Term, and at such other times as shall be appointed in accordance with any order of the Board;

Appendix Nos. 25 and 26.

Provided that no Examiner need attend unless two clear days' notice prior to the day appointed for his attendance shall have been given to the Secretary of the Board, by at least one Candidate, of an intention to present himself on that day for Examination.

7. No Attorney at Law, Solicitor, Writer to the Signet, or Writer of the Scotch Courts, Proctor, Notary Public, Clerk in Chancery, Parliamentary Agent, or Agent in any Court original or appellate, Clerk to any Justice of the Peace, Registrar of any Court, Receiver or Liquidator, whether Official, Provisional, Assistant or Deputy, or person acting in any of these or similar capacities, and no Clerk to any such person as aforesaid, or to any Judge, Barrister, Conveyancer, Pleader, Equity Draftsman, Clerk of the Peace, or to any officer in any Court of Justice, and no person acting in the capacity of any such Clerk, shall be admitted as a Student at any Inn of Court until such person shall have entirely and *bonâ fide* ceased to act or practise in any of the capacities above-named or described; and if on the Rolls of any Court, shall have taken his name off the Rolls thereof.

8. The following forms shall be adopted by each of the four Inns of Court on application for admission as Students:—

I, of aged , the Son of of , in the county of [*add father's profession, if any, and the condition in life and occupation, if any, of the Applicant*]

do hereby declare that I am desirous of being admitted a Student of the Honourable Society of for the purpose of being called to the Bar, or of practising under the Bar, and that I will not, either directly or indirectly, apply for or take out any certificate or practise, directly or indirectly, as a Pleader, or Conveyancer, or Draftsman in Equity, without the special permission of the Masters of the Bench of the said Society.

And I do hereby further declare that I am not an Attorney at Law, a Solicitor, a Writer to the Signet, a Writer of the Scotch Courts, a Proctor, a Notary Public, a Clerk in Chancery, a Parliamentary Agent, an Agent in any Court original or appellate, a Clerk to any Justice of the Peace, a Registrar of any Court, a Receiver, or Liquidator, either Official, Provisional, Assistant or Deputy, nor do I act, directly or indirectly, in any such or similar capacity, or in the capacity of Clerk of or to any of the persons above described, or as Clerk of or to any Judge, Barrister, Conveyancer, Pleader, Equity Draftsman, or Clerk of the Peace, or of or to any officer in any Court of Justice.

Dated this day of

(*Signature*)

We, the undersigned, do hereby certify that we believe the above-named to be a gentleman of respectability, and a proper person to be admitted a Member of the said Society.

} *Barristers of*

Approved, }

Treasurer, or, in his absence, by two Benchers.

9. Every person applying to be admitted as a Student shall pay the sum of One Guinea upon application for the Form of Admission; and the sums so paid shall form part of the common fund herein-after mentioned.

KEEPING TERMS.

10. The word Terms in these Regulations, except where otherwise expressed, shall mean the Terms as fixed by the Inns of Court for the purpose of Calls to the Bar.

11. Students who shall at the same time be Members of any of the Universities of Oxford, Cambridge, Dublin, London, Durham, the Royal University of Ireland, St. Andrew's, Aberdeen, Glasgow, Edinburgh, or the Victoria University, Manchester, shall be enabled to keep Terms by dining in the halls of their respective Inns of Court any three days in each Term.

12. Students who shall not at the same time be Members of any of the said Universities shall be enabled

Appendix No. 26.

to keep Terms by dining in the halls of their respective Inns of Court any six days in each Term.

13. No day's attendance in Hall shall be available for the purpose of keeping Term, unless the Student attending shall have been present at the grace before dinner, during the whole of dinner, and until the concluding grace shall have been said, unless the acting Treasurer on any day during dinner shall think fit to permit the Students to leave earlier.

14. A Student who, previously to his admission at an Inn of Court, was a Solicitor in practice for not less than five years (and, in accordance with Rule 7, has ceased to be a solicitor before his admission as a Student) may be examined for Call to the Bar without keeping any Terms, and may be called to the Bar upon passing the public Examination required by these Rules, without keeping any Terms;

Provided that such Solicitor has given at least twelve months' notice in writing to each of the Four Inns of Court, and to the Incorporated Law Society, of his intention to seek Call to the Bar, and produces a Certificate signed by two Members of the Council of the Incorporated Law Society that he is a fit and proper person to be called to the Bar.

15. A Student coming under the last preceding Rule may be exempted by the Masters of the Bench of the Inn to which he seeks Admission from passing the Examination preliminary to Admission.

Calling to the Bar.

16. Every Student shall have attained the age of Twenty-one years before being called to the Bar.

17. Every Student, except such as come under Rule 14, shall have kept Twelve Terms before being called to the Bar, unless any Term or Terms shall have been dispensed with under special circumstances by the Benchers of his Inn;

Provided that in no case shall a dispensation of a greater number than Two Terms be granted.

18. No Student shall be called to the Bar, unless such Student shall, to the satisfaction of the Council of Legal Education, have passed a Public Examination for the purpose of ascertaining his fitness to be called to the Bar, and have obtained from the Council a Certificate of having passed such Examination.

19. No Student shall be called to the Bar until his name and description shall have been screened in the Hall, Benchers' Room, and Treasurer's or Steward's Office, of the Inn of which he is a Student, 14 days in Term before such call.

20. The name and description of every such Student shall be sent to the other Inns, and shall also be screened for the same space of time in their respective Halls, Benchers' Rooms, and Treasurers' or Stewards' Offices.

21. No Call to the Bar shall take place except during a Term; and such call shall be made on the same day by each of the Inns, namely, on the 16th day of each Term, unless such day shall happen to be Saturday or Sunday, and in such case on the Monday after.

Certificates to practise under the Bar.

22. No Student shall be allowed to take out a Certificate to practise under the Bar without the special permission of the Masters of the Bench of the Inn of Court of which he is a Student, to be given by order of such Masters, and no such permission shall be granted to any Student unless he shall be qualified to be called to the Bar, and the regulations, as to screening names in the Halls, Benchers' Rooms, and Treasurers' or Stewards' Offices, applicable to Students desirous of being called to the Bar, shall be applicable to Students desirous of practising under the Bar. Such permission shall be granted for one year only from the date thereof, but may be renewed annually.

Council of Legal Education.

23. The Council of Legal Education shall consist of 20 Benchers, five to be nominated by each Inn of Court, of whom four shall be a quorum. The Members of the Council shall remain in office for two years, and each Inn shall have power to fill up any vacancy that may occur in the number of its nominees during that period. To this Council shall be entrusted the power and duty of superintending the Education and Examination of Students, and of arranging and settling the details of the several measures which may be deemed necessary to be adopted for those purposes, or in relation thereto, and such other matters as are herein in that behalf mentioned.

The Committee of Education or Board of Studies.

24. The Council shall appoint a Committee of the Members of the Council, or, if deemed expedient, a Board of Studies consisting of Members of the Council and of the Teaching Staff. The constitution of such Committee or Board, and the period for which its Members shall hold office, shall be from time to time determined by the Council.

25. The Committee or Board shall, subject to the control of the Council, superintend and direct the Education and Examination of Students, and all matters of detail in respect to such Education and Examination.

Lectures and Classes.

26. The Lectures and Classes shall be open to all members of the Inns of Court.

27. Students shall be provided with the means of Education in the general principles of Law, and in the Law as practically administered in this country, and for the purpose of such Education, Systematic Instruction shall be given in the following subjects:—

28. The subjects for instruction shall be—

1. Roman Law and Jurisprudence and International Law, Public and Private (Conflict of Laws).
2. Constitutional Law (English and Colonial) and Legal History.
3. English Law and Equity, viz.:—
   - (*a.*) Law of Persons, including:—
     Marriage and Divorce.
     Infancy.
     Lunacy.
     Corporations.
   - (*b.*) Law of Real and Personal Property and Conveyancing, including:—
     Trusts; Mortgages.
     Administration of Assets on Death; on Dissolution of Partnerships; on Winding-up of Companies, and in Bankruptcy.
     Practical instruction in the preparation of Deeds, Wills, and Contracts.
   - (*c.*) Law of Obligations.
     Contracts.
     Torts.
     Allied Subjects (implied or quasi contracts), estoppel, &c.
     Commercial Law, with especial reference to Mercantile Documents in daily use, which should be shown and explained.
   - (*d.*) Civil Procedure, including evidence.
   - (*e.*) Criminal Law and Procedure.

Staff of Teachers and Mode of Teaching.

29. There shall be a permanent staff of such a number of Readers, not more than eight, as the Council may think expedient; and such Readers shall give instruction both catechetically and by lectures, in such subjects as shall be directed by the Council.

30. In addition to the Readers there shall be a permanent staff of Assistant Readers for Elementary Classes, but the number of such Assistant Readers and Elementary Classes shall be left to the Council.

31. In addition to the staff of Readers and Assistant Readers the Council shall also have power to engage the services of Lecturers on particular subjects, whether enumerated above or not, as they may think fit.

32. Both Lectures and Classes shall be held throughout the entire year, except during the Legal Vacations, at such place or places as the Council may appoint, but so as not to unduly prefer one Inn to another.

Tenure of Offices.

33. Each Reader shall be appointed for three years, and shall be re-eligible, but he shall be removable during

his term of office by the vote of not less than ten Members of the Council.

34. The period for which Assistant Readers shall be appointed and the conditions of their tenure of office, shall be left to the discretion of the Council.

35. To secure systematic instruction, the Scheme of the Lectures to be given by each Reader and Assistant Reader shall be submitted to, and approved by, the Committee or Board of Studies, at such times and in such manner as the Committee or Board shall direct.

36. Students, in addition to availing themselves of the means of instruction provided by these Regulations, are recommended to attend in the Chambers of a Barrister or Pleader for the purpose of studying the practice of the law; but such attendance shall not be compulsory.

Salaries and Payments.

37. A system of payment by capitation fees is recommended for adoption by the Council if practicable.

38. The sum of 500*l.* per annum, and such capitation fees as the Council may decide, shall be paid to each of the Readers.

39. The remuneration of the Assistant Readers and Lecturers on particular subjects shall be left to the discretion of the Council.

40. Each Student shall pay on admission a sum of Five Guineas, which shall entitle him to attend all the Lectures and Classes of all the Readers and Assistant Readers, so long as he shall be a Student. The Council shall have power to require payment of additional fees for attendance at the Lectures of Lecturers on particular subjects appointed under Regulation 31.

The Examinations for Call to the Bar.

41. There shall be four examinations for Calls to the Bar in each year—one before each Term, and in sufficient time to enable the requisite Certificates to be granted by the Council before the first day of each Term.

42. An Examination in Roman Law and in such of the Heads of the English Law and Equity mentioned in Rule 28 (3), as the Council shall from time to time determine, shall be obligatory for Call to the Bar.

43. No Student, except such as come under Rule 14, shall be examined for Call to the Bar until he shall have kept nine Terms; but Students shall have the option of passing the Examination in Roman Law, required by Rule 42, at any time after having kept four Terms.

44. The Council may accept as an equivalent for the Examination in Roman Law—

i. A Degree granted by any University within the British Dominions, for which the qualifying Examination included Roman Law;

ii. A Certificate that any Student has passed any such Examination, though he may not have taken the Degree for which such Examination qualifies him; and

iii. The Testamur of the Public Examiners for the Degree of Civil Law at Oxford that the Student has passed the necessary Examination for the Degree of Bachelor of Civil Law;

Provided the Council is satisfied that the Student, before he obtained his Degree, or obtained such Certificate or Testamur, passed a sufficient Examination in Roman Law.

45. There shall be a Board of three Examiners in each subject, viz., a Reader, with such Assistants selected by the Council, not being members of the Staff of Readers and Assistant Readers, as the Council may determine.

46. Examination for Call to the Bar shall be by written papers, and by such *viva voce* questions (if any) as the Examiners may think desirable.

47. Each Examiner shall be appointed for three years, subject to removal by the Council; but no Examiner, other than a Reader, shall be re-eligible until he has been at least one year out of office.

48. The Council shall have power to appoint such Assistant Examiners as may be necessary, who shall hold office during the pleasure of the Council.

49. The fee to be paid to each Examiner and Assistant Examiner shall be left to the discretion of the Council.

Honours and Studentships.

50. The Council shall grant Certificates of Honour to such persons as may be reported worthy of the same by the Examiners.

51. Two Studentships of One Hundred Guineas per annum each, tenable for three years, shall in each year be given to the Students who shall pass the best Examination on the whole in all the subjects mentioned in Regulation 28. But the Council shall not be obliged to recommend any Studentship to be awarded if the result of the Examination be such as, in their opinion, not to justify such recommendation. Where any Candidates appear to be equal or nearly equal in merit, the Council may, if they think fit, divide the Studentship between them equally or in such proportions as they consider just.

52. No Student shall be eligible for a Studentship who is over twenty-five years of age on the first day of the Examination for which he enters. Only Members of an Inn not called to the Bar shall compete for a Studentship.

53. No person who has gained one Studentship shall hold another.

54. The expense of these Studentships shall be defrayed out of the Common Fund.

55. There shall be two Honour Examinations in each year, conducted by a Board of Examiners appointed by the Council, at each of which one Studentship and Certificates of Honour, and Pass Certificates enabling the holders to be called to the Bar without further Examination, may be awarded.

56. At every Call to the Bar those Students who have obtained Studentships shall take rank in seniority over all other Students called on the same day, and those Students who have obtained Certificates of Honour shall take rank immediately after the holder of a Studentship called on the same day.

57. The Inn of Court, to which the holder of any Studentship or of a Certificate of Honour belongs, may, if desired, dispense with any Terms not exceeding two that may remain to be kept by such Student previously to his being called to the Bar.

58. The Examiners shall submit their Examination Papers to the Committee or Board of Studies, for approval at such time as the Committee or Board shall direct; and the number of marks to be attributed to each paper shall also be submitted to the Committee or Board for their approval.

59. Previous to each Examination the Committee or Board shall give such notice as they shall think fit of the Books and branches of subjects in which Students will be required to pass at such Examination in order to be entitled to a Certificate.

60. One Examiner at least shall be present during the whole time of the Examination in writing.

61. The Board of Examiners shall, after each Examination, report the result thereof to the Committee or Board of Studies, who shall submit to the Council the names of those Students (if any) who are in their opinion entitled to receive Pass or Honour Certificates or to obtain Studentships.

62. All Students shall be bound by such variations as may from time to time be made in these Regulations.

Common Fund.

63. The four Inns of Court shall continue their annual contributions of Three Hundred and Sixty Pounds each towards constituting the Common Fund, to which shall be added the several fees or Forms of Admission and for attending Lectures; and also the several sums of Five Guineas for each Student, to be paid by the Inns of Court respectively, as additional contributions pursuant to the Report of the Committee of the four Inns of Court, dated 6th December 1871; and any further money which may, from time to time, be required to enable the Common Fund to meet the charges on it in any year, shall be contributed by the

Appendix Nos. 26 and 27.

four Inns of Court at the end of such year, rateably and in proportion to the number of Students belonging to the four Inns respectively, who shall in that year have been called to the Bar or have for the first time obtained permission to practise under the Bar.

APPENDIX No. 27.

Paper handed in by Montague H. Crackanthorpe, *Esq., Q.C. on October 21st*, 1892. *See Question* 12,869.

COUNCIL OF LEGAL EDUCATION.

Prospectus of Lectures and Classes during Michaelmas Educational Term, 1892.

Constitutional Law (English and Colonial) and Legal History.

Reader - - - J. P. Wallis, Esq.

During Michaelmas Term the Reader proposes to deliver Lectures on the Law and Custom of the Constitution affecting:—

I. The Crown—Succession—Allegiance—The Civil List and Pension Acts—The Royal Family.

II. The Prerogative—Historical Retrospect—Limitations and Manner of Exercise—The Councils of the Crown.

III. The Crown and the Cabinet—The Prime Minister and the Cabinet—The Cabinet and Parliament.

IV. The Ministers of the Crown and their Departments—The First Lord of the Treasury—Lord Chancellor—Home Secretary—Foreign Secretary and the Prerogative with regard to War, Peace, and Treaties—Other Departments—The Permanent Civil Service.

V. The Naval and Military Forces.

The Reader will also continue his Classes in Constitutional History, beginning with the younger Pitt's first Ministry.

The first Lecture will be delivered on Thursday, 27th October, at 2 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Class will be held on Friday, 28th October, at 3 o'clock, and the subsequent Classes on Tuesdays at 3 o'clock, Thursdays at 11 o'clock, and Fridays at 3 o'clock.

Roman Law and Jurisprudence and International Law—Public and Private.

Reader - - W. A. Hunter, Esq.
Assistant Reader - J. E. C. Munro, Esq.

During Michaelmas Term the Reader proposes to deliver Lectures and hold Classes as follows:—

Senior Lectures.

I. The Sphere of Jurisprudence considered—Critical analysis of the notions, "State," "Sovereignty," "Law"—Examination of the views of Austin and Sir Henry Maine.

II. The Nature of "Rights"—Classifications of Law—Consideration of the divisions into Public Law and Private Law, Civil and Criminal Law, Law of Persons and Law of Things.

III. Definitions of Leading Terms: Person, Thing, Act, Event, Culpa, Dolus, Intention, Malice, Negligence, Dominium, Possessio, Easement, Servitus, Status, Contract.

IV. Facts—Investitive and Divestitive of Rights and Duties.

V. The Codification of Law—Examples of Codes, ancient and modern.

In the Senior Class, the Reader will discuss the historical evolution of legal notions, under the heads: History of the notion of Sovereignty; Development of legal remedies in place of self-redress; The growth of courts of law and legal procedure; History of the Law of Evidence; History of the Law of Property and of Alienation; History of the Law of Contracts, and of Wills and universal succession. The Reader will refer, among other works, to the writings of Sir Henry Maine, Dr. Hearn's Aryan Household," "La Cité Antique," by Fustel de Coulanges, and the historical chapters in Hunter's "Roman Law."

Junior Lectures.

The Reader will deliver six Lectures on the Roman Law of Persons:—

I. Introductory Lecture: The Institutes of Justinian.

II. Slavery; its features and place in Roman Law.

III. The constitution of the legal family; *Patria Potestas*.

IV. The status of married women, and their rights to property.

V. *Tutela* and *Cura*.

The Assistant Reader will, in his Class, discuss in detail those portions of the Institutes of Justinian that bear on the Law of Property, with special reference to Dominium, Possessio, Servitus, Emphyteusis, and Pignus.

The first Senior Lecture will be delivered on Thursday, 27th October, at 4 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Friday, 28th October, at 10 a.m., and the subsequent Senior Classes at the same hour on Wednesdays and Fridays.

The first Junior Lecture will be delivered on Tuesday, 1st November, at 4 o'clock and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Junior Class will be held on Wednesday, 26th October, at 11 a.m., and the subsequent Junior Classes on Mondays at 12 o'clock, and Tuesdays and Wednesdays at 11 a.m.

The Law of Real and Personal Property and Conveyancing.

Reader - - H. W. Elphinstone, Esq.
Assistant Reader - J. Gent, Esq.

During Michaelmas Term the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

Senior Lectures.

Personal Settlements.

I. Nature of settlements.

II. Settlements of land and money distinguished. Method of settling land as money and *vice versâ*. Provisions of Settled Land Act as to Settlements in trust for sale.

III. Analysis of settlement of personalty on marriage. Methods of vesting property in Trustees. Covenants for title by Settlor.

IV. Conveyance by way of trust for sale. Wife's after-acquired property. Annuity.

V. Policy of Assurance.

VI. Investment clause. Statutory power of investment.

VII. Trustees lending money on mortgage. Power to invest in land.

VIII. Receipt clause. Powers to apportion blended trust funds, and to arrange and compromise

IX. Life interests—husband—wife—determinable—protected.

X. Provisions for children.
The power of appointment.
Trusts in default of appointment.
Hotchpot.
Maintenance.
Advancement.

XI. Deed exercising power of appointment.

XII. Ultimate trusts of husband's fortune.
Ultimate trusts of wife's fortune.

XIII. Trustee clauses.

XIV. Appointments of new trustees.

XV. Inducements and reimbursement of Trustees.

JUNIOR LECTURES.

DEVOLUTION OF PROPERTY ON DEATH, INCLUDING WILLS.

I. Descent of real estate.
(*a*) Fee simple.
(*b*) Fee tail.

II. Descent and purchase distinguished.

III. Devise to heir.

IV. Beneficial interest in personalty on intestacy.

V. Nature and form of a will.

VI. From what time it speaks.

VII. Domicile of testator.

VIII. Effect of probate or letters of administration.

IX. Legacies—general—specific—demonstrative.

X. How charged on land.

XI. Meaning of "vested" and "contingent" legacies.

XII. Residue.

XIII. Lapse.

XIV. Conversion, effect of total or partial failure of.

XV. Meaning of "children," "issue;" where they are words of limitation.

XVI. Gifts to children.

The first Senior Lecture will be delivered on Wednesday, 26th October, at 2 p.m., and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Senior Class will be held on Friday, 28th October, at 2 p.m., and the subsequent Senior Classes at the same hour on Tuesdays and Fridays.

The first Junior Lecture will be delivered on Wednesday, 26th October, at 12 o'clock, and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Friday, 28th October, at 12 o'clock, and the subsequent Junior Classes at the same hour on Mondays, Tuesdays at 11 o'clock, and Fridays at 12 o'clock.

NOTE.—In the Senior Classes practical instruction in Conveyancing (including the perusal of Abstracts) will be given.

LAW AND EQUITY.

Reader	- -	Edmund Robertson, Esq.
Assistant Reader	-	J. A. Hamilton, Esq.

During Michaelmas Term the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

SENIOR LECTURES.

NEGOTIABLE INSTRUMENTS.

I.

(*Negotiable Instruments generally.*)

(*a.*) Definition of Negotiable Instruments—Illustrations.
(*b.*) Negotiability considered as an exception to the general law governing assignments.
(*c.*) Negotiable Instruments and the Law Merchant.
(*d.*) The principle of *Estoppel*.
(*e.*) The effect of negotiable instruments in payment.

II.

(*The Bills of Exchange Act*, 1882.)

(1.) Bills of Exchange.
Form of the instrument.
Parties.
Value.
Negotiation and transfer (sec. 31-38 of the Act).
Liabilities of parties (sec. 52-58 of the Act).

(2.) Promissory notes and cheques.

III.

(*Instruments not within the Bills of Exchange Act*, 1882.)

Instruments recognised as negotiable.
Doubtful cases.
Summary.
The same subjects will be dealt with in Class.

JUNIOR LECTURES.

REQUISITES OF SIMPLE CONTRACTS APART FROM STATUTE.

I. General conception of contract in English Law. Essential elements of contract. Simple contracts defined and distinguished from contracts of Record and contracts under seal.

II. Requisites of simple contracts to be considered under five heads. (1.) The ASSENT OF PARTIES.—Offer and acceptance. Communication and withdrawal.

III. (1.) ASSENT OF PARTIES (*continued*).—Contracts by correspondence. Mistake (as excluding true consent) as to (*a*) the nature of the transaction, (*b*) the person, (*c*) the subject-matter.

IV. (2.) CONSIDERATION.—General character of consideration. Executory and executed considerations. Value. Definition of valuable consideration. Illustrations. Rule as to adequacy.

V. (2.) CONSIDERATION (*continued*).—Forbearance. Consideration founded on moral obligation. Promise to perform existing duty. Past consideration. *Lampleigh* v. *Braithwait*.

VI. (2.) CONSIDERATION (*continued*).—Past consideration further discussed.
(3.) PROMISE.—Certainty of terms. Possibility of performance.

VII. (4.) CAPACITY OF PARTIES.—(A.) *Infants*.—General rule as to capacity. Contracts for benefit of Infants. Contracts for necessaries. The Infants' Relief Act, 1874. (B.) *Married Women*.—General rule as to capacity. Separate estate. Married Women's Property Act, 1882.

VIII. (4.) CAPACITY OF PARTIES (*continued*).—(C.) *Lunatics, etc.*—Cases considered. Necessaries. (D.) *Corporations* (to be treated in a subsequent course).
(5.) LAWFULNESS (*Unlawful Agreements*). — (A.) Agreements contrary to positive law (Illegal). (B.) Immoral Agreements.

IX. (5.) LAWFULNESS (*continued*). — (C.) Agreements against public policy (Restraint of Trade). Effect of unlawfulness in consideration, promise, or purpose.

The Assistant Reader will hold Classes for Junior Students. Subject: "The Principles and Limits of Liability in Tort."

The first Senior Lecture will be delivered on Thursday, 27th October, at 3 p.m., and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Monday, 31st October, at 3 p.m., and the subsequent Senior Classes at the same hour on Wednesdays and Mondays.

The first Junior Lecture will be delivered on Wednesday, 26th October, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Thursday, 27th October, at 10 a.m., and the subsequent Junior Classes

Appendix Nos. 27 and 28.

on Saturdays at 11 a.m., and Tuesdays and Thursdays at 10 a.m.

Reader - - A. HOPKINSON, Esq., Q.C.
Assistant Reader - O. A. SAUNDERS, Esq.

During Michaelmas Term the Reader proposes to deliver a course of Lectures on

EASEMENTS.

I. Nature of Easements and Profits *à prendre*.
II. Creation of Easements:—
  (1.) Grant—express; implied.
  (2.) Prescription—
    (*a.*) At Common Law.
    (*b.*) By Statute.
III. Rights to Light.
IV. Rights of Way.
V. Rights in Watercourses.
VI. Rights to Support.
VII. Rights of Common.
VIII. Extinguishment of Easements.
IX. Remedies relating to Easements.

This course will consist of about twelve Lectures.
A Class will meet every Monday, at 10 a.m., for illustrating the subjects of the Lectures; and every Saturday, at 10 a.m., for the practical discussion and illustration of subjects suggested from time to time.
The Assistant Reader will hold Classes on

SPECIFIC PERFORMANCE.

I. The jurisdiction distinguished and defined (Limits and Conditions of Relief).
II. Parties to the Action (Assignment—Sub-sale—Death—Agency).
III. Defences to the Action, relating to
  (*a.*) The person (incapacity of either party).
  (*b.*) The substance of the Agreement (*e.g.*, Non-conclusion, incompleteness, uncertainty, unfairness, etc., of agreement).
  (*c.*) The form of the Agreement (Want of Seal—Statute of Frauds, etc.—Exception—Part performance).
  (*d.*) The subject matter of the Contract (Defects of Property—Defects of Title).
  (*e.*) The Defendant's misapprehension (Misrepresentation—Fraud—Mistake).
  (*f.*) Matter subsequent to the Contract (Default—Delay—Rescission).
  (*g.*) The Jurisdiction.
IV. Waiver of Objections by Defendant.
V. Injunction and ancillary relief.
VI. Compensation and Damages.
VII. Miscellaneous matters (Interest—Rent—Deterioration—Deposit, etc.).

The first Lecture will be delivered on Friday, 28th October, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Fridays.
The first Senior Class will be held on Saturday, 29th October, at 10 a.m., and the subsequent Senior Classes at the same hour on Mondays and Saturdays.
The first Junior Class will be held on Wednesday, 26th October, at 11 a.m., and the subsequent Junior Classes at the same hour on Fridays, Mondays, and Wednesdays.

PROCEDURE, CIVIL AND CRIMINAL, AND EVIDENCE.

Reader - - A. HENRY, Esq.

During Michaelmas Term the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

EVIDENCE.

Documentary Evidence:—
(1.) Public Documents.
(2.) Private Documents.
(3.) The Admissibility of Parol Evidence to affect written instruments.

PROCEDURE.

(1.) Appeals.
(2.) Writs of Execution and Attachment.
(3.) Interpleader.

The first Lecture will be delivered on Thursday, 27th October, at 12 o'clock, and the lectures will be continued at the same hour on subsequent Thursdays.
The first Class will be held on Saturday, 29th October, at 12 o'clock, and the subsequent Classes on Mondays at 2 o'clock, and Tuesdays and Saturdays at 12 o'clock.

NOTE.—The Lectures are free to Members of the Bar.

J. C. MATHEW,
Chairman of Board of Studies.

Council Chamber, Lincoln's Inn,
5th August, 1892.

APPENDIX No. 28.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st*, 1892. (*See Question* 12,869.)

COUNCIL OF LEGAL EDUCATION.

The COUNCIL have appointed HERBERT COWELL, Esq., to deliver a Course of Lectures in HINDU and MOHAMMEDAN LAW, and FREDERIC COLERIDGE MACKARNESS, Esq., to deliver a Course of Lectures in ROMAN DUTCH LAW, the system of law which is in force in our South African and other Colonies originally ceded by Holland.

A Course of Lectures will be delivered in the above subjects, commencing next Michaelmas Term, and be continued during the ensuing educational year.

The Council will give Certificates of Proficiency to those Students who may pass satisfactory Examinations in the above-mentioned subjects.

HINDU AND MOHAMMEDAN LAW.

The first Course of Lectures will be exclusively on Hindu Law, its origin and Schools, its applicability in British India; the law relating to the joint family, its joint worship and joint estate, and management thereof; the rights of its individual members; partition and alienation, including possibly the testamentary power if time will admit.

The foregoing will leave the law of adoption and of inheritance for each of the other courses alternatively with Mohammedan Law.

Students attending these Lectures are recommended to read Cowell's "Hindu Law (Tagore Lectures), 1870–71."

LECTURES IN ROMAN-DUTCH LAW.

Immoveable Property.
Its tenure. Conveyance. Evidence of title thereto.
Mortgage and other Bonds.
Contracts.
Purchase and Sale. Letting and Hiring. Pledge. Donations.
Wills and Succession by Intestacy.
Fedei Commissa.
Marriage.
Its effect upon property.
Divorce and Separation.
Servitudes and Water Rights.
Sequestration of Insolvent Estates.

Partnership.
Joint Stock Companies in South Africa.
Mineral Rights in South Africa.
Practice and Procedure.

Students attending these lectures are recommended to read *Van der Linden's* "Institutes of Holland," *Grotius's* "Introduction to the Laws of Holland."

A prospectus, showing the days, hours, and places where the Lectures in the above subjects are to be delivered will be published next October.

By Order,
NATHL. LINDLEY,
Chairman.

Lincoln's Inn Hall,
August, 1892.

APPENDIX No. 29.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st*, 1892. (*See Question* 12,883.)

August 1892.

AS TO ATTENDANCES at LECTURES and CLASSES during Hilary, Easter, and Trinity Terms, 1892.

—	Hilary.	Easter.	Trinity.
Constitutional Law, &c.:			
Lectures	21	21	14
Classes	13	15	10
Procedure and Evidence:			
Lectures	89	83	54
Classes	57	76	45
The Law of Real and Personal Property:			
Senior Lectures	56	41	22
Senior Classes	25	32	19
Junior Lectures	24	40	27
Junior Classes	32	26	22
Roman Law:			
Senior Lectures	17	28	18
Senior Classes	6	16	11
Junior Lectures	30	44	33
Junior Classes	31	28	26
Law and Equity (Mr. Robertson).			
Senior Lectures	59	49	29
Senior Classes	22	28	21
Junior Lectures	49	48	31
Junior Classes	41	29	21
Law and Equity (Mr. Hopkinson).			
Senior Lectures	61	48	29
Senior Classes	56	60	38
Junior Lectures	38	30	21
Junior Classes	43	40	26

NOTE.—The proportion of Indian and Colonial Students would be about one-third, except in Constitutional Law and Roman Law; in these subjects the proportion would be higher.

APPENDIX No. 30.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st*, 1892. (*See Question* 12,892.)

A systematic course of study for two years has been arranged for the subjects of examination as below.

REGULATIONS.

1. Candidates for the Pass Examination will be examined at their option in any three of the following subjects, in addition to Roman Law—

I. Elements of the Law of Real and Personal Property.
II. Elements of the Law of Contracts and Torts.
III. Principles of Equity, Trusts, and Easements.
IV. Procedure and Evidence.
V. Constitutional Law and Legal History.

Such Candidates will also be examined in one of the following groups of subjects, A, B, C, such group to be selected by the Candidate—

A { Purchases and Leases. Mortgages. Settlements and Wills.
B { Negotiable Instruments. Agency in Mercantile Contracts. Contracts of Sale of Goods.
C { Administration of Assets on Death. Specific Performance. Partnership and Winding-up of Companies.

2. Candidates for Honours will be examined in all the above subjects.

3. Up to January, 1894, both for Pass and Honour Examinations the above subjects will be examined upon so far only as treated in the Lectures and Classes since January, 1892; and after January, 1894, so far only as treated in the Lectures and Classes during the two years preceding each Examination.

NOTE.—The first Examination under the foregoing Regulations will be the Easter Examination, 1893.

(Signed) NATHL. LINDLEY,
Chairman.

Lincoln's Inn Hall,
14th June, 1892.

APPENDIX No. 31.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st*, 1892. (*See Question* 12,894.)

COUNCIL OF LEGAL EDUCATION.

SUPPLEMENTAL PROSPECTUS OF LECTURES AND CLASSES DURING EASTER AND TRINITY EDUCATIONAL TERMS, 1892.

CONSTITUTIONAL LAW, ENGLISH, COLONIAL, AND LEGAL HISTORY.

During Easter and Trinity Terms the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

I. Taxation—Leading Cases and Statutes—Annual and Permanent Taxes—The Receipt and Expenditure of the Revenue—The Consolidated

Appendix No. 31.

Fund—The Treasury—The Control and Audit Office—The Committee of Public Accounts.

II. Personal Liberty and Security — The Law of Arrest—Illegal Warrants — Remedies for wrongful Arrest—The Right of Self-defence——Martial Law.

III. The Writ of *Habeas Corpus*—The *Habeas Corpus* Acts—Leading Cases—Procedure.

IV. Freedom of Speech—Freedom of the Press—Historical Summary — The principal Libel Acts.

V. and VI. High Treason.—The Statute of Edward III.—Its construction by the judges—The different kinds of Treason—The Statutes of George III. and the Treason Felony Act—Procedure in cases of High Treason.

VII. and VIII. Sedition, seditious words, libels, and conspiracies — Unlawful assemblies — Riots—The Riot Act—Leading Cases of the last 50 years.

IX. The history and present state of the law affecting blasphemous libels.

Easter Term.

The first Lecture will be delivered on Thurday, 28th April, at 2 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Class will be held on Friday, 29th April, at 3 o'clock, and the subsequent Classes on Tuesdays at 3 o'clock, Thursdays at 11 o'clock, and Fridays at 3 o'clock.

Trinity Term.

The first Lecture will be delivered on Thursday, 16th June, at 2 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Class will be held on Friday, 17th June, at 3 o'clock and the subséquent Classes on Tuesdays at 3 o'clock, Thursdays at 11 o'clock, and Fridays at 3 o'clock.

ROMAN LAW AND JURISPRUDENCE AND INTERNATIONAL LAW—PUBLIC AND PRIVATE.

During Easter and Trinity Terms the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

SENIOR LECTURES.

THE ROMAN LAW OF WILLS AND SUCCESSION.

I. Nature of Universal Succession—Examples—The position of Heres and Bonorum Possessor—Aditio hereditatis.

II. Intestate Succession—Agnatic and Cognatic Kinship—Brief review of the changes in the law from the XII. Tables to Justinian.

III. Testamentum—Relation of Adoption to Testaments—History of the modes of Will-making: (1.) Will made in Comitia Curiata and in procinctu; (2.) Will made by mancipatio; (3.) The Prætorian or Sealed will; (4.) Written and oral wills during the Empire.

IV. Disinheritance and Portio Legitima.

V. Appointment and Substitution of Heirs—Testamenti Factio.

VI. Hereditas Fideicommissaria — Codicilli — Nature of Trusts and instruments creating Trusts—Supersession of Testamentum.

VII. Legacy — History of the Law relating to Legacies.

VIII. Interpretation of wills.

JUNIOR LECTURES.

I. Title to property: Traditio; usucapio; possessio longi temporis; accessio.

II. Quasi-property of slaves and filiifamilias—Peculium.

III. Married Women's Property.

IV. Objects of Property: res communes, res publicæ, res divini juris.

V. Possession: How distinguished from ownership—Peculiar features of the Roman law relating to possession.

VI. Personal Servitudes: Usus fructus; usus; operæ servorum.

VII. Prædial Servitudes: Urban and Rural.

VIII. Leading features of the Law relating to Mortgage.

IX. Emphyteutic and perpetual tenures.

Easter Term.

The first Senior Lecture will be delivered on Thursday, 28th April, at 4 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Friday, 29th April, at 10 a.m., and the subsequent Senior Classes at the same hour on Wednesdays and Fridays.

The first Junior Lecture will be delivered on Tuesday, 26th April, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Junior Class will be held on Wednesday, 27th April, at 11 a.m., and the subsequent Junior Classes on Mondays at 12 o'clock, and Tuesdays and Wednesdays at 11 a.m.

Trinity Term.

The first Senior Lecture will be delivered on Thursday, 16th June, at 4 o'clock, and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Friday 17th, June, at 10 a.m., and the subsequent Senior classes at the same hour on Wednesdays and Fridays.

The first Junior Lecture will be delivered on Tuesday, 14th June, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Junior Class will be held on Wednesday, 15th June, at 11 a.m., and the subsequent Junior Classes on Mondays, at 12 o'clock, and Tuesdays and Wednesdays at 11 a.m.

THE LAW OF REAL AND PERSONAL PROPERTY AND CONVEYANCING.

During Easter and Trinity Terms the READER proposes to deliver Lectures and hold Classes on the following subjects:—

SENIOR LECTURES.

Easter Term.

I. Nature of mortgage explained. Mortgage cannot be made irredeemable. Nature of equity of redemption. General form of mortgage deed. The covenant for payment.

II. The conveyance and proviso for redemption. Mortgage by tenant for life. Mortgage of wife's land by husband. Mortgage to trustees.

III. Consideration of some of the more usual clauses in mortgages.

IV. Power of Sale and Appointment of Receiver.

Trinity Term.

I. Mortgage of Leaseholds.

II. Transfers of Mortgages.

III. Transfers continued.

IV. Re-conveyances.

JUNIOR LECTURES.

Easter Term.

I. Leases. Interest of husband in wife's Leaseholds. Remedies for landlord for his rent, given by Law and by express contract. Licence to commit breach of covenant. What covenants in lease run with the land.

II. General form of Lease.
To whom are rents reserved? With whom should lessees' covenants be entered into? Covenants by lessee, implied by demise for

quiet enjoyment by trustees. Covenant in under-lease.

III. Assignments of Leaseholds.

IV. Mortgages of Leaseholds.

Trinity Term.

I. Manor — demesne lands — tenemental lands — Copyholds — Nature of Interest of tenant — Interest of husband in wife's land and of wife in husband's land.

II. Surrender—descent—devise.

III. Admission—Conveyances on Sale—Mortgages.

IV. Forfeiture—Fines—Seizure quosque heriots.

Easter Term.

The first Senior Lecture will be delivered on Tuesday, 26th April, at 2 p.m., and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Senior Class will be held on Wednesday, 27th April, at 2 p.m., and the subsequent Senior Classes at the same hour on Fridays and Wednesdays.

The first Junior Lecture will be delivered on Wednesday, 27th April, at 12 o'clock, and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Friday, 29th April, at 12 o'clock, and the subsequent Junior Classes at the same hour on Mondays, Tuesdays, and Fridays.

Trinity Term.

The first Senior Lecture will be delivered on Tuesday, 14th June, at 2 p.m., and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Senior Class will be held on Wednesday, 15th June, at 2 p.m., and the subsequent Senior Classes at the same hour on Fridays and Wednesdays.

The first Junior Lecture will be delivered on Wednesday, 15th June, at 12 o'clock, and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Friday, 17th June, at 12 o'clock, and the subsequent Junior Classes at the same hour on Mondays, Tuesdays, and Fridays.

NOTE. — In the Senior Classes during Easter and Trinity Terms practical instruction in Conveyancing (including the perusal of Abstracts) will be given.

LAW AND EQUITY.

Reader - - Edmund Robertson, Esq.
Assistant Reader - J. A. Hamilton, Esq.

During Easter and Trinity Terms the READER proposes to deliver Lectures and hold Classes on the following subjects:—

SENIOR LECTURES.

CONTRACTS OF SALE OF GOODS.

A.—*Easter Term.*

I. The Contract of Sale; its essential elements.
The thing sold.
The Price.

II. EFFECT OF THE CONTRACT IN PASSING PROPERTY.
Specific Goods.
Unascertained Goods.

III. Reservation of Jus disponendi.
Supplemental questions.

IV. Conditions and Warranties.

B.—*Trinity Term.*

I. Performance of the Contract—Duties of Buyer and Seller.

II. Unpaid Vendor's Lien.

III. Stoppage in transitu.

IV. Remedies of Buyer and Seller.

JUNIOR LECTURES.

THE STATUTORY REQUISITES OF CONTRACTS.

A.—*Easter Term.*

I. General view of statutory requirements touching the validity and operative effect of contracts.

II. The Statute of Frauds.
Sections 4 and 17 compared.

III. Agreements within section 4.

IV. Requirements of the section.
Effect of the section.

B.—*Trinity Term.*

I. Statute of Frauds, sec. 17.
Agreements within the section.

II. and III. Requirements and Effect of the Section.

IV. Consideration of statutory provisions other than the foregoing.

V. The ASSISTANT READER will conclude his course on "Torts." In Easter Term the subject will be "Specific Wrongs: Wrongs to the Person and Negligence;" and in Trinity Term "Specific Wrongs: Wrongs to Property and Deceit."

Easter Term.

The first Senior Lecture will be delivered on Thursday, 28th April, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Monday, 2nd May, at 3 p.m., and the subsequent Senior Classes at the same hour on Wednesdays and Mondays.

The first Junior Lecture will be delivered on Wednesdays, 27th April, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Thursday, 28th April, at 10 a.m., and the subsequent Junior Classes on Saturdays at 11 a.m., and Mondays and Thursdays at 10 a.m.

Trinity Term.

The first Senior Lecture will be delivered on Thursday, 16th June, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Thursdays.

The first Senior Class will be held on Monday, 20th June, at 3 p.m., and the subsequent Senior Classes at the same hour on Wednesdays and Mondays.

The first Junior Lecture will be delivered on Wednesday, 15th June, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Wednesdays.

The first Junior Class will be held on Thursday, 16th June, at 10 a.m., and the subsequent Junior Classes on Saturdays at 11 a.m., and Mondays and Thursdays at 10 a.m.

Reader - - A. Hopkinson, Esq.
Assistant Reader - O. A. Saunders, Esq.

During Easter and Trinity Terms the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

SENIOR LECTURES.

Easter Term.

Administration of Assets (*Continuation*).

I. & II. Administration Actions.
Parties.
Taking of accounts. Vouching, surcharging.
Further consideration. Costs.
Wilful default.
Payments into court, and payments out.

III. Proceedings under Order LV.

IV. Conflict of Laws. Lex domicilii and Lex loci: when to be applied.

Appendix No. 31.

Trinity Term.

A course of four Lectures will be delivered on the "Winding up of Companies."

I. Grounds for winding up.

II. Appointment of liquidators.

III. Lists of contributories.

IV. Lists of creditors and distribution of assets.

The Classes held by the Reader will deal with the subjects of all his courses of Lectures in Easter and Trinity Terms.

JUNIOR LECTURES.

I. Nature of Partnership.
Distinction between Partnership and Companies and other Associations.

II. & III. Relations of Partners to persons dealing with them.
Extent of partners' authority.
Liability for (*a*) contracts of co-partners.
" " (*b*) torts " "
Joint and several liability. *Kendall* v. *Hamilton.*
Liability of estates of deceased partners.
Doctrine of "holding out."

IV., V., & VI. Formation of Partnerships and Rights of Partners inter se.
Partnership property. *Lake* v. *Craddock.*
Duties of partners to co-partners.
Retirement and Expulsion of partners.
Assignment of shares in partnerships.
Partner's lien.
Articles of Partnership—Special clauses and their effect.

VII. & VIII. Dissolution and Winding up of Partnerships.
Rights of partners after dissolution. Goodwill.
Actions for dissolution and account.
Mode of realising assets, taking accounts, and distributing estate.
Appointment of Receivers.

The Assistant Reader will continue his course on "Trusts." In Easter Term the subject will be the "Trustee"; and in Trinity Term the "Cestuique Trust."

Easter Term.

The first Senior Lecture will be delivered on Friday, 29th April, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Fridays.

The first Senior Class will be held on Saturday, 30th April, at 10 a.m., and the subsequent Senior Classes at the same hour on Mondays and Saturdays.

The first Junior Lecture will be delivered on Monday, 2nd May, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Mondays.

The first Junior Class will be held on Wednesday, 27th April, at 11 a.m., and the subsequent Junior Classes at the same hour on Fridays, Mondays, and Wednesdays.

Trinity Term.

The first Senior Lecture will be delivered on Friday, 17th June, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Fridays.

The first Senior Class will be held on Saturday, 18th June, at 10 a.m., and the subsequent Senior Classes at the same hour on Mondays and Saturdays.

The first Junior Lecture will be delivered on Monday, 20th June, at 4 p.m., and the Lectures will be continued at the same hour on subsequent Mondays.

The first Junior Class will be held on Wednesday, 15th June, at 11 a.m., and the subsequent Junior Classes at the same hour on Fridays, Mondays, and Wednesdays.

PROCEDURE, CIVIL AND CRIMINAL, AND EVIDENCE.

During Easter and Trinity Terms the Reader proposes to deliver Lectures and hold Classes on the following subjects:—

Easter Term.

Evidence:—
(1.) Hearsay Evidence.
(2.) Secondary Evidence.

Criminal Procedure:—
(1.) Proceedings before Justices at Petty Sessions.
(2.) The Indictment.

Trinity Term.

Evidence:—
(1.) Presumptive Evidence.
(2.) Matters judicially noticed without proof.

Procedure:—
(1.) Discovery.
(2.) Proceedings in a criminal trial from arraignment to verdict, and appeals on points of law.

Easter Term.

The first Lecture will be delivered on Tuesday, 26th April, at 12 o'clock, and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Class will be held on Thursday, 28th April, at 12 o'clock, and the subsequent Classes at the same hour on Saturdays, Tuesdays, and Thursdays.

Trinity Term.

The first Lecture will be delivered on Tuesday, 14th June, at 12 o'clock, and the Lectures will be continued at the same hour on subsequent Tuesdays.

The first Class will be held on Thursday, 16th June, at 12 o'clock, and the subsequent Classes at the same hour on Saturdays, Tuesdays, and Thursdays.

NOTE.—The Lectures are free to Members of the Bar.

J. C. MATHEW,
Chairman of Board of Studies.

Council Chamber, Lincoln's Inn,
31st March 1892.

EASTER EDUCATIONAL TERM, 1892.

LECTURES and CLASSES to be held in the Lecture Room in LINCOLN'S INN, to commence on Tuesday, the 26th April, and be continued according to the subjoined Time Table until the 21st May.

	MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	Lecture Room.	Class Room.	Lecture Room.	Class Room.	Lecture Room.	Class Room.	Lecture Room.	Class Room.	Lecture Room.	Class Room.	Lecture Room.	Class Room.
10—11	Class.			Mr. HAMILTON. Class.	Mr. Hunter. Class.			Mr. HAMILTON. Class. First Class, 28th April.	Mr. Hunter. Class. First Class, 29th April.		Mr. HOPKINSON. Class. First Class. 30th April.	
11—12		Mr. SAUNDERS. Class.	Mr. MUNRO. Class.		Mr. MUNRO. Class. First Class, 27th April.	Mr. SAUNDERS. Class. First Class, 27th April.		Mr. WALLIS. Class.		Mr. SAUNDERS. Class.		Mr. HAMILTON. Class.
12—1	Mr. MUNRO. Class.	Mr. ELPHINSTONE. Class.	Mr. HENRY. Lecture. First Lecture, 26th April.	Mr. ELPHINSTONE. Class.		Mr. ELPHINSTONE. Junior Lecture. First Lecture, 27th April.	Mr. HENRY. Class. First Class, 28th April.			Mr. ELPHINSTONE. Class.	Mr. HENRY. Class.	
1—2												
2—3	Mr. HENRY. Class.		Mr. GENT. Senior Lecture. First Lecture, 26th April.		Mr. GENT. Class. First Class, 27th April.		Mr. WALLIS. Lecture. First Lecture, 28th April.		Mr. Gent. Class.			
3—4		Mr. ROBERTSON. Class. First Class. 2nd May.		Mr. WALLIS. Class.		Mr. ROBERTSON. Class.		Mr. ROBERTSON. Senior Lecture. First Lecture, 28th April.		Mr. WALLIS. Class. First Class, 29th April.		
4—5	Mr. HOPKINSON. Junior Lecture. First Lecture, 2nd May.		Mr. HUNTER. Junior Lecture. First Lecture, 26th April.		Mr. ROBERTSON. Junior Lecture. First Lecture, 27th April.		Mr. HUNTER. Senior Lecture. First Lecture, 28th April.		Mr. HOPKINSON. Senior Lecture. First Lecture, 29th April.			

The Lecture Room is the Old Hall, entrance in Old Buildings.

The Class Room is under the Library, Lincoln's Inn Hall.

Appendix No. 32.

APPENDIX No. 32.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st*, 1892. (*See Question*, 12,894.)

COUNCIL OF LEGAL EDUCATION.

HILARY EXAMINATION, 1893.

EXAMINATION OF CANDIDATES FOR PASS CERTIFICATES.

The attention of Students is requested to the following Rules:—

No Student shall receive from the Council the Certificate of Fitness for call to the Bar required by the four Inns of Court, unless he shall have passed a satisfactory Examination in the following subjects, viz., (1) Roman Law; (2) The Law of Real and Personal Property and Conveyancing; (3) Law and Equity; and (4) Procedure and Evidence.

No Student (except such as come under the next-stated Rule) shall be examined for call to the Bar until he shall have kept nine Terms; but Students shall have the option of passing the Examination in Roman Law at any time after having kept four Terms.

A Student who, previously to his admission at an Inn of Court, was a Solicitor in practice for not less than five years may be examined for call to the Bar without keeping any Terms, and may be called to the Bar upon passing the public Examination required by these Rules, without keeping any Terms;

Provided that such Solicitor has given at least twelve months' notice in writing to each of the Four Inns of Court, and to the Incorporated Law Society, of his intention to seek call to the Bar, and produces a Certificate signed by two members of the Council of the Incorporated Law Society that he is a fit and proper person to be called to the Bar.

The Council may accept as an equivalent for the Examination in Roman Law—

i. A Degree granted by any University within the British Dominions, for which the qualifying Examination included Roman Law;

ii. A Certificate that any Student has passed any such Examination, though he may not have taken the Degree for which such Examination qualifies him; and

iii. The Testamur of the Public Examiners for the Degree of Civil Law at Oxford, that the Student has passed the necessary Examination for the Degree of Bachelor of Civil Law;

Provided the Council is satisfied that the Student, before he obtained his Degree, or obtained such Certificate or Testamur, passed a sufficient Examination in Roman Law.

An Examination will be held in *December* next, to which a Student of any of the Inns of Court, who is desirous of becoming a Candidate for a Certificate of Fitness for being called to the Bar, or of passing the Examination in Roman Law, will be admissible.

Each Student proposing to submit himself for Examination will be required to enter his name, *in full*, personally or by letter, at the Treasurer's or Steward's Office of the Inn of Court to which he belongs, on or before *Monday, the 12th day of December* next; and he will further be required to state in writing whether his object in offering himself for Examination is to obtain a Certificate preliminary to a call to the Bar, or whether he is merely desirous of passing the Examination in Roman Law under the above stated Rule.

The Examination will commence on *Monday, the 19th day of December* next, and will be continued on the *Tuesday* and *Wednesday* following.

It will take place in the Middle Temple Hall; and the doors will be closed Ten Minutes after the time appointed for the commencement of the Examination.

The Examination by Printed Questions will be conducted in the following order:—

Monday Morning, 19*th December*, at Ten, on the Law of Real and Personal Property.

Tuesday Morning, 20*th December*, at Ten, on Law and Equity, first paper.

Tuesday Afternoon, 20*th December*, at Two, on Procedure and Evidence.

Wednesday Morning, 21*st December*, at Ten, on Law and Equity, second paper.

Wednesday Afternoon, 21*st December*, at Two, on Roman Law.

The Oral Examination will be conducted in the same Order, and on the same subjects, as above appointed for the Examination by Printed Questions.

The Examiners in the Law of Real and Personal Property and Conveyancing will examine in—

The Subjects of the Lectures and Classes held during Hilary, Easter, and Trinity Terms.

The Examiners in Law and Equity will examine in the following Subjects:—

FIRST PAPER.

The statutory requisites of Contracts.

Mercantile and Maritime Contracts.

Torts—the principles and limits of liability and specific wrongs to person, reputation, and property (including Negligence and Fraud).

SECOND PAPER.

Trusts.

Administration of Assets on Death.

Partnership and Winding up of Companies.

The Examiners in Roman Law will examine in the following subjects:—

1. Law of Persons—Slavery; *Patria Potestas;* Husband and Wife; *Tutela; Cura.*

2. Law of Property—*Dominium; Possessio;* Servitudes, personal and prædial; *Emphyteusis;* Mortgage.

3. Law of Contract—Formal Contracts; Contracts *re*; Contracts for valuable consideration in money; Correality; Accessory Contracts; *Fidejussio; Mandatum; Pecunia Constituta;* Elements common to all contracts.

4. Delicts.

The Examiners in Procedure and Evidence will examine in:—

The Elements of Procedure, Civil and Criminal.

The Elements of Evidence.

The Examination will be confined to those portions of each subject that shall have been treated in the Lectures and Classes during Hilary, Easter, and Trinity Terms.

NATHL. LINDLEY,
Chairman of Council of Legal Education.

J. C. MATHEW,
Chairman of Board of Studies.

Council Chamber, Lincoln's Inn Hall,
5th August, 1892.

APPENDIX No. 33.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October* 21*st*, 1892. (*See Question* 12,894.)

HILARY HONOUR EXAMINATION, 1893.

EXAMINATION OF CANDIDATES FOR STUDENTSHIP AND HONOURS.

The attention of Students is requested to the following Rules:—

Two Studentships of One Hundred Guineas per annum each, tenable for three years, shall in each year be given to the Students who shall pass the best Examination on the whole in all the subjects mentioned in Clause 28 of the Consolidated Regulations. But the Council shall not be obliged to recommend any Studentship to be awarded if the result of the Examination be such as, in their opinion, not to justify such recommendation. Where any Candidates appear to be equal or nearly equal in merit, the Council may, if they think fit, divide the Studentship between them equally or in such proportions as they consider just.

No Student shall be eligible for a Studentship who is over twenty-five years of age on the first day of the Examination for which he enters.

Only Members of an Inn not called to the Bar shall compete for a Studentship, or Honours.

There shall be two Honour Examinations in each year, at each of which one Studentship and Certificates of Honour, enabling the holders to be called to the Bar without further Examination, may be awarded.

At every call to the Bar those Students who have obtained Studentships shall take rank in seniority over all other Students called on the same day, and those Students who have obtained Certificates of Honour shall take rank immediately after the holder of a Studentship called on the same day.

The Inn of Court to which the holder of any Studentship or of a Certificate of Honour belongs, may, if desired, dispense with any Terms not exceeding two that may remain to be kept by such Student previously to his being called to the Bar.

The Council may also award to the Student, being a Candidate for a Studentship or Honours, who shall have passed the best Examination in Constitutional Law (English and Colonial) and Legal History, a special prize of Fifty Pounds. Provided that the Council shall not be obliged to award such prize if the result of the Examination has not been such as in their opinion will justify the same.

An Examination will be held in *December* next, to which a Student of any of the Inns of Court, who is desirous of becoming a Candidate for a Studentship or Honours will be admissible.

Each Student proposing to submit himself for Examination will be required to enter his name, *in full*, personally or by letter, at the Treasurer's or Steward's Office of the Inn of Court to which he belongs, on or before the 12*th day of December* next, and he will further be required to state in writing whether his object in offering himself for Examination is to compete for a Studentship or Honours.

The Examination will take place in the Middle Temple Hall; and the doors will be closed Ten Minutes after the time appointed for the commencement of the Examination.

The Examination will commence on *Monday the* 19*th day of December* next, and will be continued on the Tuesday, Wednesday, and Thursday following.

The Examination by Printed Questions will be conducted in the following Order:—

Monday Morning, 19*th December*, at Ten, on the Law of Real and Personal Property.

**Monday Afternoon*, 19*th December*, at Two, on Conveyancing, including investigation of Title.

Tuesday Morning, 20*th December*, at Ten, on Law and Equity, first paper.

Tuesday Afternoon, 20*th December*, at Two, on Procedure and Evidence.

Wednesday Morning, 21*st December*, at Ten, on Law and Equity, second paper.

Wednesday Afternoon, 21*st December*, at Two, on Roman Law.

Thursday, 22*nd December*, at Ten until One and from Two until Five, on Constitutional Law (English and Colonial) and Legal History.

The Oral Examination will be conducted in the same Order, and on the same Subjects as above appointed for the Examination by Printed Questions.

In the Law of Real and Personal Property and Conveyancing the Examination will be in the Subjects of the Lectures and Classes held during Hilary, Easter, and Trinity Terms.

The Examiners in Law and Equity will examine in the following Subjects:—

FIRST PAPER.

Contracts.

1. The requisites of simple Contracts apart from Statute.
2. The Statutory Requisites of Contracts.
3. Mercantile and Maritime Contracts.

TORTS.

The principles and limits of liability and specific wrongs to person, reputation, and property (including Negligence and Fraud).

SECOND PAPER.

(*a.*) Principles of Equity.
(*b.*) Trusts.
(*c.*) Administration of Assets on Death.
(*d.*) Partnership.

In Procedure and Evidence Candidates will be examined in the Subjects discussed at the public and private Lectures.

The Examination will be confined to those portions of each subject that shall have been treated in the Lectures and Classes during Hilary, Easter, and Trinity Terms.

ROMAN LAW AND JURISPRUDENCE.

Candidates will be examined in all the following Subjects:—

I. Institutes of Justinian and Gaius.
II. History of Roman Law.
III. Principles of Jurisprudence, with special reference to the writings of Austin and Maine.

CONSTITUTIONAL LAW (ENGLISH AND COLONIAL) AND LEGAL HISTORY.

Candidates will be examined in:—

I. The Subjects of the Lectures held during Hilary, Easter, and Trinity Terms, and the leading cases relating thereto.
II. The History of the Constitution from the Accession of James I. to the first Ministry of the younger Pitt.

The leading cases above referred to will be found in Broom's "Constitutional Law."

Text Books which may be referred to:—Anson's "Law and Custom of the Constitution," Dicey's "Law of the Constitution," May's "Law and Practice of Parliament." Bagehot's "English Constitution, and Hearn's "Government of England."

For the period of Constitutional History, Candidates are referred to Hallam's "Constitutional History," Gardiner's "History of England," May's "Constitutional History," and Taswell Langmead's "English Constitutional History."

* This paper is optional, but additional Marks will be awarded for it.

Appendix Nos. 33 and 34.

NOTE.—The Examination will be confined to those portions of each subject that shall have been treated in the Lectures and Classes during Hilary, Easter, and Trinity Terms.

NATHL. LINDLEY,
Chairman of Council of Legal Education.

J. C. MATHEW,
Chairman of Board of Studies.

Council Chamber, Lincoln's Inn Hall,
5th August, 1892.

APPENDIX No. 34.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on October 21st,* 1892. (*See Question* 12,904.)

COUNCIL OF LEGAL EDUCATION.

PROSPECTUS of LECTURES and CLASSES of the READERS and ASSISTANT READERS during Hilary, Easter and Trinity Educational Terms, 1892.

READERS AND ASSISTANT READERS.

Constitutional Law (English and Colonial) and Legal History:

Reader—J. P. WALLIS, ESQ.

Roman Law, and Jurisprudence, and International Law—Public and Private:

Reader—W. A. HUNTER, ESQ.
Assistant Reader—J. E. C. MUNRO, ESQ.

The Law of real and Personal Property and Conveyancing:

Reader—H. W. ELPHINSTONE, ESQ.
Assistant Reader—J. GENT, ESQ.

Law and Equity:

Reader—EDMUND ROBERTSON, ESQ.
Assistant Reader—J. A. HAMILTON, ESQ.

Reader—A. HOPKINSON, ESQ.
Assistant Reader—O. A. SAUNDERS, ESQ.

Procedure—Civil and Criminal, and Evidence:

Reader—A. HENRY, ESQ.

CONSTITUTIONAL LAW (ENGLISH AND COLONIAL) AND LEGAL HISTORY.

The Reader in Constitutional Law (English, and Colonial) and Legal History proposes to lecture during Hilary Term on the Law and Custom

(i.) Of the Imperial Parliament;

(ii.) Of Colonial Parliaments.

In his Classes he will deal more fully with the leading Statutes, reported Cases, and constitutional precedents referred to in the Lectures.

He will also devote one Class a week to Constitutional History, and will commence this Term with the Accession of James I.

In Easter Term the Reader will lecture on the Law of the Constitution relating to

(i.) Taxation;

(ii.) Personal Liberty;

(iii.) Freedom of Speech.

In Trinity Term the Reader will lecture on the Law Treason, Sedition, and Blasphemy, with special reference to the cases of the last fifty years.

ROMAN LAW AND JURISPRUDENCE, AND INTERNATIONAL LAW—PUBLIC AND PRIVATE.

The Reader in Roman Law and Jurisprudence, and International Law, Public and Private, will deliver during Hilary, Easter, and Trinity Terms, Public Elementary Lectures on the Roman Law, so far as time will permit, in the following Order:—

(1.) The Law of Persons: Slavery, Patria Potestas, Marriage, Tutela, Cura.

(2.) The Law of Property: Ownership, Possessio, Servitudes, Emphyteusis, and Mortgages.

(3.) The Law of Contract.

The Subject of the Public Advanced Lectures will be "The History of Roman Law, with Special Reference to the Work of Gaius."

In his Advanced Class, the Reader will deal with the Subjects of the Lectures and the topics in the Institutes of Justinian. He will refer, among other text books, to Ihne's Early Rome; Gibbon's Decline and Fall, c. 44; Sandars' Justinian; Poste's Gaius; Moyle's Institutes of Justinian; Muirhead's Institutes of Gaius and Ulpian; Roby's Introduction to Justinian's Digest; Hunter's Roman Law in the Order of a Code.

The Assistant Reader will treat the topics included in the Elementary Lectures.

THE LAW OF REAL AND PERSONAL PROPERTY AND CONVEYANCING.

The Reader in the Law of Real and Personal Property and Conveyancing proposes to deliver during Hilary, Easter, and Trinity Terms, the following Courses of Lectures:—

Junior Students.

Division of Property, Real and Personal.
Estates in Land, Tenure.
Methods of Transfer (both absolute and by way of mortgage) of Realty. This will include the Statute of Uses and the elementary learning of the Conveyancing and Settled Land Acts.
Ditto for Personalty excluding Bills of Sale of Chattels.

Senior Students.

The Reader proposes in the course of the above three Terms, to discuss the ordinary Deeds relating to land, except strict settlements, taking in, where necessary, the Conveyancing Acts, 1881, 1882, and the Settled Land Acts, 1883 to 1890.

Also to give practical instruction in Conveyancing, including advising on Abstracts of Title.

Students attending these Lectures ought to have read Williams on Real Property and Williams on Personal Property.

In the Classes which will be held by the Reader and Assistant Reader, reference will be made to Goodeve's Modern Law of Real Property, 3rd edition, Elphinstone's Introduction to Conveyancing, and Wolstenholme's Precedents.

LAW AND EQUITY.

The Reader in English Law and Equity (Mr. Robertson) will deliver during Hilary, Easter, and Trinity Terms, one Lecture to commencing Students; will deliver one Lecture and hold two Classes for Advanced Students; and the Assistant Reader will hold three Classes for Commencing Students every week.

The subjects of the Lectures and Classes will be:—

Contracts.

(1.) The requisites of Simple Contracts apart from Statute.
(3.) The statutory requisites of Contracts.
(3.) Mercantile and Maritime Contracts.

Torts.

(1.) The principles and limits of liability.
(2.) Injuries to persons; fraud and negligence; injuries to property.

The following books may be referred to:—Pollock on Contracts; Smith's Leading Cases; Smith's Mercantile (last edition by Macdonell); Broom's Maxims;

Benjamin on Sales; parts of Arnould's Marine Insurance and Carver's Carriage by Sea; Pollock on Torts; Beven on Negligence; Blake Odgers on Libel and Slander.

The Reader in English Law and Equity (Mr. Hopkinson) proposes to deliver during Hilary Term the following Course of Lectures:—

I. A. On Principles of Equity, with special reference to the leading Cases, and to provisions of the Judicature Acts with regard to the recognition of equitable doctrines.

Books which may be referred to:—
White and Tudor's Leading Cases in Equity.
Spence's History of the Equitable Jurisdiction of the Court of Chancery, part ii., books 1 and 2, and the portions of the Judicature Acts and Rules relating to the above subjects.

II. B. On Administration of Assets on Death.

Books which may be referred to:—
White and Tudor's Leading Cases.
Seton on Decrees, part iv., c. 93.

After Easter the Reader proposes to deliver a course on Partnership.

Books which may be referred to:—
Lindley on Partnership.
Pollock on Partnership.
The Statute 53 & 54 Vict. c. 39.

The Reader and Assistant Reader in the above Branch also propose to hold the following Classes:—

II*a*. On Trusts. (By the Assistant Reader.) This Class will meet three times every week.

Book which may be referred to:
Lewin on Trusts, part i.

II*b*. On Administration. (By the Reader.) A Class will meet once each week for illustrating the Subjects of Course 1*a*.

II*c*. A Class will meet once each week for illustrating the Law and Practice with regard to various Subjects usually dealt with in the Chancery Division, and not included in the above Course—

e.g., Action for Partition;
Rectification of Instruments;
Injunctions.

Cases will be proposed and discussed with the Students in the Classes.

PROCEDURE, CIVIL AND CRIMINAL, AND EVIDENCE.

The Reader in Procedure, Civil and Criminal, and Evidence, proposes to deliver a Course of Lectures in Hilary, Easter, and Trinity Terms, and to hold three Private Classes each week.

With respect to Civil Procedure, the Reader will discuss the past and present methods of administering the law in civil actions; the changes effected by the Common Law Procedure Acts, the Judicature Acts, and Rules of Court; the steps in an action up to judgment; the forms of pleadings in Actions of Tort and Contract.

With respect to Criminal Procedure, the Reader will treat of the course of a criminal prosecution; the law of arrest, proceeding by summons and warrant; the investigation before magistrates; the indictment and trial.

With respect to the law of Evidence, the Reader will examine, so far as time permits, the leading rules and maxims as to the admissibility of oral evidence.

The following books and authorities will be referred to:—

Chitty's Archbold's Practice.
The Annual Practice (1891–2).
Stephen's Digest of Criminal Law.
Archbold's Criminal Law.
Russell on Crimes.
Taylor on Evidence.
Broom's Maxims, applicable to Evidence.
Stephen's Digest of Law of Evidence.

At the Private Classes the Reader will discuss more fully the subject of the Public Lectures.

The Readers will communicate with Students desirous of attending the Private Classes at the conclusion of the first Public Lectures.

Each Student will be expected in the interval between the meetings of the Private Classes to peruse portions of works bearing on the subject of instruction pointed out by the Reader, and to be prepared, at the ensuing meeting of the Class, to answer and discuss questions arising out of the subjects of their reading.

NATHL. LINDLEY,
Chairman of Council of Legal Education.

J. C. MATHEW,
Chairman of the Board of Studies.

Council Chamber, Lincoln's Inn.
11th December 1891.

Appendix Nos. 34 and 35.

APPENDIX No. 35.

PAPER *handed in by* MONTAGUE H. CRACKANTHORPE, *Esq., Q.C., on Octotober 21st,* 1892. (*See Question* 12,920.)

26th June 1891.

RESOLVED—

1. That the Council appoint six Readers at a salary of 500*l.* a year each, viz:—

One in Constitutional Law and Legal History.
One in Roman Law and Jurisprudence and International Law, public and private.
Three in English Law and Equity, including Criminal Law, but excluding Civil and Criminal Procedure and Evidence.
One in Procedure, Civil and Criminal, and Evidence.

2. That the Council appoint Four Assistant Readers for one year (re-eligible) at a salary of 350*l.* a year each, viz.:—

Three in English Law and Equity as above defined.
One in Roman Law, &c.

3. That each Reader in English Law and Equity shall deliver two lectures a week—one to advanced and one to commencing students, and shall also hold an advanced class at least twice in each week.

4. That each Assistant Reader in English Law and Equity shall hold an Elementary Class three times a week.

5. That the Reader in Roman Law, &c., shall give two Lectures a week, viz., one to advanced and one to commencing students, and shall hold two advanced classes in each week.

6. That the Assistant Reader in Roman Law, &c., shall hold at least three Elementary Classes a week.

7. That the Reader in Constitutional Law, and also the Reader in Procedure and Evidence, shall give one Lecture and shall hold three Classes a week.

8. That the Lectures and Classes shall be for one hour each, and shall be given and held in each week throughout the entire year, except during the legal vacations.

9. That a Board of Studies be appointed annually by the Council, and that such Board shall consist of eight Members of the Council and three of the Teaching Staff, and that four Members of the Council be a quorum.

10. That two Members of the Council on the Board of Studies shall personally meet the Students at their respective Inns at times to be fixed by them, and that each Student be definitely attached to some one Member of the Teaching Staff as a consulting tutor or adviser.

11. That in addition to the Studentship examination provided by the Consolidated Regulations, intermediate voluntary examinations shall be held, at which certificates of special proficiency, and if the Inns of Court agree, prizes be given, and that the holders of such certificates be at liberty to apply to the Council for privileges by way of exemption at their final examination.

Appendix Nos. 35, 36, and 37.

12. That the Lectures shall be given, and the classes held, at places to be provided by the four Inns as follows:—

(*a.*) By the Inner Temple and Middle Temple during the Michaelmas and Hilary Sittings;

(*b.*) By Lincoln's Inn and Gray's Inn during the Easter and Trinity Sittings.

13. That each Inn be requested to provide two Class Rooms, in addition to its Hall, for this purpose.

14. That the Lectures and Classes be commenced in Hilary Sittings next, until which time the existing arrangements shall be continued.

15. That the question of payment of the Teaching Staff by capitation fees be adjourned.

16. That notices be inserted in the leading journals and legal papers, and in the Halls of the Inns, inviting applications for appointment on the Teaching Staff.

17. That whether there shall be one or more Sub-Committees to whom the names of Candidates for appointment on the Teaching Staff shall be referred in the first instance shall be decided by the Council on each occasion.

APPENDIX No. 36.

PAPER *handed in by* R. S. HEATH, *Esq., M.A., D.Sc., on October 22nd*, 1892. (*See Question No.* 13,185.)

MASON COLLEGE.

RETURN OF STUDENTS OSTENSIBLY PREPARING FOR LONDON UNIVERSITY EXAMINATIONS, AND OF STUDENTS ACTUALLY PASSING THESE EXAMINATIONS.

	1888-89.		1889-90.		1890-91.	
Number of Individual Students -	415		429		492	
Number of Students preparing for University Examinations.	90		112		107	
Number of Students who have passed Examinations of the University of London:—						
Matriculation - - -	9		7		8	
Int. Arts - - -	4		8		7	
Int. Science - - -	6	47	8	41	8	45
Prel. Sci. (M.B.) - -	18		10		12	
B.A. - - - -	5		7		5	
B.Sc. - - - -	5		1		5	

APPENDIX No. 37.

PAPER *handed in by the* REV. H. WACE, *D.D., 9th November* 1892. *See Question* 14,161; *and the Evidence of* W. G. ADAMS, *Esq., D.Sc., Question* 20,169.

THE EXTENSION OF UNIVERSITY TEACHING.

MEMORANDUM.

What is the position in regard to University Education which is taken up by the Society for the Extension of University Teaching in London?

This Society supplements teaching by lectures by the addition of a conversational class after the lecture, and encourages the students to do weekly papers on the subject of the lecture.

To encourage this work, various Certificates have been offered:

(1.) Certificates of Study for success in one course of lectures in one term.

(2.) Sessional Certificates for a complete Session's work.

(3.) Certificates of Continuous Study, each equivalent to *four* Sessional Certificates.

Of these Sessional Certificates three were granted in 1889; neither of the Candidates who gained them proceeding any further.

In 1890, 26 Sessional Certificates were granted in Botany, and 20 Sessional Certificates in all the other subjects of study. Of the 26 Certificate holders in Botany, not one has proceeded any further in that or in any other subject.

Of the 20 other Certificate holders only 10 obtained Certificates of Study during the next Michaelmas term, and of these only *one* completed the course so as to get his second Sessional Certificate in the summer of 1891.

In 1891 the number of Sessional Certificates granted has been 78, one half of which were awarded to women. The above facts show that the Certificate of Continuous Study, which is to take the place of four Sessional Certificates, is not yet required, seeing that at present there is only one student who has obtained Sessional Certificates of two years' study.

If it be asked what amount of study this Sessional Certificate represents, it appears that Certificates of Study are awarded in connexion with a course of 10 lectures and classes. Sessional Certificates are given for two such courses with a supplementary summer course. Thus, a Sessional Certificate is granted for work in connexion with 30 lectures and classes once a week.

A Certificate of Continuous Study is to be granted for attending 120 lectures and classes once a week in four several sessions or years.

What is this, compared with a course of lectures in a University or college, on any single important subject of study?

Take, for instance, English Literature, or Modern History, or Chemistry, &c. In each there would be a course of at least 60 lectures a year, and in Mathematics, or Latin and Greek, and other important subjects, at least 120 lectures in each year, in any College which puts forward study in those subjects as qualifying for a University degree.

Then, as regards Sciences such as Chemistry, Physics, or Physiology, it is evident that no thorough study in these subjects can be carried on without permanent buildings, for in each case a laboratory is absolutely required in which the students themselves can do practical work.

Seeing that the Certificate of Continuous Study has not yet been gained by any student, and in fact, has only just been prepared, it is somewhat early to lay down how many courses of continuous study of 120 lectures and classes each, or how many such four-year periods may be regarded as qualifying for a University degree. It is clear that either the degree must be given for insufficient work, or the time of getting it must be spread over such a lengthened period that the candidate might have been spending his years more profitably than in striving after a degree.

I have, &c.
(Signed) W. G. ADAMS,
Member of the Universities
Joint Board of the London Society
for the Extension of University Teaching.

APPENDIX No. 38.

PAPER *handed in by the* REV. CANON ELWYN *on November 23rd, 1892.* (See *Questions* 15,576–7.)

COMPOUNDERS.

In 1st year.

26 students	-	16 are 14 years of age. 6 are 15 ,, ,, 3 are 16 ,, ,, 1 is 17 ,, ,,

In 2nd year.

24 students	-	13 are 15 years of age. 8 are 16 ,, ,, 3 are 17 ,, ,,

In 3rd year.

31 students	-	29 between 16 and 18 years of age. 2 are 18 years of age.

In 4th year.

22 students	-	5 are 19 years of age. 11 are 18 ,, ,, 6 are 17 ,, ,,
Total	- -	103

NON-COMPOUNDERS.

Taking *special classes*, 100 of these, about 90 are *over 18 years of age.*

APPENDIX No. 39.

PAPER *handed in by* J. R. UPTON, *Esq., on the 2nd December* 1892. (*See Question* 16,576.)

EVIDENCE taken by the COMMITTEE appointed to enquire into the Pay, Status, and Conditions of Service of Medical Officers of the Army.

Monday, 8th April, 1889.

FOURTH DAY.

Present:

THE RIGHT HON. THE EARL OF CAMPERDOWN in the chair.
MAJOR-GENERAL SIR WILLIAM CROSSMAN, K.C.M.G., M.P.
REAR-ADMIRAL C. F. HOTHAM, C.B.
SURGEON-GENERAL T. GRAHAM BALFOUR, M.D., F.R.S., F.R.C.P., Q.H.P.
LIEUT.-COLONEL E. T. D. COTTON, M.P.
N. C. MACNAMARA, Esq., F.R.C.S.
R. H. HOBART, Esq., C.B., *Secretary.*

JAMES RICHARD UPTON, Esq., examined.

967. (*The Chairman.*) You are, I think, the Clerk of the Society of Apothecaries of London?—I would rather call myself the Solicitor. I am Solicitor as well, and that is perhaps my proper title for this purpose.

968. Then you advise the Society?—I am the adviser of the Society, and I should like to add that I have done so for 16 years.

969. And you are their adviser in all matters, not only connected with their constitution, but practically in matters connected with medical legislation and things of that sort?—Yes.

970. You are their professional adviser?—Yes, quite so; and I lay stress on having been so for 16 years, because those years represent very great changes in the medical profession.

971. The great change which has occurred in the Society of Apothecaries was occasioned by the Act of 1886?—Yes.

972. Prior to that you, of course, remember that the examinations of the Society of Apothecaries were not esteemed satisfactory, at all events, by the Commission that enquired into the Medical Acts?—I remember when your Lordship was Chairman of the Commission; I did not give evidence, but I was before you.

973. You remember the report?—Yes.

974. You know the opinion of the Commission was that the examinations of the Society were not satisfactory?—Yes, I remember it was to that effect; I do not remember the exact words.

975. Will you inform the Committee of what has taken place in the examinations since that time?—I believe one of the great objections which your Lordship and the Royal Commission then raised was that our examiners were not selected with a view to any special qualification for examining in particular subjects. Therefore, before the Act of 1886, or rather the Bill which was passed into an Act, was brought in by Sir Lyon Playfair, we had re-modelled our examination in the following particulars:—We had appointed special Examiners in Midwifery; we had appointed special Examiners in Medicine; and we had also appointed three Fellows of the Royal College of Surgeons of England as Examiners in Surgery. But, notwithstanding that we had done that, we could not grant a statutory diploma to our Licentiates to practise surgery.

976. Could you not prior to the Act of 1886?—No, not to practise surgery—certainly not.

977. Your license was limited to medicine?—It was limited to medicine; and we did this in order, as far as possible, that our Licentiates should have their knowledge in surgery tested by our own Examiners as well as by the Royal College of Surgeons; because all our Licentiates in those days took up two distinct diplomas; they took up our diploma in Medicine, and they took up the diploma of the Royal College of Surgeons in Surgery; but we wished, so far as we could, to ascertain their knowledge of surgery ourselves. And it was at that stage of the case that Sir Lyon Playfair brought in the Bill of 1886.

978. When that Bill became an Act will you describe to me what happened then with regard to the Apothecaries?—If your Lordship would permit me I should like to say a few words before I get to that. When the Bill was brought in by Sir Lyon Playfair the two Royal Colleges had already formed a combination or conjoint Board, as it is termed, to examine in Medicine and Surgery; and therefore, when Sir Lyon Playfair brought in that Bill he inserted the 5th section of it most specially in reference to our Society; he knew that the two Royal Colleges had combined, and he knew that the Universities did not require to combine because they had the power of examining, and always have had, in all three branches, and therefore he introduced the 5th clause to enable us, who he knew could not combine and were not an University, to get the same privileges as other bodies. So much was he impressed with this that, at my request, on finding that, if the Medical Council declined to give us assistant examiners, we might be shut out, he re-modelled the 19th section of the Act and made the Privy Council a Court of Appeal from the Medical Council on this point, That was done at my special request; so that if the Medical Council refused to appoint assistant examiners the Privy Council might re-hear the case.

979. You say that you were unable to combine?—Yes.

980. Did you make application to the Royal Colleges of Physicians or Surgeons to be allowed to enter into the joint examination with them?—Certainly.

Appendix No. 39.

981. And you were refused?—Yes; and we applied to the Universities.

982. You applied also to the Universities?—Yes, we were bound to do that under the Act. The 5th section did not come into operation unless the aggrieved body, as I may call them, showed that they had applied to everybody to combine with them.

983. What reasons were given by the Royal Colleges of Physicians and Surgeons and also by the Universities for their refusal?—The Royal Colleges, I think, stated that they had formed their combination; that they had made all their regulations before the Act was passed, and that it was impossible for them to let us in. That was the effect of their answer. The Universities, as I mentioned to your Lordships, did not care (except one University, that very nearly did combine with us—the University of Durham), they had full power to examine in Medicine, Surgery, and Midwifery, and did not care to have anything to do with us.

984. Now, then, will you describe to us what you have done since the passing of the Act of 1886?—Having been unable to combine, we represented that to the Medical Council, and asked in the first instance that three Assistant Examiners, in Surgery of course—that being the branch we could not undertake ourselves—might be appointed to take part in our examinations; and that request was at once acceded to by the Medical Council, who appointed three gentlemen, at first for a period of one year: from June, 1887 to June, 1888.

985. In June, 1888, what occurred?—In June, 1888, we found that as our numbers were increasing it was necessary to have more Examiners in Surgery, and we then applied to the Medical Council to appoint five Examiners in Surgery, and to appoint them for an indefinite period. That the Medical Council at once acceded to; Mr. Marshall, the President of the Council, the eminent surgeon, expressing his satisfaction that the application was made.

986. Is that arrangement in force now?—Yes, that arrangement is in force now.

987. Am I correct in supposing that you appointed three Examiners in Surgery yourselves, and the Medical Council appointed five?—No, we appointed none at all; five were appointed instead of three, but none are appointed by ourselves in Surgery.

988. Then am I correct in gathering from your answers that at the present time the examination in Surgery, for the surgical part of the diploma which is granted by the Society of Apothecaries, is conducted entirely by the Examiners appointed by the Medical Council?—Most certainly—exclusively.

989. But I think you only grant one diploma?—We can only grant one diploma. It is, if I might be just allowed to say so, really the same thing as the conjoint Board of the Royal Colleges, so far as the examination is concerned. There are two practically separate Boards sitting to examine our candidates. There are five gentlemen from the Medical Council examining our candidates in Surgery, and I may add that they are prohibited by the Medical Council from examining those candidates in anything else. Then there are our own Examiners in Medicine, our own special Examiners in Midwifery, and one special Examiner, Dr. Klein, in Physiology. That is the examination through which our candidates pass. But we can only grant one diploma. These gentlemen sent from the Medical Council under the 5th section are to assist in the examination; but they have no power given to them to confer a separate diploma.

990. Then apparently the Medical Council do not take any part in the examination in Medicine?—They take no part in it; but they inspect that part of our examination as well as the other part; their Inspectors come and inspect that part of the examination as well as the surgical part.

991. Then do they not only send Examiners to conduct the surgical examination, but also send Inspectors to inspect the examination conducted by their own Examiners?—Yes, quite so; they inspect the surgical examination conducted by their own Examiners, and have just recently made their report upon that.

992. And they then inspect every portion of your examination in respect of which the diploma is given, including Medicine, Surgery, and Midwifery?—Yes, every single branch is visited by separate Inspectors, who make separate reports. I think there were three Inspectors.

993. I wish now to come to that point which has been specially referred to this Committee. A correspondence has taken place with which you are no doubt familiar, between yourselves and the War Office and between yourselves and the India Office, with regard to the license and the diploma you give at the present time?—Yes.

994. And you have complained that although your Licentiates are authorised by the State to practise Medicine, surgery, and midwifery, in virtue of their license they are not admitted to competitive examination for entry into the Army and India Medical Service?—Yes, quite so.

995. And that is a full statement of your complaint?—Yes. I should like to add that I stated to Lord Harris that before the Act of 1886 was passed our Licentiates got, as they cannot do now, the license of our Society and the diploma of the Royal College of surgeons; they got a double diploma, and I have no doubt formed a large proportion of the candidates for the War Office examinations.

996. But is it not right to point out that all those Licentiates had passed the examination of the Royal College of Surgeons as well as your examination?—Yes, I stated so; I stated that they passed the two separate examinations.

997. Could they not do the same thing now?—No, because under the Act of 1886 that is not permitted. This would not be a qualifying examination, which is a technical term, within the meaning of the Act of 1886.

998. They might pass your examination, and also pass the examination of the Royal Colleges of Physicians and Surgeons?—They might do that; but then it would be a dreadful expense to them.

999. (*Sir William Crossman.*) Does the same rule obtain in the Navy?—We began with the India Office. Then the India Office stated that they could not move unless the War Office moved, and there we have stuck; we have never been to the Navy. We were advised that we could apply for a mandamus to compel the Royal College of Surgeons to examine our candidates, but that would have done us no good, supposing the Royal College of Surgeons had been ordered to examine our candidates, because we could not have taken those two diplomas and got them registered.

1000. (*The Chairman.*) But supposing that it were contended that the possession of two separate diplomas argues a greater amount of professional knowledge on the part of the holder than on the part of a person who holds one only, is not that from the Service point of view some guarantee of a higher class of men entering the Service?—I venture most respectfully to say no. The assistant examiners from the Medical Council are all Fellows of the Royal College of Surgeons of England by examination; they are men of the highest position, and they take the place, if I may venture so to speak, of the examination held before by the Royal College of Surgeons. It is a Royal College of Surgeons examination, for it can only be conducted by gentlemen who are Fellows of that College.

1001. Do you contend that you are in a position of exceptional disability?—Yes.

1002. How?—Because the gentlemen who go up to the two Royal Colleges obtain separate diplomas. The two Royal Colleges, I believe I am right in stating, when they formed the arrangement for the conjoint Board preserved the privilege of granting separate diplomas. It was not a necessity for the Royal Colleges that they should do so, but for their own dignity the preserved the right. If they had chosen to make a different arrangement—if they had chosen to say, We will grant a certificate to a man for proficiency in medicine, surgery, and midwifery in one document—they could have done so.

1003. Then you contend that your license really carries with it a certificate of the same amount of knowledge that the diploma of the Royal College of Physicians, and also the diploma of the Royal College of Surgeons carries?—Absolutely.

1004. (*Lieutenant-Colonel Cotton.*) You would almost say, perhaps, that yours is an extra diploma as well, because it includes midwifery?—No, they all do that. The two Royal Colleges give a certificate of that; no man can be put on the register without it. I claim that our own diploma is absolutely as good for the purpose under

discussion as the two diplomas of the Royal College of Surgeons and the Royal College of Physicians, and that the standard of examination is exactly the same. I have explained to his Lordship about the Inspectors; if our examination did not satisfy the Inspectors we should be struck off altogether. It is a mere technical difference, if I may so speak, that in the case of the Royal College of Surgeons and the Royal College of Physicians, as I said just now, they preserve their respective dignity in granting two diplomas instead of merging them into one.

1005. (*Sir William Crossman.*) Are the other Examiners, besides those appointed by the College of Surgeons, members of your Society?—Some are and some are not.

1006. But are they all members of any Society except yours?—Yes. May I read out there names? Our Chairman, Dr. Stocker, is an M.D. of the University of London and M.R.C.P., London; the next gentleman is Dr. Lee, an M.D. of Cambridge and F.R.C.P. London; the next is Dr. de Havilland Hall, M.D. of London and also F.R.C.P. London; the next is Dr. Thorowgood, M.D. of the University of London and F.R.C.P. London; the next is Dr. Warner, M.D. London and F.R.C.P. London; the next is Mr. Bullock, F.R.C.S. England; the next is Dr. Duncan, M.D. Brussels, M.R.C.P. London, and F.R.C.S. England; the next is Dr. Lewers, M.D. London, M.R.C.P. London, and M.R.C.S. England; the next is Dr. Radcliffe Crocker, M.D. of London and F.R.C.P. of London; the next is Dr. Smith, M.D. Aberdeen, L.R.C.P. Edinburgh, and L.R.C.S. Edinburgh; and then, as I mentioned just now, our Examiner in Physiology is Dr. Klein, M.D. and F.R.S. The Assistant Examiner is Dr. Hebbert, M.R.C.P. London and M.R.C.S. England.

1007. (*Mr. Macnamara.*) And who are the Examiners in Surgery?—I will read their names out. These are the Examiners in Surgery appointed by the Medical Council:—Andrew Clarke, F.R.C.S. England; William J. Walsham, F.R.C.S. England; George Henry Makins, F.R.C.S. England; W. Arbuthnot Lane, F.R.C.S. England, M.B. London, and M.C. University of London; and W. Adams Frost, F.R.C.S. England.

1008. Are any of those gentlemen Surgeons at a Metropolitan Hospital, there are several of them who are Assistant Surgeons?—I am afraid I cannot answer the question; I do not know.

1009. (*Sir William Crossman.*) Can you tell us the nature of the report of the Inspectors on the last examination?—In Midwifery it was exceptionally favourable; in Medicine it was extremely favourable; and in Surgery the only remark that was made was, I believe, the same remark that was made upon the examination of the Conjoint Board of the Royal Colleges, namely, that it was deficient in operations on the dead body, which, I understand, is a somewhat open question with the examining bodies at the present time. But it was a very satisfactory report.

1010. (*Dr. Graham Balfour.*) In one of your answers I think you said that the Royal College of Physicians and the Royal College of Surgeons had each the power only to grant a single diploma; are you not aware that the Royal College of Physicians has the right to grant a diploma to practice surgery as well as medicine?—I have always understood that they have, I always understood that the Royal College of Physicians need not combine.

1011. (*The Chairman.*) And the Royal College of Surgeons need not necessarily combine?—Yes, the College of Surgeons must, because they cannot examine in Medicine.

1012. But they could easily, like yourselves, ask for assistant examiners?—Yes, but then they need only ask for examiners if they cannot combine, and they have combined. I have always held this view. I do not know for how long they have combined, but if the combination came to an end, then, if the Royal College of Surgeons could not combine, say with us or with any other body, they would have to do exactly the same thing as we did—go to the Medical Council to get assistant examiners to examine in Medicine.

1013. (*Mr. Macnamara.*) Can you tell me how long it is since the Medical Council appointed these five gentlemen as assistant examiners?—In June, 1888. They appointed the three, as I have mentioned to Lord Camperdown, from June 1887 to June 1888; then from June 1888 they appointed the five for an indefinite period.

1014. How many examinations have there been since that time?—There are examinations every month.

1015. And where the assessors appointed by the Medical Council to make an inspection of one of the examinations?—I am afraid that I do not quite understand the question.

1016. Have Inspectors from the Medical Council visited at any of these examinations?—Yes; my answer to Sir William Crossman about the surgical examinations being inspected was since the five assistant examiners have been appointed; it was last autumn. They were then inspecting all the licensing bodies.

1017. It would be quite possible, would it not, for men who have taken a diploma in the Apothecaries' Society to be examined in surgery by the Royal College of Surgeons if they choose?—It would be perfectly possible for them to be examined, but it would not help forward the question of registration; that is, if I might say so, my cardinal point—that after this examination of ours they get upon the register.

1018. There is one more question I should like to ask you. How would it not do so? It would show, at any rate, that they had had what we supposed to be the highest examination that it is possible to give in surgery?—I am not certain that they could get your diploma put upon the register. I think they would still be put upon the register solely in respect of our license, because our license represents a complete and perfect examination. I very much doubt whether the Medical Council would add the diploma of the Royal College of Surgeons. Our diploma is a perfect instrument under which they are placed upon the Medical Register.

1019. (*The Chairman.*) You are aware, are you not, that you are proposing to give to the Society of Apothecaries a power which neither the Royal College of Surgeons nor the Royal College of Physicians have separately at the present time, or rather, to put it in another form, you are proposing to confer upon the license of the Society of Apothecaries an advantage which the separate diploma of either the Royal College of Surgeons or the Royal College of Physicians has not by itself?—Excuse me, I think not. As I say, it is a mere matter of arrangement between the two Royal Colleges that they grant separate diplomas. But if a gentleman had passed their conjoint examination, and then took in only the license of one Royal College, he could be put upon the register because he had passed the qualifying examination. It would be known at the Medical Register that he could not produce that diploma at all, unless he had passed the conjoint examination.

1020. Is your diploma given in the same terms as the diploma of the Royal College of Surgeons and of the Royal College of Physicians, do you know?—I believe not, I do not know; I have never seen the diplomas of the two Royal Colleges.

1021. What does your diploma state?—Our diploma states that the candidate, pursuant to the provisions of the Medical Act, 1886, has been examined in Medicine, Surgery, and Midwifery, and has been found fully qualified to practice those three branches.

1022. (*Sir William Crossman.*) I think you said just now, in answer to Dr. Balfour, that the Royal College of Physicians had the power of granting a diploma both in Surgery and in Medicine?—I have heard so. I believe it never has been exercised, but I am not quite certain about it. The Charter of the Royal College of Physicians defines Medicine, if I remember rightly, to include Surgery. It is quite clear, I would say, in answer to Dr. Balfour, that at this moment, if a gentleman who passed the conjoint examination of the two Royal Colleges, took the diploma of the Royal College of Physicians alone to the Medical Register, they would be bound to put him on; they could not help it.

1023. (*Mr. Macnamara.*) Can you tell me how many students have gone up for this examination from June 1887 to the present time?—The average has been over 200 a year.

1024. (*The Chairman.*) In the two years which have elapsed?—Yes.

1025. Is there any other statement which you would wish to make to the Committee?—I should like to add, though the Committee may be well aware of the fact, that the Medical Act of 1886 made no change in the

Appendix No. 39.

titles in respect of which a person could be put on the Medical Register. Therefore, in our own case, though the diploma confers a statutory qualification in Medicine, Surgery, and Midwifery, the holder of it can only be registered as L.S.A., Licentiate of the Society of Apothecaries; a title which, under existing circumstances, is unmeaning, being incapable of expressing that the holder of such diploma is by virtue of it enabled to do exactly the same as he formerly did when getting the separate diplomas of the College of Surgeons and of the Society.

The witness withdrew.

JOHN MARSHALL, Esq., F.R.C.S., F.R.S., LL.D., examined.

1469. (*The Chairman.*) I need not say that you are President of the General Medical Council?—Yes.

1470. And you have also been President of the Royal College of Surgeons?—Yes.

1471. And I apprehend that you are able to speak to us on behalf of your Council?—I think so, so far as I feel at liberty.

1472. I wish to ask you a few questions with regard to the present examinations of the Apothecaries' Society. The surgical examination of the Apothecaries' Society is, I believe, conducted entirely by examiners appointed by the General Medical Council?—That is quite true.

1473. And the Medical Council also send inspectors who inspect the examination in Surgery, and who also inspect the examination in Medicine of the Apothecaries' Society?—Yes, and in Midwifery also.

1474. And the Apothecaries' Society give a license in virtue of a candidate having successfully passed those examinations?—Yes.

1475. In the opinion of the General Medical Council are those examinations satisfactory?—Decidedly.

1476. I have before me the reports on the final examinations in Medicine, Surgery, and Midwifery of the Apothecaries' Society, and there are one or two qualifying remarks; but at the same time the conclusion that they come to is that the standard of efficiency required for candidates appears to be sufficient?—Yes. You asked me first, I think, whether they were satisfactory, and I said, Yes; but I ought perhaps to qualify that by saying that they are regarded as sufficient. The words in the Act of Parliament under which we carry out our inspections are "sufficiency of the examinations"; we are bound to ascertain the sufficiency of them. Now an examination may be good enough for us to say it is sufficient for a license, but we might suppose improvements in it; therefore perhaps I ought to recall the word "satisfactory," because in every examination there are little points which one would not hold to be satisfactory, not only in the case of the Apothecaries' Society but of other bodies. The word "sufficiency" is the word in the Act of Parliament, and the Apothecaries examinations are declared by us to be sufficient. Therefore, I should wish to substitute the word "sufficient" instead of "satisfactory," because "satisfactory" implies that no improvement whatever could take place which we do not hold.

1477. The General Medical Council send inspectors to the examinations of other degree-giving bodies, do they not?—Yes.

1478. Are the General Medical Council as well satisfied with the examinations of the Apothecaries' Society as they are with those of other Medical Bodies and Universities?—The word "sufficiency" implies that we consider they are so far satisfactory. Degrees of satisfaction do not enter into our reports; we may have opinions, but we are not bound to report them. The Medical Council has to determine the sufficiency of examinations in relation to general practice amongst the public; and the reports concerning the Apothecaries' Society have been to the effect that its examinations are, in that sense, satisfactory.

1479. At the present time, in the admission of candidates to the entrance examinations for the Army, it is required that a candidate should have received a separate diploma in medicine and a separate diploma in surgery?—Yes.

1480. Do you consider that is necessary in order to obtain good candidates?—I consider that that was necessary under the old system because, as you are aware, the Society of Apothecaries was not legally entitled in those days to give a surgical qualification at all. Therefore it was a most proper thing that for the public services candidates should be required to show that they had a surgical qualification as well as a medical one. Accordingly under the old system it was certainly right that they should have the two qualifications. But now that the conditions are changed I am not sure of that, for I think it is just and right in the case of any person who now holds a complete qualification in medicine, surgery, and midwifery under the supervisions of the General Medical Council, that that ought to be regarded as sufficient.

1481. Do you think that the army ought to be able themselves to institute such an examination as, coupled with the fact that a man has obtained a license to practise, ought to be sufficient?—I think so. I think the license to practice ought, on general grounds, to govern practice in military life as well as practice in civil life; but I still maintain that a special examination is absolutely required for those who are going into the Army Medical Service; and that is superadded, I believe, and I hope will always continue to be superadded.

1482. The Apothecaries' Society have complained of the present practice in the army examinations that I have spoken of, and they represent that candidates holding their license are really as well qualified as those who have passed the joint examinations of the Royal College of Surgeons and of the Royal College of Physicians, should you agree in that view?—Well, it is very difficult for me to express an opinion on that. I think we are apt to attach too much importance to examinations altogether. They are a test of a candidate's knowledge and ability at the moment; and I believe that a man who has passed the Apothecaries' examination might really be a better man than one who had passed the examination of the two conjoint bodies. Moreover, looking at the test as a whole, I believe that the Apothecaries' Society have so far improved their examinations, and are ready to improve it in every way, that I think it would be unfair to say that their Licentiates should be excluded on the ground that they have a license which is professionally inferior to those of the two Royal Colleges. I think that would be unjust. They have no absolute claim, at least they have no positive right, for the military authorities can exclude them if they like; but I think they have a really fair and just claim to be placed on the same footing and to be subject to the same special examination for the Army or the Navy as other members of the profession.

1483. It is necessary, is it not, that the Apothecaries' Society should make any change in their examination which the Medical Council think necessary?—Yes, if we urge the adoption of any change, and the Privy Council agree with us, the Society must carry it out, or we could refuse to register their Licentiates. At the last session of the General Medical Council an important resolution was passed which will in time influence all the bodies with reference to the performance of operations, and the Apothecaries' Society must consider that recommendation. We cannot order the adoption of a recommendation; but continued resistance to any important recommendation after a certain lapse of time, and after reference to the Privy Council, would lead to their license ceasing to be registrable.

1484. With regard to the Examiners sent by the General Medical Council, are you personally satisfied with the Examiners themselves, and the mode in which they are selected?—Personally we have the highest testimonials of the qualification of these gentlemen. Many of them I know, in fact, all of them I know personally; they are younger than the Examiners at the Royal College of Surgeons, but comparative youth is not always a disqualification. If earnest and faithful in the performance of his duty, a young Examiner is not a bad examiner. I might say from what I know myself of the Examiners in Surgery at the Apothecaries' Society that they are very good men; and I believe that some of those who are now examining for the Apothecaries' Society may some day or other be upon the Examining Board of the Royal College of Surgeons. They are able and earnest men.

1485. (*Mr. Macnamara.*) Can you give us any opinion as to the entrance of medical men into the Military

Service. They were allowed under a former regulation to enter for 10 years, and then to retire with a bonus. That fell to pieces and they did not come. But it is now, I believe, put forward and urged very strongly, that men might be induced to enter the service if they were enlisted, or if they were appointed for five years, and then at the end of five years to retire again with a bonus, say, of 500*l*. So far as you can judge, do you think that that is likely to be successful?—I have not formed any judgment upon that; you must not question me upon it; I really could not answer it.

1486. (*The Chairman.*) Is there anything else you would wish to say to the Committee?—I was going to supplement what you have asked me by these remarks. I have taken pains to ascertain, since the new system of the Apothecaries' examinations came into operation, what number of persons have registered as their sole primary qualification, the Licentiateship of the Apothecaries' Society since June 1887, when the system was changed. I find that 121 persons have been put upon our register with the Licentiateship of the Society of Apothecaries only to begin with. But now I want to point out what happens. Of those 121, already 47 have added some other qualification, and it appears to be the fact that the Apothecaries' license still continues to be used for the purpose of enabling young men to obtain speedily a qualification which entitles them to practice. And this is a very important matter for the profession at large and for the public, because the Medical Council is trying to put a stop to the employment of unqualified assistants, and any machinery by which men can become qualified more rapidly (because that after all is the point, they get the license of the Apothecaries' Society at less cost than other diplomas) will enable us to get rid of the evil of unqualified assistants. That is one advantage of preserving the Licentiateship of the Apothecaries' Society. And yet out of 121 persons who have taken that license alone to start with, already 47 have obtained other qualifications. Of those 47, 27 have obtained the additional qualification of Member of the Royal College of Surgeons, 14 have obtained the double qualification of the two Royal Colleges, two have obtained the degree of Bachelor of Medicine of London, and two others have acquired University degrees in Ireland. Accordingly some of the candidates who go in for the Apothecaries' license in our days, are men who aim at getting a further title or even a University degree. It shows, I think, that they do this under pressure. They are men probably of very moderate means, perhaps left, without father or mother, to fight their own way in the world; and they get the least expensive qualification they can, but with a full intention of getting a higher one. Therefore I think this is an additional argument why one should not stop these men from the competition to get into the Army Medical Department. I think in fairness one should admit them; and I believe that large numbers of them will obtain some additional qualification. As already 47 out of 121 have obtained additional qualifications, I believe that if we could follow them another year, we should find a larger proportion than that acquiring other qualifications. I may add this, that although I think it is only just to admit the Licentiates of the Apothecaries' Society to enter for the Army competitions, yet when one came to dispense important posts in the higher grades of the Service, one would naturally take into consideration the additional qualifications which an Officer might possess. This would be quite fair and proper; but I think that the Licentiates under the new system should not be excluded from the competition; they cannot claim any right; but in point of fairness, I think now it would be proper and desirable that they should be admitted to the Army examinations.

1487. From the point of view of efficiency and usefulness to the Service, you do not see any reason why candidates holding the license of the Apothecaries' Society only should not be admitted to the Army examinations?—I do not, any more than that they should not be admitted to practice in civil life.

1488. Is there any remark which you would like to make to the Committee with reference to the position and status of Medical Officers of the Army?—In reference to this part of your enquiry, I am of opinion that Medical Officers in the Navy and Army should have suitable Brevet ranks, with due relation to the several combatant ranks, and appropriate privileges. But I think it would be no real advantage to give to the Medical Officers titles which belong properly to combatant Officers. The title of "Surgeon" is so distinctive, distinguished, and honourable, that it is, in my opinion, better not to go beyond such adjuncts as Surgeon-Major, and Surgeon-General, and Surgeon of the Fleet, or others now in use. I think there would necessarily arise obvious disadvantages to the Medical Officers of the Navy and Army, from their acquisition of combatant titles, in the mode which has been suggested by some. These disadvantages are, I think, very clearly indicated in some of the replies of the Medical Officers themselves. With reference to the claim of Apothecaries to be allowed to become candidates for the Navy or Army Medical Service, I wish to add that my evidence, of course, only relates to the claim to become a candidate at the examinations, after special study at Netley or elsewhere. It occurs to me that it may be said, that in appointments under the Local Government Board, under special sanitary authorities, at asylums, and especially at private institutions, such as charitable infirmities and all kinds of hospitals, there is a restriction as to the qualifications to be held by candidates for medical appointments. But in such cases there is no subsequent special examination. The appointments are given on testimonials. But in the case of Naval and Military medical appointments, it is always provided that special tests are applied. Now, in these, not only should medical and surgical knowledge and experience count; but it is perfectly easy at the examinations to test the educational status of a candidate, especially in reference to his fitness to draw up intelligible and well-expressed reports, to his capacity in the use of statistics, and to his culture generally. All subsequent promotions would assuredly be governed by considerations of this kind.

APPENDIX No. 40.

PAPER *handed in by* SIR HENRY ROSCOE, *M.P., on Friday December 16th*, 1892. (*See Question* 17,810.)

MEMORIAL to the RIGHT HONOURABLE the EARL COWPER, Chairman, Royal Commission on the Gresham University.

The undersigned desire hereby respectfully to record their strong opinion that the foundation of a Teaching University for London, without due provision being made for higher Education and original Research, would be unworthy of the Metropolis, and would entail the neglect of an admirable opportunity for promoting the advancement of Science and Learning.

PRESIDENTS OF LEARNED SOCIETIES, &c.

Kelvin, President of the Royal Society.
Archibald Geikie, President of the British Association for the Advancement of Science.
Rosse, President of the Royal Dublin Society.
Douglas Maclagan, President of the Royal Society of Edinburgh.
F. A. Abel, President of the Iron and Steel Institute.
Geo. Fras. Fitzgerald, President of the Physical Society.
W. E. Ayrton, President of the Institution of Electrical Engineers.
W. A. Anderson, President of the Institute of Mechanical Engineers.
Alex. Crum Brown, President of the Chemical Society.
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M. Carteighe, President of the Pharmaceutical Society of Great Britain.
J. William A. Tilden, President of the Institute of Chemistry of Great Britain and Ireland.
T. H. Huxley, Ex-President of the Royal Society.
Jos. D. Hooker, Ex-President of the Royal Society.
William Huggins, Ex-President of the British Association.
Henry E. Roscoe, Ex-President of the British Association.

Appendix No. 40.

William Flower, Ex-President of the British Association.
Alexander W. Williamson, Ex-President of the British Association.
Rayleigh, Secretary of the Royal Society.
M. Foster, Secretary of the Royal Society.
John Evans, Treasurer of the Royal Society.
W. H. M. Christie, Astronomer Royal.

Edmund Warre, Head Master of Eton College.
E. J. C. Welldon, Head Master of Harrow School.
J. Percival, Head Master of Rugby School.
Fred W. Walker, Head Master of St. Paul's School.

Leslie Stephen.
Dyce Duckworth, M.D.
Lauder Brunton, M.D.

OXFORD UNIVERSITY.

F. Max Müller, Professor of Comparative Philology.
R. B. Clifton, Professor of Experimental Philosophy.
J. Franck Bright, Master of University College.
J. Herbert Warren, President of Magdalen College.
Bartholomew Price, Master of Pembroke College and Sadlerian Professor of Natural Philosophy.
N. Story Maskelyne, Professor of Mineralogy.
E. Ray Lankester, Professor of Comparative Anatomy.

CAMBRIDGE UNIVERSITY.

R. C. Jebb, Professor of Greek.
James Dewar, Jacksonian Professor of Natural Philosophy.

EDINBURGH UNIVERSITY.

Wm. Turner, Professor of Anatomy.
S. H. Butcher, Professor of Greek.
G. B. Crystal, Professor of Mathematics.
Alex. Crum Brown, Professor of Chemistry.
J. C. Ewart, Professor of Natural History.
James Geikie, Professor of Geology.
H. Calderwood, Professor of Moral Philosophy.
T. R. Fraser, Professor of Materia Medica.
A. R. Simpson, Professor of Midwifery.
J. Eggeling, Professor of Sanskrit and Comparative Philology.
A. H. Charteris, Professor of Biblical Criticism.
Fr. Niecks, Professor of Theory of Music.

GLASGOW UNIVERSITY.

Wm. Jack, Professor of Mathematics.
John G. W. McKendrick, Professor of Physiology.

ABERDEEN UNIVERSITY.

W. D. Geddes, Principal.
Wm. Milligan, Professor of Divinity and Biblical Criticism.
G. Pirie, Professor of Mathematics.
J. Harrower, Professor of Greek.
Henry Cowan, Professor of Divinity and Church History.
Wm. Ramsay, Professor of Humanity.
C. Niven, Professor of Natural Philosophy.
Alexander Stewart, Professor of Systematic Theology.
Arch. R. S. Kennedy, Professor of Oriental Languages.
W. Minto, Professor of Logic.
John Fyfe, Professor of Moral Philosophy.
J. Dover Wilson, Professor of Law.
James W. H. Trail, Professor of Botany.
Wm. Stephenton, Professor of Midwifery.
H. Alleyne Nicholson, Professor of Natural History.
Alex. Ogston, Professor of Surgery.
David J. Hamilton, Professor of Pathology.
J. A. MacWilliam, Professor of Institutes of Medicine.
Mathew Hay, Professor of Medical Jurisprudence.
T. Theodore Cash, Professor of Materia Medica.
R. W. Reid, Professor of Anatomy.
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John Burnet, Professor of Greek.
Henry Jones, Professor of Logic and Metaphysics.

VICTORIA UNIVERSITY.

Owens College, Manchester.

A. W. Ward, Principal.
A. H. Young, Dean of the Medical Department.
D. Leech, Professor of Materia Medica and Therapeutics.
J. Dreschfeld, Professor of Medicine.
Wm. Stirling, Professor of Physiology.
Sheridan Delépine, Professor of Pathology.
T. F. Tout, Professor of History.
Robert Adamson, Professor of Logic.
H. B. Dixon, Professor of Chemistry.
T. N. Toller, Professor of English.
J. Strachan, Professor of Greek and Comparative Philology.
A. S. Wilkins, Professor of Latin.
Herman Hager, Lecturer in German Language and Literature.
Victor Kastner, Lecturer in French Language and Literature.

Yorkshire College, Leeds.

N. Bodington, Principal.
Arthur Smithells, Professor of Chemistry.
Wm. Stroud, Professor of Physics.
Herbert Ingle, Assistant Lecturer on Chemistry.
Julius B. Cohen, Lecturer on Organic Chemistry.
C. F. Baker, Demonstrator of Chemistry.
T. T. Groom, Demonstrator on Zoology.
H. Wager, Assistant Lecturer in Biology.
L. C. Miall, Professor of Biology.
J. J. Hummel, Professor of Dyeing.
A. G. Perkin, Assistant Lecturer and Demonstrator in Dyeing.
Walter M. Gardner, Assistant Lecturer and Demonstrator in Dyeing.
John Goodman, Professor of Mechanical and Civil Engineering.
Sidney H. Wells, Assistant Lecturer in Engineering.
Andrew Forbes, Demonstrator in Engineering.

BRITISH (NATURAL HISTORY) MUSEUM.

William Flower, Director.
Albert Günther.
Lazarus Fletcher.
W. R. Ogilvie Grant.
W. F. Kirby.
Ernest E. Austen.
Henry A. Miers.
Thos. Davies.
Oldfield Thomas.
Arthur Smith Woodward.
Chas. E. Fagan.
Henry Woodward.
A. G. Butler.
Edgar A. Smith.
R. J. Pocock.
George T. Prior.
Robert Etheridge.
R. Bullen Newton.

ROYAL COLLEGE OF SCIENCE, LONDON.

T. H. Huxley, Dean.
Arthur W. Rücker, Professor of Physics.
T. E. Thorpe, Professor of Chemistry.
John W. Judd, Professor of Geology.
J. N. Lockyer, Professor of Astronomy.
W. C. Roberts-Austen, Professor of Metallurgy.

BRITISH UNIVERSITY COLLEGES.

UNIVERSITY COLLEGE, LONDON.

W. F. R. Weldon, Professor of Zoology.
A. E. Housman, Professor of Latin.
G. Carey Foster, Professor of Physics.
Wm. Ramsey, Professor of Chemistry.

James Sulley, Professor of Logic.
W. Wyse, Professor of Greek.
W. P. Ker, Professor of English Literature.
Victor Horsley, Professor of Pathology.

MASON COLLEGE, BIRMINGHAM.

R. S. Heath, Principal and Professor of Mathematics.
William A. Tilden, Professor of Chemistry, and President of the Institute of Chemistry of Great Britain and Ireland.
T. W. Bridge, Professor of Zoology.
W. Hillhouse, Professor of Botany.
Bertram C. A. Windle, Dean and Professor of Anatomy.
F. J. Allen, Professor of Physiology.
J. H. Poynting, Professor of Physics.
Robt. Saundby, Professor of Medicine.
E. A. Sonnenschein, Professor of Classics.
C. Bévenot, Professor of French and Italian.
G. Fielder, Professor of German.
G. Barling, Professor of Pathology.

DURHAM COLLEGE OF SCIENCE.

Wm. Garnett, Principal.
Geo. S. Brady, Professor of Natural History.
R. L. Weighton, Professor of Engineering.
G. A. Lebour, Professor of Geology.
P. Phillips Bedson, Professor of Chemistry.
John H. Merivale, Professor of Mining.
Henry Stroud, Professor of Physics.
William Somerville, Professor of Agriculture.

FIRTH COLLEGE, SHEFFIELD.

W. M. Hicks, Principal.
W. Carleton Williams, Professor of Chemistry.
W. C. F. Anderson, Professor of Classics.
Alfred Denny, Professor of Biology.
L. T. O'Shea, Lecturer on Chemistry.
George Young, Lecturer on Chemistry.

UNIVERSITY COLLEGE, DUNDEE.

W. Peterson, Principal.
Darcy W. Thompson, Professor of Natural History.
E. Waymouth Reid, Professor of Physiology.
A. M. Paterson, Professor of Anatomy.
W. S. McCormick, Professor of English.
T. C. Fidler, Professor of Engineering.
J. C. A. Steggall, Professor of Mathematics and Natural Philosophy.
Percy F. Frankland, Professor of Chemistry.

UNIVERSITY COLLEGE, BRISTOL.

C. Lloyd Morgan, Principal and Professor of Geology and Zoology.
Sydney Young, Professor of Chemistry.
John Ryan, Professor of Physics.
R. Fanchawe, Professor of Latin and Greek.
Adolph Leipner, Professor of Botany.
James Rowley, Professor of Modern History and English Literature.
A. P. Chattock, Lecturer in Physics.
F. R. Barrell, Lecturer in Mathematics.
A. Richardson, Lecturer in Chemistry.
Normand Wyld, Assistant Lecturer in Biology.
F. Brooks, Lecturer in Classics.
L. N. Tyack, Lecturer in Physics.

CITY AND GUILDS OF LONDON CENTRAL INSTITUTION.

Henry E. Armstrong, Professor of Chemistry.
W. E. Ayrton, Professor of Electrical Engineering.
O. Henrice, Professor of Mathematics.
W. C. Unwin, Professor of Engineering.

ROYAL COLLEGE OF SCIENCE, DUBLIN.

W. N. Hartley, Professor of Chemistry.
W. F. Barrett, Professor of Physics.
Grenville A. J. Cole, Professor of Geology.
Thomas Johnson, Professor of Botany.
James Lyon, Professor of Engineering.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

John Attfield, Professor of Practical Chemistry.
J. Reynolds Green, Professor of Botany.
Joseph Ince, Lecturer on Pharmacy.
Henry G. Greenish, Lecturer on Materia Medica.

FELLOWS OF THE ROYAL SOCIETY.

(*Names not contained in other lists.*)

W. T. Blanford.
Robert H. Scott.
Francis Galton.
William Crookes.
Silvanus P. Thompson.
Herbert McLeod.
E. Frankland.
W. T. Thiselton Dyer.
Raphael Meldola.
George Forbes.
John Conroy.
Shelford Bidewell.

Appendix Nos. 40 and 41.

APPENDIX No. 41.

PAPER *sent to the Commission by* DR. JOHNSTONE STONEY *after giving evidence.* (*See Question* 18,852.)

Appointment of University Professors, the professors of a College of the University being regarded as professors of the University attached to that College.

The following mode of appointing seems to me the best, although I do not strongly urge that the selection of professors shall be made in any one way in all cases.

For each vacancy which has to be filled let a special board of selection be created, consisting of professors who are experts in reference to the subject of the vacant chair, with, perhaps, some external assessors. For example, suppose that there are three Colleges in the University and that a vacancy occurs in the Chair of Greek in one of them. The Board of Appointment might in this case consist of the Professor of Latin in that College, of the Professors of Greek and Latin in the two other Colleges, and of two eminent classical scholars taken from sister Universities. There would thus be seven members of this Board specially called into existence to fill the vacancy.

The person selected would probably have already served in the office of lecturer or of recognised tutor in one of the Colleges of the University, or in another University, if, as I have suggested in my evidence, the instruction of these three classes of teacher is recognised by the University and College.

And, as the tendency in a University College is to be officered by a too-aged staff, I would suggest that this tendency be counteracted by taking age into account when appointing professors under some such rules as the following:—

1. Each elector in voting shall take the ages of the candidates into account; and when the votes are thus given—
2. —(*a.*) A majority of votes shall suffice to elect a person under 26 years of age, *i.e.*, in the instance given, four out of the seven votes.
   (*b.*) To elect a person between 26 and 30 years shall require a majority of two-thirds, *e.g.*, the votes of five out of the seven members of the board.
   (*c.*) To elect a person between 30 and 40 shall require all but one of the members of the board to concur in recommending him.
   (*d.*) And no person over 40 shall be appointed to a professorship, unless such circumstances have arisen that the Board are unanimous in recommending him.

Some minor details of this mode of selecting professors would need to be provided for before it could be put in practice, to ensure that the successive steps to be taken by the board shall not clash; but they present no special difficulty.

Appendix Nos. 41 and 41*a*.

A similar machinery for appointing lecturers could be easily planned.

The "Recognised Tutors" need not be restricted in numbers. The natural course of events would sufficiently determine their number. They may be all the sufficiently highly qualified persons who ask that their instruction be recognised. The recognition should only continue so long as the tutor is *bonâ fide* acting.

APPENDIX No. 41*a*.

PAPER *handed in by* DR. JOHNSTONE STONEY *on January 12th*, 1893. (*See Question* 18,870.)

STATEMENT with REFERENCE to CLAUSES 11, 12, 13, and 14, and the proviso in CLAUSE 4, of the UNIVERSITY EDUCATION (IRELAND) ACT OF 1879, prepared by direction of the CONVOCATION of the QUEEN'S UNIVERSITY, for the information of the Prime Minister.

In the last days of the Session of 1879 an Irish University Education Bill passed through all its stages in both Houses of Parliament, and became law.

This measure, vitally affecting the Queen's University, was hurried forward with such haste that, incredible as it may seem, no communication was made by the Government to the Queen's University, nor was any opportunity afforded to it of forming or expressing any opinion on the subject.

The Act consists of two distinct parts; a constructive part creating an Examining Board in Ireland, with power to confer degrees; and a destructive part which declares that the Queen's University shall be dissolved.

For the second of these, not only does there not exist any precedent, but, if it be maintained, it becomes itself an alarming precedent for the other Universities of the United Kingdom, having regard to the circumstances under which it was carried.

It was not denied that the Queen's University had loyally, and with signal success, discharged all duties entrusted to it; the University was even commended on this ground: but in the hurry of the late Government the essential character of the Queen's University was misconceived—the Government had no time to inquire—they put forward a history of the University according with its supposed character, but quite at variance with its real history—at variance *with its history in respect of every particular* which bore on the legislation which they proposed—and they rested on these errors their recommendation to Parliament to dissolve the University. The Queen's University exerted itself to its utmost to get these disastrous mistakes corrected; but there was not time, the Session was on the point of closing, the Bill was urged through its last stages, and became law.

Lord Cairns, in making the official statement of the Government, on the 30th June, 1879, said (Hansard, Third Series, Vol. 247, col. 937 and 941)—

> "Now, what is the case with regard to the Queen's University? My Lords, the history of the Queen's University is this:—In the year 1845 there were founded three Queen's Colleges in Ireland—one at Belfast, one at Cork, and one at Galway. They were founded, in the first instance, as Colleges, without any arrangements for conferring degrees. They were provided, by Parliament with grants for building, and with considerable endowments for the foundation of scholarships and exhibitions. In a few years afterwards—I think in 1850—the Queen's University was incorporated for the purpose of conferring degrees upon those who were students of those three Colleges. Now your Lordships will understand that the Queen's University itself has, what I may term, no local or real existence beyond that of its corporate character. What I mean to say is, it does not undertake to teach; it has no Professors, it has no Fellows. It is not provided with any scholarships or exhibitions—it is simply an Examining Body. But, then, your Lordships will observe the peculiarity of this Examining Body is this—it does not examine for the purpose of conferring degrees at large, but for the purpose of conferring a degree only on those who pass through a curriculum or course of study in one of the three Queen's Colleges."
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> . . . . . .
>
> "The question then arises, what do we propose with reference to the Queen's University? Your Lordships will remember that the Queen's University itself is but an Examining Body; but it is an Examining Body simply for the purpose of examining those students who are members of the three Queen's Colleges. It appears to the Government that it would be an arrangement not only inconvenient, but without precedent, to establish in one metropolis three Universities—Trinity College (the University of Dublin), the Queen's University, and the University which is proposed to be created by this Bill—and that it would be still more indefensible to adopt that course, when you consider that two of these Universities would be performing exactly the same functions—namely, examining for degrees—with only a trifling distinction. We, therefore, propose that as soon as the University to which I have referred is constituted by Royal Charter, steps shall be taken for the dissolution of Queen's University."
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> . . . . . .

Now, so far from the Queen's University being an afterthought grafted upon the original design of the Queen's Colleges, as represented to Parliament by Lord Cairns, it was an essential part of that original design. In introducing the Queen's Colleges' Bill, in 1845, on behalf of the Government, Sir James Graham said (Hansard, Third Series, Vol. 80, col. 358)—

> "I should still leave the statement most imperfect if I did not glance at other important and peculiar circumstances connected with it. The Bill I propose to bring in does no more than propose to build and establish those Colleges in Ireland; but the great question that presents itself is—shall these three Colleges be associated together in one University? or, following the example of Scotland, shall the Crown, in the exercise of its prerogative, endow each of these Colleges with the power of granting Degrees in Arts, Sciences, and in Medicine? Now, sir, it is not necessary—and, as I think, it would not be expedient—in the present Bill, and at the present time, to fix and carry out any definite arrangement on that point. It is not necessary on the one hand; while, on the other, I hold it to be important that we should ascertain what amount of success attends this first step—and it is a large step—in advance, before that question is finally decided. At the same time I will not be so deficient in candour as not to state what is my own opinion of the matter. I think that the advantages in favour of a Central University decidedly preponderate. . . . . This brings me to the question, if we are to have a Central University for Ireland, with which these Colleges shall be in connexion, where shall it be? Now, upon this point I am bound to say that, considering all the circumstances of the case, and having come to the conclusion that there should be a Central University, in which all these Provincial Colleges should be associated, I think that Central University should be in the metropolis of Ireland."

It thus clearly appears that the constituting of the Queen's Colleges a University was an essential part of the design laid before Parliament in 1845, and that the only question which the Government reserved was whether each College should have University powers, or whether they should be associated together. The view of the Government as to the necessity of the University was accepted by Lord Palmerston, who spoke as follows on behalf of the Opposition. (Hansard, Third Series, Vol. 80, col. 408)—

> "Sir, I agree entirely with those who consider this Bill as only a foundation which requires a superstructure in order to make the plan complete. It will be found absolutely necessary to establish some central point, probably in connexion with Trinity College, Dublin, which will combine these different Colleges into one University, and will, if possible, connect Trinity College with it as a component part. When I consider all the difficulties with which the arrangement of the details must be attended, I am far from blaming Her Majesty's Government for not having made that aggregate

University a part of their present proposal; but, at the same time, I must say their measure will be incomplete if, sooner or later, they do not combine with it a larger arrangement of that nature."

Accordingly, as soon as the Colleges were ready to receive students, steps were taken to incorporate the University which was to complete them. The Act under which the Queen's Colleges were founded passed in 1845. Four years were spent in building and preliminary arrangements. It was not till November, 1849, that the colleges were opened for the reception of students, and in the following year the Queen's University was founded to unite them into one institution, and to complete the education which they give. There was no such interval of some years as Lord Cairns imagined. Even the short interval of months, rendered necessary by the formalities that had to be gone through in preparing the University Charter was provided for by the creation by the Government of a Special Temporary Board, which discharged the University functions for the time, whose regulations were acted on in the Colleges from the beginning, and were adopted as the first ordinances of the University as soon as it was constituted. Thus, from the very first, the Colleges started as parts of one great organization, and neither in the original design, as laid before Parliament, nor in the actual order of events, was there any foundation for the representation made by Lord Cairns.

Lord Cairns was equally unfortunate when he ventured the statement to Parliament that the Queen's University was "simply an Examining Body." Nothing can be further from the truth. In its initial conception, by the terms of its Charter, and in the way in which it has been worked, the Queen's University is not a mere Examining Board, nor is it a distinct institution from the Queen's Colleges, but they together form one institution, the main and important function of which is to teach. The buildings of the Queen's Colleges are not colleges in the English acceptation of the word, *i.e.*, they are not buildings in which students reside. They are the lecture halls in which *the instruction of the University* is given at three distinct stations, and they thus correspond exactly with the University buildings of the Scotch or Continental Universities.

To mark emphatically that instruction in the Colleges is the instruction of the University, the University Charter provides that the Professors in the Queen's Colleges are Professors of the University; and the maintenance of this relation is ensured in the most substantial way by the duties imposed upon the University Senate. It is this central authority which prescribes what shall be taught whether at Belfast, Cork, or Galway, as a condition for a degree; in what order the studies shall succeed one another; how long each shall be pursued, and what option shall be allowed to the students; and this teaching, so prescribed by the Senate, is given simultaneously by the University Professors in the three Queen's Colleges. The University Senate also lays down the examinations which the students are to pass in common, and for that purpose brings together, in Dublin, nearly its whole staff of Professors, and forms them, along with some external examiners, into Boards of Examiners, by whom the students are examined. The University has thus been in a position to weave its teaching and examining into one consistent whole, and this it has done with the utmost care.

So far from the Queen's University being "simply an Examining Board," as alleged by Lord Cairns, it is a University of the strictest academical type that has yet been seen in the British Isles. To TEACH is its predominant function, and it has, with signal success, applied itself to subordinate its examinations to its more important function of teaching; to render its examinations such as will best co-operate with the instruction instead of controlling it, and to do what in it lies to counteract the baneful effects on higher education of "the examination fungus," which is abroad. Its examinations, as already explained, are mainly conducted by its teachers; its regulations for these examinations are largely based by its governing Senate on reports received from these teachers. Its examiners, being experienced teachers, are of the class who make the most efficient examiners, and they are subjected to the best checks yet contrived for insuring the full discharge of their difficult duties, inasmuch as they are the persons most interested in improving the examinations entrusted to them; and inasmuch as they fulfil their functions under the observation of colleagues as expert as themselves. The University examinations, and the instruction given to the students in the Colleges, have thus been brought by the experience of 30 years into such healthy relation, that they together tend in an eminent degree to promote the higher forms of instruction, and to discourage cramming.

It is this support given by the examinations and the instruction to each other, and the combination of both in the case of every candidate who obtains a degree, which are the distinguishing features of the culture of the Queen's University, a system of culture every part of which is in broad contrast with that which it has been made the duty of the new University to evolve. It was, therefore, an entire misapprehension on Lord Cairns' part to suppose that the new University and the Queen's University if allowed to co-exist, "would "be performing exactly the same functions with only "a trifling distinction."

This admirable system has been *fully* carried out in all the faculties except that of medicine, and in medicine it has been carried out as far as the exigencies of medical education allow. All the graduates in arts, law, and engineering of the University, and they are the most numerous body of its graduates, have received their *whole* training under this system, and the great majority of its graduates in medicine have received most of their training under it. By careful statistics, extending over ten years, it was ascertained that the *average* stay of a student under instruction in the Queen's University is over three years—a period sufficient for effectual training—and this average has taken account of every student however slenderly connected with the University. There were last session 958 students receiving instruction in the halls of the Queen's University, and the numbers are year by year on the increase, a great work, when it is borne in mind that until the Queen's University was founded, no students in Ireland obtained a true University training, except those students of Trinity College, Dublin, who did not avail themselves of the permission given by the University of Dublin to seek degrees by examination only.

A University degree may mean much, or it may mean little. Its real significance is not known until the University is named in which it has been obtained, and it reflects credit on the Queen's University that it has gained the respect and affection of the great body of its graduates. It is now proposed that the graduates of a University whose reputation has been slowly and worthily won, and is steadily rising in the estimation of educated men, shall be compelled to resign the title which they have laboriously earned, which they lawfully hold, and of which they are justly proud, for the degree of a University of an essentially different type, and whose reputation has yet to be made.

Convocation earnestly deprecates the extinction of the Queen's University, because it would be an unprecedented invasion of the lawful and highly valued rights of its graduates, but far more earnestly because it would destroy that admirable type of education which has grown up in the Queen's Colleges, the work of thirty years, and would force those institutions to begin again and shape their new course as best they can towards a less perfect ideal.

It appears from the Act of 1879 that it was not the intention of the Government or Legislature to injure the Queen's Colleges; and it further appears that the legislation in its present form was carried under an entire misapprehension of the true relation of the Queen's University to the Queen's Colleges. If the importance of this relation had been sufficiently appreciated, it may, perhaps, be questioned whether Parliament would have inflicted so great an injury upon higher education in Ireland, or interfered so seriously with the personal rights of individual graduates.

As the cost of maintaining the Queen's University is only about 4,500*l.* a year, Convocation assumes that the saving of this small sum cannot have been the motive for the dissolution of the University.

Convocation feels so strongly the injury which would be inflicted on the members of the University (in some cases expected to lead to pecuniary loss), as well as that done to the cause which they have at heart, that it earnestly desires a reconsideration of the position of the University, taking into account the real facts of the case.

By Order,
JAMES WILSON, M.A., LL.B.,
Clerk of Convocation.

Queen's University,
November, 1880.

Appendix No. 41*a*.

MEMORANDUM on the HISTORY of the QUEEN'S UNIVERSITY in its relation to recent legislation, prepared by direction of the SENATE of the UNIVERSITY for the information of the PRIME MINISTER.

In 1845, Her Majesty's Government asked Parliament to provide University Education in Ireland, which should be open to all denominations. In the Bill which was submitted, and which became the Colleges Act of 1845, an endowment was given for three colleges, and provision made for increasing the number if it should be desirable.

The Government explained to Parliament that these colleges were either to be united in one university, or endowed separately with university powers. Lord Palmerston, on the part of the Opposition, concurred in the necessity of there being a university, but argued that it would be better that they and Trinity College, Dublin, should be united in one university. The Government met this argument, by pointing out that the new colleges would be undenominational, while Trinity College was a denominational college, and that it was not desirable to bring together denominational and undenominational colleges in one university.

When the Act passed, the erection of college buildings at Belfast, Cork, and Galway was proceeded with, and the Queen's Colleges were ready for the reception of students in the session 1849–50.

As the University Charter had not yet been issued, the Government convened a special board to discharge for a time the university functions. This board consisted of the presidents and vice-presidents of the three colleges, and it was they who laid down the regulations in regard to studies under which the Queen's Colleges opened, regulations which were adopted by the University as its first ordinances, when the University some months later was legally constituted. Accordingly, the Queen's Colleges from the first were parts of one homogeneous university organization, although the Charter which gave legal force to the university powers, and made the teachers in the Queen's Colleges University Professors, did not pass the great seal for some months after the colleges of the University opened.

These ordinances continued with but little change to regulate the education in the Queen's University for several years. Meanwhile events occurred outside the University, which had an important bearing on its future destiny, and to which it is therefore necessary to refer.

In 1854 the great debates took place in Parliament which issued in the reform of the Universities of Oxford and Cambridge. This reform amounted to a revolution, as it transferred the legislating power in these universities from the heads of houses and principal university officers, by whom it had been previously exercised, to bodies created by the Acts of 1854 and 1856, in which the chief influence is vested in the persons engaged in teaching in the university, whether as professors, college tutors, or private tutors. Substantial power is also allowed to the graduates at large, while to the heads of houses and university officers a considerable share is also assigned, though less than that transferred to the other resident members of the university.

Full preparation was made for these important debates in Parliament by the exhaustive inquiries of the Royal Commissions which preceded them; and during their continuance all the parties in the universities used their most strenuous efforts that their respective views should be fully considered. One result of this has been that the record of this legislation, as it stands in the pages of Hansard, is, perhaps, the most instructive chapter in the history of the universities of Great Britain.

The Queen's University had, however, been planned before these debates in Parliament threw their abundant light upon the proper constitution of universities. The professors were omitted from its governing senate, and no provision was made that the graduates, as soon as they should become a sufficient body, should be allowed a share of influence. The precedents, in fact, that were followed, and it must be admitted were very properly followed, were those of the unreformed Universities of Oxford and Cambridge. And had it been otherwise, it would have been impracticable in the first years of a University, and before its teachers had acquired experience, to have brought into real effect the principles established in 1854. But an episode which occurred in the history of the Queen's University indirectly brought about this result in a very complete way.

In 1857 a Royal Commission was issued to inquire into the Queen's Colleges, and amongst other matters the Commissioners inquired fully into the effect of the legislation of the University on the instruction in the Colleges. By this means a voluminous and very complete criticism of the regulations of the University was elicited from its professors. Fortunately, this inquiry was not entered upon until the professors had acquired some years' experience as University teachers, and were in a position to give an enlightened opinion upon the topics about which they were examined; for there is no class of subjects in reference to which the plausible more frequently differs from the true, and in which theorists will accordingly be more in risk of feeling confident, while in reality going astray. The body of evidence collected at that time has been of inestimable service to the University. It exposed every weak point which experience had shown to exist in the legislation originally adopted in the University, and it also in many cases pointed out the remedies.

Shortly after this important evidence was published, the attention of the Senate was occupied upon it, and with great wisdom they subjected the then existing regulations of the University to a careful scrutiny, which resulted in their introducing important, and, in some instances, fundamental amendments into the curricula of the Faculties of Arts, Law, and Engineering. There were obstacles at the time to the application of a similar treatment to the Faculty of Medicine; but by a succession of steps since taken, this Faculty also has been brought into harmony with the light then and subsequently obtained, and there is, perhaps, no faculty of the University in reference to which on the whole a greater amount of improvement has taken place.

The next event of great significance to the University was the advent into the Irish Office, in 1859, of Mr., now Lord Cardwell. Lord Cardwell had been actively engaged in connexion with the legislation a few years before, which reformed the Universities of Oxford and Cambridge, and he was deeply imbued with the principles of that legislation. It is rare to meet a statesman who has the intimate acquaintance which he had of the affairs of Universities, and of the fundamental principles of University legislation. He saw the defects in the Queen's University and in its Colleges, which were the natural result of their constitution having been framed at a time when no statesman was possessed of the knowledge that had afterwards been elicited by the debates in Parliament in 1854, and the inquiries at Oxford and Cambridge which preceded them. Accordingly, under his direction, amended Charters for the Queen's Colleges and the Queen's University were drafted, by which he proposed to give to these institutions the more advantageous constitution and provisions which the discussion of University questions in Parliament had shown to be attainable.

Unfortunately, Lord Cardwell left the Irish Office shortly after he had completed the drafts of these Charters, and it devolved on his successor, who of necessity had not the same intimate knowledge of the details of these documents, to propose them for the acceptance of the Corporations of the Colleges and University. It was almost a necessary consequence that the drafts prepared by Lord Cardwell suffered some loss in obtaining that acceptance; the chief loss being, so far as concerns the present memorandum, that the clauses in which Lord Cardwell had proposed that the professors should send six representatives to the Senate were struck out, and a clause was introduced forbidding Convocation to elect a professor. This loss has in some degree been remedied by the subsequent action of the Crown, which, in the exercise of its discretion, has appointed professors to fill some of the vacancies on the Senate which have since arisen.

Although this provision was lost, a very important advance was made by these Charters. By them the Corporation of the University was extended beyond the Senate, to which it had previously been limited, so as to include the professors, graduates, and students of the University. Convocation also was called into existence, and endowed with substantial powers. And above all in importance, when measured by the effect on the subsequent progress of the University, was the provision which entrusted most of the University examinations to the University professors, acting in boards and under checks, which have caused the arrangement to work most advantageously.

This system not only committed the University examinations to the persons most competent to conduct them, but, indirectly too, it has had very important effects. It has secured an annual conference between the three colleges, and has blended the whole University into one homogeneous body. It has enabled the

Senate annually to obtain the assistance of the University professors in determining and varying the details of University legislation. Each college has, through its means, benefited by the experience of the other two. The courses of instruction for the ensuing session are arranged at each annual conference, so as sufficiently to correspond with one another in the three colleges, while at the same time the teaching in the colleges has been freed from the deadening pressure of external control, and given all the vitality of spontaneous intellectual work. It is further to be observed that the functions of each examining professor are discharged in the presence of colleagues who are equally experts with himself; and by all these means co-operating with one another the whole vigour, tone, and quality of the work done in the University has been raised to an unusual height.

In Lord Cardwell's Charter care was taken to preserve the power given in the Colleges Act of 1845, by making provision for a possible increase of the number of colleges in the Queen's University, and this provision stands part of the Charter as it now exists.

In 1862 the Queen's University established local examinations for the examination of candidates not educated at its colleges, and gave to the candidates who satisfied the examiners at these examinations certificates analogous to those issued in like cases by the Universities of Oxford and Cambridge. This branch of the University's work was, some years later, extended to women, and has proved of eminent service. The University of Dublin afterwards opened similar examinations for women, and these local examinations of the Queen's University were also the precursors of the Intermediate Examinations which have recently been established in Ireland by Act of Parliament.

The next event which deeply affected the University was the offer made to it in 1866 of a supplementary Charter, which proposed to open its degrees to all persons who presented themselves for examination, whether they had undergone a University training or not. The experience of the London University had shown that the exercise of this power led inevitably to the loosening of the connexion between a University and its colleges, and was incompatible with the maintenance of true University education. The offer was accordingly declined.

Since 1866 the career of the University has been one of continuous attention to its duties and the diligent discharge of them. The admirable mode of conducting the University examinations, established in 1863, has bound the whole institution, the University and its three colleges, into one homogeneous structure. It has enabled the Queen's University to introduce, without delay and according as they arise, such improvements into all branches of its work as the advance of knowledge or the progress of events make possible, and it has thus enabled this University to advance in the foremost rank among the Universities of the United Kingdom. The practical examinations which the Queen's University has, of late years, introduced into its medical curriculum, may be given as one out of many instances of this. The Queen's University was the first of the licensing bodies in Ireland to adopt practical examinations as a part of its medical education, and it has been able to raise some of them to a condition of unequalled efficiency.

The reputation of the Queen's University among educated men has constantly and deservedly been on the increase. The appreciation of the public is shown by the steadily increasing number of candidates who seek admission to its halls, and the prevailing seriousness of their studies while there. The labours of the Queen's University have, in fact, more than doubled the number of persons in Ireland who receive a true University education. Three hundred and thirty-eight new students obtain admission to its instruction last session; nine hundred and fifty-eight were taught: and these numbers are not the limit, they are still annually on the increase. The average stay of a student under instruction has been found to be more than three years. The work of the University is thus not only of the highest quality, but is also being carried out on a large scale, and producing a proportionately large amount of good in Ireland. The quality of this work could not be maintained if the intimate bond between the University and its colleges is severed.

By order of the Senate,
G. JOHNSTONE STONEY, D.SC., F.R.S.,
Secretary to the University.

Queen's University,
December 21, 1880.

APPENDIX No. 41*b*.

Appendix Nos. 41*a* and 41*b*.

PAPER *sent to the Commission by* DR. JOHNSTONE STONEY *after giving evidence.* (*See Question* 18,874.)

FORM for EXAMINER'S REPORT used in the late QUEEN'S UNIVERSITY in IRELAND.

[Explanation.—The subjoined form is that which was used in the Queen's University by the sub-boards who examined in the several subjects.

Let us suppose that such an examination as the "First University Examination in Arts" of the Queen's University, has to be dealt with. This examination included Greek, Latin, Mathematics, Mathematical Physics, a Modern Language, English Composition.

Three Professors should, as a rule, be associated in each sub-board of examiners. The three examiners in, for example, Greek consult together after the examination and fill in the form on the next page. When this has been done by all the sub-boards, they hold a joint meeting, and for this meeting another printed form has to be provided, of which each examiner should have a copy, and on to which he is to transfer the "Resultant Awards" (*see* next page) of the several sub-boards. The headings of this second form, in the case of the above-mentioned examination, would be—

No. of Candidate.	Greek.	Latin.	Mathematics.	Mathematical Physics.	Modern Language.	English Composition.	Final Decision.

Each examiner will thus have before him the "Resultant Awards" of all the sub-boards to guide his vote as to the "Final Decision." It was found of advantage to have the names printed on the forms, to avoid the risk of errors of transcription.]

FORM OF REPORT used by each Sub-Board.

Name of Examiner, _____

Subject of Examination, _____

Degree, Diploma, or First University Examination; and whether Honour or Pass, _____

Date, _____

Each Examiner is requested, in the first instance, to insert in the table the numbers which he allots to the Candidates for their answers to the questions put by him.

He is requested, in the next place, to copy into the table the similar numbers awarded to the Candidates by the two other Members of his Board.

The Board will then proceed, upon a review of the whole credit awarded to each Candidate in the subject in which they have examined him, to decide his place in the annexed Scale of Honour or Pass Judgments. The column headed "Resultant Award" is provided for this decision.

When the whole body of Examiners assemble to make their combined Report to the Senate, each Examiner is requested, when voting, to take into account the credit awarded to the Candidates in *all* the subjects in which they have been examined.

First University Examination in Engineering—September, 1881.

Resultant Award.	No. of Candidate.	Names of Candidate.	Credit given for each Question attempted in the Paper Examination.												Credit given for each Question attempted in the Oral Examination.												Observations.
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
	1	Adams, A. C.																									
	2	Banks, J. W.																									
	3	Byrn, G. A.																									
	4	Evans, J. D.																									
	5	Garside, E.																									
	6	Geraghty, T. R.																									
	7	Hardy, E. A.																									
	8	Heron, A. T.																									
	9	Johnson, F.																									
	0	Joyce, P.																									
	1	Jones, D. D.																									
	2	Kenny, J.																									
	3	Kyle, T.																									
	4	Long, J. S. L.																									
	5	O'Keeffe, E. A.																									
	6	Parry, R. T.																									
	7	Thompson, J.																									
	8	Thompson, W. J.																									
	9	Waddell, G.																									
	0	Waters, H. R.																									
		Whiteford, J. W.																									

Explanation of the Form of Report.

A separate number is to be recorded of the reply to each question attempted by the Candidate.

The number 4 will indicate that the Examiner is fully satisfied with the answer.

The numbers 1, 2, and 3, will indicate less degrees of merit; 1 being the lowest judgment which contributes to pass a Candidate, so far as the particular question under consideration is concerned.

The judgment 0 will indicate that the question has been attempted, but that no credit can be given for the reply. If it be necessary to record discredit, the Examiner will write *bad* or *very bad*.

A double tick [,,] will indicate that the question has not been attempted.

The number 5, which should be used sparingly, will indicate that the answer, besides being complete, does unusual credit to the Candidate.

If an Examiner deems it essential to make more minute distinctions, he can use the numbers $\frac{1}{2}$, $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$; but it will be found convenient to avoid fractions as much as possible. The Examiners are particularly requested not to employ decimals, which have sometimes led to error.

Scales of Judgments to be used in the Column headed "Resultant Award."

Honour Judgments.

Judgments contributing to place a Candidate in the First Honour Class.	Opt.	Optime, - -	The highest judgment, and one which should be awarded only for very rare merit.
	1_3	First Class + 3.	
	1_2	First Class + 2.	
	1_1	First Class + 1.	
	1	First Class, - -	By the judgment "First Class" is to be understood that the credit awarded to the candidate for his answering in the subject in which your Board has examined him is so good as to entitle him to a place in the First Honour Class if the other conditions under which he can obtain this position be fulfilled. The additions + 3, + 2, and + 1, imply that the candidate has more or less to spare above what would barely entitle him to First Class Honours. A similar meaning attaches to the judgment "Second Class," "Third Class," and "Fourth Class."
Judgments contributing to place a Candidate in the Second Honour Class.	2_3	Second Class + 3.	
	2_2	Second Class + 2.	
	2_1	Second Class + 1.	
	2	Second Class.	
Judgments contributing to place a Candidate in the Upper Pass Division.	3_3	Third Class + 3.	
	3_2	Third Class + 2.	
	3_1	Third Class + 1.	
	3	Third Class.	
Judgments contributing to place a Candidate in the Lower Pass Division.	4_3	Fourth Class + 3.	
	4_2	Fourth Class + 2.	
	4_1	Fourth Class + 1.	
	4	Fourth Class.	
Judgments implying various degrees of discredit.	if	May Pass if - -	For explanation of these judgments, see the Pass Judgments.
	un.	Rejected unless -	
	Rej.	Rejected - -	
		Pessime - -	

Pass Judgments.

Valde.	Valde, - -	By which is to be understood very unusually good.
3_3	Third Class + 3.	
3_2	Third Class + 2.	
3	Third Class + 1.	
3	Third Class.	
4_3	Fourth Class + 3.	
4_2	Fourth Class + 2.	
4_1	Fourth Class + 1.	
4	Fourth Class - -	By "Fourth Class," without further addition, is to be understood that the answering of the candidate is barely such as to entitle him to pass, if he have satisfied to the same extent his Examiners in the other subjects.
if	May Pass if - -	This judgment implies that the Board is not satisfied with the candidate's performance, but that the deficiency is slight enough to warrant his being allowed to pass, if his answering in other subjects bring the *average* of his judgments up to the Pass level.
un.	Rejected Unless -	Means that the answering of the candidate is bad, and that unless it be better in every one of the other subjects, or if the average of his judgments do not reach the Pass level, the Board thinks that he ought not to pass.
Rej.	Rejected - -	Means that the answering of the candidate is so bad that the Board is unable to recommend that he be allowed to pass, however well he may have done in other subjects.
	Pessime - -	Means that the candidate has exhibited no glimmering whatever of knowledge of the subject in which the Board has examined him. This judgment should be used very sparingly.

Appendix Nos. 41c, 41d, 42, and 43.

APPENDIX No. 41c.

PAPER *sent to the Commission by* DR. JOHNSTONE STONEY *after giving evidence.* (*See Question* 18,880.)

Suggested constitution of the Governing Body of the University.

Let us suppose that the governing body is to consist of 25 members. These might be distributed as follows:—

Ten representatives of the professors, lecturers, and recognised tutors of the University, the two senior representatives to go out of office each year unless casual vacancies have occurred.

Five representatives of all honour graduates of more than one and less than 15 years' standing—one representative to go out of office each year unless a casual vacancy have occurred.

Five representatives of undergraduates and junior graduates—the constituency consisting of—

- Students that have completed the first year with honours, each exercising one vote.
- Students that have completed the second year with honours, each exercising three votes.
- Students that have passed the second year without honours, each exercising one vote.
- Students and graduates of less than one year's standing that have completed the third year with honours, each exercising six or four votes according to his honours.
- Students and graduates of less than one year's standing that have passed the third year without honours, each exercising two votes.

Five representatives of associated institutions—professional (such as law or medical) or other (such as science schools)—in which a portion of the instruction recognised by the University may be given, one representative to go out of office each year unless a casual vacancy have occurred.

G. JOHNSTONE STONEY.

APPENDIX No. 41d.

PAPER *sent to the Commission by* DR. JOHNSTONE STONEY *subsequently to giving evidence.* (*See Question* 18,890.)

Evidence of Humphrey Lloyd, D.D., F.R.S., late Provost of Trinity College, Dublin, and before that Professor of Natural Philosophy in the University of Dublin.

Speaking of the practice of the University of Dublin of admitting to degrees candidates who have passed a series of examinations without residence, and therefore without receiving the instruction given in the University, and without having experienced "those other "moral influences which form an important part of "all University training," Dr. Lloyd concludes—

> "I would earnestly press—as the most urgent of all academic reforms—the importance of some provisions by which residence should be more directly encouraged, if it cannot be enforced." [Report of the Dublin University Commission of 1851, 52, 53, p. 303.]

APPENDIX No. 42.

STATEMENT *forwarded to the Commission by* DR. INGRAM *subsequently to giving evidence.*—(*See Question* 19,609.)

1. Number of Candidates who presented themselves at Degree Examinations in the Academic year 1891-92=202.

Passes 184.
Failures 46.

It will be observed that the sum of the passes and failures exceeds that of the individual Candidates who presented themselves: this arises from the fact that a considerable number of those who finally passed had failed at previous Degree Examinations within the year. Eighteen finally failed to pass.

Of those who passed 156 had in their previous course obtained some terms by attendance at lectures, and 28 had kept terms by examination only; and of those who finally failed to pass, 17 had obtained some terms by attendance at lectures, and one had kept terms by examination only.

2. Number of Candidates who presented themselves at Final Freshman ("Little Go") Examinations in the Academic year 1891-92=211.

Passes 201.
Failures 39.

It will be observed that the sum of the passes and failures exceeds that of the individual Candidates who presented themselves: this arises from the fact that a considerable number of those who finally passed had failed at previous "Little Go" Examinations within the year. Ten finally failed to pass.

Of those who passed 141 had in their previous course obtained some terms by attendance at lectures, and 60 had previously kept terms by examination only; and of those who finally failed to pass, eight had obtained some terms by attendance at lectures, and two had kept terms by examination only.

3. It appears from these numbers that the conjecture of the witness in his evidence that *three-fifths* of the students of Trinity College attend Arts Lectures during some part of their course was considerably under the true proportion. It also appears that the proportion greatly increases in the latter years of the course.

JOHN K. INGRAM.

APPENDIX No. 43.

PAPER *handed in by* PROFESSOR ADAMS *on January 26th*, 1893. (*See Question* 20,251.)

FACULTY OF SCIENCE.—KING'S COLLEGE.

NATURAL SCIENCE.

	Winter.	Summer.
Mathematics	3½ hours	3½ hours.
Mechanics	3 „	2½ „
Physics	2 „	2 „
Physical Laboratory	4½ „	4½ „
Chemistry	3 „	1 „
Chemical Laboratory	—	4½ „
Zoology	2 hours	—
Botany	2 „	3 hours.
Biology	—	2 „
Practical Biology	4 hours	4 „
Divinity	½ „	½ „

After completing this course the students specialise in those branches which they require, and devote their whole time to them.

APPLIED SCIENCE OR ENGINEERING.

	First Year.	Second Year.	Third Year.	
			Mechanical Engineering.	Electrical Engineering.
Mathematics	5 hours	4 hours	3 hours	3 hours.
Mechanics	2 „	4 „	4 „	4 „
Physics	2 „	2 „	—	—
Physical Laboratory	—	1½ „	2½ hours	2¼ „
Chemistry	2 hours	—	—	—
Chemical Laboratory	—	2 hours	—	—
Drawing	5½ hours	4½ „	6½ hours	2 hours.
Civil Engineering	2 „	2 „	—	—
Mechanical Engineering.	—	2 „	3 hours	3 hours.
Workshop	4 hours	—	—	—
Mechanical Engineering Laboratory.	—	6 hours	10 hours	3½ hours.
Electrical Engineering Laboratory.	—	—	—	8 „
Photography	—	—	1½ hours	1½ „
Divinity	¾ hour	¾ hour	¾ „	¾ „
Mineralogy and Geology.	3 „	1 „	—	—
Metallurgy	1 hour in 1 term.	—	—	—
Architecture	1 hour	1 hour	—	—

APPENDIX No. 44.

PAPER *handed in by* E. H. BUSK, *Esq., on February 2nd*, 1893. (*See Question* 20,923.)

SUGGESTED SYLLABUS FOR DIVINITY DEGREES.

General Conditions (as in Scriptural Examinations).

1. Each examiner shall have the power of putting a veto upon any question.
2. No question shall be so put as to require an expression of religious belief on the part of the candidate.
3. No answer or translation given by any candidate shall be objected to on the ground of its expressing any peculiarity of doctrinal views.
4. The general subjects of examination shall be—
(*a.*) Philosophy and the Philosophy of Religion.
(*b.*) The Ethnic Religions.
(*c.*) The languages and criticism of the Jewish and Christian Scriptures, and of the Ethnic Sacred Books.
(*d.*) The history of the Christian Churches, and of Judaism.

PRELIMINARY B.D.

1. Latin, as at Intermediate B.A., but the selected books to be philosophical or ecclesiastical.
2. Greek, as at Intermediate B.A., but the selected books to be by philosophical or ecclesiastical writers; *e.g.*, Plato.
3. Hebrew *or* Sanskrit *or* Arabic.
Grammar and Translation.
4. Old and New Testament History, and history of the Jews to the fall of Jerusalem.
5. General outlines of all Religions.

INTERMEDIATE B.D.

1. Mental and Moral Science.
As at B.A. final.
2. Hebrew text of some part of the Old Testament with the history therein contained;
or Arabic text of some Sacred Book with the history, &c.;
or Sanskrit text of some Sacred Book with the history, &c.
3. Greek text of some part of the New Testament with the history therein contained.
4. Selected Books of Modern Theological writers; *e.g.*, Butler's Analogy, Westcott's Canon of the New Testament, or some Ethnic writer.
5. History of Christianity (including the first six centuries with the conversion of the British Islands, and the history of the great monastic orders and sects in Modern Europe).

FINAL B.D.

1. Selected books of the Hebrew Scriptures, with history of the text, and questions on authority, date, substance, and form;
or equivalent alternative in Arabic.
2. Selected books of Greek Testament with history of the text, and questions of authority, date, substance, and form;
or equivalent alternative in Sanskrit.
3. Ecclesiastical History, including History of Creeds, Liturgies, and Doctrine.
4. Christian Apologetics;
or some branch of Comparative Religion.
5. Philosophy of Religion, and of Theism, with the Anti-Theistic theories of the Universe.

D.D. DEGREE.

(*Regulations as in D.Sc. Degree, ex. g.*)

1. Every candidate shall state in writing the special subject within the purview of the Faculty of Divinity, upon a knowledge of which he rests the justification of his candidature for the Doctorate.
2. For the purpose of this examination, Divinity shall be held to include—
(*a.*) The languages, Interpretation, Text, Canon, Criticism, History, Archæology, Chronology, and Theology of the Old and New Testaments.
(*b.*) Ecclesiastical History, including the history of Doctrines, Creeds, and Liturgies.
(*c.*) The Ethnic Religions, together with the Philosophy of Religion.
(*d.*) The History of the Attacks upon Christianity and of its Defence.
(*e.*) Philosophical and Christian Ethics.
3. Every candidate shall transmit a dissertation or thesis, printed or published in his name, treating scientifically some special portion of the subjects selected, embodying the result of independent research, or showing evidence of his own work, whether conducted independently or under advice, and whether based on the discovery of new facts observed by himself, or of new relations of facts observed by others, or generally tending to the advancement of Divinity.
4. He shall also transmit any printed contribution or contributions to the advancement of Divinity published independently or conjointly which he may desire to submit in support of his candidature.
5. Every candidate shall submit to a written examination in the special subject selected, if required.

The following letter relative to the above suggested syllabus was subsequently received by the secretary from the witness:—

45, Lincoln's Inn Fields, W.C.
4th March 1893.

DEAR SIR,

IT is right that I should inform you that the following representatives of Nonconformist colleges in and near London have expressed to me in writing their hearty concurrence with the general outlines of the syllabus for the Degrees in Divinity, which I have laid before the Gresham University Commissioners.

New College, London (Congregational).

Rev. R. Vaughan Pryce, M.A., LL.B. (London), Professor of Biblical and Systematic Theology with Apalegetics, and of Homiletics and Pastoral Theology; Lea Professor of Divinity.
Rev. J. Radford Thomson, M.A. (London), Professor of Ethics and the History of Philosophy.
Rev. Walter Frederic Adeney, M.A. (London), Professor of New Testament Exegesis, History and Criticism, and of Church History and History of Doctrine.

Appendix Nos. 44 and 45.

Countess of Huntingdon's College (Cheshunt).

Rev. Henry Robert Reynolds, D.D., President and Professor of Theology, New Testament Exegesis, and Homiletics.
Rev. Charles Owen Whitehouse, M.A. (London), Professor of Hebrew and Old Testament Exegesis.
William Alfred Todhunter, Esq., M.A., B.Sc., Professor of Mental and Moral Philosophy.
W. Douglas Reid, Esq., M.A., Professor of Ecclesiastical History and English Literature.

Hackney College.

Rev. Alfred Cave, B.A. (London), D.D. (St. And.), Professor of Systematic Theology and Homiletics.
Rev. George Alexander Christie, M.A. (London), Professor of Classics and Mathematics.
Rev. W. H. Bennett, M.A. (London and Cambridge), Professor of Biblical Languages, Introduction and Interpretation.

Regent's Park College (Baptist).

Rev. Joseph Angus, M.A., D.D., Professor of Theology, New Testament Exegesis, Homiletics and Apologetics, and of English.
Rev. Samuel Walter Green, M.A. (London), Professor of New Testament Exegesis, Greek and Latin, and of Ethics, Logic and Psychology.
Rev. George Pearce Gould, M.A., Professor of Hebrew, Old Testament Exegesis, and Church History.

Richmond College (Wesleyan).

Rev. T. Agar Beet, D.D. (Edinburgh).

I am, &c.
(Signed) EDWARD HENRY BUSK.

J. Leybourn Goddard, Esq.,
2, Harcourt Buildings,
Temple, E.C.

APPENDIX No. 45.

PAPER *sent to the Commission subsequently to the Evidence of* DR. HUNT *and* DR. TURPIN. (*See Question* 21,874.)

TRINITY COLLEGE, LONDON.

STUDENTS of COLLEGE who have gained Distinctions elsewhere.

Abbreviations:—C.O., College of Organists.
R.A.M., Royal Academy of Music.
F., Fellow.
L., Licentiate.
A., Associate.

Attwater, J. P. (A.C.O.).
Attersoll, Walter (A.C.O.).
Atkins, Elizabeth (L.R.A.M.).
Bradfield, D. (F.C.O.).
Boddington, C. J. C. (A.C.O.).
Bannister, A. B. (A.C.O.).
Belcher, W. E. (M.A. Oxon.) (F.C.O.).
Bliss, W. C. (A.C.O.).
Ceiley, G. R. (A.C.O.).
Cossom, T. (A.C.O.).
Critchfield, Harriet (L.R.A.M.).
Dear, J. R. (A.C.O.).
Dunkley, F. L. (F.C.O.), Scholar Roy. Coll. Music.
East, S. H. (M.A. Oxon.) (A.T.C.L.).
Eveleigh, W. C. (Mus. B. Oxon.) (L.T.C.L.).
Fry, P. J. (A.C.O.).
Fusselle, Kate (L.R.A.M.) (Assoc. Voc. T.C.L.)
Fellows, Eliza F. (L.R.A.M.).
Higgs, G. A. (F.C.O.) (L.T.C.L.).
Hallett, F. H. (A.C.O.) (L.T.C.L.).
Hopper, R. J. E. (Mus. B. Cantab.) (L.R.A.M.).
* Ives, Joshua (Mus. B. Camb.) (L.T.C.L.).
Klickmann, Flora (A.C.O.) (A.T.C.L.).
Lardelli, G. (F.C.O.).
Lane, E. Burritt (Mus. B. Durham) (L.T.C.L.).
Mason, Edward (Mus. B. Durham).
Pettifer, M. E. (A.C.O.).
Pitman, W. E. (A.C.O.).
Tupper, H. W. (F.C.O.) (L.T.C.L.).
Tait, J. (A.C.O.).
Vincent, C. (Mus. D. Oxon.) (F.C.O.).
Warren, J. C. (A.C.O.).
Wainwright, J. C. (A.C.O.).
Yolland, J. N. (A.C.O.).

* Professor of Music, University of Adelaide, South Australia.

LICENTIATES of the COLLEGE who have gained Distinctions elsewhere.

Alcock, Jas. (Mus. B. Camb.).
Allum, C. E. (Mus. D. Dublin).
Asquith, J. (Mus. B. Camb.).
Barrow, W. H. (Mus. B. Camb.) (L.R.A.M.).
Bentley, J. M. (Mus. D. Camb.).
Bradford, J. (Mus. D. Oxon.).
Briggs, C. H. (Mus. D. Camb.).
Bryant, Jas. (Mus. D. Durham).
Collisson, T. H. (Mus. D. Dublin.).
Corbett, S. (Mus. D. Camb.).
Curtis, J. (Mus. B. Lond.).
Dunstan, R. (Mus. B. Camb.).
Ennis, J. M. (Mus. B. Lond.).
Eveleigh, G. W. (Mus. B. Oxon.).
Flitcroft, J. P. (L.R.A.M.) (F.T.C.L.).
Gater, W. H. (Mus. D. Dub.).
Gower, J. H. (Mus. D. Oxon.).
Green, J. E. (Mus. D. Dub.).
Greenish, F. R. (Mus. D. Oxon.).
Ham, Albert (Mus. B. Dub.).
Harding, H. A. (Mus. D. Oxon.).
Hallett, F. H. (A.C.O.).
Higgs, G. A. (F.C.O.).
Hemmings, T. (Mus. B. Oxon.).
Hunt, W. H. (Mus. D. Lond.).
Iliffe, F. (Mus. D. Oxon.).
Ives, Joshua (Mus. B. Camb.).
Jozé, T. R. G. (Mus. D. Dub.).
Karn, F. J. (Mus. B. Camb.).
King, Alfred (Mus. D. Oxon.).
Lane, E. Burritt (Mus. B. Durham).
Lee, Thos. (Mus. B. Camb.).
Little, H. Walmsley (Mus. D. Oxon.).
Lloyd, C. F. (Mus. B. Oxon.).
Mann, A. H. (Mus. D. Camb.).
Merrick, F. (Mus. D. Dub.).
Mason, Edw. (Mus. B. Durham).
Middleton, E. H. (Mus. D. Camb.).
O'Donoghue, W. P. (Mus. B. Oxon.).
Pearce, C. W. (Mus. D. Camb.).
Piggott, H. (Mus. B. Camb.).
Reynolds, W. J. (Mus. D. Lond.).
Stark, H. J. (Mus. B. Oxon.).
Stokes, W. (Mus. D. Oxon.).
Taylor, E. W. (Mus. D. Oxon.).
Thackeray, D. (Mus. D. Dub.).
Tupper, H. W. (F.C.O.).
Turpin, James (Mus. B. Camb.).
Vincent, C. (Mus. D. Oxon.).
Warriner, J. (Mus. D. Dub.).
Weekes, S. (Mus. B. Camb.).
Wood, J. H. (Mus. B. Oxon.).

ASSOCIATES of the COLLEGE who have gained Distinctions elsewhere.

Collyer, A. H. (Mus. B. Dub.).
Gale, C. R. (B.A. and Mus. B. Oxon.).
Hatton, H. (Mus. B. Camb.).
Senior, J. E. (F.C.O.) (L.R.A.M.).

EXAMINERS of the COLLEGE who hold the Licentiateship of the Royal Academy of Music.

Atterbury, Ethel (L.R.A.M.).
Bevan, Elizabeth (L.R.A.M.).
Booth, John R. (L.R.A.M.).
Butcher, Mary A. (L.R.A.M.).
Carnes, Arthur A. (L.R.A.M.).
Carr, Ellen E. (L.R.A.M.).
Chartres, Emily F. (L.R.A.M.).
Critchfield, Harriet (L.R.A.M.).
Cuthbert, Minnie (L.R.A.M.).
Freeman, Helen M. (L.R.A.M.).

Griffith, Bessie (L.R.A.M.).
Hayes, Letty (L.R.A.M.).
Holden, Annie E. (L.R.A.M.).
Humphries, Emily M. (L.R.A.M.).
Isaac, Kate (L.R.A.M.).
Lewis, Lilian L. (L.R.A.M.).
Mathison, Emily E. (L.R.A.M.).
Morris, Mrs. Alfrd. (L.R.A.M.).
Prince, Alfred (L.R.A.M.).
Richardson, Ada L. (L.R.A.M.).
Round, Kate (L.R.A.M.).
Strettell, Harriet A. (L.R.A.M.).
Tallant, Catherine (L.R.A.M.).
Thomson, Jane R. (L.R.A.M.).
Whitehead, Saml. G. (L.R.A.M.).
Wilmot, Caroline D. (L.R.A.M.).
Winterbottom, Fanny (L.R.A.M.).
Yates, James H. (L.R.A.M.).

LIST of HONORARY LICENTIATES of the COLLEGE.

Aberdeen, Earl of (LL.D. St. Andrew's).
Agutter, B. (Mus. D. Cantuar.).
Bridge, J. F. (Mus. D. Oxon.).
Elvey, Sir Geo. J. (Mus. D. Oxon.).
Higgs, James (Mus. B. Oxon.).
Hinton, J. W. (M.A.) (Mus D. Dub.).
Hopkins, E. J. (Mus. D. Cantuar.).
Hunt, H. G. Bonavia (Mus. D. Dub.).
Oakeley, Sir H. S. (Mus. D. Oxon.).
Parry, C. H. H. (Mus. D. Oxon.).
Sangster, W. H. (Mus. D. Oxon.).
Saunders, J. Gordon (Mus. D. Oxon.
Sellé, W. C. (Mus. D. Cantuar.).
Turner, Bradbury (Mus. B. Camb.).
Turpin, E. H. (Mus. D. Cantuar.).

APPENDIX No. 46.

PAPER *handed in by* MR. ARTHUR CATES, *on February 17th*, 1892. (*See Question No.* 22,532.)

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE PROGRESSIVE EXAMINATIONS IN ARCHITECTURE.

Qualifying for Registration as Probationer and Student, and for candidature as Associate.

The Progressive Examinations are in three stages: *Preliminary*, *Intermediate*, and *Final*, qualifying for the grade of Probationer, Student, and Associate respectively, of the Royal Institute of British Architects. They have been so arranged as to induce the gradual development of a young man's artistic and scientific powers—to secure a systematic training in the art and science of Architecture from the entry into an office until the commencement of actual practice.

The Preliminary Examination is to test the general knowledge of aspirants in ordinary subjects of school education; and such subjects, of a technical character, as elementary Mechanics and Physics, Geometrical Drawing, Perspective, and Freehand Drawing from the Round. Exemption from attending this Examination is granted to candidates who submit satisfactory drawings and produce certificates from well-known educational bodies. A youth who is thus officially exempted, or who passes the Preliminary Examination, is at once registered as a *Probationer* of the Royal Institute of British Architects.

The Intermediate Examination is to test the Probationer's progress in Art and Science, while engaged as pupil, improver, or assistant in an office. During the two years following his admission as a Probationer he has to prepare, in the Art Section of the programme, seven sheets of carefully finished drawings with an illustrated memoir; and in the Science Section four sheets of drawings. If these "testimonies of study" are approved, and if he afterwards passes the Intermediate Examination, he is admitted a *Student* of the Royal Institute of British Architects, and his name and address are published in the Register of members.

The Final Examination is to test the candidate's further progress; and the programme, divided into Art and Science Sections, is framed on the same principle as that of the Intermediate. The work to be done by the Student, and submitted by him before entering, necessitates good draughtsmanship and an acquaintance with ancient edifices, or other well-known executed works, to be gained by actual measurement of them. It requires a knowledge of Design and of the practical details of construction, which latter can be best obtained by personal experience of buildings in progress. The "testimonies of study," with the concurrent work of preparation for this Examination, which is written, graphic, and oral, lasting a whole week, occupy the Student not less than three years; and no one can be admitted to it under the age of twenty-one, although in most cases it will probably be found desirable that he should have attained the age of at least twenty-two before presenting himself. If the *Student* passes, he becomes qualified for candidature as *Associate* of the Royal Institute of British Architects, and receives a certificate notifying the fact.

Appendix Nos. 45 and 46.

THE PROGRAMME OF THE PRELIMINARY EXAMINATION.

TUESDAY.

Hours.

10.0–10.30. I. WRITING FROM DICTATION.—A short passage from some standard English author will be given. Clear and well-formed writing, with accurate spelling, correct punctuation and use of capitals, should be aimed at.

10.30–11.30. II. SHORT ENGLISH COMPOSITION.—A simple subject will be given to test the powers of observation and description possessed by the candidate.

11.30–1.0. III. ARITHMETIC, ALGEBRA, AND ELEMENTS OF PLANE GEOMETRY.—The questions in arithmetic will include the first four rules, simple and compound, the Rule of Three, and vulgar and decimal fractions, and will be such as have a useful practical bearing on the candidate's future work. In Algebra, simple questions to test knowledge of signs and symbols, with their use and application, will be given. In the Elements of Plane Geometry, a knowledge of the first two books of Euclid will be required, also of straight lines, angles, and rectilineal figures.

1.0–2.30. INTERVAL.

2.30–4.0. IV. GEOGRAPHY AND HISTORY.—Short questions will be set to test the candidate's knowledge of the position of the principal cities, rivers, and mountain ranges of Europe, and of the prominent events in English History between 1100 and 1500 A.D.

4.0–5.30. V. FRENCH, GERMAN, ITALIAN, OR LATIN (ONE LANGUAGE ONLY).—One to be previously selected by the candidate. Short passages for translation into English will be set, with a few simple grammatical questions.

WEDNESDAY.

10.0–1.0. VI. GEOMETRICAL DRAWING (A), OR ELEMENTS OF PERSPECTIVE (B).—One of these two subjects to be previously selected by the candidate.
(A) This subject will include the construction of scales, and the delineation to scale of some simple given plan or elevation of a building.
(B) This subject will include simple problems in perspective.

1.0–2.30. INTERVAL.

2.30–4.0. VII. ELEMENTARY MECHANICS AND PHYSICS.—Simple questions will be set on the following subjects: Resolution and composition of forces in one

Appendix No. 46.

plane (parallelogram and triangle of forces), the lever, centre of gravity, &c.
The questions will not be such as to involve any trigonometrical calculations.

4.0–5.30. VIII. Freehand Drawing from the Round.—Some simple subject.

The Entrance Fee for this preliminary Examination is One Guinea.

Intermediate Examination for Probationers.

To qualify for Registration as Student.

The Intermediate Examination is held at such times in London and at such non-metropolitan and colonial centres as the Council may appoint; the non-metropolitan and colonial Examinations are conducted under the management of the Allied Society of that centre, or elsewhere by such Committee as the Council may, or that purpose, appoint.

Each application must be accompanied by *a remittance of two guineas* (2*l.* 2*s.*) as the entrance fee for the Examination.

Each Candidate must also send with his application, Testimonials of Study as herein-after set forth, accompanied by a certificate from a member of the Royal Institute, of other person of recognised position, that the candidate is a proper person to be admitted to this Examination, and that the Testimonies of Study he submits are his own work.

The Testimonies of Study required from Probationers consist of eleven sheets of drawings (half double-elephant, *i.e.*, 27 inches by 20 inches), to be neatly and carefully finished; and the seven sheets in the Art Section must be accompanied by a written description, illustrated by sketches, that is to say:—

Art Section.—Two sheets, each comprising one of the three Orders,—Doric, Ionic, or Corinthian,—fully figured, drawn in outline with the ornament and enrichments filled in: each sheet to comprise two columns of one Order with entablature complete, drawn to a scale of half an inch to the foot (the columns being not less than 20 feet high) and details one-eighth full size.

One sheet of details of Classic Ornament in outline.

Two sheets, with one example each of the Early English, Decorated, or Perpendicular periods, such as a door, a window or an arcade, in plan, elevation, and section.

One sheet of details of Mouldings and Ornament relating to such examples, to scale.

One sheet of Ornament—freehand drawing from the round, in outline.

A concise description, giving such particulars as may be accessible, of the building from which the several subjects are taken, with the dates of erection and other details, illustrated by sketches of plan, general elevation, &c., and written on foolscap paper on one side only—the whole to be the work of the candidate's own hand.

*** It is desirable that some of the drawings submitted in this Section should be from actual measurement by the candidate.

Science Section. — One sheet with diagram of timber-framed Roof Truss, not less than 30 feet span, with the nature of the strains on the several parts marked thereon, and the junctions of the timbers and ironwork drawn to a scale of one inch and a half to the foot, all in isometrical projection and dissociated.

One sheet showing in a similar manner at least three varieties each of timber Floors and three varieties of combined iron and timber Floors.

Two sheets of details of Joiner's Work in doors, windows, and fittings, shown in plan, elevation, and section, to a scale of one inch to the foot; with details at large of mouldings and framing.

The Secretary then, in due course, communicates with the candidate in reference to the centre at which he is expected to attend for the Examination, and which is chosen as near near to his place of residence as circumstances permit.

The Programme of the Intermediate Examination.

Tuesday.

Art Section (*Written, Graphic, and Oral*).

Hours.

10.0–11.30. I. The Orders of Greek and Roman Architecture, their origin, development, and application.

11.30–1.0. II. The several varieties of Classic ornament.

1.0–2.30. Interval.

2.30–4.0. III. English Architecture from the Conquest to A.D. 1500, and the successive developments of the styles.

4.0–5.30. IV. The characteristic mouldings and ornament of each period.

Wednesday.

Science Section (*Written, Graphic, and Oral*).

10.0–11.0. V. The nature of ordinary building materials—as stone, brick, tiles, timber, metals, and their qualities and defects.

11.0–12.0. VI. The calculation of strengths of materials and resistances, from data and formulas given.

12.0–1.0. VII. The elementary principles of construction.

1.0–2.30. Interval.

2.30–3.30. VIII. Elementary Physics as applicable to building.

3.30–4.30. IX. Mensuration, Land Surveying, and Levelling.

4.30–5.30. X. Plane Geometry applied to actual work; projection of solids; and development of surfaces.

Thursday, and following Days if required.

Art and Science Sections.

An Oral Examination on the Testimonies of Study submitted prior to admission, and on the work done by the Probationer during Tuesday and Wednesday.

The name and address of every Student of the Royal Institute are printed in The R.I.B.A. Kalendar. All Students have the right to use the Library and Loan Collection of Books, as well as admission to the Ordinary Meetings of the Royal Institute.

A Student of the Royal Institute, on successfully passing the Final Examination (to be passed by Students who have attained the age of at least 21 years), is qualified for candidature as *Associate R.I.B.A.*

The Final Examination (for Students).

To Qualify for Candidature as Associate.

This examination will be held not earlier than March or April 1894.

The Final Examination—which is to be passed not earlier than two years after having passed the Intermediate, though not before the candidate has attained the age of 21 years—will be held at such times in London, and at such non-metropolitan or colonial centres as the Council may appoint. The non-metropolitan and colonial Examinations are to be conducted under the management of the Allied Society or Branch of that centre; or elsewhere, by such Committee as the Council may for that purpose appoint. The examinations in London and non-metropolitan centres will be held simultaneously, and from the same examination papers.

Each application must be accompanied by *a remittance of three guineas* (3*l.* 3*s.*) as entrance fee for the Examination.

Every Student desirous of qualifying for candidature as *Associate R.I.B.A.* must, at least one kalendar month prior to the date fixed for the Examination, send to the Secretary of the Royal Institute of British Architects, at No. 9, Conduit Street, Hanover Square, London, W., an application on an official form, to be filled up as directed thereon; and accompanied by a remittance of Three Guineas, which

is returned should his application be refused. He must also send, with his application, Testimonies of Study as herein-after set forth, accompanied by a certificate from a member of the Royal Institute, or other person of recognised position, that the candidate is a proper person to be admitted to this Examination, and that the Testimonies of Study are his own work.

The Testimonies of Study required from Students are :—

A subject of Classic Architecture, shaded in sepia, indian ink, or hatching, according to the rules of sciography.

A study in perspective of Mediæval, Classic, or Renaissance Architecture, in outline or shaded.

Two studies of Ornament from the round, shaded or hatched—one Classic, or Renaissance; the other Mediæval.

A design for a Building of moderate dimensions, such as a detached villa, parsonage, school, local institution, or cottage hospital, to be fully drawn out as working drawings to a scale of not less than one-eighth of an inch to the foot in plans, elevations, and sections, duly figured and showing construction, water-supply, drainage, ventilation, &c., with sheets of details of the construction and ornament, and a perspective view.

Drawings of some Historical Building, or part of a Building, made from actual measurement, with the jointing of the masonry, &c., correctly shown, and the contruction; the whole in plan, elevation and section, carefully figured, with details at least one quarter full size. The original sketches measured and plotted on the spot are to be appended.

Two or more sheets of drawings showing the construction of Roofs, Floors, Arches, Retaining Walls, &c., with all the calculations for strength of the various parts fully worked out and appended thereto.

Two sheets of diagrams of Constructive Masonry—arches, vaults, or groined vauls, with the projections of the arch and vault-stones. These may, if the candidate think fit, be supplemented by complete drawings of a groined vault of any period between A.D. 1150 and 1500, from actual measurements, in plans and sections, with details of mouldings, ribs, and surfaces, accompanied by a full description of the construction, and a short historical account of the building from which taken.

Satisfactory evidence of having followed the carrying out of building works, and notes of the progress and conduct of such works.

Any sketch-books, evidences of study of buildings and of travel, the candidate may desire to submit, not exceeding three in number.

All the drawings are to be each on a half sheet of double-elephant drawing paper, *i.e.*, 27 inches by 20 inches; and are to be carefully finished as complete works. They must be delivered flat, in a portfolio 30 inches by 22 inches, which can be purchased for about 4*s*.

The Secretary then, in due course, will communicate with the candidate in reference to the centre at which he will be expected to attend for the Examination, and which will be chosen as near to his place of residence as circumstances permit.

In the event of any Student failing to pass the Final Examination within four years of having passed the Intermediate, his name will be removed from the Register of Students, unless the Council are satisfied that good cause exists for allowing it to remain.

The Final Examination, to qualify for admission as Associate, and to be passed by Students whose Testimonies of Study before described have been approved, will consist of Written, Graphic, and Oral Work, the Programme of which, divided into Art and Science Sections, is as follows:—

ART SECTION (*Written, Graphic, and Oral*).

I. The History of Architecture, to be illustrated by sketches: the leading characteristics, history, and development of the principal styles of Architecture, particulars of the celebrated buildings and their architects. The special characteristics and history of any one period selected by the candidate, which may be (i) Architecture of Italy or France from the 10th century to the end of the 14th century; (ii) Architecture of Italy or France from the beginning of the 15th century to the present time; (iii) Architecture of England between the years 1100 and 1700 A.D.

II. Features, Mouldings and Ornament, to be illustrated by sketches:

(i) As characteristic of architectural styles generally;
(ii) As characteristic of the special style which has been selected by the candidate.

Great importance will be attached to the character and accuracy of the sketches illustrative of the subjects I. and II.

III. Design: as illustrated by drawings of a building of moderate dimensions, to be made from particulars given, with details of construction and ornament.

SCIENCE SECTION (*Written, Graphic, and Oral*).

IV. Materials: their nature and their application in building.

V. Strength of Materials: Stresses and strains, the formulas for their calculation and their graphic determination. Arches, vaults, girders, roofs, retaining walls.

VI. Constructive details in all Trades.

VII. Sanitary Science: Drainage, water-supply, ventilation, acoustics, lighting and heating.

VIII. Specifications and Contracts.

IX. Measurement and Valuation of Buildings and Materials: Preparation of Estimates; the Legislative Enactments relative to Building.

APPENDIX No. 47.

PAPER *handed in by* MR. ARTHUR CATES, *Feb.* 17, 1893.
(*See Questions No.* 22,534 *and No.* 22,692.)

KING'S COLLEGE, LONDON.

SESSION 1892–3.

CLASSES OF ARCHITECTURE, BUILDING CONSTRUCTION AND MODERN PRACTICE.

Professor BANISTER FLETCHER, F.R.I.B.A.

Demonstrator, JAMES BARTLETT.

SYLLABUS.

DAY CLASSES.

THESE courses are intended to furnish full information in the theory and practice of Architecture and Building Construction, and in the application of the Principles of Mechanics to Construction. They are also specially arranged to enable architects' pupils, improvers, and other gentlemen intending to follow the profession of Architecture, to prepare for the progressive examinations of the Royal Institute of British Architects as set forth in their Kalendar, and other public examinations.

The student in the first year is instructed in the elementary knowledge of these subjects; in the second year the more advanced; and the third year completes the treatment of the subject.

The fees are 7*l.* 7*s.* for each year's course.

Each course consists of 33 Lectures divided into three Terms of 11 Lectures each, which are delivered once a week for each course.

ORDER OF THE COURSE.

FIRST YEAR.

Michaelmas Term.—Architecture, its origin, early history and development, including Assyrian, Egyptian and distinctive features of same, Etruscan architecture. BUILDING MATERIALS, their structure and manufacture: stone, natural and artificial in its several varieties, sand, limestone, slate, &c. The decay and preservation of stone.

Appendix No. 47.

Lent Term.—Greek architecture, its history, the five orders, proportions, mouldings, ornament, &c., &c. Elementary principles of construction. Ratio of support, principles of proportion, walls. The arch, footings and foundations, floors, &c., &c.

Easter Term.—Roman architecture, its history, the orders, further development, &c., &c. Basilicas, thermae, theatres, and chief buildings, and comparison of their sculpture and ornament with Greek work. BUILDING MATERIALS, their structure and manufacture; bricks, terra-cotta, tiles, pipes, tile pavings, mosaic, &c., in their several varieties. Timber, hard and soft wood in its numerous varieties as used for building purposes.

SECOND YEAR.

Michaelmas Term.—Early Christian architecture in Rome and Italy, its rise, development and characteristic points. Byzantine architecture. Elementary construction, including masonry and use of concrete both in footings and buildings. timber framing, centering, simple roofs in wood and iron, &c.

Lent Term.—Romanesque architecture in Italy, Germany, France, Normandy, &c. Sanitary science, plumbing. Principles of drainage to country and town houses, their water supply and storage. Ventilation, Heating, &c., &c. BUILDING MATERIALS, various uses of timber, its decay and preservation. Manufacture of iron for building purposes, and its several adaptabilities, cast, malleable, rolled, &c. The decay and preservation of iron.

Easter Term.—English architecture from the tenth to the fourteenth century. Advanced construction. Artificial foundations; Mechanics of earthwork, of walls; fireproof construction in its numerous forms and varieties, from its introduction to present day.

THIRD YEAR.

Michaelmas Term.—French, German, and Italian Gothic, their various characteristics. Advanced construction. Iron construction in girders, cast, rolled and riveted in trusses, roofs, &c. Timber framing of domed roofs, &c. Hammer-beam and other varieties of trusses. Strength and weight of materials, walls, concrete, wood, iron, &c., in compression, tension, and cross strain; their determination by formulæ.

Lent Term.—Italian, French, German, and Spanish Renaissance, its various characteristics, due to climate, &c., &c. Application and adaptability of materials to building purposes, their effect upon the character of the building, &c. Limes, cements, and their use and manufacture. The finishing and fitting of buildings.

Easter Term.—English Renaissance—Tudor, Elizabethan, and Jacobean. Development of modern architecture traced through the 18th and 19th centuries to the present day. Laws relating to building, bye-laws, Metropolitan Buildings Act, Public Health Act, &c. Building contracts, party walls, specifications, dilapidations, &c. Estimates, quantities, schedule of prices, how dealt with. Superintendence of works. Rights of light and air, and how treated. Dangerous structures, shoring, needling, &c.

EVENING CLASSES.

The CARPENTERS' COMPANY, acting in connection with the COUNCIL OF KING'S COLLEGE, LONDON, have established at King's College, London, EVENING LECTURES on ARCHITECTURE and BUILDING CONSTRUCTION, an ARCHITECTURAL STUDIO, and CONSTRUCTIONAL DRAWING and QUANTITY CLASSES, and WOOD CARVING.

ARCHITECTURE AND BUILDING CONSTRUCTION.

Professor BANISTER FLETCHER, F.R.I.B.A.

The Course of Lectures and Classes will comprise the subjects in which candidates are examined at the Royal Institute of British Architects' examinations for Building Surveyor, which examinations take place in April and October in each year; also the subjects in which candidates are examined at Carpenters' Hall in June in each year; also subjects required in the examinations at the City and Guilds Institute and the Science and Art Department.

All students have the advantage of borrowing books from the Architectural Reference and Lending Library.

LECTURES.

These will be given on each Monday from 7 to 8, by Professor BANISTER FLETCHER, F.R.I.B.A., Professor of Architecture and Building Construction at King's College. Each Term will last 12 weeks or thereabouts.

SUBJECTS.

Architecture, and its History.
Foundations.
Brickwork.
Building Stones.
Timber, its several forms and uses.
Iron, and its use in Building.
Materials, strengths, stresses, and strains.
Limes, Cements, and Concrete.
Masonry.
Fireproof Construction.
Carpentry (roofs and their constructions).
Plastering and Materials.
Plumbing and Sanitation.
Shoring.
Model Bye-laws.

Fee, 1*l.* 1*s.* for each Term, or 2*l.* 12*s.* 6*d.* for the Course (three Terms).

CONSTRUCTIONAL DRAWING CLASSES.

Demonstrator, MR. JAMES BARTLETT.

These will be held each Monday and Friday.

Fee for each Term, 10*s.* 6*d.*, or 1*l.* 1*s.* for the Course (three Terms). Time, 8 to 9 p.m.

In these Classes the Students are especially taught the preparation of Working and Detail Drawings of the various subjects dealt with by Professor BANISTER FLETCHER in his lectures, also Building Construction, Drawing and details of all the several trades, thus preparing Students for examinations of the Science and Art Department in that subject and the examinations of the City and Guilds, also that portion of the examination for the A.R.I.B.A., Surveyors' Institution and other institutions.

Students joining this Class have the free use of the Studio on Friday evenings for Drawing Practice from 7.30 till 9, when the Demonstrator attends.

QUANTITIES.

Demonstrator, MR. JAMES BARTLETT.

A Class will be formed for Instruction in Quantities by the Demonstrator, under the superintendence of Prof. Banister Fletcher.

This Class will be held every Friday during Term from 6.30 till 7.30.

Fees for each Term 15*s.* For the full course of three Terms, 2*l.* 2*s.*

In these Classes the Students will be instructed how to prepare a complete set of measurements, square and abstract same, and complete the Bills of Quantities for a building from an example, in accordance with the London practice.

The fee includes all the necessary drawings from which the Bills of Quantities will be prepared.

ARCHITECTURAL STUDIO.

JAMES FASNACHT, B.Sc., Instructor.

The Studio Fees are Five Guineas per Annum, or Two Guineas per Term, payable at the beginning of each Term.

Hours of Attendance.

The Studio is open every evening, except Saturday, from 6 to 9, and the Instructor attends on Wednesdays and Fridays.

Object.

This Studio is founded with the Object of Promoting Architectural Education, by giving Beginners as well as more Advanced Students the advantages of an Academical Training.

Advantages.

The curriculum embraces all those branches of knowledge connected with Art and Science as will enable the Student to pursue his Architectural Studies with every prospect of ultimate success. Students being allowed to follow any Special Studies, the Studio is particularly adapted to meet the requirements of those qualifying for the Testimonies of Study and Finished Drawings as required by the R.I.B.A. and R.A. examinations.

These Classes have proved of especial benefit to those who are engaged during the day in Offices and other Practical Pursuits, and have but few chances offered them to engage in Studies not immediately within the range of ordinary Office routine.

SYLLABUS.

First Year.

Technical Drawing.	Art Drawing.	Architectural Design.	Art Drawing.	Technical Drawing.
The Greek and Roman Orders.	Drawing in Outline from Architectural Casts. *Technical Drawing.* The Greek and Roman Orders.	The Greek and Roman Orders.	Drawing in Outline from Architectural Casts. *Technical Drawing.* The Greek and Roman Orders.	The Greek and Roman Orders.

Second Year.

Technical Drawing.	Art Drawing.	Technical Drawing.	Art Drawing.	Technical Drawing.
Application of the Orders in Architectural Subjects.	Drawing and Shading from Architectural Casts. *Technical Drawing.* Application of the Orders in Architectural Subjects.	Application of the Orders in Architectural Subjects.	Drawing and Shading from Architectural Casts. *Technical Drawing.* Application of the Orders in Architectural Subjects.	Application of the Orders in Architectural Subjects.

Third Year.

Technical Drawing.	Art Drawing.	Technical Drawing.	Art Drawing.	Technical Drawing.
Architectural Design, Working Drawings, and Details.	Drawing and Painting fram Architectural Casts. *Technical Drawing.* Architectural Design, Working Drawings, and Details.	Architectural Design, Working Drawings, and Details.	Drawing and Painting from Architectural Casts. *Technical Drawing.* Architectural Design, Working Drawings, and Details.	Architectural Design, Working Drawings, and Details.

GEOMETRICAL DRAWING.

W. H. Webb, Instructor.

Classes in the above will be held in the Drawing-room on Tuesdays and Thursdays, from 7 till 9 p.m.

Fee for each Term, 15*s.* or 2*l.* 2*s.* for the Academical Year.

The Course will include Plane and Solid Geometry, Construction of Scales, Construction of Regular Polygons on a given side, or within a circle, Reduction of any rectilinear Figure to a triangle or Quadrilateral of Equal Area. Construction of figures of similar and Proportional Areas. Problems relating to straight line and circle. Inscribed and described figures, &c. The principles of Projection. Projection of Solids at angles with vertical and horizontal planes and their sections, &c. Perspective, Sciography, Development of Surfaces, &c., as required for the intermediate examination of the R.I.B.A. or other institutions.

WOOD-CARVING.

Day Classes.

Teacher, Mr. W. H. Howard.

These Classes are held on Monday, Wednesday, and Friday, from 2 to 5 p.m.

Evening Classes.

Teacher, Mr. G. J. Bull.

These Classes are held on Monday and Wednesday from 7 to 9 p.m.

The Architectural *curriculum* embraces the following subjects by the Professors named, and are specially suitable to Architectural Students :—

Graphics	Prof. Adams, M.A., F.R.S.
Drawing from Life and Antique.	Prof. Holden.
Engineering, Surveying, and Levelling.	Prof. Robinson, M.Inst.,C.E.
Economic Geology	Prof. Duncan, M.D., F.R.S. Rev. Prof. Wiltshire, M.A.
Chemistry of Building Materials.	Prof. J. M. Thomson, F.R.S.E., F.C.S.
Mechanics and Physics	Prof. Adams, M.A., F.R.S.
Mineralogy	Prof. Duncan, M.D., F.R.S. Prof. Wiltshire, M.A.
Wood-Carving School	Mr. W. H. Howard.
The Workshops	In which the students are instructed in practical work.

REFERENCE MUSEUM.

Architectural.—Nearly 200 casts have been purchased of the best examples of Greek, Roman, Romanesque, and Byzantine and Gothic, and Renaissance examples, and the large number of photographs and detail drawings used by the Professor in his former lectures, have been largely added to.

Building Construction.—Specimens of building materials, sanitary appliances, and models (some specially prepared), all labelled with the names of the manufacturers, and prices affixed.

Books and Models.—The Worshipful Company of Carpenters have fitted up cases in the corridor adjoining the Lecture Room, for the reception of models of roofs, floors, framing, joints, &c., and for books, which form the Architectural Reference and Lending Library attached to these Classes, and from which all Students can obtain books, &c.

CATALOGUE OF MUSEUM, &c.

A new and complete Catalogue of the Architectural illustrations, the Casts, Constructional Drawings and Models, Specimens and Samples of Materials, numbering in all nearly 3,000, can be obtained from the Demonstrator, price 2*d.*

Appendix. Nos. 48 and 49.

APPENDIX No. 48.

PAPER *handed in by* MR. ARTHUR CATES *on February 17th*, 1893. (*See Question No.* 22,536.)

THE ARCHITECTURAL ASSOCIATION OF LONDON.

The Architectural Association was constituted in 1847. The terms of membership are now :—

That every ordinary member shall be engaged professionally in the study or practice of Architecture, but with the sanction of the committee gentlemen interested in the Arts or Science associated therewith may also become members.

The entrance fee of each ordinary member is now two guineas; and the annual subscription one guinea; but members elected prior to 1st January 1891 pay only half a guinea, annual subscription. The objects of the Association are :—To promote and afford facilities for the study of Architecture, and to serve as a medium of friendly communication between the members and others interested in the progress of Architecture.

The Association have recently, by the aid of liberal subscriptions from members and friends, established at its rooms, No. 56, Great Marlborough Street, W., an educational course for young architects for evening instruction during four years, of which the following is the curriculum :—

DIVISION I.

Lectures and Classes.

The orders of Greek and Roman Architecture, their origin, development, and applications. The several varieties of classic ornament.
The nature of ordinary building materials and the elementary principles of construction.
The rudiments of perspective.
Elementary physics as applicable to building (mechanics) and calculation of strengths.

The Studio.

Geometrical drawing of ancient examples; one example at the least to be drawn from actual measurement.
Freehand drawing.
Drawing of examples of elementary construction.
Plane geometry applied to actual work and perspective.
Meetings for criticism.

DIVISION II.

Lectures and Classes.

English Architecture from the Conquest to A.D. 1500, and the successive developments of the styles.
The characteristic mouldings and ornaments of each period.
Materials, their nature and application in building.
Elementary ornament and colour decoration.
The strength of materials, stresses, and strains; their determination by formulæ and by graphic methods.

The Studio.

Drawing of ancient examples and designs based upon them; one example at least to be drawn from actual measurement.
Freehand drawing.
Drawing of examples of elementary construction.
Solid geometry, projection of solids, and development of surfaces.
Meetings for criticism.

DIVISION III.

Lectures and Classes.

The history of Architecture: features, mouldings, and ornaments.
Materials, their nature and their application in building.
Colour decoration.
Sanitary science as applied to drainage and water supply.

The Studio.

The design and construction of modern buildings.
Freehand drawing from casts.
Perspective and sciography.
Constructive masonry.
Meetings for criticism.

DIVISION IV.

Lectures and Classes.

The history of Architecture: features, mouldings, and ornaments (continued).
Sanitary science, including ventilation, lighting, and heating.
Painting, Sculpture, and other arts allied to Architecture.
Professional practice, including legislative enactments relating to building contracts.

The Studio.

The design and construction of modern buildings.
Freehand drawing from casts.
Drawings of ancient buildings from actual measurement.
Graphic statics and perspective.
Meetings for criticism.

EXTRA SUBJECTS.

Lectures and Classes.

Plane and solid geometry.
Geology.
Mensuration, land surveying, and levelling.
Chemistry of building materials.
Quantity surveying, including the preparation of estimates.
Discussion section.

The Studio.

Sketching and measuring.
Elementary water-colour class.
Water-colour class.
Modelling.

The whole of the subjects in each division may be taken up together with one extra subject—on the same side—for an inclusive fee of *5l. 5s.* for the lectures, and a like fee of *5l. 5s.* for the studio—in each division.

APPENDIX No. 49.

PAPERS *put in by* MR. ARTHUR CATES *on February 17th*, 1893. (*See Question* 22,544.)

ARCHITECTURAL EDUCATION IN THE UNITED STATES OF AMERICA.

THE CORNELL UNIVERSITY — CITY OF ITHACA, NEW YORK, U.S.A.

DEPARTMENT OF ARCHITECTURE.

The Cornell University was incorporated by the Legislature of State of New York on the 27th April 1865, and opened on the 7th October, 1868; its existence is due to the combined wisdom and bounty of the United States, the State of New York, and Ezra Cornell.

By Act of Congress, July 2nd 1862, certain large areas of public lands were granted to the several States, from the sale of which there should be established a perpetual fund, the interest of which should be appropriated to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to

agriculture and the mechanic arts; no portion of the fund or the interest to be used for the purchase, erection, or maintainance of any building, but each State to provide within five years not less than one college.

Ezra Cornell was then dreaming of a project he thus formulates, "I would found an institution where any "person can find instruction in any study." By the union of his own resources with the proceeds of the land grants, he saw the way to the realisation of his purpose.

Ezra Cornell's direct donation to the University was $500,000, 200 acres of lands with useful buildings, and other gifts for special purposes; his largest benefaction was in the shape of profits eventually made by the University on the land scrip which he purchased from the State.

The University has received other large benefactions, such as from: Henry W. Sage, $1,163,216; John M'Graw, $140,177; Andrew D. White, $192,900; Hiram Sibly, $155,637; Daniel B. Fayerweather, $200,000; &c., &c. &c.

Under the will of Jennie M'Graw Fiske the University received $40,000 for a hospital; $50,000 for improvements in the M'Graw building and $200,000 for a M'Graw Library Fund.

The Department of Architecture.

The instruction is given by means of lectures and practical exercises in the drafting rooms, modelling room, and laboratories; its object is not only to thoroughly develop the artistic powers of the student, but to lay that foundation of knowledge, without which there is no true art. Drawing is taught during three years in all the branches applicable to the work of the architect, and afterwards applied in advanced exercises in design and construction.

The lectures on the History of Architecture are illustrated by photographs, drawings, engravings, casts, models, and lantern slides.

The study of design is continuous during the last two years of the course, students who during the first year have shown that they are possessed of a genius for the constructive side of the profession rather than the artistic, are allowed to specialise in that direction.

The study of building construction is planned to give the student a thorough training in the preparation of office drawings, the writing of specifications, contracts, and such work as will qualify him to enter any of the best offices in the country.

The whole ground of education in Architecture—practical, scientific, historical and æsthetic—is covered, as far as practicable, in a five years' course.

The Architectural Museum contains over 350 models, illustrating the various constructive forms of the various styles, and 150 models of ornaments; numerous specimens of materials and 1,500 photographs.

The Architectural Library contains not only works specially selected to illustrate the subject, but also full sets of the leading journals, both American and Foreign.

The University Library contains 113,000 volumes, 25,000 pamphlets, and about 590 serials of periodicals and transactions—literary, scientific and technical.

Admission to the Courses of Architecture.

The Primary Entrance Examinations—

English Composition. Geography—political and physical. Physiology and Hygiene. Arithmetic. Plane Geometry—Solid Geometry. Algebra—Higher Algebra. Plane and Spherical Trigonometry. French or German or Latin. American History.

The Course in Architecture leading to the Degree of Bachelor of Science in Architecture.

I.—*Freshman Year.*

Fall Term.—French or German. Algebra. Rhetoric Freehand Drawing. Chemistry. Hygiene. Drill.

Winter Term.—French or German. Trigonometry. Rhetoric. Freehand Drawing—Instrumental Drawing. Chemistry. Physical training.

Spring Term.—French or German. Analytic Geometry —Rhetoric. Pen Drawing. Chemistry. Projection and Lettering. Drill.

II.—*Sophomore Year.*

Fall Term.—Calculus. Descriptive Geometry. Mechanics and Heat. Botany. Water-colour Drawing. Drill.

Winter Term.—Building Materials and Construction—Descriptive Geometry. Electricity and Magnetism. Botany. Water-colour Drawing. Blow-pipe Analysis. Physical Training.

Spring Term.—Construction. Descriptive Geometry. Acoustics and Optics. Shades, Shadows and Perspective. Geology. Drill.

III.—*Junior Year.*

Fall Term.—Mechanics. Egyptian, Greek, and Roman Architecture. Designing. Pen Drawing.

Winter Term.—Mechanics. Byzantine and Romanesque Architecture. Designing. Structural details.

Spring Term.—Gothic Architecture. Decoration. Photography. Designing. Figure Drawing.

IV.—*Senior Year.*

Fall Term.—Renaissance Architecture. Theory of the Arch. Landscape Gardening. Designing. Heating and Ventilation, &c.

Winter Term.—Modern Architecture. Stereotomy. Designing. Thesis. Military Science.

Spring Term.—Professional Practice. Modelling —Designing. Decoration. Thesis.

The ordinary course of instruction in Architecture includes only the strictly professional subjects of the Graduate course.

Degrees of Bachelor of Science in Architecture are granted; courses of graduate study leading to advanced degrees of Master of Science in Architecture are provided.

The Special Course of Architecture at this University is as follows for Two Years only. (*See* Question 22,545.)

First Year.

Fall Term.—Building Materials and Construction. Egyptian, Greek, and Roman Architecture. Mechanics. Designing. Freehand Drawing.

Winter Term.—Romanesque Architecture. Construction. Mechanics. Designing. Freehand Drawing.

Spring Term.—Gothic Architecture. Construction. Mechanics. Designing. Shades, Shadows, and Perspective.

Second Year.

Fall Term.—Renaissance Architecture. Designing. Drawing.

Winter Term.—Modern Architecture. Decoration. Designing. Geology.

Spring Term.—Acoustics, &c. Designing. Decoration. Photography. Modelling.

COLUMBIA COLLEGE, IN THE CITY OF NEW YORK.

IV. School of Mines. Department of Architecture.

Candidates for admission must pass a prescribed Examination in Arithmetic, Algebra, Physics, Chemistry, German, French, English History, Physical Geography, and Drawing.

During the first and second years the time which is given in other courses to laboratory work is in this course given to architectural drawings, the ordinary processes of draughtsmanship, plans, elevations, sections, and details, the uses of the pencil and pen, brushes, and colours. The examples are chosen to make the student familiar with the commonplaces of architectural form, and are accompanied by lectures on the elements of Architecture, the forms and proportions of the Greek and Roman orders, and details.

Appendix No. 49.

They are supplemented by special courses on perspective, and on shades and shadows.

During the second year the students of Architecture complete the course of elementary studies in Mathematics, Physics, and Chemistry, given in the Department of Engineering.

Besides the lectures on Hygiene in the second year a special course of Sanitary Engineering is given in the third and fourth years.

In the third and fourth years the study of Scientific Construction is pursued in connexion with the classes of Engineering.

The study of Architectural History is pursued according to the following plan:—

In the first year a series of illustrated lectures is given upon Egyptian, Assyrian, Greek and Roman architectural history, and a course of reading on Classic Archæology and Architecture from French and German text-books.

The Architecture of the Middle Ages, and that of the Renaissance; and its more modern derivatives is then taken up in alternated years.

The class prepares a series of reports with illustrative drawings, followed by exercises in historical design.

Under the general head of Ornament, &c. is comprised the study of the decorative details of the different architectural styles, and of the contemporary forms in other branches of art, especially the decorative arts employed in buildings. The materials and processes employed in these arts, and the theory of aesthetics in form and colour, come under this head.

Under the head of Architectural practice is classed the subject of specifications and working drawings so far as they can profitably be studied in such a school, and of the materials and processes employed in building operations.

Under the head of drawing and design are comprised the practice in original composition afforded by the working out of problems in design from given data and general exercises in draughtsmanship.

In the first year an equivalent amount of work in Architectural History and Design may be substituted for Sanitary Engineering, &c.

A certain amount of time is given to exercises of a critical and literary character.

Besides the excellent provision in the College Library (120,000 volumes, and more than 700 serials, including the leading periodicals, transactions of societies, &c.), and the special Avery Architectural Library, the Department of Architecture has a special collection of prints and drawings, about 700 books and 12,000 photographs; also models and collections of specimens.

University courses in Architectural History and design afford to students, who take design in the fourth year, the opportunity to take another year either at once or after an interval of office work, for the study of construction and practice, and for those who have selected those studies before graduating, to take an extra year of history and design.

There are 24 University Fellowships, and in 1890 there were established in this department three travelling fellowships, one of 1,300 dollars by the Trustees, and two of 1,000 dollars each by the gift of Mr. Charles F. McKim.

These latter are open to all graduates of the Department of Architecture under 30 years of age, and are awarded in alternate years.

SYNOPSIS OF UNDERGRADUATE COURSE IN ARCHITECTURE.

First Year.

First Session.—*Trigonometry.*—Projections.—Shades and Shadows.—*Physics.*—*Heat, Sound.*—Surveying.—Ancient Architectural History.—Archæology (French).—*Chemistry.*—Design from Dictation.—Drawing: Freehand and Architectural.

Second Session.—*Geometrical Conic Sections.*—*Algebra.*—*Analytical Geometry.*—Shades and Shadows.—*Physics.*—*Magnetism, Electricity, Light.*—Elements of Architecture.—Ancient Architectural History.—Archæology (French).—*Chemistry.*—Design from Dictation.—Drawing: Freehand and Architectural.

Second Year.

First Session.—*Analytical Geometry.*—*Calculus.*—Perspective Elements of Architecture.—Modern Architectural History.—Archæology (German).—*Hygiene.*—*Applied Chemistry.*—Design.—Planning.—Ornament.—Drawings.—Freehand.

Second Session.—*Calculus.*—Elements of Architecture.—Modern Architectural History.—Archæology (German).—*Hygiene.*—*Applied Chemistry.*—Modelling.—Drawing.—Historical Design.

Third Year.

First Session.—*Analytical Mechanics.*—*Engineering.*—Sanitary Engineering.—Mediæval Architectural History.—History of Ornament.—Theory of Design.—Practice (Specifications).—*Geology.*—Design.—Problems.—Drawing: Freehand and Historical.

Second Session.—*Analytical Mechanics.*—*Engineering.*—Sanitary Engineering.—Mediæval Architectural History.—History of Ornament.—The Decorative Arts.—Practice (Specifications).—*Geology.*—Historical Design.—Drawing:—Freehand and Historical.

Fourth Year.

First Session.—*Civil Engineering.*—Descriptive Geometry.—Stereotomy.—*Graphical Statics.*—*Engineering Design.*—*Sanitary Engineering.*—Architectural History.—Research.—History of Ornament.—Theory of Design.—Practice (Construction).—Economic Geology.—Design.—Problems.—Advanced Design.

Second Session.—Stereotomy.—*Engineering Design.*—*Sanitary Engineering.*—Architectural History.—Research.—History of Ornament.—The Decorative Arts.—Practice (Construction).—Historical Design.—Economic Geology.—Advanced Design.—Projects.

Note.—The subjects in italics form also part of the Engineering Courses, and are taken therewith.

The Programme of the Competition for the McKim Fellowship in Architecture was in Five Parts, thus:—

I. First Session.—Monday, January 5th, and Friday, January 9th.—Preliminary sketch to be made at the school in two evenings, with free access to books and documents.

II. Home study during four weeks' interval.

III. Second Session.—Monday, February 9th, to and including Friday, February 20th, exclusive of Saturday, February 14th.—Finished Drawings to be made at the school in 10 evenings.

IV. Home study during one week's interval.

V. Third Session.—Monday, March 2nd, to and including Friday, March 6th.—Examination in construction and office practice to be conducted at the school during five evenings, without documents.

The Sessions at the School last from half-past seven to ten o'clock.

APPENDIX No. 50.

PAPER *put in by* MR. ARTHUR CATES *on February, 17th*, 1893. (*See Question* 22,566.)

THE ARCHITECTURAL COURSE IN VIENNA.

PROGRAMM DER KK. TECHNISCHEN HOCHSCHULE IN WIEN.

BAUSCHULE.

I. JAHR.

Mathematik. Darstellende Geometrie (Vorträge—Constructives Zeichnen). Elemente der reinen Mechanik in Verbindung mit graphischer Statik. Propœdeutik der Baukunst. Architectonisches Zeichnen. Figurenzeichnen.

II. JAHR.

Technische Mechanik. Allgemeine und technische Physik. Praktische Geometrie Vortäge—Praktische Uebungen. Situationszeichnen. Aesthetik der bildenden Künste. Architectonisches Zeichnen. Figurenzeichnen.

III. JAHR.

Hochbau: Baumaterialien und Bauconstructionen (Vorträge. Constructionsübungen). Architekturgeschichte des Alterthums. Baukunst des Alterthums. Architectonische Zeichnungs- und Compositionsübungen. Ornamentenzeichnen. Modelliren.

IV. JAHR.

Allgemeine Maschinenkunde. Architekturgeschichte des Mittelalters und der Neuzeit. Architectonische Zeichnungs und Compositionsübungen. Eisenbahnhochbau. Malerische Perspective. Ornamentenzeichnen. Modelliren.

V. JAHR.

Encyklopädie der anorganischen und organischen Chemie. Geologie, 1 Theil. Gesteinslehre. Baumechanik. Encyklopädie des Strassen- und Wasserbaues. Encyklopädie des Brucken- und Eisenbahnbaues. Baukunst der Renaissance. Architektonische Zeichnungs- und Compositionsübungen. Utilitats-Baukunde. Architektonische Compositionsübungen zur Utilitäts-Baukunde. Bau- und Eisenbahngesetzkunde.

The courses of the Ecole des Beaux Arts, Paris, are fully given under Questions No. 22,559A and No. 22,562.

APPENDIX No. 51.

SCHEME *handed in by* JOHN HILL, ESQ., B.A., *on March 3rd*, 1893. (*Question No.* 23,778.)

AGRICULTURAL EDUCATION.

In the first place perhaps I may be allowed to state something of my own experience, both as a University man and as a farmer. After taking my degree at University College, Oxford, in 1864, and having previously been at Rugby School, I naturally have always thoroughly appreciated the advantage of a public school and University career, and am therefore altogether in sympathy with those who look forward to a degree obtained at a University, in whatever the subject may be, as the crowning position in a man's education. It is something to be worked for; knowing that when gained, he will be stamped by his degree as one who will always be recognized to have mastered the subjects of the particular branch of study he may have taken up. Such being my own feeling as a Farmer, I cannot help being very strongly impressed now that the various branches of education are being provided for by establishing Degrees at the Gresham University that Agriculture should not be forgotten. No one can deny that it is not the greatest industry of the kingdom, and it is one that the country has to look to, more than any other, for its continued prosperity. It has been too much the fashion to say that "Any fool can make a farmer." This is entirely false, and I maintain that, in these days especially, a man requires as sound an education, both practical and scientific, if he has the time and means to avail himself of it, as in any other profession that can be mentioned. On leaving Oxford I went to a large farm in Yorkshire as agricultural pupil, and after two years commenced farming on my own account. This may be considered to have been a short preparation, but it was too late at my time of life to begin a scientific agricultural education, and with an inherited love of all kinds of live stock and life time spent among agricultural surroundings, together with hard work, I have worked my way until now. I have, however, always felt the loss of not having been able to give any time to Chemistry and other agricultural sciences. Agriculture from my experience is more a practical industry than any other. A man with practical experience can get on; but one who has gained the highest degrees in Science, and is thoroughly acquainted with the theory of Agriculture is certain to fail without a practical knowledge. During my long experience in the education of agricultural pupils residing as members of the family in my house I have invariably found the great advantage of their beginning early enough in life, immediately after leaving school, and before habits of extravagance and objection to control have been formed. I have had pupils fresh from the various Agricultural Colleges, where they were supposed to have undergone a scientific preparation together with a practical, and have found them totally ignorant of any practical knowledge, and they have always regretted that they have not gone to a farm first and to college later, as the lectures they had heard would then have been intelligible to them. On the other hand, the pupils which have been with me first and then to college, have been able to appreciate at once the value of the scientific instruction, and one pupil was able in his first term to take the gold medal for the best knowledge of practical agriculture. I will just take this one instance of a man who has made himself thoroughly acquainted with the every day detail of farm life on a farm and who obtained his diploma at an Agricultural College, and still unable to get employment. Of what great advantage would it have been to him to have come and taken his degree at a National University! He would have felt he had gained the highest honours possible, and it would be very unlikely if the public should not recognize his value. What an impetus it would be for a man in my position to hold out such a prospect for a young man at the beginning of his term as agricultural pupil, it would be an end to be gained, and would be an encouragement to both teacher and pupil. Expense and time, and of course time means money, are two things to be taken special notice of in education, especially so in that of agricultural pupils. Many have not the means, or cannot leave their fathers' farms, to either go to private places of instruction or colleges, but if text-books could be obtained of the subjects in which examinations could be held at a University with the practical knowledge they obtain on their own farm and with the opportunity now held out of attending the technical education lectures provided by the County Councils, they would be able, without much expense, to attend the University examinations from time to time. And if the County Councils would work with the "Agricultural Board of Studies" of the University, and co-operate in the subjects to be taught, it would be a great step in the right direction. I have no belief in too much science. A farmer has no time for it. He cannot be expected to be a walking enclyclopædia of all the "ologies" and sciences connected with his pursuit. The more he knows the better, but first must come a thorough practical knowledge of the treatment of live stock, the knowledge of the value of farm labour, the management of farm machinery, and of land surveying; all that is contained in Nesbit's

Appendix No. 51.

Mensuration, with such an acquaintance with veterinary science, as may enable them to act, until professional advice can be obtained if necessary. Such subjects are absolutely necessary to be thoroughly mastered to enable any one to succeed, while the knowledge of Chemistry as applied to food and manures, and Botany as applied to farm seeds and grasses of the next importance; but these can be learnt in a great measure from the great agricultural firms which have made them their special study. Agricultural education should be therefore made as practical and technical as possible. A farmer should be able to show any labourer how to do the work allotted to him, and this he cannot do unless he has done it himself.

All public schools, in fact all schools down to the National village schools, should have an agricultural side, or rather agricultural text-books should be used, and the subjects should be taught which lead up to the University examinations, and if scholarships could be established, it would be an additional encouragement in assisting the holders to reside in London during the time of the examination. The great difficulty now experienced in inducing good men to remain on the farm, and learn to become skilled farm labourers is a great one, as soon as the boys leave the village school all touch is lost with them, and it is almost impossible to get them to attend the lectures provided by the County Council. The following is a scheme which I think, if well carried out, might be of some practical value in remedying the evil. And it would even be possible to hold out to the labourers or small farmers' sons in the village school the ultimate reward of a University Degree.

The Technical Education of Young Farm Labourers.

The chief difficulty in making the best use of the money devoted by the County Council to the technical education of young farm labourers is that of getting them to attend the lectures provided. Unless more time can be given to agricultural subjects at the village schools before the boys leave; they have just enough smattering of education to entirely unsettle them and unfit them for the routine of farm life. If they only knew more they might be more interested, and perhaps learn the advantage of the value of technical agricultural knowledge. When they leave school, like most other boys, they note all further education a thing to be avoided, and will shirk it if possible. Besides this, even if they had the wish, they have no time to afford to give to it. They have already been prevented, too long, from being able to help their parents by earning something by their labour, and it is not likely that they will be induced to attend lectures without some pecuniary inducement. It is with a view to overcome the fatal objection to the way money is being spent by the County Council on technical education that I venture to propose the following rough sketch of a plan from which it might, perhaps, be possible for those who have the direction of this expenditure to frame some practical scheme which would be of some benefit to the class which it is so important should be educated in those subjects which are of most value to those who have an interest in the cultivation of the soil. I believe that the prosperity of the nation centres in Agriculture, and that as Agriculture cannot prosper without good and efficient labourers it is the interest of the nation as a whole to find the means of encouraging them to fit themselves in the best manner possible for the duties they have to perform, and to give them an interest in their work. On leaving school those boys whose parents were willing might, under the direction of the Council, be placed for a term of years at certain approved farm houses, appointed to meet the requirements of each district, to learn their business not merely as in old days to be the farmhouse drudge, and to be at everybody's beck and call, but to be a kind of farm pupil, earning their living by their work, and paying for their technical education by their increased knowledge. A yearly examination might be held under the supervision of the County Council, and money premiums be awarded to those who pass, in proportion to their merit; and also for good conduct. His money to be deposited in the savings bank as a reserve fund for the boy on his leaving service with as much of the balance of his yearly wages which can be spared after buying his clothes, &c. The examination should consist chiefly in practical outside work conducted *vivâ voce*. Each farmer who took these boys should have a yearly bonus allowed to remunerate him for the trouble entailed, and for the loss of the boys' time while attending lectures and examinations, with an extra grant for those who pass. Each boy should be helped on in the line he fancies most, either as waggoner, cowman, or shepherd, but it should be compulsory that he be taught the elementary rules for the management of farm machinery, thatching, stacking, hedging, broadcast sowing, &c.; and that they be sent to help the carpenter or blacksmith, when they are working on the farm. Any complaints which may arise as to food or treatment should be sent to the County Councillor residing in the district so that enquiries may be made by the Educational Committee at the earliest opportunity. If such a plan were to be organised, and supported in the way of prizes for good conduct and work by the Royal and local agricultural societies, it is possible that labourers and small farmers would see the many advantages to be obtained, and would encourage their boys to apply for such situations instead of pushing them off to the towns, before they have had time to consider what is really best for themselves, and I feel sure that much of the money, now being practically thrown away, may in some measure, be spent to the benefit of labourers and their employers. It would give the labourers the best opportunity of rising in their profession, and becoming managers or farmers; and would improve those who have only the ability for manual labour and enable them to get higher wages.

If therefore a chair of Agriculture be established it would be putting Agriculture in the high position it should hold among the other national industries, and do away with the present feeling of it not receiving the attention which is due to it.

APPENDIX No. 52.

PAPER *handed in by* SIR GEORGE YOUNG, *22nd March* 1893. (*See Question* 24,795.)

CORRECTIONS of MISTAKES of FACT in EVIDENCE affecting UNIVERSITY COLLEGE.

Mistakes.	Corrections.
1. E. H. Busk, Esq.	
611. "At University College there was a residential hall, which was such a failure that it was closed, and is now converted into a library and a kind of Toynbee Hall."	There has never been such a hall at University College. University Hall, Gordon Square, was a residential hall independently established by a committee which subsequently became identified with the Committee of Manchester New College, to receive students who might be either at University College or at Manchester New College. It was presided over sometimes, but not always, by a Professor of University College. After a career of varying success and failure, it was sold by its Committee when in a highly prosperous condition to the Trustees of the Williams Theological Library, in order to raise funds for moving Manchester New College to Oxford. Mrs. Humphrey Ward's Institution is understood now to rent a part of the building.
2.	
1407. (*Professor George Ramsay.*) "Is it possible for a school, if it had no really first-rate surgical teacher, to take a surgeon from another school? "(*Sir W. Savory.*) I do not know an instance."	It is not infrequent. At University College Professor Christopher Heath is from the Medical School of King's College, and Mr. Barker from Dublin. The following is a list of students from the Medical School of University College alone, who are, or have been Physicians or Surgeons to other Metropolitan Hospitals and Schools of Medicine. It might be largely extended by including those whom other schools have appointed from other schools. But the list from University College is by a good deal the longest. *St. Bartholomew's.* Dr. Gee, Dr. Wickham Legge. *Charing Cross Hospital.* Dr. Poore, Dr. Barlow, Mr. Godlee (formerly on the staff of this Hospital, but now at University College), Dr. Green, Dr. Murray, Dr. Mott, Mr. Boyd, Dr. A. Routh. *King's College.* Sir Joseph Lister, Sir Alfred Garrod, Dr. Haliburton. *London Hospital.* Dr. Lewers, Mr. H. P. Dean. *Middlesex Hospital.* Dr. Coupland, Dr. Douglas Powell, Dr. Pasteur, Dr. Boxall, Mr. Andrew Clark, Mr. Pearce Gould, Mr. Hensman. *St. George's Hospital.* Dr. Penrose. *St. Mary's Hospital.* Sir Edward Sieveking, Dr. S. Phillips, Mr. Pepper, Mr. Silcock. *St. Thomas' Hospital.* Professor Greenfield, Mr. H. Arnott, Mr. Shattock, all formerly on the staff. *Westminster Hospital.* Dr. Allchin, Dr. Mansell, Dr. F. C. Fox, Mr. Stonham. *Royal Free Hospital.* (London School of Medicine for Women.) Mr. Gant.

Appendix No. 52.

Mistakes.	Corrections.
3.	
Professor Weldon.	
2098. "The Council of the Gresham University represents the Governing Bodies of the constituent colleges rather than the teachers . . . In a document which some of the promoters of the charter issued, they stated very frankly that the wishes of the Governing Body of the colleges were very frequently at variance with the wishes of the teaching staff; that was the reason they gave for this preponderating influence."	If the witness refers to paragraph 8 of the document forming Appendix 16, he has stated its purport incorrectly, and has mistaken the argument. An objection that University College and King's College, by their Councils and Professors together, will have too great influence on the University Council is there met, among other things, by pointing out that their Professors, who would probably return *ten* representatives to the Governing Body as against *six* by the College Councils, often personally entertain views and have interests which are not identical with those of the Colleges as represented by their Councils. Precisely the same thing may be said of individual members of a Council. But it is not the case that the wishes of the Council of University College have frequently been at variance with those of their teaching staff taken as a whole.
4.	
F. V. Dickins, Esq.	
2410. "As far as University College is concerned, the hospital does not belong to the college at all. It is under entirely different management."	The Hospital of University College belongs to the College. It was built on College land for the purposes of the Medical School of the College, and the government of the Hospital and of its funds have always been in the College, by which are made all the rules for its management and all the appointments to its staff (*vid.* Preamble to the University College Act, 1868). The administration of the Hospital is committed by the Council to a Hospital Committee composed of seven representatives of the Council, with others appointed by the Medical Staff, and by contributors to the Hospital funds; the Council also appointing the Treasurer and Secretary.
2409. "The Medical Schools are proprietary institutions attached to the different hospitals." 2413. "They belong to the physicians and surgeons, or at all events they belong to the members of the hospital staff." 2412. "The 'arrangements' under which they 'exist' are proprietary and profitable."	The Medical School is not and never has been a proprietary institution, but is a department and Faculty of the College, without any proprietary element. The whole of the teachers' share of the fees received from students was for many years voluntarily surrendered by the teachers for the benefit of the Hospital. The present arrangements are in no other sense "profitable" than in respect of the receipt by the teachers of a portion of the fees, just as in other faculties.
5.	
F. V. Dickins, Esq.	
2679. "(*Mr. Anstie.*) I do not know whether you know as a matter of fact that the only really higher classical Chair which exists in London was that lately held by Professor Newton at University College?—Yes. But I do not think that University College has developed it as much as might have been expected."	The higher "classical" Chairs at University College are, besides the Yates Professorship of Archæology here referred to, the Professorship of Greek, held by Professor Wyse; the Professorship of Latin, held by Professor Housman; and the Professorship of Comparative Philology, held by Professor Postgate. For recent developments of the School of Archæology under Professor Poole, *see* the University College Calendar, p. 49, and the evidence of Sir G. Young, 10,944. The College is greatly indebted to Professor Poole for the liberality with which he has devoted the endowment of the Chair to the development of the School, irrespective of his personal profit. Recently a Chair of Egyptology has been endowed by the bequest of Miss Edwards, to which Professor Petrie has been appointed.
6.	
Dr. Fitch.	
3138. "The lowering of the qualification for graduating was not so much the work of inferior colleges as of University College. They began the system of giving the certificate on easy conditions; and it was because the certificates of the great colleges were found to attest so little in the way of general academic discipline that the authorities of the University felt on the whole that it was much better to throw up the collegiate system altogether, because it was worthless."	But see the evidence of the late Dr. Wood, the Chairman of Convocation, on behalf of the University, before the Royal Commission of 1888, Q. 1247. Upon the authority of the late Professor Croom Robertson, who had access to the papers of and was intimately acquainted with the late Mr. Grote, it is affirmed with confidence that there were, previous to 1857, two parties in the University Senate, one headed by Mr. Warburton, in favour of lowering the qualification of affiliation, the other by Mr. Grote, who was Treasurer of University College, in favour of keeping it to efficient institutions. The first party gradually prevailed, and Mr. Grote, finding that affiliation had become a farce, became in 1857 an advocate of its total abandonment. The statement that the system of affiliation was worthless for the purpose of the University because the certificates were too easily given is sufficiently refuted, so far as University College is concerned, by the leading position of its students in the University examinations.

Appendix No. 52.

Mistakes.	Corrections.
7. Dr. Wm. Jas. Russell. 3376. "As I have pointed out, our" (Bedford College) "teaching has been more successful than even that of University College and King's College. I mean the percentage of students that we have passed at the University of London is really higher."	The evidence to which the witness here refers has not been identified in the copy of his evidence furnished. By "students that we have passed," there is reason to believe Dr. Russell means students in the lower classes of the College, corresponding to the Junior School at University College, who have "passed," or matriculated, at the University of London. (*See* Q. 24, 839). To compare University institutions according to the per-centage of their students who have passed a particular external examination at the commencement of their course is obviously without significance.
8. Sir H. Roscoe. 17,895. "I believe the number of women going up for degrees from this" (Bedford) "College is equal to, if not more than, the number of men going up both from King's College and University College. . . . . "(*Lord Playfair.*) For academic degrees?—Yes."	This allegation has caused considerable surprise. The numbers, shown by Appendix 18, of Entries in the University of London lists of those who have taken Bachelor Degrees in Arts and Science for 1889–91, are:—

	University College.	King's College.	Bedford College.
B.A. - - -	43	9	12
B.Sc. - - -	54	13	3
Total - -	97	22	15

showing that, on the contrary, as might have been supposed, the proportion is eight to one in favour of the University Colleges.

Moreover, before any inference unfavourable to University College could be drawn from University of London figures, allowance would have to be made (1) for the considerable extent to which the Professors there have succeeded in encouraging study with a view to self-improvement, and not in order to pass external examinations; (2) for the results of their teaching as shown in the Oxford and Cambridge Class Lists; (3) for the extent to which Bedford College is indebted to University College for the supply to those who are students at both, of such higher teaching as University College does and Bedford College does not provide; (4) for the extent to which the general resources of University College are devoted to the imparting of an "academic" character to the medical and other training of which no account is taken in this comparison.

9. Professor Pearson. 5372. "Science pays in London, Arts do not . . . . . It pays better."	This is a mistake. The expenses of scientific education more than compensate for its greater popularity.
10. Professor Pearson. 5406. "The question" (as to the proposal and character of the scheme for a Teaching University now embodied in the Gresham Charter) "was never placed before the Governing Body of the College. I believe if it had been placed before them it would have been rejected."	On the contrary, the whole question was raised and fully discussed, after notice given, at the General Meeting of 22nd February 1887, on a motion by Professor Ray Lankester, that the Council should petition for a Charter identical with that of the Victoria University. An amendment was carried unanimously, the motion being withdrawn by consent, that the petition should be for a Charter on the principles previously approved by the Council in July 1886, and originally laid down in 1884 by the Association for Promoting a Teaching University for London. The Charter has been drawn strictly in accordance with those principles, and was communicated in draft to the Governors.
11. Professor Pearson. 5418. "Did it come before the Senate?—The history of the problem before the Senate is rather a long one; I could give you the brief lines of it. The Gresham Charter was never placed before the Senate, and the Senate only carried a vote of confidence in the Council after the rejection (*sic*) of the Gresham Charter."	Apparently the official action taken by the "Senate," or general meeting of the Professors of University College, in the proceedings for obtaining the Charter which has passed the Privy Council, is here differentiated from the action of Professors in their individual capacity, or as members of the Council. Of former Professors to whom since 1886 the Council has been indebted for active support and assistance in this respect, the principal have been (besides its President, who is an Emeritus Professor), Professors

Appendix No. 52.

Mistakes.	Corrections.
	Williamson, Morley, Croom Robertson, Graham, Kennedy, Berkeley Hill, Goodwin, and Scrutton; and among present occupiers of chairs, Professors Bonney, Bastian, Henry, Ramsay, and Schäfer. The Senate in February 1887 passed, on the motion of Professor Pearson, the resolution for a Charter identical with that of the Victoria University, which was afterwards moved by Professor Lankester unsuccesfully at the General Meeting, as above mentioned. That the Professors acquiesced in the unanimous decision of the Governors, and in the course which was in consequence pursued by the Council, may be inferred from a resolution of approval of the Council's petition to the Privy Council signed by *forty-three* of their number, which was received by the Council 31 May 1887. A Committee of the Senate was subsequently appointed, at the request of the President, to confer with the Committee of Council, to which, in conjunction with King's College, the task of drafting the Charter was committed. They presented a Report to the President, containing nine suggestions, nearly all of which were embodied in the Charter. Copies of the draft Charter were communicated to the Professors before it passed the Council. At the request of the Council the Senate subsequently appointed four Professors to give evidence in its favour before the Royal Commission of 1888.
12. Professor Pearson. 5636. "After a battle of long years, we" (the Professors) "have a representation" (on the Council).	There has been no such battle. The desire of the Professors to be represented was first communicated, privately, to members of Council in the 1885, and in 1886 the bye-laws were altered for the purpose, and three Professors admitted, as nominated by their colleagues. After nine months' experience of the beneficial effects of this step, the number was increased to six, with general approval.
13. Sir E. Fry. 6513. "With regard to University College I know that for many years past the whole of the classic teaching has been done by one Professor. They only had one Professor of Greek and Latin until a few months ago for many years."	The first Professorship of Latin in England was that founded at University College in 1828, and it has existed ever since. From 1889 to 1892, for a period of two years and a half only, Professor Goodwin, who had successively filled this Chair and that of Greek, was requested to hold both Chairs temporarily, with the help of a competent assistant—the Council desiring to postpone any further appointment to a classical chair till the University Charter should have been obtained. Upon his death, which there is reason to believe was hastened by overwork, the two Chairs were separately filled.
14. Sir P. Magnus. 17,490. "*Chairman.* Is there any system of intercollegiate lectures now among the different schools?—I am not aware of any."	There is one instance of such an arrangement now at work, viz., the Joint School of University College and King's College for Oriental Studies, which is under the management, subject to the Councils, of a Committee of which Sir Philip Magnus is actually himself a member. This arrangement was promoted by the Imperial Institute, in place of a design for founding a new competing school, which was abandoned at the instance of the two Colleges. The Committee, of which Sir F. Abel is Chairman, is composed of members appointed by the Institute, and by the two Councils, and meets at the Institute. The Indian department is carried on at University College, and the rest of the work at King's College. The School stands greatly in need of endowment, but it has already received one valuable benefaction—the Ouseley scholarships.

APPENDIX No. 53.

PAPER *handed in by* SIR GEORGE YOUNG, *22nd March* 1893. (*See Question* 24,796.)

GRADUATION RECORD for Degrees of B.A., B.L., B.Sc., B.M., and B.S.

—	Average for Three Years, 1889–1891.	Arts and Laws.	Science.	Medicine.	Total.
Gresham University.	University of London (entries, *see* Appendix 17).	18	34	115	167
Victoria University.	Do. do.	12	14	18	44
Do.	Degrees conferred Victoria University.	17	17	16	51

APPENDIX No. 54.

PAPER *handed in by* SIR GEORGE YOUNG, *22nd March*, 1893. (*See Question* 24,797.)

Number of Professorial Chairs in	In Medicine.	In other Faculties.	Total.
University College, London	15	30	45
King's College, London	18	38	56
Together	33	68	101
Owens College, Manchester	7	16	23
University College, Liverpool	5	12	17
Yorkshire College, Leeds	5	11	6
Total, Victoria University	17	39	6

APPENDIX No. 55.

PAPER *handed in by* SIR GEORGE YOUNG, *22nd March*, 1893. (*See Question* 24,798.)

CHAIRS and STUDIES endowed under TRUSTS.

In this Table are not included (1) prize scholarships and prizes; (2) trust funds applied by the Council to particular studies, or paid by them under agreement or otherwise to particular professors, out of funds left in this respect entirely at their disposal; (3) funds applied by the Council to particular studies, or paid by them under agreement or otherwise to particular professors, out of the Parliamentary Grant or general funds of the College; (4) funds given for lecturers.

Subject.	Trust.	Paid to Professors.	Paid to Student Teachers.	Paid for Appliances.	Total.
		£	£	£	£
Philosophy of Mind and Logic.	Grote	217	—	—	217
Hebrew	Goldsmid	63	—	—	63
Geology	„	31	—	—	301
„	Yates	270	—	—	
Archæology	„	443	—	—	443
Fine Art	Slade	194	—	—	194
German	Fielden	50	—	—	50
French	„	50	—	—	50
English	Quain (R.)	350	150	—	500
Physics	„	300	—	200	500
Botany	„	300	100	—	350
Zoology and Comparative Anatomy.	Jodrell	246			296
Physiology	„	258	—	—	373
„	Sharpey	—	115	—	
Egyptology	Edwards	150	—	—	150
Hygiene	Berridge	(Not yet applied.)			300
Comparative Law	Quain (Sir J.).	330	—	—	330
Clinical Medicine	Holme	150	460	170	930
Clinical Surgery	„	150			
Total		3,552	695	50	5,047

APPENDIX No. 56.

PAPER *handed in by* SIR GEORGE YOUNG, *23rd March* 1893. (*See Questions No.* 24,895.)

TABLE OF HONOURS obtained in the Examinations of the University of London, 1840–1889, in Medicine, Science connected with Medicine, and Pure Science, by the 12 London Medical Schools.

—	Medicine, Surgery, and Medical Subjects.	Science, as obtained in the Medical Faculty.	Science as obtained in the Faculties of Science and of Arts.	Total Science.	Total Medicine and Science.
University College	580	449	309	758	1,338
King's College	237	142	49	191	428
Two Univ. Coll. Sch.	817	591	358	949	1,766
St. Bartholomew's	182	103	10	113	295
Guy's Hospital	399	204	12	216	615
St. Thomas's	113	45	16	61	174
London	46	28	3	31	77
St. Mary's	31	15	5	20	51
St. George's	12	18	0	18	30
Women	15	7	0	7	22
Westminster	14	3	0	3	17
Charing Cross	7	7	0	7	14
Middlesex	3	1	0	1	4
10 Hospital Schools	822	431	46	477	1,299
Total	1,639	1,022	404	1,426	3,065

Appendix No. 57

APPENDIX No. 57.

PAPER *handed in by* REV. H WACE, D.D., *27th April* 1893. (*See Question No.* 25,594.)

KING'S COLLEGE, LONDON.

The following is a list of the laboratories, museums, &c., which are at present in use at the College for teaching purposes and for research, together with a short account of the nature of the work done in these laboratories in connection with the departments of Natural Science, Arts, and Medicine.

Anatomy	Lecture Theatre, Dissecting Room, & Prosectors' Room.
Architecture and Building Construction ...	Lecture Room, Museum Gallery, Architectural Studio and Work-room and Studio for Wood Carving.
Bacteriology and Comparative Pathology...	Lecture Room, Laboratory, Small Research Room, and Animal Room.
Animal Biology and Physiology	Two Laboratories and a Room for Animals.
Botany and Vegetable Biology	Laboratory.
Chemistry...	Lecture Theatre, Class Room, and Two Laboratories.
Electrical Engineering	The "William Siemens" Laboratory, with Engine and Dynamo Rooms.
Fine Art	Studios.
Mechanical Engineering	Testing Room and Laboratory, and Engineers' and Carpenters' Shops.
Metallurgy	Laboratory and Furnace Rooms.
Physics	Lecture Theatre and Preparation Room, Class Room, the "Wheatstone" Laboratory, and a Research Laboratory.
Photography	Laboratory and Studio.
Neuro-Pathology ...	Laboratory.
Surgery	Laboratory.
Practical Toxicology, State Medicine ...	Lecture Room and Laboratories.
George III. Museum.	
Natural History, and Anatomy and Materia Medica Museum.	
Marsden	Libraries.
Wheatstone... ...	
Medical	

Anatomy.—The Anatomical Department comprises a large lecture theatre, class rooms, and dissecting rooms, and a prosectors' room for the preparation of anatomical specimens and for private investigation and research. The department is open daily throughout the year, except during the summer vacation, and is attended by many occasional students in addition to the matriculated medical students of the College.

Architecture and Building Construction. — By the kindness of the Carpenters' Company in furnishing funds for the construction of an Architectural Studio and Museum of Specimens, in founding a Wood-carving School, in instituting prizes, and in establishing Technical Classes, the Council has been able to considerably increase the facilities for instruction in these subjects.

The full course for matriculated students extends over three years, and is arranged to furnish adequate information in the theory and practice of Building Construction and Architecture, and in the application of Mechanics to these subjects.

Students have the advantage of the use of the Museum for the study of practical models; and those whose diligence has entitled them to the privilege are selected by the Professor to visit works or buildings of special interest in the Metropolis.

By following this course together with those on Land Surveying, Geometry, and Freehand Drawing, students may prepare themselves, with the addition of office experience and work, for the intermediate and final examinations of the Royal Institute of British Architects.

A short course of Lectures is also given upon Architectural Design and the History of Art.

Occasional students may attend any or all of the classes.

The Technical Classes in the evening, which have also been established by the kindness of the Carpenters' Company, are conducted under the superintendence of the Professor of Architecture and Building Construction.

They form courses in Architecture and Building Construction, in Constructional Drawing, Quantities, and Wood-carving, which cover the ground of the examination for Building Surveyor at the Royal Institute of British Architects, of the examinations at the Carpenters' Hall, and of those at the City and Guilds Institute, and at the Science and Art Department.

Students attending these Classes have the advantage of borrowing books from the Architectural Reference and Lending Library, and of the use of the Museum and Architectural Studio.

Bacteriology and Comparative Pathology. — The Laboratory was founded in 1886, mainly by the liberality of the present Professor, to meet the great demand which existed for lectures and practical instruction in Bacteriology, and for facilities to prosecute researches into the causes and nature of the communicable diseases of man and the lower animals, and the best means of preventing or treating these diseases; so as to carry on the work which had hitherto been conducted almost entirely in the laboratories in France and Germany.

The course of instruction comprises lectures, demonstrations, and practical work. Students may join for the full course, or they may work independently for private study or research under the supervision of the Professor and Demonstrator. The results of many original investigations have already been published in the Medical papers, in the Transactions of the learned societies, and in reports issued by the governments of this country and the Colonies.

A course of instruction similar to that in the daytime is also carried on in the evening, and special classes in the Bacteriology of Fermentation have just been instituted, which are arranged to suit the requirements of Brewers, Analysts, &c., and which consist of lectures, demonstrations, and practical work.

Researches into the nature and methods of prevention of communicable diseases are urgently required by physicians and surgeons in practice, by medical officers of health, by veterinary surgeons and agriculturalists, by the public, and by all who are responsible for the health of the people, the production and sale of milk, meat and other foods, and the supply of water free from contamination and disease. For the teaching and study of these matters elaborate and expensive apparatus is used and required, and a great and constant expenditure is involved in the materials and plant which are daily in use, and which, owing to the considerable increase in the number of students, require continual additions.

Animal Biology and Physiology.—The Laboratory is divided into a class room for practical Biological, Physiological and Histological classes, a Research room devoted to Chemical Physiological work, a Research room for experimental work, and the Professor's private workroom.

The course in Physiology throughout the year comprises—Advanced and elementary lectures upon Physiology and Embryology; Complete practical course of Histology; Practical course of Chemical Physiology; Advanced course of Practical Physiology, and Tutorial classes for the help of students going up for examinations.

In Practical Animal Biology two courses are given, and these are arranged to be suitable for students either specially studying the subject or entering for the examinations at the University of London, or at the College of Surgeons.

With the exception of some of the more expensive instruments, the Laboratory is well equipped for teaching purposes; but is not large enough to accommodate properly the increasing number of workers who are entering for original research. The advanced classes also are becoming crowded by the attendance of many occasional students.

Research work is carried on actively in the Laboratory, as may be seen from the published accounts in the *Proceedings of the Royal Society*, the *Journal of Physiology*, &c., &c. Evening classes in Physiology and Biology are also held.

Botany and Vegetable Biology.—The course consists of Lectures, Demonstrations, and Practical classes.

The Lectures include Vegetable Morphology, Histology, and Physiology; and an additional course of Lectures is given upon Classification. The students in these subjects have free admission to the Gardens of the Royal Botanic Society upon recommendation from the Professor.

The Laboratory is divided into a class room and a smaller room for investigations.

Chemistry. — The course of instruction in the Chemical Department comprises Lectures on Inorganic and Organic Chemistry, Lectures of a more advanced and technical character, Tutorial classes on Inorganic Chemistry, both advanced and elementary, and the same on Organic Chemistry.

The two Laboratories may be designated as Elementary and Advanced.

In the former, which provides accommodation for sixty students, classes are held throughout the year for the Medical students, and a separate set for Engineering students. The Advanced Laboratory is open daily from 10 till 5 o'clock with the exception of Saturdays. The students who attend this Laboratory are in most cases qualifying to become professional Chemists. They work continuously at the subject and are encouraged, when proficient, to undertake special investigations. To this end the Daniell Scholarship "for research" is offered for competition every two years. The results of several investigations on the part of students have been published.

In the evening two courses of lectures are given, and classes in practical Chemistry are held throughout the year.

Electrical Engineering.—The Laboratory was founded by Lady Siemens in memory of the late Sir William Siemens. Connected with it are engine and dynamo rooms. The engines and boilers were presented to the college by Messrs. Davey, Paxman, and Co.

The Laboratory is equipped with instruments of the newest construction, and its fittings are arranged so that students can study every branch of Electrical Engineering.

Matriculated students who have spent two years in the Engineering Department of the College, and who have obtained certificates from the Professors of Physics, Chemistry, and Mathematics, are admitted to a special course of lectures and Laboratory work.

Students who have not passed through the preliminary training are admitted on producing qualifying certificates, or other evidence of general proficiency in the subjects mentioned.

Advanced students are encouraged to undertake original work under the advice and direction of the Professor and Demonstrator.

Evening classes of a similar nature to the day classes are held for Lectures, Demonstrations, and Laboratory work. The Laboratory is open daily throughout the week.

Fine Art.—The School of Art is open daily from 10 a.m. to 5, and in the evenings from 7 till 9, for the study of Drawing and Painting, under the guidance of the Professor of Fine Art, whose chair is maintained by the liberality of Henry Harben, Esq., L.C.C. There is a Studio for life classes and an Antique School containing a collection of casts.

Students may join for a special course of Art Training or for particular objects, such as preparation for the Royal Academy Schools and other Examinations.

There is a Sketch Club in connection with the School, and every facility is given to advanced students who may wish to paint original pictures.

Mechanical Engineering. — This Department has recently been remodelled, and a Laboratory fitted for experimental work and research. By the kindness of the Carpenters' Company, the entrance has been much improved, and the shops, &c., have been made more accessible.

In the Laboratory there are, among other pieces of apparatus, a horizontal testing machine, presented to the College by the Clothworkers' Company, adapted for tension, compression and bending experiments, a Crossley Otto cycle engine completely fitted up for experimental trials; torsion testing machines and machines for wire testing, cement testing, &c.; apparatus for testing springs, gauges, &c., and machines for investigating friction in moving machinery and the efficiency of lubricants.

Space has been reserved in the Laboratory for an experimental steam engine, to be added as soon as funds are obtained for its purchase.

The Engineers' shop contains several lathes suitable for light and heavy work, including one given by the late Sir J. Whitworth and planing, drilling, shaping, and slotting machines, some of which were presented to the College by the Clothworkers' Company. There is a smithy attached to the workshop. The Carpenters' shop is fitted with the necessary appliances for plain work, pattern and model making, and cabinet work. Instruction is given by thoroughly qualified Carpenters and Cabinet Makers.

The course in the Mechanical Engineering Department includes Lectures, work in the shops, and Laboratory work.

The course in the shops is so arranged as to give the students the knowledge of the use of tools and of the making of patterns and models, &c., necessary to fit them for the work and investigations in which they will be subsequently engaged in the Engineering Laboratory.

In this laboratory students have the means of practically illustrating a great part of the lectures which they have attended and of acquiring a thorough knowledge of the nature and properties of the materials employed by Engineers, and of their behaviour under stress. Advanced students are encouraged to undertake original investigations and to make for themselves the apparatus required for their special work.

In the evening lectures are given, and work in the shops and laboratory is carried on.

Metallurgy. — The Metallurgical Department was founded in 1879. A considerable sum of money was expended in arranging the laboratory, constructing the furnaces, and acquiring the necessary apparatus. This was effected mainly through the aid of some of the City Companies.

The courses of lectures are designed to give instruction to all those who in any way have to deal practically with the applications of metals, and with their extraction from the various natural sources. Lectures are also given in the evening. The laboratory is open throughout the day, and in the evening, for practical work in assaying, analysis, extraction and manufacturing processes, the preparation of alloys, electro-metallurgy, &c., &c. A special course is arranged for the matriculated engineering students of the College. Persons not otherwise engaged in the College may join for this course, or may devote their time to any particular branch of the subject.

Metallurgists, mining and mechanical engineers, artisans, and others, engaged in a great variety of industries, avail themselves of these opportunities.

Physics.—The Physical Department contains in the George III. Museum, and in the laboratories, an extensive and interesting collection of historical and modern apparatus. A special gallery was built in the museum to hold the valuable collection of physical apparatus bequeathed to the College by the late Sir Charles Wheatstone.

The lectures embrace the subjects of mechanics and hydrostatics, and the various branches of physics, such as heat, light, sound, and electricity. The lectures are divided into an elementary and an advanced course, and are arranged to be suitable for those who wish to gain a thorough knowledge of the whole subject, as well as for those who are preparing for the examinations of the University of London, the Institute of Chemistry, the Indian Civil Service, &c. In addition to the lectures there are elementary and advanced classes in mechanics and hydrostatics, and tutorial classes in physics.

Appendix No. 57.

The laboratories are open during each College term for practical study and research in all branches of physics. In addition to the students who are engaged in the systematic courses of practical work, accommodation is provided for those who may wish to be instructed in any one branch in fuller detail, or who desire to pursue some special investigation under the direction of the Professor and Demonstrators.

Courses of lectures and laboratory work are carried on during the evening.

Photography.—The course of instruction in photography treats of those branches which are most generally useful to students in the Engineering, Science, and Art Departments.

In the lectures and demonstrations the art and scientific principles of Photography are treated of systematically up to the use of Photography in mechanical processes of reproduction.

The practical work in the laboratory and studio embraces the preparation of collodion, of sensitive emulsions and dry plates, the methods employed for portraiture, copying, photographing machines, and interiors, and the applications of Photography to research in spectrum analysis and microscopy.

In addition to the regular work, private instruction is given to those who may wish to avail themselves of the Lecturer's services.

Neuro-Pathology.—The laboratory has been recently opened for the purposes of teaching the anatomy, physiology, and pathology of the nervous system, and for original research. There are both Summer and Winter courses of instruction, which consist of lectures and demonstrations.

In the daily work in the laboratory, the investigation of diseases of the nervous system, and the preparation of large and microscopic sections, take an important place. In this way much valuable material for teaching purposes is obtained, as the sections are exhibited in the lantern microscope to illustrate special points in the lectures.

Students may join either to make a particular study of the subject, or to prepare themselves for the higher examinations of the London University or elsewhere.

Surgery.—The laboratory in connection with this subject is a recent addition to the College, and is practically unique in London. As examples of the varied kinds of work done in it, may be mentioned the preparation of all the necessary teaching materials for the lectures on systematic surgery, the taking of photographs of hospital cases, and the preparation from these of slides to be used in lantern demonstrations at each lecture on surgery, and the preparation and photographing under the microscope of sections of all morbid growths removed from cases in the hospital. The photographs of the sections are used for lantern demonstration. Tutorial classes are held three times a week for senior and junior students, and original research is carried on by the Professor of Surgery and others.

The laboratory is utilised by other medical men in London who may wish to investigate special cases or to obtain reports upon them.

Practical Toxicology and State Medicine.—The laboratory in connection with these subjects is utilised for instruction to medical students and others in the detection of poisons and in the methods employed for the analysis of Air, Water, Foods, &c.

The College received a grant of 10,000*l.* from the trustees of the Will of the late Richard Berridge, Esq., for the advancement of Sanitary Science, including Bacteriology.

The instruction in this subject consists of Lectures, special classes in Public Health, Laboratory work, and practical Sanitary work, which embraces the Inspection of Houses, and Sanitary works such as Waterworks, Sewage farms, Disinfecting stations, &c.

The laboratory is available for research work, and evening classes and lectures are carried on.

The Natural History Museum contains, in the gallery a very good collection of Pathological and Anatomical specimens well adapted to the study of the results of pathological processes. Connected with the gallery is a room devoted to a good collection of casts of deformities, fracture, &c. This medical portion of the Museum is not open to other than medical students except by special permission from the Curator.

In the body of the museum there are collections connected with the subjects of Materia Medica, Botany, Chemistry, Toxicology, Mineralogy, Geology, and other branches of Natural History.

The Materia Medica collection was to a great extent presented to the College by the Apothecaries' Company.

The collections of mineralogical and geological specimens are large and contain some objects of great value.

In addition to the classified specimens which are set out in cases, there are separate sets in drawers which can be obtained by students who wish to handle and examine them in their study of the subjects.

The Botanical section has recently been much improved. It contains a very good collection of specimens of plant Life. Some extension of the Museum is much needed for the best use and display of the excellent teaching material which it contains.

The remainder of the space in the College is occupied by a large number of Class Rooms and Theatres employed for the purpose of Lectures and Tutorial Instruction both in the above subjects and in General Literature.

HENRY WACE, D.D.,
Principal.

March 1893.

APPENDIX No. 58.

Appendix No. 58. Paper No. 1.

COMMUNICATIONS SUBMITTED TO THE COMMISSION OTHERWISE THAN BY WITNESSES IN THE COURSE OF THEIR EVIDENCE.

1. Returns from Scotch Universities as to Graduates in Medicine.
2. Letter and Statement of Mr. Stanley Boyd relative to his evidence on behalf of the London Medical Schools.
3. Statement by Professor Henry Nettleship, M.A.
4. Statement by Professor E. Ray Lankester, M.A., LL.D., F.R.S.
5. Statement on behalf of the Albert University Charter Opposition Committee.
6. Scheme of the Association for Promoting a Professorial University.
7. Letter from the Royal Geographical Society.
8. Minutes of the Senate of the University of London of December 14th, 1892.
9. Letter from the University of London of March 7th, 1893.
10. Scheme of Convocation of the University of London for the reconstruction of the University.
11. Programme of lectures of the École Libre des Sciences Politique.
12. Paper forwarded to the Commission by M. Gilbert Boucher, of Paris.
13. Letter from Privy Council Office with Resolutions of the British Medical Association.
14. Letter from Brussels Medical Graduates Association.
15. Letter from British Homœopathic Society.
16. Memorandum as to proposed Law Department of University College, Liverpool.

(See observations by Professor Ramsay following Question No. 21,232.)

RETURNS FROM SCOTCH UNIVERSITIES AS TO GRADUATES IN MEDICINE.

By order of the Commission, and with reference to the often repeated statement that considerable numbers of London medical students leave the London medical schools to obtain degrees in the Universities of Scotland, the Secretary applied to the Universities of Edinburgh, Glasgow, Aberdeen, and Durham, for information as to—

1. The total number of M.B. and M.D. degrees respectively granted by those Universities for each of the three complete University years last preceding December 31st, 1892.
2. The number of each class of graduates who took such degrees respectively in those respective years, and who passed the whole of their medical course in those Universities.
3. The number of each class of graduates who took such degrees respectively, and who kept part of their medical course elsewhere than in those Universities with the names of the Medical Schools at which they kept such part, and the periods spent there and at the respective Universities, distinguishing between the number of those who came from London Medical Schools, and of those who came from other British Medical Schools.

The following returns were received which have been summarised in the table below them.

PAPER No. 1.

UNIVERSITY OF EDINBURGH.

SIR, January 11, 1893.

IN reply to your favour of 20th ult., addressed to the Principal, I now beg to send you for the use of Her Majesty's Gresham University Commissioners the following returns:

Return No. 1, embracing—

1. The total number of Bachelors of Medicine, and Masters in Surgery (M.B., C.M.) of this University for each of the years 1890, 1891, and 1892.
2. The number of those who took the whole of their Medical course within the University.
3. The number of those who took part of their course elsewhere than in the University of Edinburgh.
4. The number of those who took extra mural classes in Edinburgh.
5. The number of those who took classes in other Universities and Medical Schools, with the details of the number of classes taken at each.

It is important to note that graduates of this University who have taken part of their medical course in London, or in the English provincial schools, must have studied for at least two years in the University of Edinburgh before graduating.

It is also noteworthy that of the 206 Graduates of Medicine in 1892, who took part of their medical education elsewhere than in the University of Edinburgh, 99 took five years within this University, 86 took four years, 16 took three years, and five took two years within the University. The proportions for 1890 and 1891 are similar.

I have, &c.

(Signed) J. KIRKPATRICK,
Secretary of Senatus.

J. Leybourn Goddard, Esq.,
Secretary,
Gresham University Commission,
23, Great George Street, Westminster,
London, S.W.

P.S.—A copy of the new Ordinance regulating Graduation in Medicine after 1st October 1892 is enclosed.

J. K.

UNIVERSITY OF EDINBURGH.

RETURN, asked for by Her Majesty's Gresham University Commissioners, of the Number of Graduates in Medicine (M.B., C.M.) of the University of Edinburgh for each of the years 1890, 1891, and 1892; the Number of those who passed the whole of their Medical Course in the University; and the Number who kept part of their Course at other Universities or Medical Schools.

Year.	Total Graduates (M.B., C.M.).	Total of those who took their whole course in the University.	Total of those who took part of their course outside the University.	Of those who took part of their Course outside of the University, there									
				Attended Extra-mural Classes in Edinburgh.	Attended Extra-mural Classes in Glasgow.	Attended Classes in other Scottish Universities.	Attended Classes in English Universities.	Attended Classes in London Medical Schools.	Attended Classes in English Provincial Medical Schools.	Attended Classes in Dublin University.	Attended Classes in Indian Universities or Medical Schools.	Attended Classes in Colonial Universities or Medical Schools.	Attended classes in Foreign Universities.
1890	210	42	168	153	1	8 DETAILS:— *Glasgow*— 1 took 1 class. 1 „ 2 classes. 1 „ 3 „ 1 „ 4 „ 1 „ 7 „ 1 „ 8 „ *Aberdeen*— 1 took 5 classes. *St. Andrew's*— 1 took 2 classes.	4 DETAILS:— *Cambridge*— 1 took 1 class. *Victoria*— 2 took 2 classes. 1 „ 4 „	8 DETAILS:— 2 took 1 class. 2 „ 2 classes. 1 „ 3 „ 3 „ 4 „	3 DETAILS:— *Bangor*— 1 took 3 classes. *Bristol*— 1 took 2 classes. *Liverpool*— 1 took 3 classes.	1 DETAILS:— Took 5 classes.	3 DETAILS:— *Calcutta*— 1 took 3 classes. 1 „ 5 „ *Bengal*— 1 took 2 classes.	9 DETAILS:— *Otago*— 1 took 2 classes. 1 „ 5 „ *Melbourne*— 1 took 3 classes. 1 „ 9 „ *Sydney*— 1 took 1 class. 1 „ 3 classes. 1 „ 6 „ 1 „ 7 „ *Halifax, N.S.*— 1 took 2 classes.	2 DETAILS:— *Strassburg*— 1 took 6 classes. *Zurich*— 1 took 2 classes.
1891	238	54	184	177	—	7 DETAILS:— *Glasgow*— 1 took 1 class. 1 „ 3 classes. „ 11 „ *Aberdeen*— 1 took 1 class. 1 „ 5 classes. 1 „ 6 „ *Dundee (St. And.)*— 1 took 1 class.	2 DETAILS:— *Victoria*— 1 took 3 classes. 1 „ 8 „	4 DETAILS:— 2 took 1 class. 1 „ 2 classes. 1 „ 3 „	7 DETAILS:— *Bangor*— 2 took 3 classes. *Birmingham*— 1 took 2 classes. *Leeds*— 1 took 2 classes. *Liverpool*— 1 took 1 class. 1 „ 2 classes. *Sheffield*— 1 took 1 class.	1 DETAILS:— Took 6 classes.	4 DETAILS:— *Calcutta*— 1 took 3 classes. 1 „ 4 „ *Madras*— 2 took 7 classes.	6 DETAILS:— *Otago*— 1 took 4 classes. 1 „ 5 „ 1 „ 6 „ *Melbourne*— 1 took 1 class. *Halifax, N.S.* 1 took 2 classes. *Canterbury, N.Z.* 1 took 2 classes.	—
8	26	58	206	187	—	8 DETAILS:— *Glasgow*— 1 took 4 classes. 1 „ 7 „ *Aberdeen*— 1 took 1 class. 1 „ 2 classes. 1 „ 4 „ *St. Andrews*— 1 took 1 class. 1 „ 3 classes. 1 „ 4 „	4 DETAILS:— *Oxford*— 1 took 2 classes. *Victoria*— 1 took 2 classes. 1 „ 5 „ 1 „ 8 „	3 DETAILS:— 1 took 1 class. 1 „ 2 classes. 1 „ 4 „	5 DETAILS:— *Aberystwyth*— 1 took 3 classes. *Bangor*— 2 took 1 class. 1 „ 3 classes. *Leeds*— 1 took 2 classes.	1 DETAILS:— Took 6 classes.	6 DETAILS:— *Calcutta*— 1 took 3 classes. 1 „ 4 „ *Madras*— 1 took 6 classes. 2 „ 9 „ *Bombay*— 1 took 7 classes.	11 DETAILS:— *Otago*— 3 took 3 classes. 3 „ 4 „ *Melbourne*— 1 took 2 classes. 1 „ 3 „ 1 „ 4 „ *Sydney*— 1 took 3 classes. *Dalhousie, N.S.* 1 took 1 class.	1 DETAILS:— *Appleton, U.S.A.* 1 took 1 class.

RETURN of the Total Number of Doctors of Medicine (M.D.) who received the Degree from the University of Edinburgh in each of the years 1890, 1891, and 1892.

1890	54
1891	41
1892	62

In accordance with the regulations in force down to 1st October 1892, Doctors of Medicine of this University must have previously obtained the Degrees of Bachelor of Medicine and Master in Surgery (M.B., C.M.) in this University. No further attendance at a Medical School necessary for the Degree of M.D., but candidates must be 24 years of age, and must have been engaged, after having received the Degrees of Bachelor of Medicine and Master in Surgery, for at least two years in attendance on a hospital, or in the military or naval medical services, or in medical and surgical practice. Further, the Degree of M.D. is not conferred on any person unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or other University approved by the University authorities, or unless he has passed (in addition to the other preliminary subjects required for M.B., C.M.), a satisfactory examination in three subjects, two of which must be Greek and either Logic or Moral Philosophy, and the third must be one of the following, at the option of the candidate, namely, French, German, Higher Mathematics, or Natural Philosophy. Each candidate is also required to submit to the Faculty of Medicine a Thesis, to be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the Degrees of Bachelor of Medicine and Master in Surgery which he may have made a subject of study after having received these degrees.

J. KIRKPATRICK,
Secretary of Senatus.

11th January 1893.

UNIVERSITY OF GLASGOW.

RETURN desired by Her Majesty's Gresham University Commissioners.

1. The total numbers of M.B. and M.D. Degrees respectively granted by the University of Glasgow during each of the complete years 1890, 1891, and 1892 are as follows:—

	M.B.	M.D.
1890	118	16
1891	104	20
1892	125	20

2. Of the above M.Bs., the following numbers passed the whole of their Medical Course in the University of Glasgow:—

1890	105
1891	101
1892	115

3. The following numbers of M.Bs. kept part of their Medical Course elsewhere than in the University of Glasgow:—

1890	13
1891	3
1892	10

The following are the details on this head:—

	Glasgow University.	London Medical Schools.	Other Medical Schools.	
	Years.	Years.	Years.	Classes.
1890. 7	4	—	—	1.* Anderson's College, Glasgow.
1	4	—	—	1.* Western Medical School, Glasgow.
1	3	—	1. Edinburgh University.	—
1	3	—	1. Glasgow Royal Infirmary Medical School.	—
1	3	—	1. Queen's College, Belfast.	1.* Western Medical School Glasgow.
2	1	—	3. Grant Medical College, Bombay.	—
13				

* Attended simultaneously with Classes at Glasgow University.

	Glasgow University.	London Medical Schools.	Other Medical Schools.	
	Years.	Years.	Years.	Classes.
1891. 1	4	—	—	1.* Anderson's College, Glasgow.
1	4	—	—	1.* Glasgow, Royal Infirmary Medical School.
1	3	1. University College Hospital, London.	—	1.* Glasgow, Royal Infirmary Medical School.
3				
1892. 5	4	—	—	1.* Anderson's College, Glasgow.
1	4	—	—	2.* Anderson's College, Glasgow.
1	4	—	—	1.* Western Medical School, Glasgow.
1	3½	—	½. University College of North Wales, Bangor.	—
1	3	—	1. University College of North Wales, Bangor.	—
1	3	—	1 Aberdeen University.	—
10				

* Attended simultaneously with Classes at Glasgow University.

NOTE.—The M.D. Degree of the University of Glasgow is obtainable only by persons who have previously received the degree of M.B., and as, in many cases, a lapse of from 10 to 20 years occurs between the conferring of the two degrees, any statistics in regard to the education of those who receive the Doctorate would relate to such a remote period, and to such various periods† as to be almost entirely irrelevant to the present inquiry.

WILLIAM STEWART,
Clerk of Senate.

University of Glasgow,
24th December 1892.

† For example, of those who graduated M.D. in 1890, 1 received the M.B. Degree in 1871, 1 in 1875, 2 in 1876, 1 in 1878, 1 in 1880, 2 in 1883, 1 in 1884, 2 in 1885, 2 in 1887, 3 in 1888, and consequently did not attend any Medical Classes after these years.—W. S.

Appendix No. 58. Paper No. 1.

UNIVERSITY OF ABERDEEN.

RETURN called for by the GRESHAM UNIVERSITY COMMISSIONERS regarding number, &c. of Medical Graduates.

1. The total number of M.B. and M.D. degrees respectively granted by the University of Aberdeen for each of the three complete University years last preceding December 31st, 1892:—

	M.B.	M.D.
Year 1890 - -	55	13
„ 1891 - -	72	16
„ 1892 - -	70	25

N.B.—The Degree of M.D. is conferred only on graduates (M.B. and C.M.) of Aberdeen University.

2. Number of graduates (M.B.) who passed the whole of their medical course in Aberdeen University:—

Year 1890 - - -	52
„ 1891 - - -	64
„ 1892 - - -	66

3. Number of graduates (M.B.) who kept part of their medical course elsewhere than in the University of Aberdeen, with the names of the Medical Schools at which they kept such part, and the periods there, and at the University of Aberdeen respectively, distinguishing between the numbers of those who come from London Medical Schools, and those who come from other British Medical Schools:—

Year.	Number of Graduates.	Length of Study in Aberdeen University.	Length of Study elsewhere than in Aberdeen.	London Medical Schools.	Other British Medical Schools.	Colonial Medical Schools.
1890 - -	1	2 years	3 years	University College	—	—
„ - -	1	3 years	1 year	St. Bartholomew's	—	—
			1 year	—	Edinburgh University.	—
„ - -	1	3 years	1 year	—	Glasgow University.	—
	3					
1891 - -	1	3 years	1 year	Guy's Hospital	—	—
„ - -	1	2 years	3 years	„	—	—
„ - -	1	4 years	1 year	Charing Cross Hospital	—	—
„ - -	1	3 years	1 year	—	Edinburgh University.	—
„ - -	1	1 year	4 years	—	Edinburgh University and Medical School.	—
„ - -	1	3 years	1 year	—	Glasgow University.	—
„ - -	1	3 years	1 year	—	Anderson's College, Glasgow.	—
„ - -	1	2 years	4 years	—	—	Ceylon Medical College.
	8					
1892 - -	1	3 years	2 years	—	Glasgow University.	—
„ - -	1	3 years	1 year	—	„	—
„ - -	1	3 years	3 years	—	—	Ceylon Medical College.
„ - -	1	3 years	5 years	—	—	Grant Medical College, Bombay.
	4					

UNIVERSITY OF DURHAM.

University of Durham College of Medicine,
Newcastle-on-Tyne.

SIR, 14 January 1893.

HEREWITH I have pleasure in sending you the information desired by Her Majesty's Gresham University Commission asked for in your communication of the 20th ultimo.

The total number of M.B. and M.D. degrees respectively granted by the University of Durham during the years 1890, 1891, and 1892, is

31	M.B., and 36	M.D., in 1890.
40	„ „ 29	„ „ 1891.
42	„ „ 32	„ „ 1892.
113		97

Of the 113 M.Bs., 51 passed the whole of their medical course at the University of Durham College of Medicine, the remaining 62 coming from other schools and remaining from one to two years at the University of Durham College of Medicine.

Of the 97 M.Ds., 35 were practitioners of 15 years' standing, and not less than 40 years of age. Of the remaining 62, 16 passed the whole of the medical course at this College, the other 46 coming from other schools. All the 62 had previously taken the M.B. degree.

Of the 62 M.Bs. who passed a portion of their time only at this College, 47 came from the London Schools and 15 from other schools as below, at which schools they passed the portion of their Curriculum not passed at this College.

Middlesex Hospital - - -	7
St. Mary's Hospital - - -	7
London Hospital - - - -	8
Guy's Hospital - - - -	3
St. Bartholomew's Hospital - -	9
University College Hospital - -	2
St. George's Hospital - - -	2
St. Thomas's Hospital - - -	4
King's College Hospital - -	2
Charing Cross Hospital - - -	3
	47

Yorkshire College, Leeds - -	5
Owens College, Manchester - -	3
Queen's College, Birmingham - -	3
Edinburgh School of Medicine - -	1
Liverpool - - - - - -	1
Bristol - - - - - - -	1
Ceylon - - - - - - -	1
	15

I am, &c.,
GEORGE HARE PHILIPSON,
President.

J. Leybourn Goddard, Esq.

SUMMARY OF THE FOREGOING RETURNS AS REGARDS M.B. DEGREE.

University of Graduation.	Year.	Total Graduates (M.B.)	Total of those who took their whole Course in University of Graduation.	Total of those who took part of their Course outside that University.	Of those who took part of their Course outside the University of Graduation, there attended—									
					Extra-mural Classes in Edinburgh.	Extra-mural Classes in Glasgow.	Classes in other Scottish Universities.	Classes in English Universities.	Classes in London Medical Schools.	Classes in English Provincial Medical Schools.	Classes in Irish Universities.	Classes in Indian Universities or Medical Schools.	Classes in Colonial Universities or Medical Schools.	Classes in Foreign Universities.
Edinburgh	1890	210	42	168	153	1	8	4	8	3	1	3	9	2
Glasgow	1890	118	105	13	—	10	1	—	—	—	1	2	—	—
Aberdeen	1890	55	52	3	—	—	2	—	2	—	—	—	—	—
Durham	1890	31	(Other details slumped for the three years—*see* below.)				—	—	—	—	—	—	—	—
Edinburgh	1891	238	54	184	177	—	7	2	4	7	1	4	6	—
Glasgow	1891	104	101	3	—	3	—	—	1	—	—	—	—	—
Aberdeen	1891	72	64	8	1	1	3	—	3	—	—	1	—	—
Durham	1891	40	(Other details slumped—*see* below.)				—	—	—	—	—	—	—	—
Edinburgh	1892	264	58	206	187	—	8	4	3	5	1	6	11	1
Glasgow	1892	125	11	10	—	7	1	—	—	2	—	—	—	—
Aberdeen	1892	70	66	4	—	—	2	—	—	—	—	2	—	—
Durham	1892	42	(Other details slumped—*see* below.)				—	—	—	—	—	—	—	—
Durham	1890 1891 1892	113	51	62	1	—	—	—	47	13	—	1	—	—

NOTE.—As regards those who took part of their Course elsewhere than at the University of Graduation, the Returns are not made on an altogether uniform principle, and it has been found impracticable to tabulate any information as to the *period* spent at the University and the period spent outside. Both in Edinburgh and Glasgow, the attendance on University and outside Classes was, in many cases, simultaneous—that is to say, students attended, during the same Session, some University Classes and some extra-mural Classes. It was thus impossible to say exactly how much time was passed in the University, and how much outside. The Returns from Edinburgh give no particulars as to either Classes attended or time spent in Scottish extra-mural Classes, and, as regards attendance at other outside Courses, they deal only with Classes and not time. The Glasgow Returns are made up according to Classes, and also (where simultaneous attendance occurred) according to years. The Aberdeen Returns deal with years only. The Durham Returns are general in their terms, and do not give exact figures.

Appendix No. 58.
Paper No. 1.

Appendix No. 58. Paper No. 2.

PAPER No. 2.

LETTER and STATEMENT of MR. STANLEY BOYD relative to his Evidence on behalf of the London Medical Schools.

DEAR SIR,

I MUST apologise for the lateness of the accompanying addition to my evidence, and also for its length. In it I have endeavoured to bring together scattered bits of evidence, to make clear answers which were evidently unsatisfactory, and to answer more fully and after careful consideration certain questions which were put to me, especially concerning the Professorial Scheme as it would apply to the medical schools. I have endeavoured to consider the various ways in which such amalgamation of medical schools as appears to me to be desirable might be effected. I have little more to say with regard to my suggestion concerning the medical degrees of the new University and a licence. I laid my scheme before a gentleman thoroughly acquainted with the views of the General Medical Council, and he expressed warm admiration of it; but the General Medical Council would not move in the matter, he said, as it was outside the sphere of action of the Council. It appears to me to be a subject upon which this Commission might well make a recommendation.

In reading the evidence concerning the medical schools, I find the terms "larger" and "smaller" used in a loose way, and "smaller" seems often to imply inefficiency. Dr. Crosbie in his evidence referred by name to Charing Cross, as if it were the smallest school he could think of. The average daily attendance at this school is said by the secretary to be 240. The curriculum is now of five years' duration, and the largest classes contain the men of two years only. I have had the accompanying plans drawn for submission to the Commissioners in order that they may see how complete is the accommodation provided in one of the "smaller schools."

I am, Sir,
Yours faithfully,
STANLEY BOYD,
Dean, Charing Cross Hospital Medical School.

To J. Leybourn Goddard, Esq.

Charing Cross Hospital Medical School,
62 and 63, Chandos Street, London, W.C.,
October 15, 1892.

In support of my *objection to the foundation in London of a second University*, on the ground that competition would probably arise between it and the existing University, I may refer to Mr. Busk's reply to Q. 716, which gives, authoritatively, the wishes of Convocation with regard to the establishment of a professoriate in connexion with the University of London. Next, circular letters of the Senate to the Royal College of Physicians and to the medical schools, dated June 4th and 16th, 1891, are doubtless before the Commission. In these the Senate express the view that, under the existing Charter, they will be able to carry out the arrangement with the Royal Colleges sketched in para. 47 of the Revised Scheme, and that they will be able also to establish consultative boards of teachers of various colleges and schools, London and provincial. Add to this that, to speak only of Medicine, certain medical schools expressed to the present Commission a distinct preference for the scheme of the Senate, and that others preferred the scheme of the Senate to that of the Gresham Charter; and it seems evident that the existing University will have the power to teach and to attach to itself certain of the medical schools—how many it is difficult to say. But, should the University of London succeed in carrying out para. 47, loyalty to the Royal Colleges might cause certain schools, at present in favour of the Gresham Scheme, to desert it and go with the Royal Colleges. On the other hand certain medical schools regard para. 47 as a mistake, and these would adhere to a new University. Some colleges in Arts would surely be glad to join the University of London upon the terms offered; and it might well be that the Royal School of Science would do so. Under these circumstances the University of London would have at least as great a claim as the new University to State aid, municipal and private endowment, with the probable result that neither University would be really well supported. Professor Schäfer's statement that the University of London needs no endowment would have no weight if this University laid itself out for teaching.

(Q. 11,113–11,119.) With regard to the medical representation in the Gresham Charter, which strikes many as excessive, but which is, apparently, not so regarded by the principal witnesses for King's and University Colleges, I should have pointed out that the reasons why each medical school insisted upon its right to a representative in the Council were:—(1) That the University was to be a federation of institutions which were in many respects rivals, and it was therefore necessary that each should be able to guard its interests; (2) that the medical schools, other than those of King's and University Colleges, felt bound to protect themselves from a possible combination against them of the representatives of King's and University Colleges with the representatives of the Faculties of Arts, Science, and Laws—Faculties in which King's and University were to be the only colleges; (3) that the power of taxing the colleges was given to the Council, and taxation was held to necessitate representation. I am, therefore, inclined to believe that the medical schools would not be satisfied either with a diminished representation or with an increased representation of other Faculties, although I notice that some of their witnesses either assented to, or even suggested, the latter change.

As to the so-called PROFESSORIAL SCHEME; and, first, as to the *suggested mode of government of the University*. My answer to Q. 11,134 will have shown that I was not strongly wedded to that portion of the scheme which vests the government of the University in the professors. I think that the University professors ought to have large influence in their respective departments, but that their powers ought to be carefully considered and clearly mapped out, so as to prevent any abuse which may reasonably be feared. I am not prepared to say whether or not a University professor should necessarily have a seat upon the Council; obviously all could not if each Faculty is to have the same number of representatives. But, I do think that, in any new University, all teachers should be organised in Faculties and Boards of Studies, that the professors should be members of these bodies, and that the Faculties should not be left without the means of supporting their views in the Council.

Next, as to "*absorption*." Why should not the medical schools be absorbed; or, if not absorbed, amalgamated into one or a few; or why should not a small one be tacked on to each large one? were some of the questions asked. On reading Mr. Anstie's questions, I think—but am not at all sure of it—that he thought that the Commission would do well to propose that some of the schools should be closed. *Absorption of medical schools* seems to be impossible because the school buildings and sometimes the furniture (not the teaching apparatus) belong to the hospitals to which they are attached; the funds of the charities are invested in the schools, and the teachers in the school pay either a fixed rent or a proportion of the school fees. Sometimes a hospital committee is bound by the Charter of the hospital to maintain a school. Surely, under these circumstances, it is impossible that medical school buildings and their teaching plant should be placed at the disposal of the University. I believe that the only school buildings which could be thus handed over are those of University and King's Colleges; but the hospitals to which these schools are attached could not be handed over. Therefore, even in these cases, the University could obtain nothing like complete control; and partial control would probably dislocate the arrangements between the school and hospital, and seriously damage both.

Next, as to *amalgamation of medical schools*. Amalgamation would not effect any improvement in a school in which the various classes are large enough each to retain the services of a teacher of the highest class, and to keep him fairly occupied; for, although a large number of students may listen to and profit by a lecture, it soon becomes impossible for the principal teacher to exercise his influence upon the individual students in their practical work, and it is most undesirable that this influence should be lost by the handing over of practical classes to a number of demonstrators. Certain schools assert that they are in the above-described position. Assuming the statement to be true, amalgamation of the less wealthy schools only would have to be considered. I believe that, to start with the *preliminary sciences*, the classes in these sub-

jects are not sufficiently remunerative in some schools to secure the best teachers, or a sufficient number of demonstrators, or the most suitable accommodation and appliances for teaching. I think that it would be a distinct advantage if the students of these schools could be gathered together into classes of convenient and remunerative size. As regards *anatomy and physiology*, the same remarks may apply in a much more limited way to the teaching of these subjects, and to physiology rather than to anatomy. I should anticipate little or no benefit from amalgamation in the teaching of the *strictly professional and clinical subjects*. These were the views which I wished to express to the Commission, but, apparently, I did not make them clerr.

Some of the schools have felt and have acknowledged their deficiencies in the teaching of the preliminary sciences and of physiology. I believe that these schools would gladly give up the teaching of the preliminary sciences were a University established which would provide neutral science schools open to their students. This the Professorial Scheme proposed to do; but neither of the other schemes would help in this matter—both the Gresham scheme and that of the Senate would leave the less wealthy medical schools unassisted. Could the same result be obtained in any other way? Certain schools might combine to build a Science Institute, to which they could send their science pupils. Money is not forthcoming for the purpose; and, if it were, the institute would probably still be open to criticism owing to insufficient support. A less speculative plan is that certain schools should establish "intercollegiate" classes in science to be held in their own buildings. It would be a distinct convenience to the students that all the subjects should be taught at one school; but rivalry would forbid this. Further, although the accommodation of the largest school in the federation might be ample for its own students, it would probably be insufficient for a practical class twice the usual size. It would, therefore, be necessary, for practical work, to take the students in relays; or, after hearing a lecture given at one school, the students might return to their own school-buildings for practical instruction by demonstrators. Neither of these plans would be economical, and the second would render effective supervision by the lecturer difficult and would waste the students' time. For no London schools are so close together that the time which would be occupied in passing to and fro between them could be disregarded. All who are engaged in teaching medical students know how difficult it is to find time for the various classes and practical work which they have to attend, the day is too short for what has to be got into it! Whatever arrangements might be made for practical work, to effect economy even in lectures, these would probably have to be given in the theatres of the largest school in the federation, and this would in time lead the majority of students to enter at this institution, *i.e.*, intercollegiate lectures would be likely to cause the transfer of students from the smaller to the largest school in the federation. This probably explains why, with the advantages of united action before them, no such action has as yet been agreed upon between any schools—although negotiations have taken place. Under the Professorial Scheme, the acceptance by the University of the principle of amalgamation would be felt by the medical schools in common with other parts, and I believe that such amalgamation as is possible and advantageous would ultimately be brought about.

Arrangements for intercollegiate lectures could be made and carried out by the school committees concerned; but complete amalgamation of schools, such as I understood Mr. Anstie to suggest, would require the consent of the hospital committees concerned, and I imagine that their consent would not be readily given, seeing that they are financially interested in their own particular schools. If, in his last question, Mr. Anstie meant that it would be well for the Commission to recommend that some of the medical schools should be required to amalgamate, I know of no power which would insist upon the carrying out of the recommendation; it would not be carried out voluntarily, for I believe it would mean the closing of certain schools for all but clinical work. I think that the Professorial Scheme would be most likely to lead to a satisfactory result, for if the teaching of a school in one or more subjects appeared to be unsatisfactory, the University would cease to recognise it, and this would lead to the transfer of its University students to other institutions which would be proportionately strengthened. Such an adverse verdict against a school, when necessary, would probably be obtained from the Senate of a Professorial University more easily than from that of the Gresham University upon which the institution to be condemned, together with others, sympathetically shaky, would be represented.

Powers of the University over Medical Schools in the University.—My evidence on this important point is so scattered that it seems desirable to summarize it. (1.) The University should prescribe the subjects and modes of examination, and the schools would have to teach according to these. (2.) Evidence of insufficient teaching or of insufficient teaching "plant" should be a reason for ceasing to recognise a school in certain subjects or entirely. (3.) The University should have power to inspect and examine closely into the working of schools; and I believe that the best method of testing the efficiency of the school laboratories would be the holding of the practical portions of the University examinations in these laboratories, the examiners in their report being required to state whether or not all proper facilities were afforded them. (4.) Lastly, with regard to *the appointment of lecturers*. Given the representation upon the Senate demanded for medicine, I think that recognition by the University, on the recommendation of the schools, of all teachers in the schools might be rendered necessary to obtain recognition by the University of the teaching of these officers and seats for them in the Medical Faculty. Under existing circumstances the actual appointment of the teachers in medical schools could not rest with the University, for the University would not be permitted by the hospital committee to appoint the surgeons and physicians to the London hospitals, and it is from the staffs of these hospitals that most of the teachers in the schools must be selected, seeing that the ablest men available are appointed to the posts upon these staffs. That a school is bound to the hospital to which it is attached for its teachers of medical subjects is recognised by the hospital authorities, most of which allow great weight to the opinion of the staff in the choice of a new officer; and the staff always consider the prospective requirements of the school in making their selection. The greatest care and trouble are, as a rule, taken when the claims of candidates personally unknown to the medical committee have to be considered. The choice may be easy when one candidate is pre-eminent; it is most difficult when all the candidates are young men, holding practically the same qualifications, all bringing the highest testimonials from their respective schools, and all too young to have done much original work or to have gained wide experience. I fail to see that, in either case, a committee of experts appointed by the University would be more likely to arrive at a more satisfactory choice than one appointed by a hospital which would have its interests (identical with their own) most deeply at heart.

A word may be added about the tendency exhibited by the larger schools to appoint their own men to vacancies upon their staffs, in the same way that the the fellowships of a college are, as a rule, filled up from among former students. Vacancies upon a staff are not of very frequent occurrence, and when one occurs, a great school will probably have a choice between the best men of several years; the staff will have watched the whole course of these men both in the school and after graduation, and their personal character, upon which success in a school so largely depends, will be known. The temptation to select from among these men must be great; but I admit that a school and hospital should have no bias against an outsider if there is reason to suppose—as must sometimes be the case—that he is better than the home-trained man. Here, again, I am inclined to hope that a Senate made up of representatives selected without regard to institutions might do something towards obliterating any undesirable feeling on the part of the various bodies included in the University.

In filling *the higher posts in the schools, e.g.*, the Chairs of Medicine and Surgery, fitness is certainly the main point considered, but seniority must have weight.

In *the appointment of teachers of science* I believe that the schools would derive great benefit from the advice of a University, and that they would naturally seek it, so that whether the actual appointments were or were not placed in the hands of the University the practical result would be the same.

Supposing the question "whether it is better that "the average student should be taught anatomy and "physiology by specialists or by practitioners of "medicine having special knowledge of these subjects" were decided in favour of the specialists, I have equally no doubt but that the advice of a University having laboratories for anatomical and physiological research would be sought. But I must point out that only under

Appendix No. 58. Papers Nos. 2 and 3.

the professorial scheme would there be any advantage in consulting the University on these points, for only under this scheme would there be single bodies knowing all the young chemists, physiologists, &c., and able to judge between them.

Another important question is *whether or not the medical degrees of the new University should confer a licence to practise.* There are many reasons why they should not do so, and all do not seem to have been stated. The importance of a uniform minimum standard is admitted by all; when, however, the endeavour to do something towards obtaining it would interfere with the carrying out of some present plan a uniform standard is said to be "Utopian." It certainly will be difficult to obtain, and will require many years for its evolution; but it probably would not take so long if the educated public recognised its importance to them. If it were appreciated that men who are adjudged unfit to practise by one licensing body can go to another and obtain its licence at once, if it were known that men to whose care one would be sorry to commit oneself are occasionally licensed by even the most exacting of the licensing bodies, showing that the men it refuses to license must be bad indeed; if it were widely felt (and the proceedings of the General Medical Council can prove it) that the names struck off the Register are chiefly those of ill-educated men, then, surely the public would say, "We have it in our power to insist that this "state of things shall be altered, and we will do so." I think that there ought to be a state licence granted by a body in each division of the kingdom, and, if possible, by others in India and the Colonies. From these bodies a central board should be constituted, in relation with the General Medical Council, having power to inspect all examinations, and to receive all papers worked, at the various examinations throughout the Empire, and having laid upon them the duty of examining a certain percentage of these papers with a view to reporting to the Privy Council on the relative standard maintained by the various licensing bodies. The present system of inspection by the General Medical Council is, I believe, quite ineffectual in obtaining a uniform standard.

University degrees should confer a licence only under certificate from one of the State licensing bodies that the examinations passed included all subjects required for the licence and were above licensing standard. It should be the duty of the licensing body to satisfy itself on these points by constant inspection; but it should have no other power than to protect the interests of the public by preventing the University from granting a decree on a standard as low as or lower than that of the State licence. I do not suggest that the new University should in any way be put under the control of an outside body; the only power this body would have over the University would be to inspect its examinations, and, in case its standard did not surpass that of the licence, to report the fact to the Privy Council. It is hardly conceivable that under these conditions a University would allow its standard to sink to this level.

Next, the General Medical Council opposed the establishment of a new University the medical degrees of which should confer a licence, and recent legislation has been steadily against increasing the number of licensing bodies.

Lastly, no one would wish unnecessarily to injure the Royal Colleges, and it is difficult to see how the Royal College of Surgeons could maintain its magnificent museum, its library, and its laboratories, if the new University were allowed to grant a licence.

My answers to Professor Ramsay's question (11,417–11,438) concerning the degrees of the new University were not always clear. My wish was that the new University, including in itself the University of London, and constituted, as regards its governing and teaching body, from London, should grant medical degrees open to London students only (London students being those who have studied in the University for at least two years) upon examinations which should stand to the present pass examinations in the matter of standard as pass to honours. The present examinations would remain, as now, open to all comers. A slight change would, indeed, be necessary in them; for I suggest that, for example, the present Preliminary Scientific 1st or 2nd Pass M.B. (1st division) should be called Preliminary Scientific 1st or 2nd M.B. with 3rd class honours in all subjects. I think that the 2nd division of the present pass examinations of the London University might be abolished. The 1st and 2nd class honours might remain much as at present. These examinations would be continuous, so to speak, and conducted by the same examiners; except that where competition came in (1st and 2nd class honours) not more than two examiners should act, and their names need not be previously announced. It would be open to a London student to enter for the pass degree or for the degrees with 3rd class honours; but I would not allow a man who had taken only the pass degree to sit for 1st or 2nd class honours in any subject. That the London University allowed men who passed in the 2nd division to sit for honours acted as a discouragement from steady, all-round work which, in my opinion, is of the first importance. The non-collegiate student would sit for the same papers as now, and be judged by the same standard, obtaining, should he pass, the style "M.B., with 3rd class honours in all subjects." Subsequently he could sit for higher honours in any subject, and he would here meet the world in competition.

A London student entering for (say) the M.B. with 3rd class honours, but failing to attain the required standard, might be recommended for a pass; or having obtained a pass he might be permitted to sit for the examination with third class honours.

I think that the work of the London University has unfortunately caused the true value of education to be obscured, in that the University has directed practically all its attention to examination, and has said, in so many words, that it did not matter how the necessary knowledge was gained. Holding this view, I think that if the University of London becomes the centre of the new University, being so modified as to meet the teaching requirements of London, nothing should be allowed to compromise its success in its new work. The provision of a good degree for non-collegiate students will be an important part of its duty; but no suspicions (which are absolutely groundless), I believe that these students will be unfairly dealt with, or that rules and regulations tending to inconvenience and exclude them would be passed, ought, in my opinion, to be allowed to interfere with the work, in and for London, of the new University, nor, I think, should the excessive value which many London graduates set upon their degrees, be allowed to interfere with such arrangements in the new University as may seem absolutely best; that "M.A. London" will not mean exactly the same thing "then" as "now" ought not, I submit, to have weight against any change for the better education of London. I firmly believe that the advantage will lie with the degrees of "then" and not with these of now."

No one can esteem more highly than I the value of *residence in college;* much has been said, especially by King's College, upon the importance of preserving the various teaching institutions as they are in order that such advantages of collegiate life as are possible to London may be preserved. I am a University College man and I lived with King's College men during the whole of my student period. I feel confident that if University and King's Colleges were "absorbed" and converted to other uses, as proposed in the Professorial Scheme, not one social advantage, at present enjoyed by their students, would be lost. Further, if the Governing Body of any new University will keep in mind, as one of their duties, the promotion of common life among its students, and will turn their attention to the founding of college halls under suitable discipline, to the formation of a debating union, to the provision of a good athletic ground, easy of access, to the establishment of a boating club, a rifle corps, and so forth—then we should get many of the effects upon London men of life at one of the older Universities.

PAPER No. 3.

STATEMENT by Professor HENRY NETTLESHIP, M.A.

Professor Nettleship attended to give evidence on behalf of the Association for Promoting a Professorial University, but there not being time on the day he attended to take his evidence he was requested to send a statement of his views in writing.

The following letter was subsequently sent to the Commission:

To the GRESHAM UNIVERSITY COMMISSION.

MY LORDS AND GENTLEMEN,

I HAVE been asked to give evidence before you upon one or two points on which it is, perhaps, possible for me to speak without presumption, although the

whole of my academic life has been passed away from London.

(1.) The preamble of the proposed Charter of the Gresham University states "that there exists at pre- "sent in London an urgent demand for the extension "of the benefits of University education, and for the "better encouragement of learning and research, and "that it is expedient there should be constituted in "and for the London district a University providing "for its students the best attainable teaching in all "the subjects included in its Faculties, together with "the necessary appliances and aids to study, and "commending to its students systematic courses and "methods of study, for efficiency of which it should "become responsible."

(2.) The Charter appears to assume the continued existence of the University of London as an examining University. But, side by side with it, it creates a new University, the functions of which shall be both to examine and to teach. An essential feature of the new University, as constituted by the Charter, is, that it is to be an aggregate of colleges and teaching institutions, some of which already exist, while others may in course of time be called into existence.

(3.) I am aware that among the many difficult questions which beset the subject one of the most difficult is that which concerns the relation of the London medical schools to the new University. On this question I have no means of forming an independent opinion, and I shall therefore confine my remarks to the subject of the Humanities, as they are sometimes called; in other words to those branches of study which are comprised under the terms philosophy, history, and literature.

(4.) Speaking under these limitations, I wish to express my general agreement with the proposals adopted by the Association for Promoting a Professorial University for London at their meeting held on June 14, 1892.

(5.) It seems to me undesirable, as involving a waste of labour and money, that there should be two Universities in London. I see no reason why the work both of teaching and examining should not be well performed by the same body. Indeed, it is, in my opinion, expedient that the teachers of a subject should always take part in the examinations on that subject. If it be possible, I should wish to see the present University of London continue to exist. But I should wish it to assume teaching functions in addition to the functions of examining which it exercises at present.

(6.) With regard to the government of the new University, its educational appointments, and its examinations, I agree with Nos. 3, 6, and 7 of the proposals adopted by the Association for Promoting a Professorial University for London.*

(7.) The proposed Charter of the Gresham University does not, if I read it aright, provide for the establishment of a professoriate outside the limits of the colleges which are to form part of the University. There are to be college professors, as there now are, but no University professors. But the existence of an effective University professoriate I regard as essential both to the maintenance of a high standard of teaching and to the advancement of knowledge. Those two subjects are, in my opinion, indissolubly connected. A high standard of teaching cannot be maintained unless the teachers are interested and engaged in advancing knowledge. On the other hand, it seems to be true in the main that knowledge is most effectively diffused, and an active interest in its advance most effectively created by the constant personal contact and co-operation of teachers and students. It is by this that the serious intellectual tradition which during the last hundred years has been so potent an element in the national type of Germany has been to a great extent created and fostered. The best German Universities have, by means of their independent professorial system, maintained the tradition and habit of thorough work, together with the high estimate of knowledge, for which Germany is justly distinguished among the nations of Europe.

(8.) As the professors spoken of in the Charter are to be only college professors, so there are speaking generally, to be no students outside the colleges. If I rightly understand the third clause of the Charter, degrees are only to be conferred upon such persons as have pursued a regular course of study in a college or medical school in the University, either during the whole or during a part of their period of study. This restriction appears to me to be very undesirable, especially when it is remembered that the London colleges and medical schools are not, like the colleges at Oxford and Cambridge, institutions for residence and discipline, but institutions for instruction only. To insist on such a restriction would be, in my opinion, to inflict a hardship on many students, and thus to hinder the general efficiency of the University.

(9.) There appears to be no provision in the Charter against the creation of denominational colleges, or colleges in which the professors and other teachers are bound to signify their adherence to the views of some particular religious denomination. But the existence of such societies within a University would, it appears to me, be an evil as possibly tending to promote religious dissensions within the acedemical body.*

(10.) It may be said that there is nothing in the Charter which prevents the formation of a University professoriate outside of the colleges and medical schools. In answer to this I would observe that, from what I have seen of the working of the college system at Oxford, it would, in my opinion, be a grave mistake to establish a University in London on the double basis of collegiate and professorial instruction. The double system involves needless complexity in the educational arrangement, and is almost certain to involve waste of money, especially when each college aims at securing for itself the position of a small University. The college will naturally desire to keep the teaching of their own students in their own hands, and will probably succeed in doing so to a great extent. Thus the University professors will find, as they do at Oxford, that they have very little teaching work to do, and will through lack of interest, be tempted to evade the performance even of that little.

(11.) The demand spoken of in the preamble of the Charter will not, it seems to me, be satisfied except by the establishment and adequate endowment of a University such as is contemplated by the Association for Promoting a Professorial University for London. The efficiency of such a University will, I think, be seriously impaired by the continued independent existence of bodies such as King's and University Colleges; and I should, therefore, wish to see their funds and appointments, due regard being had to vested interests, gradually transferred to the control of one central University.

HENRY NETTLESHIP, M.A.,
Corpus Professor of the Latin Language and Literature in the University of Oxford.

PAPER No. 4.

STATEMENT by Professor E. RAY LANKASTER, M.A., LL.D., F.R.S.

Bembridge, Isle of Wight,
MY LORD, December 14th, 1892.

IN July last I undertook to give evidence on behalf of "the Association for Promoting a Professorial "University in London" to the Commission over which your Lordship presides. I have been asked to appear before the Commission on the 16th, but venture to ask your Lordship to receive this letter as a substitute for oral evidence, for two reasons, 1st, that I am only now recovering from severe illness, and 2nd, that owing to that illness I have not been able

* (5.) Subject to clauses (9) and (12) the University to be governed by a Senate which shall ultimately consist of the professors and a certain number of Crown nominees.

(6.) "The University to have the power of appointing readers and lecturers, either to supplement the teaching of the professors or to deliver graduation or other courses of lectures within the metropolitan area at such places as may be determined by the Senate."

(7.) "The University to have power to grant degrees and to institute degree examinations. These examinations may, if found necessary, be different for those who have followed prescribed courses and those who have not. Each professor of the University to be *ex officio* an examiner in the subject of his Chair, but not necessarily to take part in every examination in that subject. Examiners, who shall not be professors in the University, to be appointed by the Senate to take part in all degree examinations."

* Mr. Thiselton Dyer, in a letter to "Nature," February 25, 1892, speaks of "the removal to English Universities of Nonconformist Colleges." If he alludes to the Mansfield and Manchester New Colleges, it should be remembered that these bodies are not colleges in the University of Oxford. It is also doubtful whether the word "denominational" can properly be applied to them.

Appendix No. 58. Papers Nos. 4 and 5.

to take part in the recent deliberations of the association.

I should wish in the first place to say that the evidence which I gave before the former Commission on a University for London contains arguments to which I adhere in favour of a "professorial" as distinguished from a "federal University" for London, and an explanation of the difference between these two kinds of organisation.

From my experience both of London and of Oxford, I am convinced that the attempt to form a University in London by placing representatives of a great variety of teaching bodies upon its governing body, would lead to a disappointing result.

Every small teaching organisation which is not actually a boys' or girls' school, now calls itself by some name implying University rank, or puts forward a claim to interfere in some way in the organisation of a new University in London. Colleges for young ladies, working men's colleges, and suburban lecture societies, now-a-days, misuse the name of "University" and claim to be known as "University expansions" or by some such title. If it be found impossible to establish a true professorial University in London by giving to University and King's College the opportunity of fusion and voluntary absorption in either a new University or the existing University of London, re-modelled, then I am most strongly convinced that it will be for the advantage of the true interests of the highest education in London that the whole question of University re-organisation in, and for London, be left alone for some years until public opinion has made further progress.

The proposal to re-organise the present University of London, so as to make it the basis of a professorial University in and for London whilst still continuing its extra metropolitan work, is in my judgment, one which could be carried out with success. Everything depends in such a scheme upon the details. The mere use of the words "Faculty" and "professor" is quite compatible with the creation of an organisation which would be worthless.

It would be not merely of great value, but almost the only certain guarantee of success, that the "professorial University" of London should have the prestige of the existing University of London.

It would, however, be essential to provide that the sole executive and governing body of the University should be the Senate (only consultative powers being given to Convocation and Boards of Studies), and secondly, that the professors of the University should constitute a majority of the Senate. Further, in order to secure the most distinguished men of the country in each subject as professors, provision should be made for their payment, and for their selection (as vacancies occur) by special boards subject to ratification by the Senate.

I have hoped that the plan recently approved by the associates and representatives of the University of London may be developed so as to give us some approximation to a true University in London. But to carry out that plan is no easy matter. It would, I think, require an executive commission with very special powers, consisting of men specially acquainted with all the details of both the existing institutions and the proposed reconstructions.

I am, &c.

(Signed) E. Ray Lankester,
M.A., LL.D., F.R.S.,
Linacre Professor in the University of Oxford.

To the Right Hon. the Earl Cowper.

PAPER No. 5.

Statement on behalf of the Albert University Charter Opposition Committee to the Royal Commission appointed to Inquire into the Question of a New Teaching University for London.

My Lords and Gentlemen,

In accordance with the permission conveyed to us in the letter of your secretary, and in view of the present stage of your inquiry, we beg to submit for your consideration the following statement:—

There would seem to be at present, broadly speaking, three schemes for the constitution of the new teaching University which command some measure of support:—

(1.) A constitution on federal lines, as formulated in the Gresham Charter.

(2.) The proposal of the "Association for promoting a Professorial University" for the establishment of a University to be controlled by its professors, "with a certain number of Crown nominees."

(3.) The scheme recently approved by the Convocation of the University of London.

(i.) To the scheme of a University formed by a mere federation of the colleges, the objections formulated by our Committee 12 months since (copy of which is enclosed) remain in our opinion unshaken. Here it is only necessary to emphasise the point that such a scheme must of necessity involve the establishment of a second University in London in rivalry with that existing at present, a result which it can hardly be doubted would be highly prejudicial to the best interests of education.

(ii.) With respect to the "professorial University," while we fully agree with the object of the Association—the establishment of a single great teaching University for London—it appears to us that the leading principle of the scheme which they have drawn up is open to serious objection. It is proposed in effect that the professors of the University shall themselves practically constitute the governing body. The suggested inclusion of "a certain "number of Crown nominees" can hardly qualify this result; for all previous experience shows that persons, however eminent, when nominated by the Crown on governing bodies, are rarely found to take the same active interest in the work as those members who are direct representatives of the interests concerned.

It is clear that the educational work of the new University will have to be handled in a broad and liberal spirit if it is to attain success. Ordinary academic methods must prove inadequate to cope with the direction of a new metropolitan University; and new means will have to be devised to meet the special circumstances of the case. Moreover, in a matter of this importance, no body of professional men, however eminent, can wisely be trusted with supreme control. The work of the new University—which is to organise the higher teaching in London, and to raise it to a level much higher still—needs a force of initiative on the one hand, and of popular sympathies on the other, such as a broadly representative body can alone hope to command. A University established on narrower lines, and governed entirely by its professors, could not expect to receive either municipal or imperial support.

(iii.) There remains the scheme of Convocation. With this we are happy to find ourselves very largely in agreement, embodying, as it does, many of the most essential principles contained in our former memorandum. It alone of the three appears to contain the materials for a satisfactory solution of the question, and to it accordingly the observations which follow are principally directed.

I. Degrees and Examinations.—Here, and we may add here only, the proposals of Convocation appear to us to need large modification, if the new University is effectually to fulfil the functions of a teaching University for London. By clause 17 of the draft scheme of Convocation it is provided that "all degree examina-"tions shall be irrespective of the place or manner" of the candidate's education. We submit that this provision, insisting, as it does, on the absolute severance of the examining from the teaching side of the University, is open to grave objection, inasmuch as it would seriously prejudice the chances of an effectual organisation by the University of the higher teaching in the colleges and elsewhere in London.

We do not, indeed, think it possible or desirable that special privileges in respect of the admission to degrees or examinations should be granted to the colleges as such. But we believe it to be possible, without any such undue preference, to provide what may be called an educational avenue to the degree, side by side with, and as an alternative to, that by examination only.

The suggestion, we venture to submit, is, that the University should be empowered, if it think fit, to

institute degree examinations (both final and intermediate) in connexion with courses of study prescribed by itself, and pursued under professors or other teachers appointed or authorised by itself, admission to such examinations being conditional on the candidate having followed the prescribed courses under the prescribed conditions. These examinations would probably be in part identical with the ordinary examinations, in part different. That is to say, some of the papers would be the same for all candidates, others would be different for those who had followed prescribed courses and for those who had not. The latter might or might not be taken at different times. In no case should the professor or other teacher be himself the (sole) examiner.

The effect of such a provision would be to encourage students resident in London to pass through courses of University instruction (whether at colleges or elsewhere) in preparation for the degree examinations, an object which is secured at Oxford and Cambridge by the requirement of residence and by the college system. As regards the provinces, it would probably be found desirable to allow the prescribed courses to be taken at the provincial University colleges, or those of them which do not form part of another University. These would be (excluding Wales, in view of the contemplated Welsh University) the colleges at Birmingham, Bristol, Nottingham, and Sheffield.

The examination test is no doubt indispensable, and must be retained in all cases, and in the hands of the University. But no examination—at all events, no "pass" examination—can by itself discriminate between the student who has been educated and the candidate who has been merely "crammed." And if the object is to establish a teaching University for London, we submit that the very first business of such a University is to bring its system of degrees into direct relation with its system of teaching.

Such an educational avenue as we suggest, arranged, as it would be, in close connexion with the organised teaching of the University and the colleges, would probably become the usual one for students resident in London. But we would point out that its adoption would not interfere with the purely examinational degree (which would still remain in force and be open open to all comers); and the imperial character of the university, on which the present University justly prides itself, would be in no way prejudiced. But it would enable the University for the first time to exercise its proper control over the higher teaching at the colleges and elsewhere in London, and it would go far to insure that students in London preparing for the degree should receive a genuine University education on the way to it. Without some such powers, it is difficult to see how the desired end of the organisation of the higher teaching in London, in the language of the former Commission, "under the University as its natural head" is to be secured; or, we may add, how in the face of the competition of the colleges and the private teachers there can be any sufficient guarantee for the effectual influence of the University over the education of its students.

We submit that the fear lest such an alternative system of examinations should tend to lower the standard of the degree is entirely groundless. We believe it would have the very opposite effect. For, whereas by a system of mere examination the University can only test results, by the educational degree it would, in addition, regulate the methods of study and control the character of the teaching, which in London is at present left far too much to take care of itself. It would also promote the harmonious co-operation of the colleges and the University, which is so much to be desired in the interest of both.

Lastly, we may point out that all we ask is that the University should be given powers by its Charter in the direction indicated; whether it should act upon them would be for itself to determine. Such powers could be given by a clause which, while making it clear that the degrees of the University may be obtained as at present by examination only, should, at the same time, provide that the examinations may, *if thought desirable by the Senate*, "*be different for those who have* "*followed prescribed courses and for those who have* "*not.*"* Provided always that the standard required shall be the same in both cases.

* We have adopted here the phraseology of a clause in the scheme of the "Association for promoting a Professorial University," and we are glad to be able on this point to support ourselves with the authority of the distinguished body of men composing that association.

We proceed to some further points to which we desire to call the attention of the Commission.

II. The Senate.—With respect to the composition of the Senate, we are in general agreement with the scheme of Convocation—more especially as regards the inclusion of the municipal authorities (a necessity if there is to be endowment from those sources) and the representation (through Crown nominees) of learned institutions. But we would urge the desirability of a stronger representation being given to the professoriate. Under the scheme of Convocation (clause 3 (iii.)) 10 members of the Senate are elected by the Faculties. But it is clear that from the first (and increasingly as time goes on) the University professors will be largely outnumbered by the other teachers "recognised by the University," who will be included in the several Faculties (clause 12 (ii.)). In order to secure to the professoriate its legitimate influence in the counsels of the University, it might be provided either (*a*) that the professors should be represented independently of the Faculties, or (*b*) that one representative in each Faculty should always be a University professor in that Faculty.

III. The Faculties.—We think that in clause 12 (iii.) the term "recognised" needs explaining. The following modification of the clause is suggested:—

12. Each Faculty shall consist of—
   (i.) The examiners of, &c.
   (ii.) All University professors, *lecturers*, and *demonstrators* in, &c.
   (iii.) Such other teachers of subjects comprised in any Faculty *as the Senate may designate from time to time as members of the Faculty. Provided* that the total number so designated shall not exceed the total number at any time of *ex-officio* members under subsections (i.) and (ii.) of this clause.

We submit, further, that it should be expressly provided that membership in the Faculties shall be open to women.

IV. The Teaching.—(i.) The necessity for an independent professoriate, appointed and endowed by the University, is now admitted on all hands, and we strongly support the proposals of Convocation on this head.

(ii.) Not less important than the direct provision of teaching through the professoriate is the work of organising and co-ordinating the teaching already in existence, and we desire to endorse the opinion expressed in Mr. Llewellyn Smith's Report, adopted by the Technical Education Committee of the London County Council, that the University should be given full powers in this direction. The clause to which we refer runs as follows (page 75):—"The University to "have power to co-ordinate teaching, as well as to "supply it, to put an end to the present competition "among the colleges, to lay down courses of study, fix "the fees, and either by concentrating particular "branches of work at particular institutions, or by "establishing a system of intercollegiate lectures or "laboratory work, to enable every University student "to obtain conveniently the highest form of instruction "in his particular branch of study."

(iii.) We desire to emphasise in particular the recommendation of clause 9 in the scheme of Convocation, "that the teaching of the University should be given "at various centres, according to requirements." For, in the Bishop of Durham's words, "the area of London "is so large and its population so various" that its educational needs can never be adequately dealt with from a single centre. It appears to us beyond dispute that, for instance, in the East End, where so much has already been done by the Universities settlement at Toynbee Hall, there is an important field for University effort. We think that the organisation, and so far as possible the direct provision and endowment of the higher teaching in the outlying parts of London, should be expressly laid down as among the duties which it is incumbent on the new teaching University to undertake. This need in no way interfere with the centralisation of the more advanced teaching.

(iv.) Lastly, it must be borne in mind that, not only in the East End, but throughout the entire field which the University is to cover, there is a very large class of students who can only be reached through evening teaching. In this class are included, not artisans only, but shop hands, clerks, civil servants, teachers, and others (both men and women) in the middle ranks of society. Whether in the majority of cases such students

Appendix No. 58, Paper No. 5.

may or may not be able to proceed to a degree is a matter of comparatively little moment. Some do so already, and, with improved educational opportunities, the number of these may be expected to increase. But, however this may be, the importance of this class of students as a whole, and their claims on the attention of the University, are evidenced by the statistics of the Birkbeck and other evening institutions for higher teaching; and here again we would submit that the duty of the University to make provision for their requirements—to provide and organise the higher education for evening as well as for day students—should be expressly laid down in the new Charter.

V. FUNDS.—The establishment of an adequate teaching University for London manifestly requires large funds, which would enable it to develop its work speedily and effectively. These might reasonably be provided by grants (1) from Parliament, (2) from the County Council, (3) from the City Companies, (4) from the Corporation, and, perhaps, (5) from the City parochial charities. With regard to a parliamentary grant, the following precedents, among many others, seem to us fully to justify the demand for an endowment from public funds. We find (1) that a capital sum of 120,000*l.* was granted by Parliament towards the new buildings of Glasgow University, while in 1891 the Treasury grant for the year was nearly 7,000*l.*, more than a quarter of the University income. (2.) For the same year at Edinburgh the Treasury grant was 8,479*l.*, or more than half the total University income. (3.) To Queen's College, Belfast, the grant for the same year was 8,583*l.*, that is to say, more than two thirds of its income. (4.) The various provincial University colleges enjoy an annual grant of 15,000*l.* These instances might be multiplied, but we submit that they are fully sufficient to support our contention.

With regard to the suggestion as to the County Council funds, there has been as yet only a short time for the making of precedents. Still we find (1) that the Durham College of Science at Newcastle-on-Tyne receives 1,000*l.* per annum from the County Councils of Northumberland and Durham. (2.) The Yorkshire College of Science at Leeds, University College at Nottingham and Bristol, each receive substantial help from their respective county councils. (3.) Many of the Welsh county councils have assigned grants to aid the various Welsh University colleges. (4.) The Technical Education Committee of the London County Council recommend, on certain conditions, an annual grant of 10,000*l.* In this connexion it is worth while to call attention to a statement made by Mr. Acland, the Vice-President of the Committee of Council, at Chelsea last November, that if the London County Council could see its way to provide an annual grant of 10,000*l.* or of 20,000*l.* for the new teaching University for London, "it would go hard with any Government "which refused to meet it with a similar grant."

We have the honour to remain,
My Lords and Gentlemen,
Your obedient servants,
CHARLES S. ROUNDELL,
Chairman.
J. SPENCER HILL,
Secretary.

February 13, 1893.

THE ALBERT UNIVERSITY DRAFT CHARTER.

36, Outer Temple, Strand,
February 2nd, 1892.

SIR,

THE committee for opposing the grant of the Albert University Charter in its present form invite your attention to the following statement:—

A Draft Charter for the establishment of a teaching University for London will at the beginning of the Session be laid upon the tables of both Houses of Parliament; and, unless within thirty days thereafter an address be presented by either House praying Her Majesty to withhold her approval, the Charter will pass the Great Seal.

The main grounds of objection to the provisions of the proposed Charter are as follows:—

1.—That the recommendation of the Royal Commissioners that, in an event which has since happened, "if your Majesty should think fit to "remit the subjects on which we have been "appointed to make inquiry for our further "consideration, we should be at liberty to "make to your Majesty a further report," has been disregarded.

2.—That the only basis for the establishment of a University worthy of the metropolis as laid down by the commissioners, namely, the "co-ordination" of "the greater teaching agencies of the metropolis" under "a University, as their natural head" has likewise been disregarded.

3.—That, having regard to the past history and present character of University College and King's College, the erection of these two Colleges, along with the Medical schools, as the constituent elements and nucleus of the new University, affords no adequate guarantee for the advancement of the higher education of London.

4.—That, under the proposed charter for a teaching University, no provision is made for University teaching, except by lecturers designated for subordinate purposes; and thus a University Professoriate, which, in the opinion of the Oxford Commissioners of 1852, is "necessary "for any healthy and complete system of Uni-"versity Reform": and, in the opinion of the Cambridge commissioners of the same year, "should be the exponent of what is highest and "best in the condition of Literature and "Science," is set aside in the interest of the Colleges.

5.—In place of this University Professoriate, which, according to these high authorities, is so essential a part of a University, the University will be dependent for its teaching on the Professors of the Colleges, in the appointment of whom it itself will have no voice. The attraction to the University of men of eminence and their independence when appointed, is thus hindered and compromised.

It is in this respect that the Religious Tests of King's College come into prominence: inasmuch as they will operate as a bar to intellectual freedom and educational progress. The mere existence of a denominational college in an undenominational University may not, in itself, be open to objection. But the cases of Keble College and Selwyn College, which have no legal status in relation to the Universities of Oxford and Cambridge, serve to show that the recognition of any claim on the part of King's College, or of any similar institution, in its own right, to a share, and that a substantial share, in the government of a University is contrary to precedent, and is opposed to public policy.

6.—That, under the provisions of the Charter, the two colleges will have, not only a virtual monopoly of the appointment of the University teachers (except in medicine), but also a predominant voice in the University council; together with control over the assemblies of faculties (that of medicine being again excepted), the Boards of Studies, the examinations, and the admission of other constituent bodies as members of the University.

7.—That the constitution of the University out of twelve colleges, ten of which are medical schools, whilst in the other two the Medical Faculty is an important if not a predominant factor, will have the effect of investing that faculty with an undue ascendency. Such a limitation is not only antagonistic to the broad policy indicated by the Royal Commissioners, but, as has been elsewhere observed, "in no "British University has the degree-giving "power hitherto been intrusted to a body in "which a single Faculty is thus made para-"mount."

Lastly, these objections will be seen to be made in the interests of learning and education, and also in accordance with the letter and spirit of the recommendation of the Royal Commissioners.

The oppposition to the charter in its present form is not a party question; it is not even a London question; but one of national concern, calling for a settlement upon lines, and in a manner, worthy of the greatness of the Capital.

On behalf of the Committee,
CHARLES S. ROUNDELL, *Chairman.*
J. SPENCER HILL, *Secretary.*

The Case against the Albert University Draft Charter.

The Royal Commission of 1889.

I. During the last few years there has been a movement for the establishment in London of a teaching University, to supplement the work of the existing University of London. In 1889 a Royal Commission was appointed to consider the whole question. Broadly speaking, two alternative schemes were under its consideration. One was the remodelling of the University of London, so that it should include within it a great teaching University, co-ordinating under itself the various institutions for academical teaching in the metropolis. The other was embodied in a petition of King's College and University College, that they should be formed by themselves into the new University. The Commissioners reported in favour of the former, and indicated the lines on which the new University might be founded. In the event of the University of London consenting to be so remodelled, they recommended "that no other University be now established in London, and that the petition of University College and "King's College be not granted." In the contrary event, that the issue should be for the present reserved, and that the matter should be remitted to them for a further report.

The Senate of London University accordingly prepared a scheme, differing, however, in important particulars from that outlined by the Commissioners. This was submitted to the Convocation of the University, and rejected by that body on the 12th of May 1891. Thereupon the two colleges at once carried their petition to the Privy Council, and within a very few weeks their Charter was approved. It is important to note that no other teaching institution in London, with the single exception of Bedford College, received notice of, or was represented at the inquiry. The result was the present draft Charter; under which King's College and University College, with the ten medical schools of the London hospitals, are erected into a University.

The Exclusion of other Educational Bodies.

II. An essential feature of the scheme outlined by the Royal Commission was the co-ordination under the University, as their natural head, of all the institutions for higher teaching in London. This wise conception of a University has been set aside in favour of one founded on a narrow collegiate basis; the inadequacy of which for the special needs of London is shown by the present languishing condition of the two colleges which will have the conduct of the new experiment. The Charter provides that the course of study required for degrees can (except for medical students) be pursued only in the class-rooms of these two colleges. This single fact at once places the proper organisation of academical teaching, of which there are many centres in London, outside the purview of the University. Any impetus, therefore, which may be given to the two colleges will be at the cost of the discouragement of educational effort elsewhere.

The Position of Credentials of the two Colleges.

III. That this statement of the case is not too strong may be seen from a consideration of the constitution of the University Council, as provided by the draft Charter. It is to be thus composed:—The Chancellor and the High Steward of the University (*ex-officio*); nominees of the Crown—probably eight in number; three representatives of each of the two colleges; one representative of each of the ten Medical Schools; four representatives of each of the Faculties of Arts, Science, Law, and Medicine—the Faculties consisting of the college professors, and, in the case of the Medical Faculty, of the professors of the two colleges and the Medical Schools; one representative each of the Inns of Court and of the Incorporated Law Society (if they so please). The effect is to give to the two colleges, directly and indirectly, eighteen representatives, or a practical predominance in the governing body of the University. How far this position is justified by the actual achievements of the colleges may be gathered from the fact, taken from figures in their official calendars, that these two colleges together, omitting theology, possess at the present time a total of about 150 students who aim at a University degree—a number which, while the colleges stand apart, unsupported by the other teaching institutions of London, would seem insufficient to merit the status and privileges of a University. And that this is generally true of the two colleges is emphasised in the current *Quarterly Review*, which states that "both colleges are languishing for lack of students," and that "the number of day students "in the departments of arts or general literature who "are pursuing a regular course of liberal education is "comparatively small, and shows no tendency to "increase."

A University without University Professors.

IV. But, apart from the question of the efficiency of the two colleges which are to control the new University, it will be fatally handicapped at its very start. For the very first requirement of a University is that it shall possess a strong and independent professoriate; whereas under this Charter there will be no University professors (though lecturers for subordinate work may be appointed if thought fit); and no power is taken to appoint them. The University, therefore, will be dependent for its teaching on the existing professors of the two colleges, appointed as at present by each college for itself, and in the case of King's College under a strict religious test. The University has no voice in their appointment, and no security for their efficiency. The alleged parallel of the Victoria University, in which the professors of the several University colleges at Manchester, Liverpool, and Leeds are the professors of the University, does not hold good. A division of the professoriate is in that case unavoidable. But in London such a system is unnecessary and, therefore, indefensible, and can only be regarded as a sacrifice of the interests of education to those of the two colleges. It is impossible for mere college professorships, deprived of University status, to take the high rank which ought to belong to a London professoriate. They can rarely hope to attract men of the highest eminence, and, if the Albert University is established in the form proposed, London must be prepared to see her best teachers still drawn away, as they are at present, to other Universities.

Religious Tests and University Education.

V. The proposed admission of King's College, with its strict system of religious tests, to a leading position in the University, has occasioned much just criticism. It cannot be defended by the precedents of Keble College, Oxford, or Selwyn College, Cambridge. For between the position of King's College, with its three direct and six indirect representatives on the University Council, and that of Keble or Selwyn Colleges there is no real analogy. In the first place, the position of "constituent Colleges," with direct representation on the Council of the University, has no counterpart at Oxford or Cambridge. Secondly, Keble and Selwyn Colleges are not, in the full sense of the term, Colleges in the University. Their heads do not rank as Heads of Colleges, and are not eligible to the Vice-Chancellorship. Thirdly, the denominational Colleges at Oxford and Cambridge are but one or two among many more important; whereas King's College is one of the two constituent college (excluding the Medical Schools) of which the Albert University is to be composed. Allowing that a denominational college might properly find a place in an undenominational University, to give it a share, and that a substantial share, in the government of the University is clearly opposed to the spirit of modern legislation. Lastly, in the Albert University—unlike Oxford and Cambridge—the Professors of the Colleges would be the University Professors; at least, it will have no others. One half of those Professors in the Faculties of Arts, Science, and Law would be the Professors of King's College, and would continue to be appointed, as at present, subject to those religious tests which the Charter itself forbids the University to impose. The question of the King's College tests, therefore, becomes of prime importance to the interests of learning and education in the University. For the imposition of a religious test means in our day the closing of the door of the University in many cases to the most eminent men, and thereby the weakening the authority and independence of the entire Professoriate.

The Cheapening of Degrees.

VI. With its teaching power thus crippled, and its status compromised, there is every reason to fear that, in order to attract students to itself, and from its natural rival, the University of London, the standard of degrees in the Albert University will be unduly lowered. And, indeed, with regard to the Medical Faculty, this degradation of the standard—this "traffic in medical degrees," to use the words of the *Standard*—will almost certainly follow from the well-known cir-

Appendix No. 58. Papers Nos. 5 and 6.

cumstances of medical education in London. These apprehensions are confirmed by the official utterances of prominent promoters of the scheme; who have not hesitated to purchase the co-operation of the Medical Schools by the ominous suggestion, that the mere qualification granted by the General Medical Council shall also qualify candidates (*per saltum*) for the Albert M.D. degree.

VII. To sum up. (1) The Albert University Draft Charter has been approved in disregard of the recommendations of the Royal Commission, and after an inquiry at which several of the institutions primarily interested were not represented. (2) Setting aside the scheme sketched by the Commission, it gives the practical control of the University to two colleges in which the public has not the fullest confidence. (3) Though professedly a teaching University, it can appoint no University Professors, and is dependent for its teaching on the staffs of the Colleges, over which it has no control; (4) by perpetuating sectarian restrictions it lessens the efficiency of its university teaching; while (5) there is serious reason to fear a depreciation in the standard of its degrees, more especially in the Medical Faculty.

Such a scheme ought not to be permitted to pass into law, and it is hoped that the friends of education everywhere will do their utmost to secure its rejection, with a view to the introduction of a scheme founded on more comprehensive lines.

Committee for opposing the Albert University Charter,
36, Outer Temple, Strand.
February, 1892.

PAPER No. 6.

Sent to Commission after Conclusion of the Evidence.

Scheme of Organisation of the New University for London.

Adopted by a General Meeting of Members of the Association for Promoting a Professorial University for London, held March 23rd, 1893.

Preamble.

[The Preamble should state the objects of the Charter to be—

The organisation and improvement of the Higher Education in London;

The better allocation and distribution of educational means in the Metropolis:

The continuance of the work of the present University of London and of the existing higher Teaching Institutions in London;

The promotion of Research, and the advancement of Science and Learning.]

I. Constitution of the University.

The University to consist of—

(*a*) The Chancellor.
(*b*) Members.
(*c*) Undergraduates.

The Members of the University to be—

(1) The Vice-Chancellor.
(2) The Members of the University Court.
(3) Professors and other Teachers appointed by the University during their term of office.
(4) Examiners of the University during their term of office.
(5) Graduates of the University.

II. Governing Body of the University.

1. The Supreme Governing Body of the University to be called the University Court, and to consist of the Chancellor and 50 members, as follows:—

(*a*) The Chancellor, to be nominated by the Crown.

(*b*) The Vice-Chancellor, to be elected annually by the Court from among its own body.

(*c*) Twenty-five Professors of the University, each of whom shall be elected annually by the Professors of a definite group of cognate subjects in the University,—though each such group shall not necessarily elect the same number of members. The groups of subjects to be determined from time to time; the following are suggested:—

1. Philosophy (including Psychology).
2. History (including Archæology and Economics).
3. Philology.
4. Literature (English and Foreign, non-classical).
5. Literature (Classical).
6. ,, (Oriental).
7. Fine Arts.
8. Law.
9. Mathematics.
10. Physics.
11. Chemistry.
12. Biology and Geology.
13. Engineering and other applied Sciences.
14. Medicine.

(*d*) Fourteen Members nominated by the Crown (except in the first instance, as herein-after provided, see Chap. v. 3) who shall hold office for five years, —a provision being made for the retirement of these members according to some fixed scheme of rotation.

(*e*) Four Members, who shall hold office for five years, two being nominated by the Corporation of the City of London, and two by the London County Council.

(*f*) Four Members, not being Teachers in the University, to be nominated by the Court itself, and to hold office for five years.

(*g*) The Chairman of Convocation and two other members elected by Convocation.

2. All Members of the Court to be eligible for re-election or re-nomination at the expiration of their term of office.

If any member of the Court shall fail to attend a certain number of meetings, to be fixed by the Court, his seat shall *ipso facto* become vacant.

3. The Court to have power to delegate any of its functions to committees of its own body. The Chancellor and Vice-Chancellor to be *ex-officio* members of every such Committee; and of the remaining members at least one-third shall be nominated from among the professorial members of the Court.

4. The Senate to consist of all the Professors of the University.

5. Boards of Studies to be appointed by the Senate, from among the Professors and Examiners. One such Board to be appointed for each group of cognate subjects, as may from time to time be determined. The Examiners for the time being to form part of every Board of Studies which deals with those subjects in which they they examine. The Senate to have power to nominate as Member of a Board of Studies any University Teacher who is not a member of the Senate.

6. Convocation to consist of the Chancellor, the Vice-Chancellor, the Members of the Court, the Professors and Examiners of the University, the registered Doctors and Masters, and the registered Bachelors of three years' standing. All members of Convocation of the existing University of London to be members of the Convocation of the new University.

III.—Powers of the above-named Bodies.

1. *The Court and its Committees* to have control over all University affairs, and on report from the Senate to appoint all Professors and Examiners, and to confirm the appointment of other Teachers.

All Fees, Donations, and Bequests shall be paid to and vested in the University Court; and in case of the incorporation of existing institutions their property and funds shall become University Funds under control of the University Court, the conditions attaching to the use of Trust Funds being respected.

2. *The Senate and its Committees* to have charge of all purely educational matters, subject to the general control of the Court; to advise the Court from time to time, and to make such recommendations to the Court as may seem to them fit.

3. *Convocation* to have power to elect the Member or Members of Parliament, and the representatives on the Court; and also to discuss University affairs, and to have power of appeal to the Privy Council in case of any change in the University Charter proposed by the Court.

IV.—As to Professors.

Every Professor of the University shall be appointed and paid by the University, special arrangements being made, where necessary, for the payment of Professors out of trust or corporate funds.

Each Professor of the University to be *ex-officio* an examiner in the subject of his Chair, but not necessarily to take part in every examination in that subject.

V.—As to the Initial Organisation of the University.

A.—*The existing Teaching Institutions in London* which it is desirable to bring into, or into connexion with the University are—

Bedford College,
Central Institution of the City and Guilds Institute,
Gresham College,
King's College,
Medical Schools,
Royal College of Science,
University College.

There are other institutions, especially those giving instruction in Fine Arts and in Law, with which it may be possible for the University to establish relations.

B.—*A Statutory Commission* to be appointed:—

1. To make arrangements for bringing the existing Teaching Institutions of the higher order into connexion with the University, by complete or partial incorporation, or in such other manner as may seem expedient.

2. To have power to deal with Trust or other funds, or to present a Bill to Parliament for that purpose.

3. To organise the first Court or Senate in the following way:—

(*a.*) To select the first 14 Members elected under Cap. II. d. from among the existing Members of the Senate of the University of London, and from Members of the Governing Bodies of those Colleges which may be incorporated in such proportion as shall seem advisable to the Commission, having regard to the importance of the vested interests involved, and to the magnitude of the educational resources which may be placed by each at the disposal of the new University.

These initial appointments to last for 10 years; and at the end of 10 years, or in the event of vacancy through death or resignation, the appointment to be made by the Crown as above provided.

(*b.*) To nominate the Professors who are to form the first Senate.

When this has been done, the Court shall be constituted, *first*, by the appointments made as above; *secondly*, by the election of representatives by the Senate, by Convocation, and by the other Public Bodies mentioned in Chap. II. c.

4. After the complete formation of the first University Court, the Statutory Commission shall resign all control over the University into the hands of the Court.

5. The proposals of the Statutory Commission not to be operative until they have been made public for a fixed period. All persons who may believe that their vested interests are affected thereby to have the right to be heard before the Commission. The decision of the Commission, after such persons have been fully heard, to be final.

VI.—Powers of the University.

1. After the functions of the Statutory Commission shall have ceased, and so far as the Commission shall not have been able to exercise, or shall not in fact have exercised its powers in this behalf, to exercise the powers to be conferred upon the Statutory Commission under Chap. V. B. 1.

2. To organise instruction generally, establish and modify curricula, allocate and distribute means and materials, recognise or withhold recognition of courses and places of instruction, and exercise all powers needful for maintaining a proper standard of University teaching.

3. To institute and confer degrees, and grant certificates, &c., after the payment of such fees, and upon such conditions and subject to such regulations, as may from time to time be determined upon, and to both candidates who have, and candidates who have not, attended University or other recognised courses of instruction.

4. To confer honorary degrees, and to confer degrees with exemption from any or all of the examinations and regulations in force for the time being.

5. To provide Scholarships, Prizes, &c., attached to examinations or degrees or not.

6. To appoint and to fix and pay the salaries of Professors and other Teachers, and of Examiners, and to fix and receive the fees payable by students or by candidates for examination or for degrees.

7. To regulate the expenses, powers, and procedure of Convocation within the Charter.

8. To receive all grants, endowments, and gifts. To keep, manage, invest and deal with all funds for University purposes.

9. [Power to hold, buy, and sell land.]

10. To hold, manage, sell, and deal with all University property.

11. To suspend or dismiss any person paid by the University, and to exercise discipline in respect of candidates, undergraduates, and graduates.

To annul membership, certificates, and diplomas upon proper grounds.

To take proceedings against persons falsely pretending to University Membership, distinction or degrees; in cases of personation; in cases of counterfeiting certificates, diplomas, &c., or other University writings; in cases of aiding and abetting University offences.

12. To make special provision for the advancement of the higher learning and research; and to perform such other actions, and to exercise such authority as may be necessary for the furtherance of education and the promotion of Science and Learning.

13. To appoint or to recognise teachers giving instruction of a more or less academic character at institutions and colleges, the objects or the standing of which render complete incorporation with the University undesirable.

14. To institute lectures at various local centres of the type known as "University Extension" lectures.

15. The control exercised by the University over teaching institutions, and the teaching directly conducted by the University itself to be confined to the Metropolitan area.

PAPER No. 7.

Letter from the Royal Geographical Society.

1, Savile Row,
Burlington Gardens, W.,
January 30, 1893.

Gentlemen,

On behalf of the Council of the Royal Geographical Society, I beg respectfully to submit for your consideration the claims of Geography to a Chair in a teaching University, should such an institution be established in London.

In 1884-85 the Council undertook an inquiry into the position of geography in English and Continental education. The result was unfavourable to England; and there has been a general concurrence of testimony, according with their own strong conviction, that the most effectual step towards the removal of our inferiority would be the establishment in our Universities of Chairs or Readerships, similar to those held in Germany.

Memorials on the subject were, as a sequel to this inquiry, presented to the Vice-Chancellors of Oxford and Cambridge, and, as a result, a Readership in Geography was established at the former University, and a Lectureship at the latter. I send you the numbers of our "Proceedings" containing the Annual Reports of the gentlemen who fill these Chairs, from which it will be seen that the representations of the Council have been justified by the results.

So much of human knowledge and human interests is bound up with the relations and interaction of the physical conditions of the earth, the study of which is practically embraced in geography, that there are few branches of education which do not present a geographical aspect, and which do not therefore offer a field for instruction in geography in combination with some other subject.

It is unnecessary to insist upon the close connexion of history and geography, or upon the importance of a

Appendix No. 58. Papers Nos. 7, 8, and 9.

knowledge of the physical conditions of the various regions of the world, to those who engage in the conduct of our political affairs.

Without the comprehensive study of the earth, for which Englishmen, as a people, have the largest opportunities and the least preparation, physical students would fail to grasp the true character and relations of the various sciences of observation, such as anthropology, geology, botany, meteorology, &c.

I send you also a copy of the society's Report on Geographical Education, from which it will be seen how important a place the subject holds in foreign Universities. I would especially draw your attention to the representations made in 1871 and 1874, with respect to the establishment of Chairs in Oxford and Cambridge (pp. 79 and 81), from which you will be able further to learn the wide and important field which, in the conception of the Council, may justly be allotted to geography.

I have, &c.,
M. E. Grant Duff,
President, Royal Geographical Society.

The Royal Commission on
the Proposed Charter of the
Gresham University.

PAPER No. 8.

Sent to the Commission from the University of London subsequently to the receipt of the Evidence of the Vice-Chancellor and Registrar:

UNIVERSITY OF LONDON.

From "Minutes of the Senate."
December 14th, 1892.

The Senate having reason to believe that a distinct expression of opinion may be useful to the Commissioners at the present stage of the inquiry, desire to recall to their attention the fact that during last year the Senate approved at scheme for a re-constitution of the University which provided for the constitution of Faculties consisting of teachers and of Boards of Studies in each Faculty, and for the election of members of the Senate by the Faculties; and that the scheme further proposed to confer on the University power to hold real property and to accept grants, gifts, devises, and legacies for the purposes of the University, including the establishment of Professorships and Lectureships, whether attached or not to any particular College, and the furtherance of regular liberal education and of original research.

The Senate now desire to state that, if in accordance with the decision of the Commissioners, the Senate is prepared, in order to promote the efficiency of the University, and with a view to its reorganization as a teaching University in and for London, without curtailment of the functions which it now discharges,—

(*a*) To establish and incorporate with the University Faculties in Arts, Science, Laws, and Medicine, and Boards of Studies acting thereunder.

(*b*) To provide for the incorporation with the University of Teaching Institutions of the higher rank.

(*c*) To utilize with their consent existing organizations for higher education, and subject to such utilization to institute and maintain Professorships and Lectureships, whether for academical or for other purposes, and generally to assume such functions as may be required for the furtherance and superintendence of a regular liberal education, and for the promotion of original research.

(*d*) To accept and administer fees and such other funds, public or private, as may be necessary and may be granted or given for the purposes of the reorganized University.

(*e*) To provide for the adequate representation of the Professoriate on the Senate.

PAPER No. 9.

University of London, W.,
March 7th, 1893.

To the Secretary of the Gresham University Commission.

Sir,

The Senate of the University of London desire, in addition to the communications already made, to submit to the Gresham University Commissioners the following considerations, in support and explanation of the Resolutions forwarded to the Commissioners on the 16th of December 1892. At present, as heretofore, the Senate confine themselves to the statement of fundamental principles and to the suggestion of the measures which appear to them to be the most important practical consequences of those principles. In view of the many conflicting views and interests which have to be taken into account, and, if possible, reconciled, they are of opinion that it is not only undesirable to enter upon questions of detail, but that it would be mischievous, in so far as such a course might be interpreted to signify that the Senate are committed to fix opinions on these matters. On the contrary, the Senate desire to leave questions of this kind open; all the more, that the adoption of this course has the advantage of enabling them not to go beyond the limits of those proposals on which the Senate believe they are substantially at one with Convocation and with the Association for promoting a Professorial University.

The first and the most important of the proposals thus agreed to is, that there shall be one, and only one, University in London. It is required of the modern Metropolitan University that it shall not merely subserve the purposes of ordinary education and constitute the highest of the high schools and examining bodies for young people; but that it shall contribute to the advancement of knowledge and play the part of a centre for all the higher forms of intellectual activity. As such it will acquire the prestige which rightly attaches to an Institution comprising within its organisation all the most distinguished teachers, and all the most elaborate appliances for teaching and research; it will deserve and obtain the estimation of the public, and it will receive that material support which has never been withheld either in ancient or in modern times from institutions of recognised public utility. Hence it may be confidently anticipated that the University, enlarged and completed, will be in a position, not merely to put the remuneration of all who are doing University work upon a sound and equitable footing, but to provide efficiently for the promotion of learning and research. Moreover, it will possess the weight and authority which will enable it to exert a proper and needful influence on professional education; and in its regulations for graduation to strike a just balance between the requirements of practical life and those of science and learning.

All the discussions that have taken place have tended to confirm the Senate in the opinion which they have already expressed, that the establishment of two, necessarily competing, Universities in London must result in preventing either from satisfactorily performing the high functions of a University; that it would confuse the public mind; that it must involve the waste of energy and of funds, and leave the present regrettable inequalities of remuneration for professorial work unremedied. If there are any compensating advantages, the advocates of the establishment of two Universities have not brought them to the knowledge of the Senate; nor has any good evidence been adduced in favour of the assumption that the exercise of the functions at present performed by the University of London is, somehow or other, incompatible with the work of a Teaching University.

After careful deliberation, therefore, the Senate formulated the modifications in the constitution of the University of London which, in their judgment, suffice

to meet the indispensable requirements of modern times, in the Resolutions which have been submitted to the Commissioners.

Should the Commission decide, in accordance with the earnest representations of the Senate, to recommend—

1. That the present University of London and the various Teaching Institutions of higher rank which may desire connexion with it shall constitute one organic whole, with common and equitably adjusted, financial arrangements;
2. That the Professoriate shall be adequately represented on the Senate;
3. That proper provision shall be made for the higher learning and research;—

the Senate conceive that no difficulty will arise in adjusting matters of detail; for example, by a Statutory Commission, before which the University and the Teaching Institutions in question would place their views respecting matters which lie outside these fundamental conditions, and are of relatively minor importance.

In fact, the Senate believe that, in view of the rapid change of opinion which is in progress, it is not desirable that the freedom of action of the University in the future should be unduly restricted by Charter.

I have, &c.

(Signed) JAMES PAGET,
Vice-Chancellor.

Appendix No. 58. Papers Nos 9 and 10.

PAPER 10.

OUTLINE OF SCHEME FOR THE RECONSTITUTION OF THE UNIVERSITY.

(Adopted by the ANNUAL COMMITTEE OF CONVOCATION on December 9th, 1892.)

I.—OBJECTS OF INCORPORATION.

1. The purposes of the incorporation of the University to be so defined as to include in addition to the existing purposes the organisation of regular and liberal education throughout the British Empire, and especially in the Metropolis and its neighbourhood, and the advancement of knowledge and encouragement of original research.

II.—CONSTITUTION.

2. The University to consist of:—

i. Members—
  (*a.*) Fellows.
  (*b.*) Graduates.
  (*c.*) Professors, Examiners, Teachers, and Demonstrators of the University during their respective terms of office.
ii. Undergraduates.

III.—SENATE.

3. The Senate shall be the executive of the University, and consist of the Chancellor and 39 Fellows to be appointed as follows:—

i. The Chancellor and seven Fellows to be nominated by the Crown in consideration of a fixed grant from the Treasury, three of such Fellows to be nominated in respect of National Museums and libraries in London.

ii. The Chairman of Convocation (ex-officio) and 11 other Fellows to be elected by Convocation.

iii. Ten Fellows representing the Faculties of the University, and distributed as follows:—Arts and Music three, Laws one, Medicine two, Science two, Divinity one, Technology one.

iv. The President of University College, London, the Principal of King's College, London, the Presidents of the Royal College of Physicians of London, and the Royal College of Surgeons of England, the Chairman of the Council of Legal Education, and the President of the Incorporated Law Society.

v. Four Fellows representing the Municipal Authorities of London, viz.:—The City Corporation and the London County Council, on condition of an adequate endowment from each authority represented.

4. Members of the Senate other than those appointed under section iv. to serve for a term of six years only, but to be re-eligible, with provision for the retirement of some members every three years.

IV.—CONVOCATION.

5. Convocation to continue as at present, and to retain its existing powers, rights, and privileges, and to include graduates of the existing University.

6. Convocation to appoint at least two members of each Board of Studies.

V.—TEACHING STAFF.

7. There shall be a University Professoriate, and a staff of Teachers and Demonstrators.

8. All appointments shall be vested in Senate, and shall be held during their pleasure. The Senate shall have power to appoint members of the Teaching Staffs of the Colleges or other higher educational institutions as University Professors, Teachers, and Demonstrators, with endowments from the funds of the University, on condition that the appointment to such chairs whenever a vacancy occurs should pass to the University.

9. Although the University must be centralised for certain purposes, with its own lectures, laboratories, and libraries, yet the teaching of the University should be given at various centres, according to requirements.

10. The National Museums and libraries to be available for members and undergraduates of the University in consideration of their representation on the Senate, as provided in *paragraph* 3, *sub-section* i.

VI.—FACULTIES.

11. There shall be seven Faculties, viz.:—

i. Arts,
ii. Laws,
iii. Medicine,
iv. Science,
v. Divinity,
vi. Music,

} Examinations wherein shall result in degrees.

vii. Technology, Examinations wherein shall result in certificates or diplomas.

All branches of knowledge not qualifying for a degree and not included in any other Faculty shall be included in the faculty of Arts.

12. Each Faculty shall consist of all the persons for the time being answering the following descriptions:—

i. All University Professors in the subjects comprised in their Faculty.

ii. Such other Teachers and Demonstrators of subjects comprised in the Faculty as may be recognised by the University.

iii. The Examiners of the University in subjects comprised in the Faculty.

13. Each Faculty shall appoint—
  (*a.*) Members of the Senate.
  (*b.*) From its own body members of a Board of Studies.

VII.—BOARDS OF STUDIES.

14. Each Board of Studies shall consist of members appointed by the Faculty and two members appointed by Convocation.

15. The powers and duties of each Board shall be consultative only, viz.:—(1) to consider and report upon any matter referred to it by the Senate; (2) to represent to the Senate its opinion upon any matter connected with the degrees and examinations and teaching of the subject of its Faculty; (3) to deliberate, if so requested, in conjunction with the Senate, or any Committee thereof; and (4) to meet and act concurrently with any other Board or Board of Studies on particular subjects.

16. The Boards of Studies shall also advise as to regulations in connexion with Museums, Laboratories, &c.

VIII.—DEGREES AND EXAMINATIONS.

17. The imperial character of the University to be retained and its examinations to remain open to all

Appendix No. 58. Papers Nos. 10 and 11.

candidates who have complied with the regulations, irrespective of the place or manner of their education.

18. The standard of attainment for matriculation and the various examinations in all the Faculties to be maintained at as high a level as at present.

19. Restrictive regulations as to compulsory intervals of time between Matriculation and the Preliminary Scientific Examination, and the Intermediate Examination in Medicine and M.B. Examination to be abolished; provided always that the usual medical curriculum required by the General Medical Council shall have been passed through by a candidate before he presents himself for the final M.B.

20. The Examinations in Divinity to be confined to the testing of knowledge, and to be in no way concerned with the religious opinions of the Students.

21. The University to have power to grant certificates or diplomas as well as degrees.

22. The University not to have power to grant Honorary or *ad eundem* degrees, or to allow of procedure to a higher degree without examination.

23. The University to have power to hold real property, and to accept endowments, grants, gifts, devises, and legacies, notwithstanding the statutes of mortmain.

PAPER No. 11.

(*Referred to in* REPORT, PART II.:—LAW.)

ÉCOLE LIBRE
des
SCIENCES POLITIQUES.
27, Rue Saint-Guillaume, a Paris,
Vingt-deuxième Année (1892-1893).
LES COURS OUVRIRONT LE LUNDI 7 NOVEMBRE 1892.

CONSEIL D'ADMINISTRATION.

MM. E. André, Président du Conseil; Hély D'Oissel, Vice-Président; E. Boutmy, de l'Institut, Directeur de l'École; Alfred André, régent de la Banque de France; Aynard, député, Vice-Président de la Chambre de Commerce de Lyon; Jean Casimir-Périer, Vice-President de la Chambre des députés; Comte Chaptal; Griolet, maître des requêtes honoraire au Conseil d'État, Vice-Président du Conseil d'administration du chemin de fer du Nord; comte L. de Ségur, administrateur du chemin de fer d'Orléans; Jacques Siegfried, banquier; H. Taine, de l'Académie française; C. de Varigny.

Commissaire: M. Louis Muller, Industriel.

ENSEIGNEMENT.

I.—*Directeur.*

M Émile Boutmy, Membre de l'Institut, Membre du Conseil Supérieur de l'Instruction Publique.

II.—*Comité de Perfectionnement.*

MM. Aucoc, de l'Institut; Barthélemy Saint-Hilaire, de l'Institut, sénateur, ancien ministre; Clavery, directeur des affaires commerciales et consulaires au Ministère des Affaires Étrangères; Flourens, député, ancien ministre, professeur honoraire de l'École; Glasson, de l'Institut, professeur à la Faculté de Droit, professeur honoraire de l'École; S. Goldschmidt, fondateur d'une chaire d'Économie politique à l'École; Humbert, sénateur, premier Président de la Cour des comptes; Janet, de l'Institut, professeur honoraire de l'École; Laferrière, Vice-Président du Conseil d'État; P. Leroy-Beaulieu, de l'Institut; Machart, inspecteur général des Finances; Marquès di Braga, conseiller d'État; Nisard, directeur des affaires politiques et du contentieux au Ministère des Affaires Étrangères; G. Picot, de l'Institut; A. Ribot, député, ministre des Affaires Étrangères, professeur honoraire de l'École; Léon Say, de l'Académie française, député, ancien ministre, professeur honoraire de l'École; Ch. Tranchant, ancien conseiller d'État; Vallon, administrateur du chemin de fer du Nord.

III.—*Corps Enseignant.*

MM. Levasseur, de l'Institut.
Albert Sorel, de l'Institut.
H. Gaidoz, directeur à l'École des Hautes Études.
Lyon-Caen, professeur à la Faculté de Droit.
Renault, professeur à la Faculté de Droit.
Funck-Brentano.
Colonel Niox, professeur à l'École supérieure de Guerre.
Anatole Leroy-Beaulieu, de l'Institut.
Albert Vandal.
Raymond Kœchlin.
E. Boutmy, de l'Institut, directeur de l'École.
Jules Dietz.
André Lebon, chef de cabinet du président du Sénat.
J. Flach, professeur au Collège de France.
Levi-Bruhl, professeur agrégé de l'Université.
Gabriel Alix.
Le Vavasseur de Précourt, maître des requêtes au Conseil d'État, commissaire du Gouvernement.
Dunoyer, ancien conseiller d'État.
Cheysson, inspecteur général des Ponts et Chaussées, professeur d'économie politique à l'École des Mines.
De Foville, chef du bureau de statistique au Ministère des Finances, professeur au Conservatoire des Arts et Métiers.
René Stourm, ancien inspecteur des Finances et administrateur des Contributions indirectes.
Aug. Arnauné, chef de bureau à la Direction générale des Douanes.
Raphaël-Georges Levy, banquier.
Boulanger, conseiller référendaire à la Cour des Comptes.
Dubois De L'Estang, inspecteur des Finances.
Plaffain, inspecteur des Finances.
Paul Leroy-Beaulieu, de l'Institut, professeur au Collège de France.
Silvestre, ancien chef de la Justice indigène en Cochinchine.
Houdas, professeur à l'École des langues orientales vivantes.
Henri Cordier, professeur à l'École des langues orientales vivantes.
Wilhelm, secrétaire du Comité du Contentieux de la Marine et des Colonies.
Paul Pelet, membre du Conseil supérieur des Colonies.
Leser, professeur à l'École des Ponts et Chaussées.
Morel, professeur au Lycée Louis-le-Grand.
Louis Leger, professeur au Collège de France.

Secrétaires: MM. Ch. Dupuis et R. Pinot.
M. L. Poinsard, Bibliothécaire.

ANNÉE 1892-93.

TABLEAU ET PROGRAMMES DES COURS RÉGULIERS DU 7 NOVEMBRE 1892 AU 3 JUIN 1893.

Nota.—Une brochure spéciale donne des détails complets sur l'enseignement de l'École et les carrières auxquelles elle prépare.

LÉGISLATION CIVILE COMPARÉE.

M. Jacques FLACH, Professeur au Collège de France.

(*Une leçon par semaine.*)

Le Droit de famille.

I. Histoire du droit de famille.

La famille comme unité politique.—Sociétés antiques.—Puissance paternelle et maritale.—Copropriété de famille.—Vestiges actuels de cet état primitif: Russie, Slaves méridionaux, orient, etc.

Le droit de famille subordonné au régime foncier.—Société féodale.

L'individu, unité politique.—Conséquences au point de vue du droit de famille.—Sociétés modernes.

II. Le droit de famille considéré dans son organisme. Mariage.—Le mariage religieux et le mariage civil. —Régimes matrimoniaux.—Condition de la femme.— Divorce et séparation de corps.

III. Le droit de famille dans ses rapports avec le droit public.

Régimes successoraux en vigueur dans les divers pays.—Partage égal.—Droit de masculinité.—Droit d'aînesse et de juveigneurie.

Liberté de tester.—Réserve héréditaire. Partage d'ascendants.—Substitutions et majorats.

Organisation et Pratique Administratives en France et dans les Pays Étrangers.

M. Le Vavasseur de Précourt, Maître des Requêtes au Conseil d'État, Commissaire du Gouvernement.

(*Une leçon par semaine.*)

I. *Organisation du pouvoir central.*—Principes généraux de droit public et administratif.—Séparation des pouvoirs.—Pouvoir constituant, pouvoir exécutif, pouvoir législatif; droit électoral.

II. *Organisation administrative.* — Président de la République.—Ministres.—Conseil d'État.—Juridiction administrative, ses organes, ses règles de compétence et de procédure.—Conflits.—Cour des Comptes.—Instruction publique.—Conseil supérieur.—Régime des cultes.—Armée, recrutement, état des officiers.

III. *Organisation judiciaire.*—Comparaison avec les pays étrangers.

Matières Administratives.

M. Gabriel Alix.

(*Deux leçons par semaine.*)

I. *Introduction:* Résumé des principes généraux du droit administratif français.

II. *Administration locale.*—Idées générales sur l'administration provinciale dans les divers États d'Europe.— De l'administration provinciale dans l'ancien régime.— Du département.—Son histoire.—Budget départemental. —Des divers services publics départementaux.—Voirie départementale.—Chemins de fer d'intérêt local.—Commune.—Origines de la commune.—Patrimoine communal.—Des divers marchés passés au nom de la commune.—Budget.—Octrois.—De l'accroissement des charges locales en France depuis cinquante ans.—Des divers services publics communaux.—Voirie communale. —Chemins vicinaux et ruraux.—Concours pécuniaire de la commune à divers services de l'État: cultes et instruction primaire.—Sections de commune.—Syndicats de commune.—Administration des grandes capitales: Londres, Berlin, Paris.—Du mouvement de décentralisation qui s'est produit en France depuis 1830. —Du mouvement de centralisation qui s'est produit dans d'autres États.

III. *Colonies françaises et Algérie.*—Organisation.— Budget colonial.—Administration de l'Algérie et de la Tunisie.

IV. *Des établissements publics et d'utilité publique.*— Question de la propriété des personnes morales.—Principales institutions d'assistance publique et de prévoyance: Caisses des retraites; Caisses d'épargne postales.

Finances Françaises et Étrangères.

M. René Stourm, Ancien Inspecteur des Finances et Ancien Administrateur des Contributions indirectes.

(*Une leçon par semaine.*)

I. *Revenus publics: impôts et domaine.*—Définition de l'impôt.—Qualités qu'il doit posséder.—Analyse et détail des diverses formes d'impôt: Impôts directs, impôts de répartition et de quotité.—Impôts sur le revenu.—Impôts indirects.—Impôts de consommation. —Monopoles exercés ou délégués par l'État.—Revenus divers.—Domaines.—Forêts.—Revenus départmentaux, communaux et coloniaux.

II. *Ressources extraordinaires.*—Crédit public.—Emprunts et dette.—Amortissement.—Conversions.—Cours forcé.—Dette flottante.—Moyens de trésorerie.

M. Dubois de l'Estang, Inspecteur des Finances.

(*Une conférence par semaine.*)

Étude détaillée et pratique sur l'administration financière en France.—Analyse du décret du 31 Mai 1862: Comptabilité de l'État.

M. Plaffain, Inspecteur des Finances.

(*Une conférence par semaine.*)

Législation des impôts et organisation des régies financières.—Attributions des agents de chaque administration. — Contributions indirectes, Douanes, Postes et Télégraphes.

Nota.—Il sera fait en outre une conférence d'interrogation pour les candidats à l'Inspection.

M. Boulanger, Conseiller référendaire à la Cour des Comptes.

(*Deux conférences par semaine.*)

Examen théorique et pratique des règlements sur la comptabilité publique. — Budget général de l'État; contrôle législatif, administratif et judiciaire.

Économie Politique.

M. Cheysson, Inspecteur général des Ponts et Chaussées, professeur à l'École des Mines.

(*Une leçon par semaine.*)

Introduction.—Besoins; Travail; Richesse; Utilité; Capital.

La Statistique.—Son rôle vis-à-vis de l'Economie politique.

1. *Production.* — Travail: Division du Travail; Liberté du travail.—Capital: les machines. La nature: la propriété; questions agraires.—Le classement des industries.—Le climat et les lieux.

2. *Répartition.*—Salaire.—Rente.—Intérêt.—Profit. *Rapport entre le capital et le travail.*—Importance et caractères de l'harmonie.—Patronage.—Association.— Institution de prévoyance.—Syndicats.—Grèves.—Collectivisme.

3. *Circulation.*—Echange; Valeur; Monnaie; Credit; Banques.—Transports.—Commerce; Douanes.

4. *Consommation.*—Consommations publiques et privées.—l'État; son rôle ses limites.—L'impôt.—Les travaux publics.

Nota.—Des conférences libres sur les *questions agricoles au point de vue économique* seront faites par M. D. Zola, professeur à l'École d'agriculture de Grignon.

Géographie Commerciale et Statistique.

M. Levasseur, de l'Institut.

(1er trimestre. *Une leçon par semaine.*)

Les grandes routes de commerce et les principales marchandises dans l'antiquité et au moyen âge jusqu'à la découverte de l'Amérique.—Les grands marchés du monde de la découverte de l'Amérique jusqu'à l'ère des chemins de fer.—Coup d'œil sur les grandes régions économiques du globe.—Les chemins de fer, leur histoire en Europe et aux États-Unis. État actuel dans le monde.—Les routes de terre et la navigation intérieure.—Les grands ports du monde.—La navigation à vapeur.—État actuel de la marine marchande (voile et vapeur).—Le commerce comparé des grands États du monde.

M. de Foville, Professeur au Conservatoire des Arts et Métiers, chef du bureau de statistique et de législation comparée au Ministère des Finances.

(2e trimestre. *Une leçon par semaine.*)

Productions principales, grandes industries et commerces internationaux: Les céréales.—La viande.—Les boissons. — Les matières premières. — Combustibles, textiles, métaux, etc.—Or et argent.—Régime économique et richesse comparée des principaux Etats.

Commerce Extérieur et Législation Douanière.

M. Arnauné, Chef de Bureau à la Direction Générale des Douanes.

(*Une conférence par semaine.*)

Transformations successives du système commercial de la France.—Le commerce extérieur aux XVIIe, XVIIIe, et XIXe siècles.—Législation douanière.—Commerce général et commerce spécial.—Tarifs.—Modes d'évaluation.—Tableaux du commerce extérieur.

Appendix No. 58. Paper No. 11.

Affaires de Banque.

M. Raphael-Georges Lévy.

(*Une conférence par semaine.*)

Généralités.—Utilité du cours.—Historique.—Idées fondamentales sur lesquelles repose la banque.

Théorie de l'intérêt de l'argent.—Description des principales opérations de banque.—Comptabilité.—Lettre de change.—Théorie du change.—Questions monétaires.—Double et simple étalon.—Billet de banque.—Cours forcé.—Banques d'émission.—Revue des principales banques d'émission du monde.—Banques particulières: banques de depôt et associations financières.—Étude des bilans.—Banques foncières.

Revue sommaire et description des diverses catégories de titres mobiliers.—Rapports de la banque et de la Bourse.

Nota.—Des conférences libres et exercices sur la *comptabilité* seront faits par M. des Essarts, chef des études économiques à la Banque de France.

Droit des Gens.

M. Funck-Brentano.

(*Une leçon par semaine.*)

Le droit des gens en temps de guerre.—L'organisation des armées et leur conduite dans les pays envahis.—Rapports des Etats et des armées ennemies.—Droits et devoirs des neutres.—Le droit des gens maritime, la traite, la guerre et la neutralité maritimes.

Le progrès et la décadence des États dans leurs rapports avec la pratique et les doctrines du droit des gens.

Droit International.

M. Renault, professeur à Faculté de droit.

(*Une leçon par semaine.*)

Nationalité d'origine; naturalisation; conséquences d'un démembrement de territoire.—Territoire; traités de limites et de vosinage.—Condition des étrangers (Législation; traités de commerce et d'établissement; Capitulations, traités avec l'Extrême-Orient).—Statuts personnel et réel; exécution des jugements et actes étrangers; compétence à l'égard des étrangers.—Application de la loi pénale; extradition.

Géographie et Ethnographie.

M. Gaidoz, Directeur à l'École des Hautes Études.

(*Une leçon par semaine.*)

L'Empire d'Allemagne et le pangermanisme: Origines historiques: la nationalité allemande et les nationalités non allemandes de l'empire.—Les Allemands de Russie et les provinces baltiques.—L'élément allemand en Autriche.—La Suisse.—Les Pays-Bas, la Belgique et le Luxembourg.—La France, l'Italie, l'Espagne et le Portugal.—Le Royaume-Uni de Grande-Bretagne et d'Irlande.—Formation historique de ces différents États.—Répartition et situation des nationalités et des religions dans ces États.

Histoire Diplomatique de l'Europe de 1789 à 1818.

M. Albert Sorel, de l'Institut.

(*Une leçon par semaine.*)

1. Droit public de l'Europe en 1789.
2. La Révolution française et l'Europe.
3. L'Empire français et l'Europe.
4. Le Congrès de Vienne et les traités de 1815.
5. La Restauration.—Congrès d'Aix-la-Chapelle.—L'Europe en 1818.

M. Albert Sorel, de l'Institut.

(*Une conférence par semaine.*)

Les services diplomatiques en 1789.—Des sources de l'histoire diplomatique en général.—Sources de cette histoire de 1789 à 1818.—Analyse et étude des textes.—Exercices pratiques.—Procédure d'une négociation.

Histoire Constitutionnelle de l'Europe depuis 1789.

M. André Lebon, Chef de cabinet du président du Sénat.

(*Une leçon par semaine.*)

Les constitutions de l'Allemagne, de l'Autriche-Hongrie, de la Suisse, de l'Italie et de la Belgique.

Histoire des Idées Politiques et de l'esprit public pendant les deux derniers siècles.

M. Lévy-Bruhl, Professeur agrégé de l'Université.

(*Une leçon par semaine.*)

L'évolution de l'esprit public en Allemagne de 1815 à 1860.

Organisation Militaire comparée.

M. le colonel Niox, professeur à l'École supérieure de Guerre.

(*Une leçon par semaine.*)

Géographie stratégique et organisation militaire comparée des principaux États.

L'Empire Allemand. Constitution de l'Empire.—Organisation défensive de ses frontières.—Armées et procédés de mobilisation.

Monarchie austro-hongroise. Compétition des races.—Situation stratégique vis-à-vis de l'Allemagne, de la Russie, de l'Italie et des États danubiens.

Italie. Système de défense de ses frontières de terre et de mer.—Armée et flotte.

Petits États de l'Europe occidentale. Suisse et Belgique; conditions de leur neutralité.—Pays-Bas.

Russie. 1° Situation stratégique vis-à-vis de l'Allemagne, de l'Autriche-Hongrie et de l'Empire Ottoman. 2° Situation des Russes dans l'Asie centrale et en Transcaucasie. Leurs relations avec l'Empire Ottoman, la Perse, la Chine, l'Afghanistan.

L'Empire Ottoman et les États danubiens. Situation politique et militaire respective de la Roumanie, de la Serbie, de la Bulgarie et de la Turquie.

L'Angleterre. Sa puissance maritime et son développement colonial, ses positions stratégiques sur les grandes routes de navigation.

Bassin de la Méditerranée. États riverains. Leur puissance relative, leurs intérêts militaires et commerciaux.

Afrique. 1° Afrique du nord: Maroc, Algérie, Tunisie, Tripolitaine, Égypte. Le mouvement musulman. 2° Entreprises de découverte et de colonisation dans l'Afrique centrale, dans les bassin du Niger et du Congo. 3° Développment des protectorats anglais et allemands dans l'Afrique australe et sur les côtes orientales.

Asie. Mers des Indies et de la Chine.—L'Inde anglaise.—Annam et Cochinchine.—Les routes du Pacifique.

Systèmes Coloniaux.*

M. Paul Leroy-Beaulieu de l'Institut.

(*Une leçon par semaine.*)

Des systèmes coloniaux des principaux pays: Espagne, Portugal, Angleterre, Hollande, France.

Droit Annamite.*

M. Silvestre, ancien chef de la Justice indigène en Cochinchine.

(*Deux conférences par semaine.*)

Origines, histoire et philosophie du droit annamite.

Lois religieuses et rituelles; administratives; civiles; criminelles; commerciales, etc.

Régimes politique, législatif, civil, administratif et judiciaire: l'État, le souverain, les ministères, la province, l'arrondissement, le canton, la commune, la famille et l'individu.

Impôts, travaux publics.—Agriculture, commerce et industrie.

Histoire des Rapports des États occidentaux avec l'extrême-orient.

M. Cordier, professeur à l'École des langues orientales vivantes.

(*Une leçon par semaine.*)

I. Notions sommaires pour l'époque antérieure au XVIII^{e} siècle; découverte du Cap de Bonne-Espérance; conquêtes portugaises; expéditions hollandaises.—La France et l'Angleterre aux Indes au XVIII^{e} siècle.

II. L'Angleterre, la France, la Russie, les États-Unis et l'Allemagne dans les pays de l'Extrême-Orient au XIX^{e} siècle.

III. Histoire contemporaine: la Chine, la Cochinchine, le Tongking, Siam et le Japon depuis 1860.

COURS COMPLÉMENTAIRES.

Législation des chemins de fer.*

M. Lyon-Caen, Professeur à la Faculté de Droit.

I. *Historique du développement des chemins de fer en France.*—Période de 1823 à 1851.—Premières concessions : leurs caractères généraux, leur durée. Discussions de 1837 et de 1838 à la Chambre des députés : construction et exploitation par l'État ou par l'industrie privée. Loi du 11 juin 1842 : plan général du réseau, système des concessions mixtes.—Crise de 1847 et de 1848. Exploitation de plusieurs lignes par l'État.

Période de 1852 à 1870.—Concessions de longue durée. Fusions. Formation de six grandes compagnies. Crise de 1858. — Conventions financières de 1859. Création des compagnies secondaires. Chemins de fer d'intérêt local (loi du 12 juillet 1865).

Période de 1871 à 1882.—Reprise du développement des lignes ferrées. Situation fâcheuse des compagnies secondaires et d'intérêt local. Loi du 18 mai 1878 : rachat de 2615 kilomètres par l'État et constitution d'un réseau d'État. Plan des grands travaux (loi du 17 juillet 1879).—Modification de la législation sur les chemins de fer d'intérêt local (loi du 11 juin 1880).

Période de 1883 à 1891.—Conventions financières de 1883 conclues entre l'État et les grandes compagnies. Leurs résultats.—Notions sur l'histoire du développement des chemins de fer dans les principaux États étrangers.

II. *Des lois relatives à l'établissement des chemins de fer.*—De la déclaration d'utilité publique.—Des concessions.—Concessions de gré à gré et par voie d'adjudication.—Effets des concessions.—De leur durée et des causes exceptionnelles qui y mettent fin. Du rachat. La question du rachat en France.—Notions sur l'état de la question en Allemagne, en Autriche et en Italie. —Du cahier des charges.

III. *Des lois concernant l'exploitation des chemins de fer.*—Des tarifs. De leurs différentes espèces. Réformes opérées depuis 1883.—Principes de l'homologation et de l'égalité.—Des pouvoirs de l'administration et des droits des compagnies.—Notions sur les règles relatives aux tarifs admises dans les principaux États étrangers.

Les Questions ouvrières en France et à l'Étranger (2e Partie).*

M. Cheysson, inspecteur général des Ponts et Chaussées, professeur à l'Ecole des Mines.

Les Crises de la famille ouvrière.—Rappel de la 1re partie relative à la situation de l'ouvrier dans son état normal de travail et de santé.—*Crises de la famille ouvrière :* maladie, chômage, accident, infirmités, vieillesse, mort.—Remèdes appliqués ou proposés en France et à l'étranger. — *Systèmes en présence :* Action de l'État ;—du patronage ;—des intéressés ;—des mœurs.

Nota. — Ces conférences seront accompagnées de visites industrielles qui auront lieu sous la direction du professeur.

Caisses de Retraites et Sociétés de secours mutuels.*

M. Paul Guieysse, Député.

Généralités sur les caisses de retraite.—Tables de mortalité.—Calcul élémentaire des annuités viagères. —Conditions de fonctionnement des caisses de retraites. — Examen théorique des divers systèmes de caisses de retraites ouvrières.—Sociétés de secours mutuels : but, budget, fonctionnement, réglementation. Diverses branches (maladie, décès, retraites ; rapports entre elles).—Fonds commun et livret individuel.—Établissement du bilan.

Conférences sur l'Enregistrement.*

M. de Colonjon, Chef du Personnel à la Direction Générale de l'Enregistrement, des Domaines et du Timbre.

Cours de Langues.

Allemand : M. Leser, Professeur à l'École des Ponts et Chaussées.

Anglais : M. Morel, Professeur au Lycée Louis-le-Grand.

Russe : M. Leger, Professeur au Collège de France.

Arabe parlé (dialecte algérien et tunisien) : M. Houdas, Professeur à l'École des Langues orientales vivantes.

N.B. — *L'ouverture des cours marqués de ce signe : * sera indiquée par affiche.*

ANNÉE 1893–1894.

Tableau sommaire des Cours.

Organisation administrative comparée (Le Vavasseur de Précourt).
Matières administratives (Alix).
Finances françaises et étrangères (Stourm).
Conférence pour l'inspection des finances (Dubois de l'Estang,—Plaffain).
Conférence pour la Cour des comptes (Boulanger).
Histoire parlementaire et législative (Dietz).
Histoire constitutionnelle de l'Europe.—Angleterre, États-Unis, France (Lebon).
Histoire diplomatique de l'Europe, 1648–1789 (N...—Kœchlin).
Histoire diplomatique de l'Europe 1618–1878 (Sorel).
Conférence d'histoire diplomatique (Sorel).
Histoire politique de l'Europe pendant les quinze dernières années (Anatole Leroy-Beaulieu).
Affaires d'Orient (Vandal).
Droit des gens (Funck-Brentano).
Droit international (Renault).
Législation commerciale et maritime comparée (Lyon-Caen).
Economie politique (Dunoyer).
La monnaie, le crédit et le change (Arnauné).
Droit annamite (Silvestre).
Droit musulman (Houdas).
Législation coloniale (Wilhelm).
Géographie coloniale (Pelet).
Allemand (Leser).
Anglais (Morel).
Russe (Leger).

N.B.—Voir pour les programmes détaillés la brochure explicative.

BUT DE L'ÉCOLE.

Dans son ensemble, l'Enseignement de l'École des Sciences politiques est *le couronnement naturel de toute éducation libérale.* Son programme embrasse des connaissances auxquelles aucun homme cultivé ne doit rester étranger.

A un point de vue plus spécial, l'École des Sciences politiques se propose le même but que l'ancienne *École d'Administration.* Chacune des grandes divisions de son enseignement constitue une préparation complète à l'une des carrières suivantes et aux examens ou aux concours qui en ouvrent l'entrée :

1. Diplomatie. (Ministère des Affaires étrangères. Legations. Consulats.)*
2. Conseil d'État. (Auditorat de 2e classe.)
3. Administration. (Administration centrale et départmentale. Contentieux des ministères. Sous-préfectures. Secrétariats généraux de département. Conseils de préfecture. Administration algérienne et tunisienne.)†
4. Inspection des finances.
5. Cour des comptes.
6. Entreprises industrielles, commerciales et emplois dans les colonies. Enfin le programme réunit et groupe des éléments d'instruction supérieure formant préparation à des postes d'initiative ou de contrôle, en France ou à l'Etranger, dans les services commerciaux et contentieux des grandes entreprises industrielles et financières, particulièrement celles qui reposent sur une concession ou un monopole. (Banques, Assurances, Mines, Compagnies de chemins de fer, de navigation, de câbles transmarins, de crédit foncier, de gaz, d'éclairage électrique, de transports urbains, etc.) Il contient, en outre, les enseignements spéciaux nécessaires pour la préparation aux consulats d'Orient et d'Extrême-Orient et aux emplois dépendant de compagnies qui ont des intérêts dans les mêmes régions.‡

Pendant les dernières années, les résultats des concours placés à l'entrée des carrières auxquelles l'École prépare peuvent se résumer ainsi :

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* Art. 8 du décret du 25 août 1888 :—
" Nul de pourra se faire inscrire en vue du concours :—4° s'il ne produit—soit un diplôme de licencié en droit, ès sciences ou ès lettres, soit un diplôme de l'École des Chartes—soit, à la condition d'être bachelier ès lettres, un diplôme de l'*École des Sciences politiques.*

† Arrêté de M. le Gouverneur général de l'Algérie en date du 26 mars 1892 :—" Peuvent être nommés adjoints aux administrateurs de communes mixtes les candidats pourvus du diplôme de langue arabe délivré par l'École des langues orientales vivantes ou du diplôme de l'*Écoles des Sciences politiques.*"

‡ Les compagnies dont les noms suivent ont fondé des bourses d'études à l'École : *Banque de France,* cinq bourses ; *Crédit foncier de France,* deux bourses ; *Chemin de fer du Nord* trois bourses.

Appendix No. 58. Paper No. 11.

Conseil d'État.

De 1877 à 1891, sur 73 candidats reçus, 58 ont appartenu à l'École.

Inspection des Finances.

De 1877 à 1892, sur 62 candidats reçus, 59 ont appartenu à l'École. Depuis 1880 tous les candidats reçus ont été préparés par l'École.

Cour des Comptes.

Aux concurs de 1879, de 1882, de 1884, de 1886, de 1888, de 1890 et de 1892, les élèves de l'Ecole ont obtenu 31 places sur 33.

Ministère des Affaires étrangères.

Aux concurs de 1886, de 1887, de 1888, de 1889, de 1890, de 1891 et de 1892, sur 57 candidats reçus, 48 ont appartenu à l'Ecole.

ORGANISATION.—RENSEIGNEMENTS GÉNÉRAUX.

Conditions de Scolarité.

L'Ecole reçoit des élèves et des auditeurs ; les uns et les autres sont admis sans examen, avec l'agrément du Directeur et du Conseil l'École.

Ils n'ont à justifier d'aucun grade universitaire.

Les *élèves* sont les personnes qui ont pris une *inscription d'ensemble.*

Les *auditeurs* sont les personnes qui ont pris une ou plusieurs *inscriptions partielles.*

Les élèves sont seuls admis à briguer le diplôme de l'École.

Aucun auditeur ne peut s'inscrire aux conférences de préparation pour l'Inspection des Finances ou pour la Cour des Comptes, s'il n'est inscrit, en outre, au cours de finances, ou au cours d'organisation administrative, ou au cours de matières administratives, ou au cours d'économie politique.

Enseignement.

L'Enseignement comprend dans chaque section des Cours et des Conférences ; il est plus général dans les Cours, plus spécial et plus pratique dans les Conférences. Les institutions et les faits ne sont pas exposés seulement dans leur état actuel. Le professeur les suit dans leur développement historique, compare la France avec les pays étrangers et fait ressortir les idées générales qui résultent de ces rapprochements.

Ordre des Études.

On peut commencer les études chaque année. Leur durée normale est de deux ans ; elle peut être étendue à trois ans, de manière à coïncider avec les études de droit, ou en vue d'une préparation plus approfondie.

Les Cours et Conférences sont distribués en *cinq sections :* I. Section administrative ; II. Section diplomatique ; III. Section économique et financière : IV. Section coloniale ; V. Section générale (droit public et histoire). Les sections étant organisées en vue du diplôme l'École, les élèves qui ne briguent point ce diplôme ont toute liberté pour composer autrement et selon leurs convenances particulières la liste des cours qu'ils entendent suivre.

L'enseignement est réparti de façon à se combiner utilement avec les études de licence ou de doctorat en droit. Dans les trois premières sections, le cadre des études a été déterminé, non seulement d'après le programme des concours qui ouvrient l'accès de l'Inspection, de la Cour des Comptes, de la Diplomatie, de l'Auditorat au Conseil d'Etat, mais d'après les nécessités ultérieures de chaque carrière et en vue des autres emplois sur lesquels le candidat pourra trouver avantageux de se rabattre en cas d'échec. La Section coloniale prépare à des emplois administratifs en Algérie et en Tunisie et complète les éléments fournis par les sections diplomatique et financière pour la préparation aux consulats du Levant et de l'Extrême-Orient, ou aux emplois de compagnies ayant des intérêts dans ces régions. La Section générale est destinée spécialement aux jeunes gens qui cherchent à la l'École le complément d'une éducation libérale, ou qui se préparent à la vie publique.

Des cours d'Anglais, d'Allemand, de Russe et d'Arabe parlé (dialecte algérien et tunisien) ont lieu, chacun deux fois par semaine.

Examen Diplômes.

Dans chaque Section, un examen partiel a lieu à la fin de chaque année en cours d'études, un examen général et final à l'expiration de la dernière année.

Les élèves qui en font la demande sont seuls admis à subir ces épreuves. Elles portent *sur toutes les matières* de la section choisie par le candidat, et, en outre, sur ceux des cours des autres sections et sur les cours complémentaires qu'il indiquera dans une demande adressée au Directeur de l'École.

Un diplôme est décerné dans chaque section aux élèves reconnus capables.

Des prix en livres, pour une valeur totale de 1,200 francs, sont attribués aux candidats les plus distingués.

Directeurs d'Études.

Le but de cette création est de procurer des conseillers et des guides aux élèves qui sentent le besoin d'une direction.

Chaque année le Directeur de l'École désigne, parmi les hommes distingués que l'École s'honore d'avoir formés depuis dix ans, un certain nombre de personnes de bonne volonté qui acceptent le mandat de Directeurs d'études.

L'élève qui en exprime le désir est présenté à l'un de ces Directeurs. Le Directeur reçoit une fois par mois les élèves qu'il a agrées, s'enquiert de leurs progrès, les interroge sur les difficultés qu'ils recontrent, leur suggère des travaux à entreprendre, examine et revise avec eux leur plan d'études.

Groupes de Travail.

Les *groupes de travail* sont des conférences où d'anciens élèves, réunis sous la direction de leurs anciens professeurs, traitent par écrit et discutent des questions spéciales, actuelles et pratiques. Les meilleurs des mémoires élaborés dans les groupes sont insérés dans les *Annales de l'École des Sciences politiques.* Trois groupes sont actuellement organisés : celui de Finances, sous la direction de MM. Léon Say, de Foville, Stourm et Arnauné ; celui de Droit public et privé, sous la direction de MM. Ribot, Alix, Renault et André Lebon ; celui d'Histoire et Diplomatie, sous la direction de MM. Sorel, Albert Vandal.

Bibliothèque.

La bibliothèque et les salles de lecture sont ouvertes de 10 heures du matin à 10 heures du soir aux personnes qui y ont entrée par leur inscription. La bibliothèque se compose d'environ 25,000 volumes et d'environ cent revues et journaux français et étrangers.

Année Scolaire 1892-93.

L'année scolaire commencera le lundi 7 novembre et finira le 3 juin 1893.—Elle est divisée en deux termes. Le second terme commence le 1er mars.

On s'inscrit au secrétariat à partir du 3 novembre.

Les cours seront suspendus pendant la semaine du jour de l'an, la semaine sainte, la semaine de Pâques et les jours de fêtes légales.

Inscriptions.

	Par Terme. fr.	Par Année. fr.
1° *Inscription d'ensemble.*		
Donnant entrée à tous les cours et conférences tant réguliers que complémentaires et à la bibliothèque.	180	300
2° *Inscriptions partielles.*		
Un cours (une leçon par semaine) -		60
Id. (deux leçons par semaine) -		120
Une conférence (une leçon par semaine)		50
Id. (deux leçons par semaine).		100
3° *Cours de Langues.*		
Allemand, Anglais, Russe ou Arabe parlé (deux leçons par semaine).	30	50
4° *Bibliothèque.*		
Pour toute l'année (sauf août et septembre).		50
5° *Examens.*		
Examen de 1re année (épreuves orales)		40
Examen final (épreuves écrites et orales).		60
Diplôme - - - -		20

Appendix No. 58. Paper No. 12.

PAPER No. 12.

PAPER *forwarded to the Commission by* M. GILBERT BOUCHER.

Avant d'entrer dans le détail de l'organisation et du fonctionnement de notre Enseignement Supérieur, il y aurait lieu de remarquer qu'il n'est légalement accessible qu'à ceux qui ont déjà reçu un enseignement classique, désigné plus particulièrement sous le nom d'enseignement secondaire.*

Indépendamment de toutes autres conditions spéciales, il faut, en effet, pour être admis dans les grandes écoles du Gouvernement, et notamment dans les écoles militaires, aussi bien que pour pouvoir prendre ses degrés dans nos Facultés, avoir satisfait à certains examens qui témoignent d'une connaissance sérieuse des matières qui font l'objet de cet enseignement secondaire.

Ces examens qui portent le nom d'examens du Baccalauréat sont les mêmes pour tous.

Les cours partout identiques de nos lycées et de nos colléges (établissements de l'Etat), en donnant aux jeunes gens une culture générale, exclusive de toutes préoccupations d'enseignement professionnel, les préparent en même temps à subir les épreuves du Baccalauréat, qui ne sont en réalité que le contrôle de bonnes études classiques.

Comme le titre de Bachelier est indispensable à quiconque veut entrer dans les Ecoles du Gouvernement ou se faire inscrire dans une Faculté, il en résulte que lorsqu'un jeune homme n'est pas parvenu entre 18 et 20 ans à obtenir son diplôme, il doit renoncer à poursuivre plus loin ses études. Et comme d'un autre côté les grades que confèrent les Ecoles et les Facultés sont nécessaires pour remplir les fonctions publiques, et exercer ce que nous appelons les *carrières libérales*, c'est-à-dire le Professorat, la Médecine, les Professions juridiques, un échec définitif au Baccalauréat † a pour conséquence d'exclure pour toujours le candidat malheureux des emplois publics aussi bien que des carrières libérales. Il faut ajouter enfin que dans un milieu social un peu élevé, on est jusqu'à un certain point disqualifié lorsqu'on a échoué à ces examens. Et ces différentes raisons expliquent suffisamment, je crois, pourquoi notre enseignement secondaire est si suivi; et comment malgré de grands défauts dont le surmenage de jeunes intelligences n'est pas le moindre, il donne une moyenne d'hommes assez instruits et bien préparés pour d'autres études.‡

Les diplômes de Bacheliers, ainsi d'ailleurs que tous les autres diplômes octroyant un grade universitaire, sont conférés exclusivement par l'Etat, qui délègue à ses Facultés et à elles seules, la mission d'examiner les candidats et de leur délivrer des grades.

Il en résulte que bien que la liberté de l'enseignement existe en France, on peut dire qu'il ne s'y donne qu'un enseignement qui est celui de l'Etat, et cela à tous les degrés sans en excepter l'instruction primaire (elementary education). En effet non seulement l'Etat a partout ses établissements d'éducation, Ecoles primaires, lycées, Facultés, fondés et entretenus à ses frais, et relevant d'une manière absolue du Ministre de l'Instruction publique, mais il a, au moyen de la cellation des grades Universitaires, placé dans sa dépendance tous les établissements libres d'éducation. Du moment où il conférait ces grades, il a été le maître d'imposer ses programmes et naturellement il les a imposés. Dès lors quiconque, en dehors de l'Université, a voulu enseigner, a dû enseigner comme lui, les mêmes choses et par les mêmes méthodes; car si personne n'est obligé d'être Bachelier ou Docteur, on ne peut être bachelier ou docteur qu'en subissant les examens officiels, pour lesquels il faut savoir ce que l'Université professe. C'est ainsi que partout on explique les mêmes auteurs, on étudie les mêmes livres; à ce point, que les Jésuites, par exemple, sont obligés d'apprendre à leurs élèves l'histoire et la philosophie, non pas selon leurs doctrines, mais d'après l'esprit, certainement très différent, qui anime l'enseignement public.*

Je n'ai pas ici à apprécier des faits, mais je veux seulement rappeler qu'en France les questions d'enseignements ont, peut-être plus que partout ailleurs, un côté politique dont on ne peut nier l'importance. Notre système d'éducation, tel que l'a créé Napoléon, a eu surtout pour but, en donnant la toute puissance à l'Etat laïque, de soustraire l'instruction de la jeunesse à la domination de l'Eglise. Et après un siècle c'est encore l'Eglise qui est seule capable de se poser en rivale de l'Etat.†

Munis de leurs diplômes de Bacheliers, les jeunes gens se spécialisent; et, quittant les lycées, viennent suivre les cours des Facultés.

Nos Facultés, qui sont nos établissements publics (c.-à.-d. officiels) d'enseignement supérieur, se divisent

* Nous entendons par enseignement classique, l'instruction donnée aux enfants des hautes classes de la société et des classes moyennes, et dont l'étude des langues anciennes aussi bien que des éléments des sciences est la base. Son nom d'enseignement secondaire vient de ce qu'il ne s'adresse qu'à ceux qui ont déjà acquis ces premières notions du savoir que nous appelons une instruction primaire et qu'on reçoit dans les écoles publiques (elementary schools). Mais en fait nos écoles primaires, comme les vôtres, ne sont fréquentées que par les enfants du peuples et leur véritable appellation serait la dénomination allemande de Volksschulen. Ainsi nous avons trois degrés d'enseignement; l'enseignement primaire ou élémentaire; l'enseignement secondaire ou classique: et l'enseignement supérieur.

† Rien n'empêche un candidat qui a échoué plusieurs fois aux examens du Baccalauréat de se représenter encore. Mais en fait après un ou deux échecs, il renonce généralement à obtenir son diplôme.

‡ Voici un exemple de ce surmenage et de la somme de travail qu'on exigeait jusqu'à ces dernières années des collégiens.

Le tableau suivant extrait de la dernière statistique de l'enseignement secondaire publié en 1889, donne l'emploi du temps le plus généralement adopté alors dans nos lycées.

Les élèves se lèvent à 5 h., 30 et se couchent à 8 h. 30. La journée est donc de 15 heures; elle comprehend:—

Lever et soins de propreté		0 h. 20
2 classes	8 h. à 10 h.	4 h.
	2 h. à 4 h.	
4 études	5 h. 30 à 7 h. 15	7 h. 10
	10 h. 15 à midi	
	1 h. à 2 h.	
	5 h. à 8 h.	
4 récréations	7 h. 30 à 8 h.	2 h.
	10 h. à 10 h. 15	
	midi 30 à 1 h.	
	4 h. 15 à 5 h.	
repas	0 h. 15	1 h. 30
	0 h. 30	
	0 h. 15	
	0 h. 30	
Total		15 h.

Une veillée facultative d'une heure existe pour les élèves des hautes classes, à partir de la rhétorique inclusivement.

La promenade et les récreations plus longues et plus multipliées réduisent à 4 h. 10 le jeudi et à 3 h. 55 le dimanche le temps consacré à l'étude.

La sortie réglementaire a lieu tous les 15 jours; le dimanche à Paris, et le jeudi dans les départements.

On vient tout récemment d'apporter quelques modifications à cet état de choses et de diminuer un peu le temps consacré aux études. Mais encore en 1889, de 10 ans à 18, nos enfants avaient en tout et pour tout deux heures de récréations par jour.

* L'organisation d'un enseignement d'Etat à tous les degrés, depuis l'Enseignement primaire jusqu'à l'enseignement des plus hautes sciences, a été l'œuvre de Napoléon 1er, et il a donné à cette immense armée de professeurs et d'instituteurs (parish schoolmasters) nommés et rétribués par l'Etat, le nom d'Université de France. Aussi par ce mot d'Université, il ne faut pas entendre comme en Angleterre, un établissement d'Enseignement Supérieur, mais l'ensemble des maîtres qui forment le personnel enseignant officiel; ou ce qui revient au même, l'Etat enseignant.

A la tête de l'Université se trouve le Ministre de l'Instruction Publique qu'on désigne aussi parfois par le nom de Grand Maître de l'Université, titre qui a cessé du reste d'avoir un caractère officiel.

Enfin à côté du Ministre existe une grande assemblée consultative, le Conseil Supérieur de l'Instruction Publique, appelée à des époques fixes à délibérer et à donner son avis sur les questions les plus importantes en matière d'éducation.

† La collation des grades par l'Etat a été l'objet de vives attaques de la part du parti catholique, qui, en 1875, parut un moment sur le point de lui arracher ce privilége. L'assemblée nationale, ou les catholiques militants se trouvaient en majorité, vota alors une loi qui autorisait les établissements libres d'enseignement supérieur à faire subir à leurs élèves les examens conférant des titres Universitaires, sous la condition que les juris d'examens fussent composés par moitié de Professeurs des Facultés de l'Etat.

C'était là un fait considérable. Mais dès 1880 la loi fut rapportée et dans les conditions de notre organisation sociale, c'était là incontestablement un acte de sagesse.

Appendix No. 58. Paper No. 12.

en Facultés de lettres, de sciences, de droit et de médecine. Si, au lieu d'avoir chacune une existence indépendante des autres, et de ne relever que du Ministre de l'Instruction Publique, elles avaient entre elles quelques liens communs, ainsi qu'en Angleterre et en Allemagne, leur groupement formerait ce que vous appelez une Université. Et, au point de vue de la nature de leur enseignement, du rang et de la valeur de leurs professeurs, du degré de culture intellectuelle des étudiants qui les fréquentent, c'est à vos Univerités qu'il faut les comparer.

Mais tandis que les Universités d'Oxford et de Cambridge, puissament riches, ne reçoivent aucuns subsides de l'Etat, et, échappant ainsi entièrement à son intervention, règlent comme il leur convient l'ordre et les matières des études, recrutent elles-mêmes leurs professeurs, et administrent leurs biens en toute liberté, il en est tout différement de nos Facultés. Elles n'ont aucune fortune propre (no endowments)*; et les rétributions scolaires que payent les étudiants,† pour suivre les cours et passer les examens, sont tout à fait insuffisantes pour permettre à ces grands établissements de vivre.‡ Aussi l'Etat a dû prendre à sa charge toutes leurs dépenses. Il fait verser au Trésor le montant des rétributions scolaires, et il paye lui-même le traitement des professeurs, l'entretien des laboratoires, les travaux de réparation ou d'agrandissement des batiments occupés par les Facultés. Dans ce but une somme d'environ douze millions (exactement 11,878,815 francs pour 1893) est inscrite annuellement au Budget;§ la conséquence de cet état de choses, c'est que les professeurs sont des fonctionnaires du Gouvernement, qui se réserve le droit de les nommer et de donner à leur enseignement la direction qui lui convient.

Une autre différence considérable entre vos Universités et nos Facultés est dans le but qu'on y poursuit. Si je ne me trompe, les Universités d'Oxford et de Cambridge ne sont fréquentées que par un petit nombre de jeunes gens, riches pour la plupart, et qui sont venus chercher là un complément d'études, sans aucun souci généralement de se préparer ainsi à une carrière déterminée. Nos étudiants sont dans une situation toute autre. Le plus souvent peu fortunés, ils sont pressés d'avoir un métier qui leur permette de gagner leur vie. Ils veulent être médecins, professeurs, avocats et c'est un enseignement professionnel qu'ils demandent aux Facultés, où ils sont aujourd'hui plus de 20,000 inscrits.‖ Cet enseignement, du reste essentiellement scientifique et d'un ordre élevé, n'est professionnel qu'en ce sens qu'il est circonscrit dans les limites des connaissances nécessaires ou utiles à l'exercice de certaines professions.

Une Faculté se compose d'un corps de professeurs titulaires et de professeurs suppléants qui, outre leurs cours, font passer les examens, d'ou dépendent la collation des grades exigés pour les différentes fonctions et professions politiques et civiles. A la tête de chaque Faculté se trouve un directeur qui porte le titre de doyen. Nommé par le Ministre et choisi parmi les professeurs titulaires il doit, en dehors des devoirs de sa charge, se livrer à l'enseignement de même que les autres professeurs. D'ailleurs les fonctions du doyen se réduisent en réalité à peu de chose. Les Facultés étant des établissements de l'Etat, toutes les questions importantes, depuis le nombre des professeurs et le chiffre de leurs traitements jusqu'aux matières qui font l'objet des cours, sont règlées par des instructions ou des décisions ministérielles. Le doyen est donc surtout le représentant du pouvoir central, qui lui délègue le soin, en faisant appliquer les lois et les règlements, de veiller au fonctionnement régulier des cours et des examens et de maintenir partout le bon ordre. A un autre point de vue, le doyen est chargé de défendre auprès du Gouvernement les intérêts de la corporation dont il est le chef, intérêts qui peuvent être examinés et discutés dans une sorte de conseil composé de tout le personnel enseignant et qu'on appelle Assemblées de la Faculté. Mais il faut ajouter que les pouvoirs de cette Assemblée sé bornent à peu près à émettre des vœux.

Les professeurs titulaires sont nommés par décret du Président de la République, sur la proposition du Ministre de l'Instruction Publique, et ils sont *inamovibles*, c'est-à-dire qu'une fois nommés, le Gouvernement ne peut les dépossèder de leurs chaires, non plus que des traitements qui y sont attachés.

Leur recrutement ne se fait pas de même dans tous les ordres de Facultés. Pour les lettres et pour les sciences, c'est le Ministre qui les choisit librement, sous la réserve qu'ils remplissent certaines conditions dont la principale est d'être docteurs de l'ordre de la Faculté où ils sont appelés à enseigner. Il n'en est pas ainsi pour les professeurs de droit et de médecine. Ils sont toujours pris parmi les agrégés (professeurs suppléants de ces Facultés) et comme ceux-ci doivent leur titre au concours (competition) les chaires de médecine et de droit s'obtiennent donc, en réalité, par le concours.*

Mais quelle que soit l'origine des professeurs, on peut affirmer que le personnel enseignant est très brillant et tout à fait à la hauteur de sa tâche.

Une quinzaine de Facultés de lettres et autant de Facultés de sciences sont disséminées sur différents points de la France. Treize villes possèdent des Facultés de droit, et il y a sept Facultés de médecine. Paris a naturellement les quatre Facultés, et la moyenne des traitements de ses professeurs est de 15,000 francs. En province ce traitement varie de 6000 à 10,000 francs.

Il ne faudrait pas juger l'étendue de l'enseignement des Facultés d'après leur nombre. Ainsi, quoique les Facultés de lettres et de sciences soient de beaucoup les plus nombreuses, elles ont très peu d'élèves, tandis que dans les écoles de droit et de médecine, l'affluence des étudiants est considérable.

Si on les classe par importance†, ce sont les Facultés de droit qui tiennent la tête. Cela s'explique aisément par cette raison que de tous les grades universitaires, il n'y en a pas un qui donne accès à plus de carrières que ceux de licencié et de docteur en droit. Il faut avoir le premier de ces titres, qui s'obtient après trois années d'études et trois séries d'examens, pour entrer dans la magistrature, qui est très nombreuse, pour être

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* Nos facultés ont bien le droit de recevoir des dons et legs, mais, malgré ce droit, aucune d'elles n'a eu encore l'occasion de se constituer un patrimoine.

† La moyenne de la rétribution scolaire payée annuellement par un étudiant varie de 300 à 400 francs.

Le principe de cette rétribution est le même dans toutes les Facultés. Elle se compose d'une somme fixe de 30 francs, connue sous le nom de droit d'inscription, versée chaque trimestre par l'étudiant pour être admis à suivre les cours; et en outre des frais d'examens et de délivrance de diplômes, dont le chiffre varie selon les Facultés et les grades.

	Fr.
Pour être licencié en droit, trois années d'études et trois séries d'examens	1,130
Docteur en médecine, quatre années d'études et huit examens	1,360
Licencié ès-lettres ou ès-sciences, une année d'études, un examen	230

‡ Seule de toutes les Facultés, la Faculté de droit de Paris pourrait, au moyen des rétributions scolaires, faire face aux frais de son enseignement.

§ Outre ce crédit régulièrement inscrit au Budget, une somme de cent millions a été dépensée pendant les vingt dernières années, soit par les villes, soit par l'Etat, pour agrandissements ou réparations des bâtiments affectés à l'usage des Facultés.

‖ Au mois de Janvier 1892 il y avait 22,328 étudiants inscrits dans les diverses Facultés. Environ la moitié d'entre eux étaient étudiants des Facultés de Paris.

* Les concours pour l'agrégation de droit et de médecine ont lieu lorsque des vacances se produisent dans le corps enseignant, et par conséquent à des époques variables. Il faut être docteur pour être admis à concourir.

Il y a deux séries d'épreuves: les épreuves d'admissibilité, qui ont pour but, en établissant un premier classement des candidats d'après leur mérite, d'éliminer les moins capables, et les épreuves définitives auxquelles ne prennent part que ceux qui ont déjà subi avec succès la première partie du concours.

Les juges du concours sont nommés par le Ministre de l'Instruction Publique.

Pour l'agrégation du droit, le jury se compose ordinairement de quatre professeurs titulaires, dont l'un est désigné comme président du concours, et de trois membres de la Cour de Cassation. Les épreuves définitives aussi bien que les épreuves d'admissibilité consistent en compositions écrites et en leçons publiques (lectures) faites par les candidats sur des sujets qui sont indiqués par le jury.

Les juges des concours d'agrégation à la Faculté de médecine sont choisis parmi les professeurs des différentes Facultés de médecine. Les épreuves varient selon qu'il s'agit d'un concours de médecine, de chirurgie ou d'accouchement.

† J'entends par importance, non pas tant le chiffre des étudiants inscrits dans les Facultés, que le nombre de ceux qui obtiennent chaque année le grade universitaire nécessaire pour l'exercice d'une profession. Ces grades sont ceux de licencié pour les carrières juridiques, et de docteur pour les médecins. Le titre d'agrégé des lettres ou des sciences donne seul droit à une chaire dans les lycées et collèges, mais un simple bachelier ès-lettres ou ès-sciences peut y enseigner.

La dernière statistique officielle de l'Enseignement supérieur est de 1889, c'est à elle que je me référerai pour citer des chiffres. Pour les Facultés de droit ces chiffres sont les suivants:—

En '86 on a conféré 1,379 diplômes de licencié en droit et 110 de docteur.

En '87 on a conféré 1,251 diplômes de licencié en droit et 109 de docteur.

En '88 on a conféré 1,325 diplômes de licencié en droit et 123 de docteur.

Et en prenant ces résultats pour base d'un calcul, très approximatif il est vrai, on pourrait en conclure qu'il doit y avoir en France une moyenne de 40,000 licenciés en droit.

Le grade de docteur qui, règlementairement, pourrait s'obtenir après une année d'études complémentaires des études de licence, en demande en fait au moins deux et demie. Il faut passer trois examens difficiles et faire une thèse, c.-à.-d., écrire sur des matières juridiques un ouvrage original. Ce titre qui n'est exigé que pour exercer le professorat dans les facultés de droits à une réelle valeur, et il est ambitionné par beaucoup d'hommes qui se destinent au barreau et à la magistrature.

avocat (Barrister) avoué (Solicitor) notaire*; et, en fait si non toujours, par suite d'une obligation légale, pour remplir presque toutes nos fonctions publiques; sous compter que les hommes de loi sont recherchés dans beaucoup de grandes administrations privées, qu'on en trouve dans les affaires dans le journalisme et un peu partout. Pourtant notre législation est loin d'être aussi compliquée que la vôtre et nous ne sommes pas processifs. Mais on considère que des études de droit sont un bon complément d'éducation, et lorsqu'elles ont été sérieusement faites, on n'a peut-être pas tort. En effet notre enseignement juridique est tout à fait remarquable et digne d'attirer votre attention. Il est tout théorique, remonte aux sources, les explique, et naturellement fait une très large part au droit romain. Il donne une très grande habitude de réflexion, de déduction logique, de clarté, et une réelle puissance d'argumentation.†

Après le droit, c'est vers la Médecine que se porte le plus grand nombre d'étudiants.‡ Nul ne peut, en France, se livrer à aucune pratique chirurgicale ou médicale, donner la moindre consultation ou rédiger l'ordonnance la plus insignifiante, sans avoir obtenu d'une Faculté de l'Etat, le titre de docteur en médecine. Toute infraction à cette règle est punie des peines les plus sévères, l'amende et la prison. Or comme les professions Médicales sont relativement lucratives, qu'il y a maintenant des médecins dans presque tous les villages, il s'en suit forcément qu'il y a dans les Facultés une grande affluence d'étudiants. Mais, pour des motifs multiples, c'est surtout à Paris que les jeunes gens viennent étudier. L'enseignement y est naturellement à la fois théorique et pratique et se fait au moins autant dans les hôpitaux que dans les amphithéâtres de la Faculté.

En fait, il y a deux sortes d'élèves, ceux qui recherchent seulement leur diplôme de docteurs, qu'ils obtiennent après cinq ou six années d'études, et s'en vont ensuite plus ou moins savants, faire de la clientèle à bas prix; ce sont les plus nombreux. Puis à côté d'eux, se trouve une autre catégorie d'étudiants, qui visent beaucoup plus haut. Ils aspirent non plus seulement au doctorat, mais à un titre, qui, bien que n'ayant rien d'officiel, est pourtant le plus recherché de tous dans leur profession, celui de médecin ou chirurgien des hôpitaux de Paris. Il faut de dix à quinze ans d'études acharnées avant de pouvoir en arriver là, passer exames sur exames, subir un nombre incalculable de concours, ou beaucoup échouent. Mais ceux qui réussissent sont assurés d'avoir une très belle clientèle de faire rapidement leur fortune.§

Viennent enfin les Facultés des Lettres et les Facultés des Sciences. Aussi absolunent indépendantes les unes des autres, qu'elles le sont, par exemple, des Facultés de Droit ou de Médecine, elles ont pourtant plusieurs points communs, qui pour vous, sont les plus importants dans un exposé d'ensemble tel que celui-ci.

Elles confèrent ces diplômes de bachelier, assez comparables aux certificats de maturité des Allemands et qui sont, pour les jeunes gens sortant des lycées et des collèges, la consécration de leurs études. Ce n'est pas là cependant la raison d'être de ces facultés et elles ont pour but de donner un enseignement littéraire et scientifique élevé et approfondi; et par littéraire, il faut entendre aussi bien l'histoire, la philosophie, les langues anciennes et étrangères, que les belles lettres. Mais à qui donnent-elles cet enseignement? En réalité à un nombre infiniment restreint d'étudiants Non pas que, en France, nous soyons dédaigneux des hautes connaissances scientifiques et littéraires, que nous restions indifférents aux recherches savantes. Bien loin de là. Seulement, par la force même des choses, nous sommes obligés de nous spécialiser dès la sortie du collège, et de diriger nos études du côté où elles nous permettront l'accès d'une carrière. Il y a pour ceux qui ont étudié le droit ou la médecine, qui sont sortis des grandes écoles où on forme des ingénieurs et des chimistes, des débouchés nombreux. C'est tout le contraire pour les étudiants des Facultés de lettres et de sciences. S'ils sont devenus licenciés ou docteurs de ces facultés, ils ne peuvent prétendre qu'à une chose, avoir une chaire de professeur dans nos lycées. Et comme dans les lycées il n'y a relativement que peu de chaires vacantes chaque année, il en résulte forcément que les trente facultés de lettres et de sciences réunies n'ont pas plus d'élèves que de professeurs.*

C'est là évidemment, une situation anormale. Il ne faut pas toutefois désirer voir s'accroitre la proportion de ces étudiants; et le Gouvernement a fait tout récemment l'expérience du danger qu'il y aurait à cela. Animé du désir de donner un peu de vie à ces Facultés, il avait en 1877 créé 350 bourses (scholarships) destinées à être accordées chaque année à des jeunes gens sans fortune qui voudraient préparer les examens de la licence soit des lettres, soit de mathématiques. Il vient d'être forcé de reduire le nombre de ces bourses de près de moitié.† Les licenciés arrivaient en effet à dépasser de beaucoup les besoins de l'enseignement, et le Ministre de l'Instruction Publique se trouvait par suite dans l'impossibilité absolue de les appeler à des postes auxquels ils se croyaient presque des droits acquis.

Manquant de vrais étudiants, les professeurs de ces Facultés sont dans la nécessité de faire leurs cours pour ce qu'ils appellent, j'aime à croire ironiquement, "le grand public." Et, il faut reconnaître, qu'à Paris "le grand public" ne fait pas défaut à quelques uns d'entre eux. Il y a tel professeur d'histoire ou de littérature très en vogue qui deux fois par semaine, parle devant plusieurs centaines de personnes. Malheureusement cet auditoire n'est imposant que par le nombre. Il ne se compose guère que de femmes du monde venues par genre, d'oisifs, de vieillards et même de misérables qui ont voulu simplement se mettre un moment à l'abri du froid de la rue; tout un monde, en un mot, qui ne sait pas grand chose et qui ne peut rien apprendre.‡

Les hommes d'étude n'ont pas le loisir de se rendre à la Sorbonne;‡ et le pourraient-ils, est-ce que cela leur servirait? Leur instruction générale n'est plus à faire et dès lors ils ne peuvent travailler utilement qu'avec leurs livres ou dans leurs laboratoires.

De l'ensemble de ces faits, on est nécessairement amené à reconnaître que les Facultés des lettres et des sciences servent, pour ainsi dire uniquement, aux professeurs qui y ont des chaires et des traitements.

Maintenant étant donné, que ces professeurs sont pour la plupart des hommes distingués, très érudits, ayant fait des ouvrages remarqués, on peut soutenir que, dans un grand pays, il est bon de créer ainsi à des personalités littéraires et scientifiques, une situation

* Légalement les notaires ne sont pas astreints à l'obligation d'avoir fait leur droit; mais à Paris et dans les grandes villes, ils sont tous licenciés.

† Si on veut se rendre compte de la nature de notre enseignement juridique, il n'y a qu'à parcourir quelques-une de nos ouvrages de droit. Par exemple: Le Cours de Droit Civil Français de MM. Aubry et Rau; et pour la législation Romaine: Le Cours de Droit Romain d'Accarias, ou bien celui plus élémentaire d'Ortolan, revu par MM. Bonnier et Labbé.

‡ Le nombre des étudiants en Médecine s'élevait en 1888, à 5,663 dont 4,158 étaient inscrits à la Faculté de Paris.

En '86, il a été reçu 539 docteurs.
En '87, „ 627 „
En '88, „ 645 „

Le titre de Docteur en Médecine peut s'obtenir après 4 années d'études.

Mais comme il faut passer 8 examens et soutenir une thèse en pratique les étudiants ne terminent leur doctorat qu'au bout de six années environ.

Les examens et le diplôme sont les mêmes pour les médecins et les chirurgiens.

§ Independament des Facultés de Médecine, il y a une *Ecole Supérieure de Pharmacie* à Pare qui est placée sur le même rang que ces Facultés.

* Ainsi que je l'ai déjà dit ce n'est pas tant au nombre des étudiants inscrits qu'il faut se reporter, qu'à celui des titres universitaires accordés chaque année et qui témoignent seuls d'études sérieuses. Le titre qu'on recherche surtout dans ces deux ordres de facultés est celui de *licencié*. Il s'obtient ordinairement au bout d'un an de préparation, après la sortie du collège. Ceci possé voici les résultats donnés par la statistique officielle de 1889.

Pendant les années 1886, '87 et '88, le nombre des professeurs chargés de cours, maîtres de conférences, s'élevait dans les facultés de lettres et de sciences à 488.

Le nombre de licenciés reçus a été:

De 619 en 1886 dont 261 pour les lettres et 358 pour les sciences.
633 en 1887 „ 290 „ „ 343 „ „
609 en 1888 „ 249 „ „ 360 „ „

De sorte que pour 600 licenciés environ il y avait a peu près 500 professeurs.

Si on remarque en outre que certainement plus de la moitié de ces licenciés, déjà professeurs ou répétiteurs dans les collèges n'ont pu suivre les cours, on arrivera à ce résultat qu'il a fallu deux professeurs pour un licencié.

† Le nombre de ces bourses est pour 1893 de 210 et il est encore beaucoup trop élevé. La valeur de ces bourses est de 1,500 fr. par an. Elles paraissent avoir pour but principal de donner des auditeurs sérieux aux professeurs, qui n'avaient que ce moyen d'astreindre des candidats à la licence à suivre leurs cours.

‡ Il n'y a dans ce que j'avance aucune exagération. Voici d'ailleurs un témoignage qui ne saurait être suspect, c'est celui de M. Lavisse, un académicien de beaucoup de talent, professeur à la Faculté des lettres, et qui est lui même un favori du grand public. Il n'a donc aucune raison de le maltraiter. Or dans un article qu'il faisait paraître le 15 Avril 1884, dans la Revue internationale de l'enseignement, après avoir fait une peinture très pittoresque de ces auditoires de la Sorbonne, il s'exprime ainsi: "Me sera-t-il permis de dire qu'en plusieurs années "d'enseignement public, trois personnes en tout se sont détachés de "cet auditoire pour s'adresser à moi; une m'a demandé sans que j'ai "jamais pu savoir pourquoi, au sortir d'une leçon sur l'Ordre teutoni- "que, si les femmes pratiquaient la médicine au moyen âge; une "autre m'a recommandé un candidat au baccalauréat; un troisième "m'a demandé de l'argent." Cela n'empêche pas M. Lavisse d'être un champion convaincu et ardent de l'enseignement des Facultés des lettres et des sciences.

§ La Sorbonne est le nom des bâtiments où se font à Paris les cours des Facultés de lettres et de sciences—ce n'est pas un établissement d'enseignement d'un caractère particulier.

Appendix No 58. Paper No. 12.

honorable et qui soit suffisamment rétribuée pour leur permettre de se livrer à des travaux d'un ordre élevé et désintéressé.

Ainsi posée, la question mérite qu'on y réfléchisse et qu'on la discute. A une condition toutefois, c'est qu'en acceptant le principe du maintien des Facultés de lettres et de sciences, on soit bien déterminé à en restreindre considérablement le nombre.* On aura de la sorte plus de chances de ne pensionner que le savoir et la valeur véritable, et surtout on enlèvera aux Facultés, trop préoccupées aujourd'hui de justifier leur existence, cette ardeur inquiétante qu'elles montrent à attirer à elles des élèves qui ne peuvent, le plus souvent, retirer de leur enseignement d'autres profits que des diplômes avec lesquels il leur sera ensuite impossible de trouver un gagne pain.

Du reste, si nos Facultés de lettres et de sciences n'ont pas de véritable raison d'être, c'est qu'en dehors du droit et de la médecine, notre haut enseignement est concentré dans un certain nombre de grandes écoles formées, qui ne s'ouvrent que par les concours (compétition) et qui répondent d'une façon admirable aux besoins du Professorat et des carrières scientifiques. Telle est, entre autres, l'Ecole Normale Supérieure.

L'Ecole Normale Supérieure a été créée pour former, dans les sciences et dans les lettres, des professeurs destinés à être l'élite de notre corps enseignant.

On entre à l'Ecole Normale par le concours ; la durée des études est de trois années, et les élèves, soumis aux obligations de l'internat, sont non seulement instruits, mais entretenus aux frais de l'Etat.

Il y a deux sections, l'une littéraire, l'autre scientifique. On reçoit, chaque année, environ 24 élèves dans la première section et 18 dans la seconde ; et, comme il y a trois promotions en même temps à l'Ecole, cela représente un personnel de 120 à 130 pensionnaires.

Les concours d'admission sont des plus difficiles, et ceux qui y prennent part ont toujours été, pendant leur temps de collège, des sujets exceptionnellement brillants.†

Les Normaliens ont, depuis longtemps, joué un rôle considérable dans notre pays. Ce sont eux qui, devenus professeurs de lycées ou de Facultés, ont donné a nos études classiques et scientifiques tout leur développement. Mais ils ont fait plus. Et, si la plupart d'entre eux se sont entièrement consacrés à l'enseignement ou à l'érudition, il s'en est trouvé encore un assez grand nombre qui, ayant abandonné l'Université, ont marqué leur place avec éclat dans la littérature, le journalisme et la politique.

Pour ne citer que quelques noms, Augustin Thierry, Prévost-Paradol, Edmond About, Beulé, J. Weiss, Raoul Frary étaient sortis de Normale. MM. Taine, Grcard, Sarcey, Lavisse, Richepin, Lemaitre sont des Normaliens, aussi bien que MM. Victor Duruy, Jules Simon, Challemel-Lacour, Mézières et l'évêque d'Autun Mgr. Perraud.

S'il est vrai que ce soit aux résultats qu'on juge les institutions, ne suffit-il pas de cette énumération rapide pour montrer ce qu'est la section des lettres de l'Ecole Normale ?

Le niveau des études y est des plus élevés ; et, par la, il faut entendre non pas seulement l'enseignement qu'on y donne, mais la somme considérable d'intelligence et de travail que fournissent des élèves, déjà très instruits avant leur entrée à l'Ecole.

L'enseignement, qui comprend le latin, le grec, la langue française et ses classiques, l'histoire et la philosophie, est, pendant les deux premières années, le même pour tous les *littéraires*. Mais, au commencement de la troisième année, ils se séparent et suivent des cours différents, selon qu'ils se destinent au professorat des lettres proprement dites,‡ de philosophie, d'histoire ou des classes de grammaire.§ Ainsi, si dès l'Ecole ils commencent à se spécialiser, ce n'est pourtant qu'après avoir acquis un ensemble de connaissances générales, qui leur permette de n'être étrangers à aucun ordre d'idées. Cette habitude de généraliser et l'étude constante qu'ils ont faite de la forme littéraire, sont les causes principales de leurs succès en dehors de l'Université. Ils sont des écrivains, et, consciemment ou non, c'est surtout à en faire des écrivains qu'a tendu toute l'éducation qu'ils ont reçue. Cela n'est pas un résultat d'une médiocre importance dans une société comme la nôtre, ou le talent littéraire et l'élégance de la parole inspirent non seulement une réelle admiration, mais aussi un certain respect superstitieux. Si on en doute, on n'a qu'à voir la puissante influence que le petit groupe des Normaliens a exercée sur notre époque.*

Pour les élèves les plus distingués de Normale l'Ecole a, en quelque sorte, un prolongement et un complèment dans l'Ecole Française d'Athènes. Chaque année, à la suite d'un concours entre les Normaliens dont les études sont terminées,† six jeunes professeurs sont envoyés en Grèce ou, pendant trois ans, ils sont pensionnés par l'Etat. A leur retour, ils entrent presque toujours dans l'enseignement des Facultés et sont ainsi placés dans les conditions les plus favorables pour faire valoir leur mérite et acquérir de la réputation. Et, en fait, parmi les Normaliens qui se sont fait un nom, presque tous ont passé par l'Ecole d'Athènes.

L'Ecole Normale *donne également* un Enseignement Scientifique qui a produit des savants renommés, dont Pasteur est probablement le plus illustre. La manière de procèder est identiquement la même que pour la section des lettres. Les mêmes cours de Mathematiques, de Physique et de Chimie, d'Histoire Naturelle, sont suivis par les élèves pendant deux années. Puis, suivant qu'ils se destinent à l'une de ces trois branches de sciences, ils bifurquent et se spécialisent comme leurs camarades des lettres.‡

Mais tandis que l'Ecole Normale supérieure est, à proprement parler, le seul grand établissement dont le haut enseignement littéraire produise d'importants résultats, il n'en est pas ainsi pour les sciences, et une de nos écoles militaires, l'Ecole Polytechnique, est au même titre que l'Ecole Normale, si ce n'est davantage,

* Pendant les années 86, 87, 88—sur les 15 Facultés des lettres 12 n'ont pas reçu un nombre de licencié supérieur à 20 par an ; et il en est de même pour 13 Facultés de sciences—Parmi ces Facultés quelques unes n'ont pas produit plus de 2, 5, 6, licenciés annuellement.

† Pour 42 élèves reçus chaque année dans les deux sections réunies de l'Ecole Normale, il se présente en moyenne aux concours d'admission 450 jeunes gens.

‡ On entend ici par enseignement des lettres, l'étude des langues anciennes et de la littérature française, non plus dans leurs éléments, mais aussi approfondies qu'il est possible de le faire avec les élèves des plus hautes classes des lycées. Les classes de grammaire sont celles ou s'enseignent les premières connaissances du latin, du grec et des règles de la langue française. On demande plus spécialement aux professeurs de ces classes d'être au courant des questions de philologie et de grammaire comparée.

§ Des concours, dits concours de l'Agrégation de l'Enseignement Secondaire Classique, et auxquels ne peuvent prendre part que des licenciés ès-lettres, ont pour objet d'établir l'aptitude au professorat de ceux qui en ont subi les épreuves avec succès. La nature de ces épreuves varie suivant, qu'il s'agit de l'enseignement des lettres, de la philosophie, de l'histoire ou des classes de grammaire. Mais le titre d'Agrégé est le même pour tous ; et au lieu d'être, comme dans les Facultés, synonyme de professeur suppléant, c'est au contraire un grade qui donne droit à une chaire de professeur titulaire.

Les élèves de Normale qui doivent, à la fin de leur première année avoir obtenu leur diplôme de licenciés ès-lettres, sont tenus après leur troisième année de concourir pour l'agrégation ; et ce concours, qui n'est aucunement un examen d'école, est, cependant, à la fois le contrôle et le but principal de leurs études.

Beaucoup de licenciés ès-lettres, en dehors des Normaliens, se présentent à l'agrégation et quelques uns sont pour ceux-ci des concurrents très-sérieux.

Les juges des concours, au nombre de trois au moins, sont des Inspecteurs Généraux de l'Instruction Publique des professeurs de la Faculté des lettres et un agrégé de l'enseignement secondaire.

* Voici le programme officiel de l'enseignement de la section des lettres de l'Ecole Normale :

Première année.

Lettres.

Philosophie théorique.
Histoire ancienne.
Langue et littérature grecques.
Langue et littérature françaises.
Langue et littérature latines.
Grammaire.
Allemand et anglais.

Deuxième année.

Histoire de la philosophie.
Littérature grecque.
Littérature latine.
Littérature française.
Histoire du moyen-âge et histoire moderne.
Géographie.
Allemand et anglais.

Troisième année.

Conférences préparatoires aux divers ordres d'agrégation.

† Tout docteur ès-lettres ou agrégé, âgé de moins de 30 ans, peut prendre part à ce concours, mais, en fait, les élèves de Normale n'ont pas encore trouvé de concurrents en dehors de leurs camarades et sont seuls à concourir pour l'Ecole d'Athènes.

‡ Voici, par année, les matières de l'enseignement :—

Première année.

Sciences.

Mathématique.
Chimie.
Minéralogie.
Zoologie.
Botanique.
Allemand et anglais.

Deuxième année.

Mathématiques.
Physique.
Géologie.
Allemand et anglaise.

Troisième année.

Conférences préparatoires aux divers ordres d'agrégation.

Ces divers ordres d'agrégation sont ; 1°, l'agregation des sciences mathématiques ; 2°, l'agrégation des sciences physiques ; 3°, l'agrégation es sciences naturelles

une pépinière de jeunes savants. En effet, les 20 ou 30 premiers élèves sortant chaque année de Polytechnique, n'entrent généralement pas dans l'armée, mais dans les services civils qui sont infiniment plus recherchés que l'artillerie et le génie, et ils forment l'élite de nos ingénieurs.*

Il était assez naturel de rapprocher ces deux écoles, puisque le programme d'admission est absolument le même, et que la force des études qu'on y fait est, pour ainsi dire, identique.

Il y avait récemment encore, des Facultés de Théologie catholiques et protestantes. Ces dernières subsistent seules aujourd'hui, le Parlement, pour donner satisfaction aux passions radicales, ayant supprimé en 1885 les Facultés de Théologie catholique. Cet acte d'intolérance, qui devait irriter assez justement les catholiques, ne pouvait toutefois avoir une réelle importance au point de vue religieux. Les cours de ces Facultés n'étaient pas suivis en effet par nos prêtres, parcequ'ils reçoivent l'enseignement théologique dans les grands séminaires, établissements subventionnés par l'Etat, et qui existent dans chaque diocèse, c'est-à-dire, dans chaque département.†

Ainsi les Facultés de Droit et la Medecine, les Ecoles Normale et Polytechnique sont nos grands établissements d'enseignement supérieur; auxquels il faut ajouter, pour avoir une énumération complète, l'Ecole des Ponts et Chaussées, l'Ecole des Mines, l'Ecole Centrale des Arts et Manufactures, destinées à former les ingénieurs de l'Etat et nos ingénieurs civils.‡

Il existe encore plusieurs autres établissements de l'Etat ou se poursuivent de hautes études; mais leur importance est secondaire. Avant d'en parler, je dois revenir pour quelques instants, en arrière et vous entretenir de nouveau de certaines questions relatives à nos colléges et à nos Facultés.

Pour plus de clarté et afin de faire mieux saisir l'ensemble de notre système d'instruction publique, j'ai évité d'entrer dans les détails, et j'ai même supposé parfois que les choses étaient plus simples qu'elles ne sont en réalité. J'ai omis également, pour le même motif, de m'expliquer sur plusieurs points qui, peut-être, seront restés obscurs. Et c'est ce qui rend maintenant indispensables quelques indications complémentaires.

Lycées et Colléges.—En montrant ainsi que je l'ai fait précédemment, les liens étroits, qui unissent notre enseignement supérieur à l'enseignement secondaire, j'ai indiqué déjà la grande place qui était faite, dans l'éducation nationale, aux études classiques. Mais les chiffres seuls peuvent en faire comprendre vraiment toute l'importance. On conçoit certes aisément que la population des colléges doive être nombreuse dans un pays ou pour étudier le droit ou la médecine, être officer dans l'armée, professer l'histoire ou les langues vivantes, il est de toute nécessité d'avoir appris le grec et le latin. Supposerait-on toutefois que nos établissements d'enseignement secondaire ont près de 200,000 élèves qui y reçoivent l'éducation libérale que vous donnez au plus à 20,000 jeunes gens en Angleterre. Il en est ainsi pourtant.*

C'est dans les lycées et les colléges que la grande majorité de ces jeunes gens est élevée et que se font aussi les études les plus fortes. Il ne faudrait pas induire de ces noms différents qu'il y a entre ces établissements des distinctions semblables à celles qui existent en Allemagne entre les *Gymnases* et les *Realschulen*. Ce serait une erreur. Les lycées et les colléges ne diffèrent entre eux que par la qualité de leurs professeurs, par la source de leurs revenus, et l'entretien des lycées figure au budget de l'Etat; tandis que les Colléges sont à la charge des villes qui les ont établis et qui doivent sur leurs propres ressources faire face aux dépenses que ne couvrent pas les rétributions scolaires. Les lycées placés dans les grands centres, et beaucoup plus fréquentés que les colléges, ont un personnel enseignant mieux choisi et recruté pour les classes supérieures parmi les agrégés et les élèves de Normale. Dans les petits colléges il n'est pas rare, au contraire, de trouver parmi les professeurs, des simples bacheliers.

Mais colléges et lycées sont dans la dépendance immédiate et absolue du Ministre de l'Instruction Publique, qui fixe les programmes et nomme ou révoque les professeurs.

Ces programmes sont d'ailleurs les mêmes pour tous les établissements publics d'éducation secondaire. Dans tous on enseigne les mêmes choses et d'après des méthodes identiques. Et c'est ce qu'a exprimé d'une façon originale votre compatriote M. Matthew Arnold, lorsqu'il a raconté que, reçu un jour par un de nos Ministres de l'Instruction Publique, le grand maître de l'Université, au cours de la conversation, tira sa montre et lui dit: "En ce moment, dans " tous les lycées et colléges de France, les élèves de " rhétorique expliquent le 25e vers du 5e livre de " l'Eneïde."

C'était là, sous forme de plaisantarie, une critique fort spirituelle de l'uniformité de notre enseignement. Et il est certain que rien n'est plus étrange et plus en contradiction avec les besoins différents de la societé, que d'avoir imaginé de créer, absolument sur le même modèle, un millier d'établissements d'instruction secondaire.

Au moins avait-on fait, dans chacun de ces établissements, la part de certaines aptitudes particulières des individus, qui portent les uns de préférence vers les études scientifiques et les autres vers les études littéraires. Il existait partout, dans les divisions supérieures, un double enseignement parallèle, l'un où les langues anciennes et la littérature tenaient la plus grande place, l'autre où c'était surtout aux sciences mathématiques et physiques qu'avait été faite une large part. .

A ces deux ordres d'études correspondaient deux baccalauréats différents, mais dont les diplômes étaient d'une égale valeur, le Baccalauréat ès-lettres, et le Baccalauréat ès-Sciences.

Il fallait pour être bachelier ès-sciences savoir beaucoup plus de mathématiques que de latin; et, pour être bachelier ès-lettres beaucoup plus de latin et de grec que de mathématiques. Mais quelque soit l'examen, on demandait également aux candidats la preuve d'une culture générale. Seulement suivant leurs dispositions naturelles et la carrière à laquelle ils se destinaient, ils avaient, pendant leurs trois ou quatre dernières années de collége, étudié d'une façon, si non exclusive, du moins toute spéciale, les sciences ou la littérature.

Cela, parait-il, était intolérable; et dernièrement, sur l'avis de très hautes autorités universitaires, un Ministre de l'Instruction Publique a décidé qu'on ne tiendrait plus compte désormais des tendances et des aptitudes particulières des élèves, et qu'il n'y aurait plus qu'un baccalauréat unique, dit de *l'enseignement secondaire*

* Les élèves qui, lors des examens de sortie, sont à la tête de leur promotion ont le droit, dont ils usent presque toujours, d'entrer soit à l'Ecole des Ponts et Chaussées, soit à l'Ecole des Mines, ou, après trois années d'études, ils obtiennent le titre d'Ingénieurs de l'Etat. C'est là un titre qui a une grande valeur et dont le prestige est tel que dans les grandes entreprises industrielles et particulièrement dans les Compagnies de chemins de fer, les directeurs (general managers) et les principaux chefs de service sont presque tous d'anciens ingénieurs de l'Etat.

L'Ecole Polytechnique a produit aussi des hommes politiques dont les plus en vue aujourd'hui sont certainement MM. Carnot et de Freycinet.

† Il y a deux Facultés de Théologie protestantes, l'une à Paris, l'autre à Montauban. Tandis que cette dernière est entièrement du culte réformé, celle de Paris a en même temps des professeurs qui enseignent d'après les principes de la confession d'Augsbourg et d'autres conformément au dogme luthérien.

Voici l'organisation de l'enseignement à la Faculté de Théologie protéstante de Paris :—

Chaires.

Dogme, selon la confession d'Augsbourg.
Morale évangélique.
Exégèse sacrée.
Histoire ecclésiastique.
Eloquence sacrée.
Dogme réformé.
Dogme luthérien.
Morale évangélique.
Exégèse sacrée.
Histoire ecclésiastique.
Théologie pratique.
Dogme réformé.
Cours complémentaires.
Théologie pratique.

Conférences.

Les pères de l'Eglise grecque et latine.
Philologie sacrée.
Histoire de la philologie.
Langue et littérature théol. allemandes.
Les pères de l'E. grecque et latine.
Philologies. (N.Testament).
Langue et littérature théologiques allds. et histoire ecclésiastique.

‡ Pour être ingénieur de l'Etat, il faut être sorti dans les premiers de l'Ecole Polytechnique et être ensuite passé soit par l'Ecole des Mines soit par l'Ecole des Ponts et Chaussées. L'Ecole Centrale ne confère que des brevets d'ingénieur civil.

* D'après les statistiques officielles, la population de nos établissements d'enseignement secondaire, tant publics que libres, était en 1892, de 174,857 élèves.

J'ai emprunté à un article de M. Matthew Arnold, paru dans la "Fortnightly Review," le chiffre de 20,000 jeunes gens faisant en Angleterre des études classiques.

Appendix No. 58. Paper No. 12.

classique, dont le programme est, à peu de chose près, celui de l'ancien baccalauréat ès-lettres.*

Ainsi pour 200,000 jeunes gens, il n'existait de choix qu'entre deux enseignements, très semblables d'ailleurs par certains côtés et précédés de longues études communes. C'était trop. Il n'y en aura plus qu'un, qui sera le même pour tous, et il sera indispensable à l'avenir d'avoir fait du grec jusqu'à 17 ans, pour pouvoir s'adonner à l'étude de la géométrie, de l'algèbre ou de la chimie. Je n'ose pas affirmer que ce soit là un progrès, et le triomphe du bon sens et de la raison.

Je sais bien que les mêmes hommes qui se font honneur de cette révolution dans l'enseignement, se vantent d'avoir, par une initiative hardie, donné satisfaction aux besoins nouveaux de la société en créant à côté des études classiques tout un ordre d'études d'un caractère différent.

Sous le nom *d'enseignement secondaire moderne* ils ont organisé un système d'instruction qui aboutit à un baccalauréat, et qui repose principalement sur ce que les langues vivantes y ont été substituées aux langues anciennes. Ils ont ainsi, croient-ils, le droit de repousser l'accusation d'avoir méconnu les exigences de leur époque et d'un grand corps social tel que le nôtre.

Ils oublient seulement qu'ils n'ont rien innové. Ils ont trouvé organisées dans les colléges des classes où ne s'enseignait que le Français avec les premières connaissances des sciences; et, avec cette passion, qu'ont trop souvent les Universitaires, de vouloir, selon leur propre expression "élargir les cadres de l'enseignement," ils ont surchargé indéfiniment des programmes de ces classes élémentaires. Dès lors le but que M. Duruy s'était proposé il y a une trentaine d'années, et qui avait été admirablement atteint, s'est trouvé manqué. Il s'agissait d'élever des enfants qui avaient besoin d'en savoir un peu plus qu'on en apprend à l'école primaire et qui retourneraient dans leurs familles vers 14 ou 15 ans. C'est à ces mêmes enfants que s'adresse aujourd'hui l'enseignement secondaire moderne. Il leur apprend beaucoup de choses dont ils n'ont que faire et qu'ils ne sauront jamais qu'imparfaitement; et, avec l'appât du titre de bachelier, il retient au collége jusqu'à 18 ou 19 ans bien des jeunes garçons qui feraient plus utilement l'apprentissage d'un métier et qui, leur parchemin dans leur poche, risquent pour la plupart de devenir des déclassés.

Ce ne seront pas en effet parmi les élèves appartenant à la catégories de ceux qui suivent maintenant l'enseignement classique que se recrutera l'enseignement moderne. Il y a en faveur de nos vieilles études un préjugé trop fort, en admettant que ce ne soit qu'un préjugé. Tous les parents ambitieux pour leurs enfants, les pousseront de ce côté. Et alors c'est tout un personnel nouveau dont on va chercher à faire l'éducation, comme si déjà les carrières libérales, les Administrations de l'Etat, et les grandes administrations privées n'étaient pas encombrées au point qu'il y a au moins dix candidats pour une place.

Sur les 174,847 enfants et jeunes gens qui, en 1892, recevaient une éducation libérale, 85,291 étaient élevés dans les lycées et colléges; 15,508 dans les établissements laiques libres; et 74,058 dans les établissements ecclésiastiques.†

Il ne faudrait pas conclure de ces chiffres que l'enseignement libre peut contrebalancer par son importance celui de l'Etat.

En effet tandis que les lycées et presque tous les colléges‡ donnent une instruction classique complète, il en est tout différemment des établissements libres; et de ceux-ci: 225 seulement (153 ecclésiastiques et 67 laiques), sur 651 peuvent conduire leurs élèves jusqu'au terme de leurs études.

C'est là une indication assez certaine pour qu'il ne soit pas nécessaire de recourir à d'autres renseignements statistiques, que l'immense majorité des élèves qui poussent leurs études jusqu'au baccalauréat, sont élèves des établissements de l'Etat.

Il y a du reste à cela une excellente raison. L'Etat a un personnel enseignant dont la supériorité est incontestée par ses concurrents eux-mêmes;* et, par suite, le niveau des études dans les lycées et les colléges est infiniment plus élevé que partout ailleurs.

En voici un preuve entre autres. Si on prend les résultats des concours (compétition) d'admission aux Ecoles du Gouvernement en 1891, on trouve que:—

A l'Ecole Normale Supérieure sur 42 candidats admis 42 étaient élèves de l'Etablissements de l'Etat.

A l'Ecole Polytechnique sur 270 candidats admis 233 étaient élèves de l'Etablissements de l'Etat.

A l'Ecole St. Cyr (Ecole Milit.) sur 450 candidats admis 342 étaient élèves de l'Etablissements de l'Etat.

A l'Ecole Navale sur 70 candidats admis 52 étaient élèves de l'Etablissements de l'Etat.

A l'Ecole Centrale sur 248 candidats admis 198 étaient élèves de l'Etablissements de l'Etat.

Ainsi il n'y a qu'à l'Ecole St. Cyr qu'il y ait parmi les admis un nombre important de candidats étrangers à l'Université. Et il n'est pas sans intérêt de remarquer que presque tous ceux-là sortent de l'Ecole de la rue des Postes, établissement tenu par les Jesuites, où on ne fait pas d'études suivies, mais où, pendant un an ou deux, on prépare exclusivement aux concours; ce que les Jesuites qui sont de très habiles *crammers* savent parfaitement faire.

Nous n'avons rien de comparable à Eton et à Harrow. Riches et pauvres vont dans les lycées et les colléges, où le prix de la pension est toujours très minime. La moyenne de ces prix est, annuellement de 27*l.* pour l'internat (boarding school), et de 5*l.* pour l'externat (day school).*

Il suffit donc, pour que des enfants puissent faire des études classiques, que leurs parents aient la plus modeste aisance. L'Etat vient en outre, au moyen de bourses et d'exemptions de frais d'études (scholarships) en aide à beaucoup de familles nécessiteuses, et c'est ainsi qu'environ 18,000 jeunes gens sont élevés gratuitement dans les colléges.‡

Les épreuves des baccalauréats ès-lettres et ès-sciences, que les jeunes gens ont à subir à la fin de leurs études classiques, et auxquelles les deux tiers environ échouent, font une sélection parmi eux et réservent les meilleurs sujets à l'enseignement supérieur.§

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* Le Baccalauréat ès-lettres et le Baccalauréat ès-sciences seront supprimés à partir de 1894.

Les épreuves du Baccalauréat de l'enseignement secondaire classique divisées en deux parties, et on ne peut se présenter aux épreuves de la seconde partie qu'un an après avoir subi avec succès, celles de la première. Les examens de la première partie sont les mêmes pour tous et se passent à la fin de la rhétorique.

Mais aux examens de l'année suivante les candidats ont le choix entre 2 programmes; l'un correspondant aux études de la classe de philosophie, l'autre aux études de la classe de mathématiques élémentaires, et le diplôme de bachelier porte par suite l'une de ces deux mentions; lettres ou mathématiques.

† On comprend parmi ces 74,058 élèves des établissements ecclésiastiques les élèves des petits séminaires qui sont au nombre de 23,359. Les petits séminaires sont des institutions ayant en quelque sorte un caractère public, et où on fait l'éducation d'enfants qui paraissent destinés à entrer plus tard dans les ordres religieux.

‡ Il y a 107 lycées et 246 colléges.

* La supériorité du personnel enseignant de l'Etat tient à deux causes principales. Les établissements libres, dont les ressources sont forcément limités, ne peuvent donner à leurs professeurs des traitements aussi élevés que ceux que reçoivent les professeurs de l'Etat. Voici la première raison. La seconde est d'un ordre différent, mais contribue peut-être plus encore à pousser vers l'enseignement des lycées et des colléges les hommes les plus distingués. C'est que le professorat dans les établissements de l'Etat est une fonction publique, et qu'ainsi le professeur devient un fonctionnaire au même titre qu'un magistrat, par exemple, ce qui lui donne un certain rang social, qu'il n'aurait pas dans l'enseignement privé.

† Pour sortir des moyennes qui ne sont jamais que des procédés approximatifs de calcul, voici les prix des pensions, les plus élevés et les plus bas dans les lycées.

	Division élémentaire.	Division supérieure.
À Paris - - -	Internat 1,100 frs.	1,500 frs.
	Externat 250 „	350 „
À Albi - - -	Internat 600 „	700 „
	Externat 80 „	120 „

Les prix de pension des colléges sont inférieurs à ceux des lycées.

Dans les établissements libres ces prix sont supérieurs à ceux des lycées et des colléges.

Voici d'après les documents officiels la moyenne de la pension d'internat dans ces différentes maisons d'éducation:—

Lycées, 687,83; Colléges, 656,40; établissements libres laiques, 927,98; établissements ecclésiastiques, 779,16.

‡ Le dernier chiffre officiel que j'aie est celui de 1887. A cette époque il y avait dans les lycées et colléges 17,606 boursiers.

§ Le nombre des bacheliers reçus chaque année varie entre 7,000 et 8,000 il a été en 1888 de 7,463 (bacheliers ès-lettres et 3,625 bacheliers ès-sciences.

Cet enseignement est essentiellement un enseignement d'Etat. Non pas que l'Etat ait un monopole, (depuis 1875 la liberté de l'enseignement supérieur est inscrite dans nos lois) mais la puissance de son organisation et la grande valeur de son corps de professeurs, lui assurent ici beaucoup plus encore que pour l'instruction secondaire une indiscutable suprématie. Les catholiques seuls ont essayé de se mesurer avec lui, et tous leurs efforts n'ont guère abouti qu'à d'insignifiants résultats. Ils ont créé des Instituts catholiques, et ont ouvert à Paris, Angers, Lille, Lyon, Marseille, Nantes et Toulouse, des Cours où on professe la Théologie, le droit, les lettres, les sciences, la médecine. Les étudiants leur ont manqué, et tandis qu'au mois de Janvier 1892, il y en avait 22,328 inscrits dans les Facultés de l'Etat, les Facultés catholiques réunies en comptaient seulement 1,022 (331 à Paris et 691 en province).

De même que la pension de nos lycées est d'un prix peu élevé, les études qui se font dans les Ecoles du Gouvernement et dans les Facultés n'entraînent pas pour les familles de grandes dépenses. Ainsi à Paris, où la vie est plus chère que partout ailleurs, les étudiants en droits et en médecine, originaires de la province, ne reçoivent guère plus de 2,000 à 3,000 f. par an de leurs parents pour se loger, se nourrir, faire face aux frais des inscriptions et des droits d'examen. Ce n'est vraiment pas exagéré. Mais il faut songer que la majorité de ces étudiants appartiennent à des familles presque pauvres pour lesquelles des sommes comme celles-là représentent d'enormes sacrifices.

Il me reste, pour compléter ce que j'ai dit de notre enseignement supérieur, à mentionner trois ou quatre grandes établissements publics ou se poursuivent les hautes études, tels que le Collége de France, l'Ecole Pratique des Hautes Etudes.

Le Collége de France est une institution d'une origine très ancienne. Son enseignement embrasse toutes les connaissances humaines; et il est peut-être trop savant pour être pratique.

Il comprend l'astronomie, les mathématiques, la médecine, la chimie organique, le droit des gens, l'histoire des législations comparées, l'économie politique, l'histoire, l'épigraphie, la philologie et l'archéologie Egyptienne, la philologie et l'archéologie assyriennes, les langues hébraique, syriaque, arabe, turque, chinoise, l'éloquence et la poésie latines et grecques, la philosophie, la grammaire comparée, etc.

C'est pour le Collége de France, plus encore que pour les Facultés de lettres et de sciences, qu'on peut dire à juste titre qu'il n'a d'autre raison d'exister que de pensionner des littérateurs et des savants. Il est vrai que parmi eux il s'en est trouvé d'aussi illustres que Renan.

Fondée à Paris en 1868, l'Ecole Pratique des Hautes Etudes avait pour but de placer à côte de l'enseignement théorique, les exercices qui peuvent les fortifier et les étendre.

Aucune condition d'âge, de grade ou de nationalité n'est exigée pour l'admission.

L'Ecole est divisée en cinq sections:—sciences mathématiques, sciences physico-chimiques, sciences naturelles, sciences historiques et philologiques, sciences religieuses.

Le nom d'Ecole ne convient guère à cette institution, du moins si on l'envisage au point de vue des études scientifiques qui sont sa seule raison d'être. Ce n'est pas, en effet, un établissement d'enseignement, mais un ensemble d'une quarantaine de laboratoires de physique, de chimie et de sciences naturelles, disséminés un peu de tous les côtés, au Muséum, à la Faculté des Sciences, au Collége de France, à l'Ecole Normale, à la Faculté de Medécine, et dans différentes villes de France.

Pour les sections de mathématiques, des sciences historiques et philologiques, des sciences religieuses, c'est une école sans élèves quelque chose comme le Collége de France avec le vieux renom en moins.*

Je dois citer encore des établissements dont le nom seul indique l'importance et le but, comme l'Ecole des Langues Orientales Vivantes, le Muséum d'Histoire Naturelle, l'Observatoire de Paris.

L'Ecole Libre des Sciences Politiques, à l'organisation de laquelle vous vous intéressez, doit son existence à l'initiative privée. Elle a été fondée par Monsieur Boutmy, avec le concours de quelques personnages éminents dans la politique, les lettres et les affaires, pour être "le couronnement d'une éducation libérale"* en donnant un ensemble de connaisance générales aux hommes qui se destinaient à la politique ou à l'administration de leur pays.

C'était là une pensée élevée, mais qui ne tenait pas compte suffisamment des conditions de notre état social et des exigences du temps où nous vivons. Ces exigences ont donné une autre direction à l'enseignement de l'Ecole et c'est là, incontestablement, un des exemples les plus frappants de la nécessité, pour les études supérieures, d'avoir un caractère professionnel.

Parmi les cours de l'Ecole, plusieurs traitaient, de matières importantes qui ne s'enseignaient pas ailleurs, et qui faisaient pourtant partie des programmes des concours d'admission dans certains grands services de l'Etat. Les jeunes gens, se préparant à ces concours suivaient ces cours et négligeaient les autres, si bien que tout naturellement l'enseignement s'est specialisé. Les aspirants au Conseil d'Etat, aux Affaires étrangères, à l'Inspection des Finances et à la Cour des Comptes, sont devenus les élèves assidus de l'Ecole des Sciences Politiques, où ils trouvent, suivant qu'ils ambitionnent d'entrer dans la diplomatie, l'administration des Finances ou l'administration publique, tout un ensemble de cours et de conférences qui sont pour eux, une excellente préparation. Ainsi limitée à une catégorie tout à fait spéciale d'élèves, l'Ecole des Sciences Politiques à parfaitement réussi.

La dernière question que vous m'avez posée est de savoir s'il convient, dans un enseignement supérieur, de confier pendant toute la durée de leurs études les élèves aux mêmes professeurs; ou bien, au contraire, s'il ne vaut pas mieux que cet enseignement soit spécialisé, laissant aux une le soin de faire les cours élémentaires et donnant aux autres la mission de développer et d'approfondir les connaissances déjà acquises par les étudiants.

Je crois que la façon dont les choses se passent en France est sage et très rationnelle.

Lorsqu'il s'agit de l'enseignement secondaire que donnent nos collèges, on établit une distinction entre les classes élémentaires et les classes supérieures. Les maîtres qui, en seconde ou en réthorique, sont chargés d'expliquer et de commenter les grands écrivains anciens et modernes, non seulement ne sont pas les mêmes que ceux qui apprennent les premiers principes du latin et du grec aux élèves de sixième et de cinquième, mais ils ont une une origine différente. Il en est de même pour l'enseignement des sciences. Et il me paraît difficile d'admettre qu'il puisse en être autrement. Il faut en effet des qualités toutes différentes pour enseigner les éléments de la grammaire ou du calcul à des enfants, et pour achever l'éducation de jeunes hommes; et surtout l'ensemble de connaissances que doivent avoir les professeurs d'humanité serait tout à fait inutile aux professeurs de grammaire, et en rendrait probablement le recrutement impossible.

Mais ce qui est vrai pour l'enseignement secondaire l'est-il pour l'enseignement supérieur? Et est-ce que le nom seul d'enseignement supérieur n'est pas la réponse à la question?

Si nous prenons, par exemple, les programmes des Facultés de lettres et de sciences, ou trouvons-nous la trace d'un enseignement élémentaire? Les élèves qui, sortant des lycés, viennent suivre les cours de ces Facultés, y ont après tous les éléments, ils savent où sont censés savoir le latin, le grec, l'histoire, la philosophie s'ils sont des élèves de lettres, et tout ce qui rentre sous la dénomination de mathématiques élémentaires s'ils sont des élèves de sciences. Dès lors, pour les lettres surtout, ils peuvent suivre n'importe quel cours car c'est seulement un complément d'éducation qu'ils sont venus chercher. Tous leurs professeurs sont donc des hommes également distingués et instruits, et s'ils se sont spécialisés, ce n'est pas pour donner un enseignement plus humble ou plus élevé, mais ou contraire pour que leur enseignement soit plus solide, plus nourri de faits, plus rempli de vues profondes et larges, en un mot plus complet, ce qui est justement l'opposé d'élémentaire.

Vous me concèderez peut-être cela, mais vous m'arrêterez, j'en suis persuadé, pour m'opposer le droit et la médecine. Là, tout est nouveau pour l'étudiant et la question d'un enseignement des éléments se pose, j'en conviens volontiers.

Voulez-vous que nous voyions comment les Facultés de droit ont résolu cette question?

Parmi tous les cours de droit, celui de notre législation civile est assurement le plus important. Or son

* Voici quelques-unes des matières de l'enseignement de la section des sciences historiques et philologiques: Histoire de la philologie classique; langue néo-grecque; gothique et vieux haut-allemand; langues et littératures celtiques; langue sanscrite; langue zende; hébreu rabbinique; hébreu et syriaque; langues éthiopienne et himyarite; histoire des doctrines psychologiques.

* Ce sont les termes mêmes dont aujourd'hui encore l'Ecole définit l'objet de son enseignement.

Appendix No. 58. Papers Nos. 12, 13, and 14.

enseignement présent tout de suite pour les débutants une grande difficulté, c'est que dès les premiers articles, il faudrait savoir afin de les comprendre le code civil tout entier. Tout se tient étroitement dans la législation; et l'étude du titre premier du Code Napoléon, suppose la connaissance de tous les autres. Il y est question de tout: de contrats, d'obligations, de servitudes, de privilèges, d'hypothèque; et ce n'est qu'après trois années que les étudiants auront appris la signification exacte de tous ces termes, lorsqu'ils auront achevé l'explication du code. Et je néglige de mentionner les rapports multiples que le droit civil a avec le droit commercial, pénal et administratif, dont l'enseignement se répartit sur toutes la durée des études.

Dans ces conditions, on aurait pu croire qu'il avait intérêt à consacrer la première année, ou une partie de la première année, à enseigner les principes généraux de nos lois, à définir les termes techniques, et, en négligeant d'entrer dans les détails et de discuter les innombrables questions controversées, de donner un aperçu sommaire de l'ensemble de la législation.

Ce n'est pas l'opinion qui a prévalu. On a pensé qu'il n'y aurait là qu'une simple énumération de faits, un travail imposé à la mémoire et sans grand profit pour l'étudiant, parce que les généralisations sont le complément et non le début des études et que seuls les gens qui savent sont aptes à généraliser.

On a pensé aussi que les étudiants en droit n'arrivaient pas à l'Ecole sans une certaine préparation; que leur éducation classique leur avait ouvert l'esprit, les avait accoutumés à la réflexion et à l'effort intellectuel et qu'ils avaient tout à gagner à être traités non comme des enfants, mais comme des hommes.

Et dès le premier jour on leur explique les textes et on discute devant eux les principes avec toute l'ampleur et toute l'étendue que peuvent apporter à cet enseignement des jurisconsultes consommés.

Les cours de droit civil qui durent trois ans sont donc faits par les mêmes professeurs, qui, prenant les élèves aux débuts, les conduisent jusqu'à l'achèvement de cette branche de leurs études. Puis ils recommencent leur enseignement avec une nouvelle génération d'étudiants. Il en est de même pour les cours de droits romain qui durent deux années; et quelle que soit d'ailleurs la durée des cours, l'enseignement est toujours aussi élevé, confié à des professeurs du même ordre et qui sont présumés être de même valeur.

En ce qui concerne la médecine, je crois que les choses se passent à peu près de la même manière.

PAPER No. 13.

Privy Council Office, Whitehall,
December 23, 1892.

SIR,

I AM directed by the Lord President of the Council to transmit to you, to be laid before the Royal Commission on the proposed Charter for the Gresham University, the accompanying copy of certain resolutions passed at a meeting of the Metropolitan Counties Branch of the British Medical Association held on the 8th instant, in favour of the establishment of a teaching University in and for London.

I am, &c.
(Signed) C. L. PEEL.

The Secretary, &c.,
Royal Commission on
Gresham University.

RESOLUTIONS passed by a Special Meeting of the Metropolitan Counties Branch of the British Medical Association.

1. That this meeting of the Metropolitan Counties Branch of the British Medical Association is strongly of opinion—

(*a*) That it is eminently desirable that a degree in medicine, based upon a sound, thorough, and practical standard, should be placed within reasonable reach of students educated in London, as is already done in the case of students educated in certain English provincial towns, in Scotland, and in Ireland.

(*b*) That facilities should be afforded to medical practitioners educated in London, and already holding qualifications from the London examining bodies, to attain such degree upon passing such examinations as are needful to preserve the standard prescribed for it.

2. That this meeting of the Metropolitan Counties Branch records its opinion that it is desirable to establish a teaching University in and for London.

(Signed) ANDREW CLARK,
ISAMBARD OWEN,
Hon. Secretaries.

Dec, 8, 1892.

PAPER No. 14.

BRUSSELS MEDICAL GRADUATES' ASSOCIATION.

In July last the Secretary received a letter from the above-named Association, signed D. S. Skinner, M.D. (Chairman), and Major Greenwood, M.D. (Hon. Sec.), asking if it would be within the scope of the Commission to receive a deputation from the Association.

The letter further stated that the Association had been in existence for 13 years, and that graduates of the Brussels University now resident in England and the Colonies number over 1,000, many of whom reside in the metropolitan area; that the *raison d'être* of the Association was chiefly because the inadequacy of the means of obtaining a medical degree in this country drove many English practitioners to continental Universities; that the members took great interest in the matter now before the Commission, and that they are well qualified to speak on some of the subjects under discussion.

The reception of a deputation by the Commission was then requested, or that the Association might be allowed to formulate some objections to the Charter as lately proposed.

The Secretary replied that the Commission does not proceed in its inquiry by receiving deputations, but by hearing the evidence of persons who have matters to bring to its notice which the Commissioners are of opinion should be inquired into with a view to assisting in the decision of the subjects committed to them for determination, and suggested that the Association should embody what they wished to bring to the notice of the Commission in a written statement or memorial which he would lay before the Commission, and then evidence could be heard if necessary.

The Association replied that the matter should again be brought before its Council, and would forward, a little later, in writing, the particular matters it wished to bring before the Commission.

The following letter has since been received:—

Brussels Medical Graduates' Association,
243, Hackney Road, N.E.,
September 19, 1892.

DEAR SIR,

THE only point our Association thinks it necessary to urge before your Honourable Commission is the necessity of there being some provision in any charter, granted to a second University in London, for the admission of registered practitioners residing in London, or the suburbs thereof, to the examinations for its medical degrees without requiring fresh hospital attendance or further professional education, which the nature of a medical man's avocation render impossible for the greater number.

We desire to point out that we do not ask for any modification in the stringency of the examination, although we could show that in the past, on the institution of new Universities, notably in the case of the University of London, medical men in practice were admitted to its examinations on much easier terms than those who commenced their education after the granting of the Charter.

By the Charter last proposed the whole body of the medical profession practising in London were virtually cut out of all prospective benefit; for, although they had most of them been educated at the hospitals, which by that Charter became constituent colleges of the University, unless they re-entered those hospitals, and

took out further classes, they would be ineligible to become candidates for degrees, as it was necessary for graduation that a student should have studied in one of the constituent colleges of the new University, and the above hospitals could not become colleges till after the granting of the Charter.

Our Association is of opinion that there is a great want felt by many members of the profession in this country, who from various causes have been unable to give the necessary time during their professional education to study for a medical degree to have the means afforded them of doing this after they are settled in practice by passing standard examinations for that purpose; and they feel sure that it is for the good of the profession and the public at large that this spirit should be encouraged among the general practitioners of the country, and, further, that if this were so there would not be the present exodus to foreign Universities, a fact in itself discreditable to our present system, and of which the very existence of our Association, with its large membership, is an ample proof.

If, then, it should be thought necessary to limit the candidates for the Gresham Degree to those who have studied at one of the constituent colleges of the University, at least permit registered practitioners, who were students at the same institutions before they became colleges of a University, to become candidates for the medical degrees, for if this should not be allowed the older practitioners might fairly urge they are subjected to great injustice, for if the proposed University be as successful, as we would all wish it might be, the practitioner of the future will naturally be a Doctor of Medicine, and an invidious distinction is likely to be caused between these and the older class of practitioners.

Trusting your Honourable Commission will take this matter into consideration,

We are, &c.

(Signed) D. S. Skinner, Chairman.
Major Greenwood, Secretary.

J. Leybourn Goddard, Esq.,
Secretary,
Gresham University Commission.

PAPER No. 15.

Letter from the British Homœopathic Society.

To Her Majesty's Commissioners for inquiring into the establishment of a Teaching University for London.

My Lords and Gentlemen,

The British Homœopathic Society, founded in 1844 by the late Dr. Quin, and constituting the main organization, in this Kingdom, of medical men practising homœopathically, has appointed us, the undersigned, a committee for the purpose of opening communications with your honourable body. Our object is that some provision should be made in the proposed University for the teaching of the medical system which we represent.

We urge the desirableness of such a course on the following grounds:—

1. A University, as its name implies, should embrace every branch of actual knowledge; and as the present one will (at least in the first instance) have a preponderance of medical students, it is important that no living chapter in the history of medicine should be omitted from its course of instruction. That the homœopathic method occupies such a position is a plain matter of fact. It looks back upon nearly a century of existence. It has an extensive literature. It is practised in every civilized country of the old and new worlds, and probably not less than 12,000 qualified medical men avowedly adopt it as their guide. It has numerous hospitals, dispensaries, societies, journals devoted to its administration and propagation. An unfortunate prejudice, incurred at the outset of its career, still hinders the medical authorities from recognising it as a legitimate mode of practice, and allowing their students to receive the benefit of it, whatever this may be. It seems to us that the State, rising superior to differences of opinion, should recognise facts and provide for their being studied and taught in such a University as it is now proposed to establish. We ask that, in its Charter, liberty should be given for the establishment and endowment there, of professorships of any genuine branch of human knowledge, among which, to avoid possible hindrances from the prejudice we have mentioned, homœopathy should be instanced by name. There have been such Chairs in times past at the Sorbonne and at Leipsig; there is one now in Buda-Pesth; and a serious movement is going on for establishing them in the State Universities of Belgium.

2. There are some hundreds of thousands of Her Majesty's subjects in this kingdom who habitually resort to homœopathic treatment when they are ill. Whether they are mistaken or not in this choice, they have a right to ask that provision shall be made for training practitioners in the system of medicine they prefer, and that they shall have some means of recognising those who have received such training. This boon they cannot receive from private efforts. Students have a certain curriculum through which they must pass to enter the portals of the profession. While *in statu pupillari* they have no time for anything else; and when once qualified they are impatient at once to enter upon practice and obtain its emoluments. It is, therefore, exceedingly difficult to get them to attend upon the teaching of the homœopathic method unless this is in some way blended with their ordinary studies. In the United States such end is attained by the establishment of Homœopathic Colleges, where all the teachers are disciples of the system, and their instruction is coloured accordingly. We do not advocate such a plan here. We would rather follow such a course as that adopted in the University of the State of Michigan. There professorships of Materia Medica and of the Practice of Medicine exist, officered by avowed homœopathists, and the students of the University are at liberty to take these courses of their curriculum at the homœopathic chairs, and to be examined for their degree in the subjects taught from them by like-minded examiners. We would suggest that the British Homœopathic Society be invited to make the appointments to such professorships and examinerships, as it would best know who were qualified for the posts.

(Signed) C. Knox Shaw, President,
British Homœopathic Society.
John C. Blackley, Hon. Sec.
Stephen Yeldham.
R. E. Dudgeon, Treasurer.
Richard Hughes.

London Homœopathic Hospital,
Great Ormond Street, W.C.,
June 1892.

PAPER No. 16.

(*See Evidence of* Professor Jenks. *Question* 24,448.)

Memorandum as to Proposed Law Department of University College, Liverpool.

Objects.

1. The Liverpool Board of Legal Studies was established in the year 1886 for the "encouragement of "legal studies in Liverpool by the institution and "management of law lectures and classes, the conduct-"ing of examinations, the granting of exhibitions and "prizes, and such other means as might from time to "time be considered expedient." It was constituted of representatives of the Incorporated Law Society of Liverpool, of University College, Liverpool, and of the Liverpool Law Students' Association.

It is proposed to establish a law faculty in University College, Liverpool, in order to carry out the above objects more systematically and completely, by bringing the study of law into close connexion with the other studies of the College, and by affording opportunities for the study of jurisprudence and kindred

Appendix No. 58. Paper No. 16.

subjects, thus enabling students to qualify themselves for the LL.B. examinations of the London and Victoria Universities.

Constitution and Management.

2. Subject to the provisions of the College Charter and Statutes, the law department shall be managed by the Law Faculty in conjunction with representatives of the Incorporated Law Society of Liverpool and of the Liverpool Law Students' Association. The conjoint body may be called the Liverpool Board of Legal Studies.

3. The law faculty shall consist of five professors or lecturers of the college, of whom the Principal and the Professor or Professors of Law (when appointed) shall be *ex officio* members, and the remainder shall be elected by the Senate of the College.

4. There shall be on the Board four representatives of the Incorporated Law Society of Liverpool, one of whom shall be the President of the Society *ex officio*, and the remainder shall be elected by the Committee of the Society.

5. There shall be on the Board three representatives of the Liverpool Law Students' Association, who shall be elected by the Committee of the Association.

6. In the first instance there shall be one Professor and at least two Lecturers.

7. The Professor shall be appointed by the Council of the College on the recommendation of the Board, for such term (of not less than three years) as the Board from time to time determine.

8. The lecturers shall be appointed by the Board for such periods and upon such terms as the Board from time to time determine, but no appointment shall be made for a longer period than one year.

9. The Professor shall, except so far as the terms of appointment otherwise provide, be subject to the statutes of the College.

10. Practising barristers and solicitors shall be eligible for professorships or lecturerships, upon the understanding that they will not allow their professional work to interfere with the adequate performance of their duties.

11. All lectures and classes shall be held at such times and places as may be approved by the Board.

12. The fees and conditions of attendance, except in the case of students preparing for law examinations of Victoria University, shall be determined by the Board.

13. The annual grants made by the Incorporated Law Society of the United Kingdom, by the Council of University College, and by the Liverpool Law Students' Association, shall, with the consent of those bodies, be administered by the Board, together with all payments derived from fees, excepting only such fees as are paid by students preparing for law examinations of Victoria University; and the Board shall be responsible for the payment of professors and lecturers, for the collection of fees, for the hire of rooms, for printing, advertisement, and all other expenses connected with the working of the Law Department.

14. The Board shall have the general supervision of the Law Department, and shall have power to make any such alterations and extensions in the work of the Department as they from time to time think fit. It shall be regarded as a primary object of the Department to make efficient provision for instruction in the subjects of the three practical courses defined in section 15, and the annual grants and the fees mentioned in section 13 shall in the first instance be applied in providing such practical instruction.

Proposed Outline of Working.

15. There shall be provided annually three practical courses, each consisting of a lecture and a class, upon subjects selected from each of the three following main divisions of law, namely:—

(*a*) Real and personal property and conveyancing.
(*b*) Common law and the procedure in the Queen's Bench Division.
(*c*) Equity, and the procedure in the Chancery Division.

It is suggested that the three practical courses shall be delivered consecutively during the autumn and Lent terms, and that each of the three courses be assigned to a different professor or lecturer.

16. There shall also be provided lectures and classes on the following subjects:—

(1) Jurisprudence.
(2) Roman Law.
(3) International Law.
(4) Constitutional Law.

17. Lectures and classes may also be provided on the Law of Bankruptcy, Probate, Divorce, and Admiralty and Criminal Law if the Board shall think fit.

Cost of Working.

Estimated Income.

	£	
Incorporated Law Society of U.K. -	150	per annum.
University College, Liverpool -	100	,,
Liverpool Law Students' Association	20	,,
Lectures, Fees, &c. - - -	50	,,
Annual Subscriptions (to be guaranteed for not less than a term of 3 years)	300	,,
	£620	

Estimated Expenditure.

	£	
Salary of Professor - - -	375	per annum.
Fees and expenses of two Lecturers Practical Courses - - -	150	,,
Advertising, printing, &c. (say) -	50	,,
Fees paid to Professor and Lecturers	25	,,
	£600	

Note.

This scheme does not contemplate the transfer to the Law Department of the lectures on Stephen's Commentaries now managed by the Liverpool Law Students' Association. These lectures (which are intended to prepare articled clerks for the Intermediate Examinations) have, ever since they were instituted in 1878, been entrusted to Mr. W. J. Sparrow, LL.D. (barrister-at-law), who has given the greatest satisfaction. The lectures are (with the aid of a small grant from the Law Students' Association) self-supporting, and as they form one of the attractions to articled clerks to join the Law Students' Association, the Committee of that Association desire that the management of them should be allowed to remain in their hands.

ANALYTICAL INDEX

TO THE

PRINCIPAL MATTERS REFERRED TO IN THE EVIDENCE OF THE RESPECTIVE WITNESSES.

TABLE A.

*** The following subjects were more particularly discussed by the respective witnesses named in the following Table, though they were also referred to by many others. For greater detail of their evidence, see Table B.

AGRICULTURE.
Clarke, Ernest.
Hill, John.
Moreton, Lord.
Pell, Albert.
Rogers, J. C.
Wallace, R.
Webb, H. J.

APOTHECARIES, Society of.
Allchin, W. H.
Carter, R. Brudenell.
Macnamara, N. C.
Moore, Norman.
Upton, J. R.

ARCHITECTURE.
Anderson, J. M.
Cates, A.
Emerson, William.
Slater, J.
Smith, T. Roger.

BEDFORD COLLEGE.
Bryant, Mrs.
Cunninghame, H.
Heath, H. F.
Russell, W. J.
Young, Sir George.

BIRKBECK INSTITUTION.
Norris, G. M.
Wace, Rev. H.
Young, Sir George.

BRITISH MEDICAL ASSOCIATION.
Bristowe, J. S.
Cleveland, W. F.
Macnamara, N. C.

BRITISH MUSEUM.
Bryce, Right Hon. J.
Busk, E. H.
Colvin, S.
Flower, Sir W. H.
Young, Sir George.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.
Boyd, Stanley.

CITY AND GUILDS OF LONDON INSTITUTE.
Armstrong, H. E.
Ayrton, William
Unwin, W. C.
Watney, John.

CITY OF LONDON COLLEGE.
Savage, D.
Whittington, Rev. Prebendary.

CONVOCATION OF LONDON UNIVERSITY.
Busk, E. H.
Clark, Sir Andrew.
Collins, W. J.
Dickins, F. V.
Fitch, J. G.
Pye-Smith, P. H.
Thompson, S. P.
Young, Sir George.

DIVINITY.
See THEOLOGY.

DUBLIN UNIVERSITY.
Adams, W. E.
Flower, Sir W. H.
Ingram, J. R.
Mahaffy, Rev. J. P.
Stoney, G. J.
Wace, Rev. H.

ENGINEERING.
Ayrton, William.
Beare, T. Hudson.
Capper, D. S.
Fleming, J. A.
Kennedy, A. B. W.
Magnus, Sir P.
Robinson, H.
Thomson, J. M.
Unwin, W. C.

EVENING STUDY.
Adams, W. G.
Bryce, Right Hon. J.
Busk, E. H.
Cunninghame, H.
Gault, J.
Jennings, H. R.
Lubbock, Sir John.
Mure, R. J.
Norris, G. M.
Roberts, R. D.
Stuart, James.
Wace, Rev. H.
Whittington, Rev. Prebendary.

FINE ART.
Brown, F.
Colvin, S.
Gilbert, Alfred.
Groot, C. H. de.
Hunt, Holman.
Smith, T. Roger.

FOREIGN UNIVERSITIES AND INSTITUTIONS.
Couvrem, A.
Emmott, G. H.
Groot, C. H. de.

GRESHAM COLLEGE.
Crosby, T. B.
Watney, John.
Young, Sir George.

GRESHAM UNIVERSITY AND CHARTER.
Adams, W. G.
Allchin, W. H.
Angus, Rev. Principal.
Boyd, Stanley.
Bryce, Right Hon. J.
Busk, E. H.
Cave, Rev. Principal.
Clark, Sir Andrew.
Cleveland, W. F.
Collins, W. J.
Crosby, T. B.
Cunninghame, H.
Dickinson, W. H.
Erichsen, J. Eric.
Fitch, J. G.
Flower, Sir W. H.
Fry, Sir Edward.
Heath, R. S.
Henrici, O.
Holland, T. E.
Huxley, Right Hon. T. H.
Lister, Sir Joseph.
Max Müller, F.
Moore, Norman.
Payne, F.
Pye-Smith, P. H.
Ramsay, W.
Roscoe, Sir H.
Russell, W. J.
Thorpe, T. E.
Upton, J. R.
Wace, Rev. H.
Young, Sir George.

GUY'S HOSPITAL MEDICAL SCHOOL.
Taylor, F.

HOLLOWAY COLLEGE.
Cunninghame, H.
Smith, Clifford.
Thring, Lord.

INCORPORATED LAW SOCIETY.
Pennington, R.
Rollitt, Sir A. K.
See also Law, Faculty of, and Legal Education.

INDIAN CIVIL SERVICE.
Baines, J. A.
Plunkett, Lieut.-Col.
Pollen, J.
Smith, V.
West, Sir Raymond.
White, E.

INDIAN UNIVERSITIES.

West, Sir Raymond.
White, E.

INNS OF COURT.

See Law, Faculty of, and Legal Education.

JOHNS HOPKINS UNIVERSITY.

Emmett, G. H.

KING'S COLLEGE.

Adams, W. G.
Capper, D. S.
Gault, J.
Halliburton, W. D.
Lister, Sir Joseph.
London, Bishop of.
Robinson, H.
Thomson, J. M.
Wace, Rev. H.

LAW, FACULTY OF, AND LEGAL EDUCATION.

Anson, Sir W.
Baines, J. A.
Bowen, Lord Justice.
Bryce, Right Hon. J.
Busk, E. H.
Clark, E. C.
Coleridge, Lord.
Cozens-Hardy, H. H.
Crackanthorpe, M. H.
Davey, Sir Horace.
Dicey, A. V.
Giffard, H. A.
Holland, T. E.
Jenks, E.
Kennedy, Hon. Sir W. R.
Longbourne, J. V.
Pennington, R.
Pollock, Hon. Sir C. E.
Pollock, Sir F.
Rigby, Sir J.
Rollitt, Sir A. K.
Webster, Sir Richard.
Westlake, J.

LONDON UNIVERSITY.

Adams, W. G.
Allchin, W. H.
Armstrong, H. E.
Boyd, Stanley.
Bryce, Right Hon. J.
Busk, E. H.
Clark, Sir Andrew.
Collins, W. J.
Crosby, T. B.
Cunninghame, H.
Dickins, F. V.
Dickinson, W. H.
Fitch, J. G.
Huxley, Right Hon. T. H.
Mahaffy, Rev. J. P.
Max Müller, F.
Milman, A.
Paget, Sir James.
Pye-Smith, P. H.
Ramsay, W.
Thompson, S. P.

MEDICINE AND MEDICAL SCHOOLS.

Allchin, W. H.
Boyd, Stanley.
Bristowe, J. S.
Busk, E. H.
Carter, R. B.
Clark, Sir Andrew.
Cleveland, W. F.
Collins, W. J.
Coupland, Dr.
Crosby, T. B.
Dickins, F. V.
Dickinson, W. H.
Erichsen, J. Eric.
Fitch, J. G.
Flower, Sir W. H.
Fry, Sir Edward.

MEDICINE AND MEDICAL SCHOOLS—*cont.*

Halliburton, W. D.
Heath, R. S.
Howse, H. G.
Hulke, J. W.
Huxley, Right Hon. T. H.
Lister, Sir Joseph.
Liveing, Edward.
Macnamara, N. C.
Moore, Norman.
Page, H. W.
Paget, Sir James.
Payne, F.
Pye-Smith, P. H.
Russell, W. J.
Shore, T. W.
Spencer, W. G.
Stirling, W.
Taylor, F.
Thorpe, T. E.
Upton, J. R.
Waller, A. D.
Weldon, W. F. R.
Windle, B. C. A.

MIDDLESEX HOSPITAL MEDICAL SCHOOL.

Coupland, Dr.

MUSIC, AND FACULTY OF.

Bruce, Lord Charles.
Grove, Sir G.
Hunt, Rev. B.
Mackenzie, A. C.
Trelfall, T.
Turpin, E. H.

MUSIC, ROYAL ACADEMY OF.

See Royal Academy of Music.

MUSIC, ROYAL COLLEGE OF.

See Royal College of Music.

ORIENTAL LANGUAGES.

Baines, J. A.
Plunkett, Lieut.-Col.
Pollen, J.
Smith, V.

PHYSICIANS, ROYAL COLLEGE OF.

See Royal College of Physicians.

POLYTECHNICS.

Cunninghame, H.
Watney, John.
Whittington, Rev. Prebendary.

PROFESSORIAL SCHEME.

Adams, W. G.
Ayrton, William
Beet, Rev. J. A.
Busk, E. H.
Dickins, F. V.
Dyer, W. T. Thiselton.
Erichsen, J. Eric.
Foster, G. Carey.
Fry, Sir Edward.
Heath, H. F.
Heath, R. S.
Henrici, O.
Huxley, Right Hon. T. H.
Liveing, Edwd.
Magnus, Sir P.
Milman, A.
Page, H. W.
Paget, Sir James.
Pearson, Karl.
Ramsay, W.
Roscoe, Sir H.
Rücker, A. W.
Russell, W. J.
Schafer, E. A.
Thorpe, T. E.
Unwin, W. C.
Waller, A. D.
Watney, John.
Weldon, W. F. R.
Windle, B. C. A.
Young, Sir George.

PROVINCIAL COLLEGES.

Heath, R. S.
Milman, A.
Pye-Smith, P. H.
Schafer, E. A.
Windle, B. C. A.

QUEEN'S COLLEGE.

Cunninghame, H.
Elwyn, Rev. Canon.

ROYAL ACADEMY OF MUSIC.

Mackenzie, A. C.
Threlfall, T.

ROYAL COLLEGE OF MUSIC.

Bruce, Lord Charles.
Grove, Sir George.

ROYAL COLLEGE OF PHYSICIANS.

Allchin, W. H.
Clark, Sir Andrew.
Crosby, T. B.
Dickinson, W. H.
Huxley, Right Hon. T. H.
Liveing, Edward.
Moore, Norman.

ROYAL COLLEGE OF SCIENCE.

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Rücker, A. W.
Thorpe, T. E.
Weldon, W. F. R.
Young, Sir George.

ROYAL COLLEGE OF SURGEONS.

Carter, R. B.
Crosby, T. B.
Howse, H. E.
Hulke, J. W.
Huxley, Right Hon. T. H.

SAINT BARTHOLOMEW'S HOSPITAL MEDICAL SCHOOL.

Russell, W. J.
Shore, T. W.

SAINT GEORGE'S HOSPITAL MEDICAL SCHOOL.

Dickinson, W. H.

SAINT MARY'S HOSPITAL MEDICAL SCHOOL.

Page, H. W.

SAINT THOMAS'S HOSPITAL MEDICAL SCHOOL.

Payne, F.

SCIENCE.

Ayrton, Wm.
Adams, W. G.
Allchin, W. H.
Armstrong, H. E.
Halliburton, W. D.
Armstrong, H. E.
Beare, T. Hudson.
Capper, D. S.
Donnelly, Gen.
Fleming, J. A.
Foster, Michael.
Hill, John.
Kennedy, A. B. W.
Magnus, Sir P.
Pell, Albert.
Robinson, H.
Rücker, A. W.
Shore, T. W.
Thomson, J. M.
Thorpe, T. E.
Unwin, W. C.
Wallace, R.
Watney, John.
Webb, H. J.

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Smith, T. Roger.

SCIENCE, ROYAL COLLEGE OF.

See Royal College of Science.

SURGEONS, ROYAL COLLEGE OF.
See Royal College of Surgeons.

SURVEYORS, INSTITUTION OF.
Rogers, J. C.

TEACHING UNIVERSITY, SCHEMES FOR AND PRINCIPLES OF.
Adams, W. G.
Halliburton, W. D.
Allchin, W. H.
Anson, Sir W.
Bruce, Lord Charles.
Bryce, Right Hon. J.
Busk, E. H.
Carter, R. B.
Clark, Sir Andrew.
Cleveland, W. F.
Collins, W. J.
Crosby, T. B.
Dyer, W. T. Thiselton.
Erichsen, J. Eric.
Fitch, J. G.
Flower, Sir W. H.
Foster, G. Carey.
Foster, Michael.
Fry, Right Hon. Sir Edward.
Heath, R. S.
Holland, T. E.
Howse, H. G.
Hulke, J. W.
Huxley, Right Hon. T. H.
Magnus, Sir P.
Mahaffy, Rev. J. P.
Max Müller, F.
Mileman, A.
Moore, Norman.
Paget, Sir James.
Pearson, Karl.
Pye-Smith, P. H.
Ramsay, W.
Roscoe, Sir H.
Rücker, A. W.
Russell, W. J.
Schafer, E. A.
Stirling, W.

TEACHING UNIVERSITY, SCHEMES FOR AND PRINCIPLES OF—*cont.*
Stoney, G. J.
Thorpe, T. E.
Wace, Rev. H.
Weldon, W. F. R.
Windle, B. C. A.
Young, Sir George.

THEOLOGY AND THEOLOGICAL FACULTY.
Angus, Rev. Principal.
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Cave, Rev. Principal.
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Dykes, Rev. Principal.
Holland, T. E.
Pryce, Rev. Principal Vaughan.
Reynolds, Rev. Principal.
Roscoe, Sir H.
Thompson, S. P.
Wace, Rev. H.
Whitehouse, Rev. O. C.
Young, Sir George.

TOYNBEE HALL.
Barrett, Rev. S. A.
Mark, J. E.

TRAINING COLLEGES.
Barnett, P. A.
Fitch, J. G.
Oakeley, H. E.
Sharpe, Rev. T. W.
Young, Sir George.

TRINITY COLLEGE, LONDON.
Hunt, Rev. B.
Turpin, E. H.

UNIVERSITY COLLEGE.
Beare, T. Hudson.
Brown, F.
Erichsen, J. Eric.
Ramsay, W.

UNIVERSITY COLLEGE—*Cont.*
Schafer, E. A.
Young, Sir George.

UNIVERSITY EXTENSION.
Adams, W. G.
Bryce, Right Hon. J.
Busk, E. H.
Collins, Churton.
Cunninghame, H.
Gault, J.
Lubbock, Sir John.
Paget, Sir James.
Ramsay, W.
Roberts, R. D.
Stuart, James.
Wace, Rev. H.
Young, Sir George.

UNIVERSITY OF LONDON.
See LONDON UNIVERSITY.

VICTORIA UNIVERSITY.
Stirling, W.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.
Spencer, W. G.

WOMEN, EDUCATION OF.
Bryant, Mrs.
Elwyn, Rev. Canon.
Heath, H. F.
Roscoe, Sir H.
Russell, W. J.
Smith, Clifford.
Thring, Lord.
Young, Sir George.

WORKING MEN'S COLLEGE
Jennings, H. R.
Lubbock, Sir John.
Mure, R. J.

TABLE B.

*** NOTE.—The same subjects are in many instances spoken of frequently by the same witness in various parts of his evidence. References to each recurrence to the same subject are not generally given.

Names.	Subject Matter.	Page.
Adams, W. G., Halliburton, W. D. Day 48. Questions 19,897-20,241.	King's College professors	896
	Teaching University, views as to constitution	896
	Committee of Professors, paper by	896
	Professors of King's College, number of	897
	Professorial scheme; autonomy of colleges	897
	Teaching University with constituent colleges wanted	897
	London University, no connexion with teaching	897
	Modification of present University	897
	Teaching work and research work in colleges	897
	University and college professors, distinction objectionable	897
	Apparatus, duplication inevitable	897
	Professors, duplication of	897
	Medical schools, duplication	897
	Science only taught in a few medical schools	897
	Union of medical schools for science	897
	Professorial scheme; partly satisfactory	898
	Professor Huxley's suggestions discussed	898
	University must be free from State control	898
	Prestige, loss of when University separated from colleges	898
	Examinations and grant of degrees by colleges	898
	Examinations under Gresham Charter preferred	898
	Higher teaching in colleges	898
	Professorships attached to colleges only	898
	One professor of subject in each college with lecturers and demonstrators	898
	That is King's College system	898
	Competition, advantage of	898
	Crammers, objections to	898
	Gresham Charter, modification	898
	Science, Faculty of, two branches; engineering	898
	Professor Hudson Beare's evidence, general agreement	899
	Inter-collegiate lectures in certain cases	899
	Royal College of Science, assocation of	899
	State endowment	899
	King's College, Physical Laboratory	900
	Students, number of	900
	Strasbourg and Berlin, numbers	900
	Engineering certificate of King's College	900
	Associateship, merger in Degree	900
	Students from other Universities	901
	College work to count towards degree	901
	Evening classes, day study preferred	901
	Combination of Medical Schools and centralization	901, 905
	College professors to be professors of University	902
	Students from other Colleges, number of	902
	London University, few graduates from King's College	902
	Post-graduate teaching	903
	Higher teaching and research, elementary work	903
	London University matriculation, objections to	904
	Matriculation examination, not objected to	904
	Imperial examination and University teaching	905
Day 49. Questions 20,242-20,283.	Matriculation, London University, objections	913
	Examinations frequent as tests of progress	913
	Internal and external students, same examination for	913
	University Extension lectures, degrees	914
	Science Department, King's College, distribution of work	914
	University candidates from King's College, few; reason	914
	Dublin, non-resident students	914
	Non-resident pupils, depreciation of examination	915
Allchin, W. H. Day 15. Questions 7574-8015.	Royal College of Physicians	292
	Agreement with Sir Andrew Clark	292
	Influence on examinations for medical degrees	292
	Art of examining, experience in, of College	292
	Association with University in examining desired	292
	Revised scheme of London University preferred	292
	Convocation, opposition of	293
	Gresham scheme, a second alternative	293
	London degree, objection to	293
	Objections to Gresham scheme	293, 307
	Medical "Faculty," meaning and position	293
	Dominant control on Senate	293
	Predominant influence of Kings and University Colleges	294
	London University, re-modelling for London	294
	Two functions, Metropolitan and Imperial, possible	294
	Examiners for University from Medical Schools	294
	Teachers and Examiners, closer connexion wanted	295
	Royal Colleges and University, connexion and control	295, 298
	Teachers, influence over examinations	296
	Competition of schools for pupils; fees	296
	Conjoint Board and London University examinations compared	297
	Medical Schools, scientific teaching, surrender of	297
	Combination of smaller schools for scientific teaching	297
	Scientific and practical study, separation	297
	Three years sufficient for scientific study	297
	Faculties of Science and Medicine, joint control	297
	Graduation in Medicine	297
	Preference for one University for London	298
	With Metropolitan and external functions	298
	Gresham Charter, registrable qualification under	298
	Licensing authorities in England	299
	Provincial students, expense	299
	College of Physicians, association with University	299
	Associateship, age 19, value of	908
	University Extension course, witness's paper	909
	Harvard University course, B.Sc. curriculum	912

Names.	Subject Matter.	Page.
	Relation of Royal Colleges to Medical Schools unsatisfactory	301
	Society of Apothecaries, relative position of	301
	Gresham University, alliance with Apothecaries' Society	301
	Professorial scheme, objections to	302
	Provincial Medical Schools, relation to University	302
	Facilities for degrees required	304
	Apothecaries' Society, merger	304
	Examinations not to be lowered	305
Anderson, J. M. Day 56. Questions 22,449–22,520.	Royal Institute of British Architects	1024
	Work of an Architect	1024
	Artist, construction, knowledge of business	1024
	Power of design, encouragement of	1024
	Literature of the profession, thorough knowledge of	1025
	Construction, scientific knowledge	1025
	Building materials, thorough knowledge	1025
	Sanitation	1025
	Electricity	1025
	Physical knowledge	1025
	Description, power of, for specification	1025
	Dissection of buildings, bills of quantities	1025
	Contracts, drawing and interpretation	1025
	Pupilage by Articles, formerly seven, now five or three years	1025
	Advantages, practical knowledge	1025
	French system, academical, not desirable alone	1025
	Combination preferred	1025
	An open profession	1025
	Institute, examination for	1025
	Membership of Institute not necessary for practice	1025
	Foundation and object of Institute	1025
	Work of Institute, medals and prizes	1025
	Travelling students	1025
	Architectural Association and other Institutions	1025
	Examinations of Institutes	1026
	Institute an examining not a teaching body	1026
	Teaching in University desired	1026
	School for Architects wanted	1026
	Funds	1026
	Registration opposed	1026
	Closing profession by University objected to	1026
	Chairs in University, endowment	1027
	Associates and Fellows	1027
	Architectural Association, future support (Q. 22,760)	1041
Angus, Rev. Principal. Day 9. Questions 5063–5180.	Rev. Principal Cave, agreement with	190
	University teaching in Colleges	190
	Gresham scheme preferred to Professorial	190
	Colleges, affiliation with University	190
	Non Christian Colleges and persons	191
	Tests	191
	University lectures, obligatory attendance	191
	Degrees impracticable for Nonconformists unless honorary	191
	Professors and lecturers, appointment by University	192
	Representation of Colleges in Governing Body	192
	Secondary education, supervision by University	192
	Nonconformist Colleges, interference with, by University	193
Anson, Sir W., Bart. Day 50. Questions 20,467–20,633.	Oxford, Warden of All Souls' College	926
	Paramount power of University, where vested	926
	Executive power, small central body	927
	Teachers, representation of	927
	Faculty of Law, organisation of	927
	Oxford system	927
	Legal subjects of education	927
	Inns of Court, connexion with Faculty of Law	927
	Absorption of lectures of Inns	927
	No amalgamation	927
	Academic and professional law, how to be taught	927, 934
	Compulsory subjects	927
	Examinations, compulsory and optional subjects	927
	Education preliminary to legal study	928
	Early stage for intending professional men and others	928
	Subjects for second stage	928
	Political Economy part of Political Science	928
	Inns of Court and University, opportunity for arrangements	938
	Law as a study, difficult after leaving University	928
	Practising barrister, not from jurisprudence school	929
	Difference between Medicine and Law	929
	Recognition of University examinations by Inns of Court	929
	Post-graduate education at Inns of Court	929
	Convocation, the sovereign power	929
	Degree, release from part of legal course	930
	Lectures and examinations of Inns of Court	930
	Roman Law	931
Armstrong, H. E. Day 61. Questions, 24,148–24,282.	City and Guilds Institute, Professor of Chemistry	1115
	Establishment of technical education	1115
	Difficulty of professor as to classes of students	1115
	Organisation of students required	1115
	Post-graduate work and research	1115
	Laboratories and equipment unsatisfactory	1116
	German laboratories	1116
	School leaving examination; University matriculation	1117
	Loss of trade by neglect of Chemistry	1118
	Chemists, misapplication of term	1118
	Medical students in Chemistry	1118
	London University examinations, faults	1119
	Organisation of secondary teaching	1119
	Zurich, laboratories at	1120
	Funds for University	1120
	Science, representation on governing body	1121
	Chemistry, medical study of	1121
Ayrton, Wm. Day 41. Questions 17,644–17,807.	Engineering	771
	Agreement with Professor Unwin	775
	Apparatus and laboratories at Colleges different	775
	Freedom in teaching required	775
	Diploma, value of, in avoiding premium	775
	Workshop practice necessary	775
	American system, technical schools	775
	Pure and applied physics	775
	Practical teaching the best training	776
	City and Guilds Institute, studies and examinations	778
	See also Professor Unwin's evidence.	
Baines, J. A. Day 49. Questions 20,284–20,356.	Indian Civil Service	916
	Course of study for Civil Service	916
	University, and King's and University College training	917
	Law and Oriental languages, London study of	917
	Vernacular languages, great importance attached to	917
	Attendance at Law Courts	917
	Special officer as general adviser on study needed	917
	Subjects for examination	918
	Civil Code, Contract Act, Hindu and Mohammedan law, optional	918
	History of British India	918
	Political economy	918
	Sanscrit and Arabic	918
	Arts Faculty, most subjects in	918
	Oxford and Cambridge courses sufficient for open competition	919

Names.	Subject Matter.	Page.
Barnett, P. A. Day 38. Questions 16,663–16,772.	British and Foreign School Society	715
	Foundation and objects	715
	Metropolitan Training College	715
	Students candidates at London University	715
	Connexion of Training Colleges with Government	715
	Government inspection and examination	715
	Number of students	715
	Affiliation of Residential Training Colleges with University	715
	Affiliation of Colleges approved	715
	Value of University examinations	715
	Representation on Council desired	715
	Teachers on Faculties	715
	Examinations of Education Department passed to University	715
	School management, examinations in	716
	Statistics of London Training Institutions	716
Barnett, Rev. S. A. Monk, J. E. Day 35. Questions 15,397–15,516.	Toynbee Hall, Warden	660
	Original foundation and object	660
	A centre of Education	660
	University Extension Classes	660
	Number of students	660
	Fees	660
	Examinations by University Extension Association	660
	Higher and continuous teaching required	660
	Work to be taken by University	661
	Expenses	661
	Position in life of students	661
	Candidates for London University	661
	Funds	662
Beare, T. H. Day 31. Questions 14,337–14,553.	Engineering Professor, University College	597
	Applied Sciences in Universities	597
	No recognition at London University	597
	B.Sc. degree; intermediate examination	597
	Certificates of general proficiency	597
	Scotch and Dublin systems	598
	Applied and Pure Science distinguished	598
	Scientific Colleges, curricula and diplomas	598
	Attendance at classes, large	599
	Faculty of Applied Science; recognition in Charter	599
	Applied separated from Pure Science	599
	Representation of Engineering Societies	599
	Pure Science study; adaptation to future professions	599
	Branches of Applied Science, union in one Faculty	600
	Technical institutions, supervision of education	600
	Degrees in Engineering	601
	Institutions of Civil and Mechanical Engineers	602
	Institution of Civil Engineers: admission and constitution	602
	Examinations	602
	Theoretical knowledge slight	602
	Institute of Mechanical Engineers	602
	Practical training for engineers	602
	Diplomas or Certificates of proficiency desired	603
	Evening classes, great demand	603
	Massachusetts Institute	603
	Technical training and degrees, value of	604
Beet, Rev. J. A. Day 9. Questions 5140–5180.	Wesleyan College, Richmond	193
	Agreement with evidence of Principal Cave	193
	Theological Faculty, desire for	193
	Position of the Nonconformist Colleges	193
	Control over University, share desired	193
	If not available, affiliation and examination	193
	Professorial scheme, disapproval	193
	Autonomy required	194
	Theological science as a department of knowledge	194
	Examinations in Theology	194
	Board of examiners in Theology not sufficient	194
	Education desired as well as examination	194
	Absorption of College in University rejected	195
Bowen, Lord Justice. Day 59. Questions 23,360–23,488.	Law Faculty	1076
	Inns of Court, prospect of joining University	1076
	Development of legal education desired	1076
	Theoretical education as foundation valuable	1076
	Chamber study for practice, great importance of	1076
	Legal study, subsequent to University, delay of	1076
	Legal Faculty, importance of Inns of Court joining	1076
	Scientific study of law	1076
	Legal faculty, outside element	1076
	Law degree for persons other than lawyers	1076
	Roman law, value of study of	1077
	General culture desirable for profession of law	1077
	Great practical difficulty, attitude of Inns of Court	1077
	University degrees, not accepted for examinations	1077
	Advantage of preliminary scientific training	1077
	Scientific knowledge in unsatisfactory state	1078
	Solicitors, importance of their joining	1079
	Legal study for others than lawyers	1079
	Admission of strangers to lectures	1080
	University school of law, attempt to get Inns to join	1082
	Faculty of Law, promote if Inns will not join	1082
	Board of Studies, ideal	1082
	Oxford and Cambridge, study of law, increase of	1082
	Professional law, teaching in University	1083
	Practical, commercial, and other subjects	1083
	Professors, selection of	1083
Boyd, Stanley. Day 22. Questions 11,068–11,562.	Medical Schools of London, representative of	447
	Teaching University, need for	447
	Gresham Charter, favoured by some schools	447
	London University and professorial schemes by others	447
	Medical degrees, beyond reach of majority	447, 452
	Difficulty; too much required in time limited	447
	A second easier degree required	447
	Medical representatives on Governing Body	447
	Training in Arts and Sciences	447
	Degree unduly easy not desired	447
	One University preferred	447
	Degrees for London students controlled by London teachers	447
	Present degree to be an honour degree	447
	Faults in present degree	448
	Examination of candidates by their own teachers	448
	Medical schools to be schools of the University	448
	Representation under Gresham Charter	448
	London University should be brought into scheme	448
	Charing Cross Hospital, evidence as representative of	448
	One University only desired	448
	Endowments and funds	448
	Professorial scheme, preference for	448, 449
	Medical schools exceptional	448
	Colleges of Physicians and Surgeons, not to be part of University	449
	Representation on Senate	449
	Graduation and license; University and Royal Colleges	449
	Laboratories	450
	Schools joining University voluntary	450
	Conditions of joining various Colleges	450
	Gresham Charter, objections to	450
	Co-ordination between Medical Schools	451
	Inter-collegiate arrangements	451
	Examinations for degrees by University	451
	Examination for license	251
	Residence	451
	Faculty, teachers members of	451

Names.	Subject Matter.	Page.
	University medical professors	451
	Post-graduate classes	451
	Honour and pass degrees	451, 452
	Medical Council, inspection by	453
	Union of Medical Schools	454
	Appointments in Medical Schools	459
	See also Schafer, E. A., Dickinson, W. H., Shore, T. W., Page, H. W., Taylor, F., Payne, F., Spencer, W. G., and Coupland, Dr.	
Bristowe, J. S. Day 8. Questions 4600–4801.	British Medical Association	175
	Medical degrees, facilities for, required	175
	London University degrees, difficulties	175
	London University and Medical Schools, connection wanted	175
	Gresham scheme, general approval	175
	Two universities or one	175
	Degrees for past students desirable	176
	Medical examinations and education, connection wanted	176
	Practical examinations	176
	Final education in London important	176
	Matriculation and scientific examinations	176
	Uncertainty in examinations	176
	Qualification with graduation	177
	Residence in London	177
Brown, F. Day 59. Questions 23,250–23,359.	Slade School of Fine Art, University College, professor of	1072
	Practical school of painting, sculpture and drawing	1072
	No lectures	1072
	Fine Art teaching already provided for	1072
	Theory and History of Fine Art suitable for a University	1072
	Institutions, connection with University	1072
	Good general education desirable, but not necessary	1072
	French system of education for Artists	1073
	Students of Slade school, simultaneous instruction elsewhere	1073
	Connection with University College no advantage to school	1073
	Age of students of Slade school	1074
	Number of students about 210	1074
	Assistants to Slade professors	1074
Bruce, Lord Charles. Grove, Sir G. Day 53. Questions 21,474–21,668.	Royal College of Music	975
	Foundation and history of College	975
	Scholars, number of	975
	Scholarships, number and value	975
	Funded property 130,000*l.*	975
	Buildings, donation for	975
	Boarding-houses	975
	Examinations by professors	975
	Examinations by outside musicians	975
	Degrees, power to give	975
	Power not exercised	975
	Associates; A.R.C.M.	976
	Associateship open to non-collegians	976
	Number who pass	976
	Scholars; foreign travel	976
	Fellowships	976
	Royal Academy of Music; similarity of work	976
	Reason for two institutions	976
	Associated Board	976
	Other Institutions for music	976
	Professors and teaching staff	977
	Certificate, examination for	977
	Women and men, proportion of	977
	Associated Board, proceedings of	977
	Musical degrees at Universities, nature and value	977
	Teaching University, Musical Faculty	978
	Association with Teaching University, desire for	978
	College Imperial, not local	978
	Collegiate degree, dropping of power to grant	978
	Admission of outsiders to lectures	979
	College concerts	979
	Matriculation	979
	Italian class	979
	Social status of students	979
	Age for entry	980
	Collegiate degrees, no agreement with University of London	980
	London University musical degrees	980
	History of music in England	980
	Musical degree, general preliminary studies	982
	Diplomas or degrees	982
Bryant, Mrs. Day 7. Questions 3835–4005.	Bedford College for Ladies, Lecturer	150
	Professorial scheme good, but not the only alternative	150
	Gresham Charter, objections	150
	Sectarian Colleges, no objection to	150
	Maintenance of special college for women	150
	Financial difficulties	150
	Mixed and separate classes for girls	151, 153
	Queen's and Holloway Colleges	151
	Laboratories for women	151
	Lady professors desired	152
	Teachers not always professors	152
	Matriculation at school	153
	King's College female students	153
	Intercollegiate system of lectures, effect	154
	Mixed classes at University College	154
	Queen's College	154
Bryce, Right Hon. J. Day 39. Questions 16,773–16,974.	Teaching University for London, need for	719
	Evidence before previous Commission	719
	One University prefered to two	719
	University of London, reconsideration of rejected scheme	719
	Act of Parliament, possibility of over-riding Convocation	720
	Remuneration of eminent men for University	720
	Degrees to all comers, alteration preferred	720
	Reconstruction of University	720
	Teaching the primary object, degree small value	720
	Professorial scheme	720
	Procedure to create University	720
	Curriculum of examination, teachers' influence	720
	Faculties and Boards of Studies	720
	Inclusion of every kind of knowledge	721
	University Extension Work, Evening Classes	721
	Lecturers, appointment of and Certificates of attendance	721
	Allowance for attendance for College lectures or residence	721
	Legal education for laymen	721
	Oxford law lectures, attendance at	721
	Attendance at lectures before reading in chambers preferred	721
	Oxford law degree, subjects	721
	Subjects to be studied	721
	Ecole Libre des Sciences Politique, Paris.	722
	Course of education there	722
	Similar course at new University	722
	Inns of Court, course of teaching	722
	Call to Bar, and jurisdiction over barristers	722
	Connection with University	722
	Representation on Senate	722
	And on Faculty	723
	Incorporated Law Society, connection	723
	Examinations by past or present teachers	723
	Teachers and outsiders, joint examiners	723
	London University and Oxford men compared	723
	Law lectures should be open to all	723
	Present system of law studies, defects	724
	American system	724
	Duplication of examinations undesirable	724
	Practical training subsequent to theoretical	724
	University and professional bodies, difficulties	725
	Scotch system	725
	Professors not to be practising men	726
	Johns Hopkins University, course of study	726
	Degrees, evil influence of	727
	Entrance examinations	727
	Professional bodies and law school, connection	727

Names.	Subject Matter.	Page.
Busk, E. H. Day 2, Questions 505–1031.	Convocation of London University	24
	Proceedings since University for London Commission	24
	Scheme of Senate, 1891	24
	Royal Colleges of Physicians and Surgeons, acceptance by	26
	Opposition in Convocation to scheme	26
	Scheme of 1886	26
	Nature of Convocation	26
	Medical opposition	27
	Matriculation examination	28
	Standard of degrees	28
	Collegiate and non-Collegiate students	29
	Examination by teachers	29
	Teaching University approved	29
	Scheme of 1886 approved	29
	Gresham Charter, objections to	29
	Memorial and Deputation to Marquis of Salisbury in opposition	30
	Teaching body added to London University desired	32
	Convocation, meetings and votes—medical majority	33
	Examiners, appointment of	33
	University professoriate independent of Colleges	34
	Examination by teachers	35
	Incorporated Law Society's lectures and examinations	36
	Birkbeck and other institutions	40
	British Museum	41
	University Extension lectures	41
	Compulsory attendance at colleges	41
	Metropolitan teaching and Imperial examination, combination of	42
Day 51. Questions 20,778–21,124.	Scheme of Convocation for reconstruction of London University	941
	Report of annual committee	941
	Resolution of Convocation	941
	Number present	941
	Faculty of Divinity, division as to	941
	Letters of approbation from absent members	941
	Alteration of Charter, power of veto valued	942
	Executive functions, share in not desired	942
	Present and absent members, voting power	942
	Opinion of absentees, how obtained	942
	Details of scheme, generally omitted	942
	Report; desire for Teaching University	942
	Teaching throughout British Empire, vital question	943
	Constitution, not to be federal	943
	Professorial University Association, not agreed with	943
	Points of disagreement	944
	Constitution proposed	944
	Absorption, meaning	944
	Endowments, not to be given up to University	944
	Medical schools, how dealt with	944
	Teachers of schools recognised by University	944
	Senate, constitution of	944
	Teachers, admission to Convocation; qualification	945
	Faculties, inequality of representation	945
	Powers of Convocation besides veto	946
	Boards of Studies, number undecided	946
	College teachers, recognition as professors	946
	Appointment of teachers by colleges	947
	Appointment of University professors	948
	Public Museums	948
	Laboratories of London University	948
	Faculty of Divinity, undenominational	948
	County Council, grant by for technology	948
	Secondary and technical education, University influence	949
	Divinity, undenominational degree, possibility of	949
	Music, Faculty of, not new	950
	Musical representative doubtful	950
	Technology distinct from pure science	950
	Faculties, their constitution	950
	Boards of Studies, consultative only	951
	Faculties, their powers	951
	Examinations and degrees	952
	Medical degrees, standards of	952
	Facilities elsewhere than in London	952
	University and other bodies; combination for examinations	952
	Honorary and ad eundem degrees	954
	Law Faculty; Inns of Court, position of	955
	Object of scheme, arrangement of commencement	955
	Imperial character of University preserved	957
Capper, D. S. Day 50. Questions 20,685–20,777.	King's College, Mechanical Engineering professor	938
	Applied Science should be strongly recognised	938
	Training, early differentiation of branches	938
	Differentiation of teachers	938
	Faculty, separate branch of Science	938
	Scotch University system	938
	Details for University to arrange	938
	Engineering degree of Dublin, objection to	938
	Workshop teaching outside University	938
	D.Sc., qualification for	938
	Institute of Civil Engineers, &c., and University	939
	Certificates of proficiency advisable	939
	Laboratories, overcrowding objectionable	939
	Laboratory at King's College	939
	Workshop at King's College preliminary	939
	Research work, sub-division	939
Carter, R. B. Day 38. Questions 16,518–16,662.	Apothecaries' Society	709
	Agreement with Mr. Upton's evidence	709
	Representation on Governing Body	709
	Royal Colleges, grant of degrees by	709
	Scheme of Senate of London University	709
	Medical graduation, union of Royal Colleges and University	709
	Exclusion of Society	709
	Evidence of witness before previous Commission	709
	Representative of Society on Medical Council	709
	Examinations of Society, good quality	709
	Inspection of examinations, favourable	709
	Gresham Charter, graduation of licentiates only	709
	Preliminary examinations in general knowledge	710
	Standard of general culture for degrees	710
	Title of "Dr."	710
	Society and Royal College of Physicians, relative positions	711
	Society's examiners, rank	711
	Sale of drugs	712
Cates, A. Day 56. Questions, 22,521–22,723.	Royal Institute of British Architects	1028
	General concurrence in evidence of Mr. J. M. Anderson	1028
	Chairman of Board of Examiners	1028
	Nature and work of Institute	1028
	Course of study	1028
	Classes at King's and University Colleges	1028
	Architectural Association, classes	1028
	Pupilage, articleship	1028
	Institute, foundation, admission by examination	1028
	Numbers examined	1028
	Courses of study in America and Paris	1028
	Royal Institute, progressive examinations	1029
	Examinations, subjects	1029
	Architectural Association, foundation and objects	1030
	Professors' remuneration	1030
	Course or Faculty for Architecture in University desired	1030
	Degree in Architecture not desired, but in Science	1030
	Professorship of Architecture	1030
	Cornell University and Columbia College, America	1030
	Architectural Faculties, America	1030
	Ecole des Beaux Arts, Paris	1031
	L'Ecole Spéciale d'Architecture, Paris	1032
	Royal Academy School	1032
	University study in Italy, Berlin and Vienna	1032

Names.	Subject Matter.	Page.
	University study not to supersede practical pupilage	1032
	Degree, whether to be accepted for part of examination	1032
	Curriculum, subjects	1033
	French system not adapted to our wants	1033
Cave, Rev. Principal. Day 9. Questions 4802–5062.	Hackney and Nonconformist Colleges	181
	Number of members of colleges	181
	Theological Faculty, request for	181
	Colleges, Association with University	182
	Undenominational theology	182
	"Theological," meaning of	182
	Studies, nature of; not opinions	182
	Existing united examinations	182
	Relation towards Church of England Colleges	182
	Scotch University schemes	183
	Non-Christian Colleges	183
	Tests	183
	Professors, appointment	183
	Representation of Colleges on Governing Body	184
	Degrees, system and nomenclature	185
	Nonconformist incapacity for degrees in England	186
	Collegiate professors and lectures, appointment	186
	Examinations, conduct of, and examiners	187
	Gresham Scheme, preference for	187, 188
	Limit of Theology as a science, possibility of	189
	Collegiate study, need for, and certificates	189
	Professorial University lectures, compulsory attendance	190
Clark, Sir Andrew. Day 14. Questions 6998–7489.	Royal College of Physicians	267
	Chief Medical Authority since 1518	267
	Conjoint Board formed with College of Surgeons	267
	Examination Hall, building and equipment	267
	Endowment for original research	267
	Qualification and number of medical candidates	267
	Examinations compared with those of University	267
	Control over Licentiates, Members, and Fellows	268
	Medical Schools, connexion with	268
	Body of examiners collected	268
	Teachers examining their own pupils	268
	Association of external examiners	268
	Consulted by the State	268
	Constitution compared with that of College of Surgeons	268
	Working jointly respecting University question	268
	Medical interests in University, protection of	268
	Teaching University, need for	269
	One University preferable to two	269
	Formation out of present University	269
	Scheme of Senate, acceptance	269
	Convocation, its hostile vote, abolition of	269
	Gresham scheme, approbation if other impossible	269
	Objections and amendments to that scheme	269
	Dominant control in medical subjects in Senate	269
	Conjoint examination by Colleges and University	270
	License and degree, attainment thereby	270
	Scotch M.D.'s, need for similar facilities in London	270
	Matriculation, acceptance of college examination	271
	Provincial colleges, association with University	271
	Residence in London for University Candidates	271
	Imperial character of University unavoidable	271
	University complete in and for London	272
	Two examiners, one may be teacher of candidate	272
	Difference with College of Surgeons as to this	272
	Medical schools, relation to University	272
	Higher education and research	272
	Recognition of teachers of Medical Schools	272
	Fitness for qualification, examination insufficient test	273
	Teaching and examination, connexion between	273
	Expense to students at Medical Schools	273
	Fees for examinations	273
	Income of Royal Colleges, sources of	274
	Professorial scheme, objected to	275
	Pass and honour Medical degrees	275
	Gresham Charter; qualification preliminary to degree	276
	Degrees without residence objected to	277
	Provincial candidates	286
Clark, E. C. Day 62. Questions 24,283–24,426.	Civil Law, Professor at Cambridge	1124
	Examiner at London University and Cambridge	1124
	Law tripos at Cambridge, fairly sought	1124
	Classes, attendance small	1124
	Law degree, by others than intending lawyers	1124
	Law Faculty in new University, utility	1124
	Co-operation of Inns of Court and Incorporated Law Society	1124
	Law examinations of University and Inns respectively	1124
	Degree, acceptance of Inns of Court for theoretical examination	1124
	Law degree, non-professional candidates	1125
	Utility of degree and theoretical training	1125
	Examinations necessary as supplementary to teaching	1125
	Cramming, how restrained	1125
	Examiners, teachers and outsiders	1125
	Fresh examinations for successive degrees, bad	1125
	The "Act" at Cambridge good	1125
	Moots or disputations of doubtful value	1125
	Examiners, partial change of yearly	1126
	Pass examinations, objection to	1126
	Problems and essays	1126
	Pass and honours, separate papers, London University	1126
	Prizes for law	1126
	Inns of Court, the new system of education	1126
	Examinations, Inns of Court practical, University theoretical	1127
	Subjects for University examination	1127
	Duplication of examinations, Inns and University	1127
	Teachers as examiners, outsiders	1127
	Examinations, functions of	1127
	Cambridge Law candidates, number of	1128
	Honour candidates, Cambridge, mostly for profession	1129
Clarke, Ernest. Day 60. Questions 23,698–23,762.	Agriculture	1094
	Foreign scientific education for farmers	1094
	Farmers and labourers, extension of education	1094
	Better farming abroad	1094
	System of instruction abroad	1095
	Scientific and practical instruction concurrently	1095
	Science degree for agricultural knowledge wanted	1095
	For teachers, land agents and owners	1095
	Tenant farmers, degree for not practicable	1095
	Royal Agricultural Society, examinations	1095
	Preference for University degree, to Society's diploma	1095
	Annual show of Society, cost of	1096
	Instruction of show	1096
	Foreign Universities, agricultural instruction	1096
	Funds, County Councils	1097
Cleveland, W. F. Day 8. Questions, 4440–4599.	British Medical Association	170
	Agreement with Mr. Macnamara	170
	Examinations, evil of	170
	Gresham Charter approved	170
	Examination and hospital attendance requisite	170

Names.	Subject Matter.	Page.
	Degrees for past students wanted	170
	Degree, value of	170
	One university preferred to two	171
	Degree a registrable qualification	171
	Degree, standard of examination for	172
	Practical examination and clinical instruction	172
	Dual system at London University impracticable	174
Coleridge, Lord. Day 55. Questions 22,124-22,218.	Lord Chief Justice of England	1005
	Mr. Crackanthorpe's evidence, approval	1005
	Lord Justice Lindley's scheme, rejection of	1005
	Public teaching of law, most unsatisfactory	1005
	Absence of teaching, yet great lawyers	1005
	Examples	1005
	Practice and scientific study distinct	1006
	Examples	1006
	Roman law, advantage of	1006
	Law Faculty only for theoretical law	1006
	Lectures of little use for practice	1006
	Barristers chambers, reading in most valuable	1007
	Law as a science not attractive	1007
	Study by non-professional persons	1007
	Diplomacy, knowledge of international law	1007
	Merchants, knowledge of law affecting them	1007
	Income of Inns of Court	1007
	Heavy expenses, Library, Professors, Prizes, Dinners	1007
	Co-operation of Inns difficult to get	1008
	Intercollegiate arrangements	1008
	Law Faculty; Inns the dominating power	1008
	Discipline, prerogative of the Inns	1008
	Governing body, non-professional element rejected	1008
	Professors, control over	1008
	Inns of Court as Colleges of University	1009
	Lectures of Inns of Court, opening to public refused	1010
	Degrees as an essential for call to Bar	1010
	Connection with University, difficulty as to Governing body	1012
Collins, Churton. Day 55. Questions 22,414-22,448.	University Extension Society	1021
	Agreement with Professor Stuart	1021
	Time for study, men and women respectively	1021
	Needs for London education	1021
	State control and regulation for education	1021
	Education of the citizen	1021
	Literature and political education	1022
	Present academic authority objected to	1022
	London University curriculum, insufficient	1022
Collins, W. J. Day 3. Questions 1032-1472.	Convocation of London University	45
	Mr. Busk's evidence	45
	Medical degrees, standard of	45
	Graduation in Scotland by English medical students	45, 48
	Facilities for graduating in London	46
	Examination by teachers	46
	Gresham Charter opposed	46
	Scheme of Senate and Convocation	46
	Internal and external students	46
	London medical degrees	47
	Two universities for London, objection	47
	Intercollegiate arrangements	48
	Medical Schools, equality of efficiency	48
	Qualification and graduation	48
	Medical Schools, scientific teaching	48
	Matriculation examination	51
	London University, adaptation to wants	51
	Schemes of Senate and of Convocation	51
	London Medical examinations and degrees	51
	Matriculation at London University, subjects and extent	
	Preliminary scientific examination	54
	Scotch standard for degrees and course of study	55, 58
	Expenses at Scotch Universities	58
	London Medical Schools, teaching appointments	59
	Medical schools, position in University	59
	Art and archæology	845
	Training of artists not University work	845
	University College, teaching of Art	845
	Slade's endowments, Oxford, Cambridge, and University College	845
	Archæology and history of Art, University teaching	845
	Organisation of	845
	Preliminary knowledge	845
	Courses of study	845
	German Universities, study of archæology	846
	Students matriculated in Faculty of Arts	847
	British Museum, utilisation of	847
	Subordinate teachers and professors	847
	Museum, inconvenient for lectures	847
	Present lectures there	847
	New system, suggestions for	847
	Foreign tours for first graduate study	847
	Museum and University, relations of	847
Coupland, Dr. Day 22. Note after Question 11,859.	Middlesex Hospital Medical School	473
	Concurrence with other Schools	473
Couvreur, A. Day 13. Questions 6827-6997.	Belgian	260
	Universities in Belgium, number	260
	Faculties; Philosophy, Law, Science, Medicine, Theology	260
	Schools for various subjects	260
	Distinctive characters of Universities	260
	Social and Political Science	260
	Constitution and government of Belgian Universities	260
	Entrance examination, abolition, result	262
	Entry, mode of	262
	Course of studies	262
	Examination of pupils by their own teachers	262
	Secondary education—schools	264
	Women, education at Universities	264
	Professors, their rights—dismissal	265
	Salaries of professors	266
	Competition among Universities, lowering of degrees	266
Cozens-Hardy, H. H. Day 57. Questions 22,892-22,977.	Law graduate of London University	1049
	Law Faculty of London University	1049
	Degree in Law previous to 1866	1049
	Previous graduation required	1049
	Faculty, absence of legal knowledge	1049
	In 1866 thrown open to all matriculated students	1049
	Present examinations in law	1049
	Increase of law graduates	1049
	Degree in great request	1049
	Not recognised by Inns of Court	1049
	Degree unsatisfactory	1049
	Relations between Senate and examiners wanted	1049
	Law Faculty essential to University	1050
	Connection with Inns of Court requisite	1050
	Law classes at University College	1050
	Decline of the classes, reasons	1050
	Funds of Inns of Court	1050
	Failure of Faculty if in competition with Inns of Court	1050
	Connexion advantageous to Inns of Court	1050
	Opening of classes to all comers	1051
	Accommodation at Inns of Court	1051
	Possibility of connexion	1051
	Conferring of degrees no function of Inns of Court	1051
	Recognition of examinations by Inns of Court	1051
	Inns of Court to be substantially the Faculty	1051
	None others than teachers on Senate needful	1051
	And possibly on Faculty	1051
	Necessity for Parliamentary intervention	1051
	Work of Council of Legal Education	1051
	Negotiation with each Inn separately	1051
	Income of Inns of Court unknown	1052
	Expenditure on legal education	1052
	Chair of Comparative Jurisprudence, University College	1052

Names.	Subject Matter.	Page.
	Quain professor, where to lecture	1052
	Incorporated Law Society included with Inns of Court	1052
	Roman Law, estimation of	1052
Crackanthorpe, M. H. Day 27. Questions 12,853–13,093.	Council of Legal Education, member of	521
	Legal Education, control of Inns of Court	521
	Duty of Inns as to education	521
	Solicitors excluded from Inns	521
	Incorporated Law Society, origin of	522
	Professors and Readers, appointment by Inns	522
	Absence of legal education	522
	Compulsory examinations established 1859	522
	House of Commons, Select Committee	522
	Council of Legal Education, formation	522
	Royal Commission, 1855	522
	Committee of Inns of Court	522
	Compulsory examination established	523
	Legal Education Association, 1870	523
	School of Law, proposal for	523
	Consolidated Regulations, 1872	523
	School of Law Bill, 1875	523
	Objections thereto	523
	Advantage or otherwise of compulsory examination	524
	Readers changed to Professors	524
	Reappointment of Readers	524
	Readers, appointment of	524
	Council of Legal Education, how elected	524
	Chairman	525
	Board of Studies	525
	Syllabuses	525
	Lectures and classes, attendance voluntary	525
	Examination subjects; results	525
	Roman law, its value	525
	International Law	525
	Studentships and prizes	526
	System unsatisfactory	526
	Barristers' chambers, students' attendance	526
	Lecture system interferes with such attendance	526
	Honours and pass, separate papers	526
	Vivâ voce examination	526
	Lectures confined to members of Inns	527
	Should not be so confined	527
	Non-professional law, where taught	527
	Exclusion of solicitors	527
	Solicitors, lectures abandoned	527
	Solicitors, tuition by correspondence	527
	Teaching University, education in law	528
	King's and University Colleges, legal education	528
	Graduation and license to practise	529
	Position of Inns of Court as to University	529
	Incorporated Law Society, representation in University	529
	Professors of University, appointment of, by Inns	531
	Boards of Studies, functions of	531
Crosby, T. B. Day 17. Questions 8444–8501.	Gresham Committee, City side	331
	Two sides, Mercer's side and Gresham side	331
	Co-operation to found the Gresham University	331
	Gresham Charter approved	332
	Teaching University, nature of	332
	University of London, deficiency in medicine	332
	Preference for Gresham scheme to University's scheme	332
	University of London an impracticable body	332
	Degree made available, but standard not lowered	332
	Limit of area, must be universal	332
	Two universities unobjectionable	332
	Medical degree not sufficiently accessible	332
	Lowering of degrees by competition, Scotch Universities	332
	Medical representation on Senate	332
	Examinations of Royal Colleges unsatisfactory	333
	University and Royal Colleges, combination	333
	Graduation a registrable qualification	333
	Inclusion of London University in scheme	333
	Resolutions of Gresham Grand Committee	333
	Gresham Committees	333
	Position of Gresham College	333
	The lectures, popular in character	333
	No examinations	333
	Co-operation of the College, nature of, and funds	333
	See Watney, John.	
Questions 8519–8810.	Medical education, term too long	335
	Scientific study	335
	Cambridge degree system preferred	335
	Scotch degrees	335
	Gresham professors, responsibility and supervision	335
	Annual appointments, re-election	335
	Co-operation with University	336
	University of London, general dissatisfaction	336
	Resolutions of Gresham Committee	336
	Area for University	
	College funds, University purposes	336
	Medical qualification and graduation, standards of	336
	One University preferred to two	337
	Provincial medical schools	337
	City College similar to King's and University	337
	Teaching at Edinburgh	337
	Attraction of students, facility for degrees	337
	Clinical experience, London and Edinburgh compared	337
	Preliminary Scientific examination	338
Cunynghame, H. Day 40. Questions 17,243–17,444.	Polytechnics	
	Character of, technical and wage earning	750
	Education, technical	750
	Relations with University	750
	Evening classes, certificates wanted	750
	Practical not written examinations	750
	City and Guilds of London Institute, its character	750
	Birkbeck Institution, its character	751
	City of London College	751
	Bedford College for Ladies, connection with University	751
	Queen's College for Ladies, rank	751
	Holloway College, outside metropolitan area	751
	Laboratories at Bedford College	751
	University influence over Birkbeck and other institutions	751
	University Extension Society	751
	Artizan Students	751
	Evening work	751
	Certificates	751
	Recognition at Cambridge	751
	Degradation of degree, safeguards by University	751
	Evening work, possibility of degree from	752
	Gresham Charter, draughtsman of	753
	Fusion of examining and teaching bodies, difficulty of	753
	Imperial degree needed	753
	London University, Imperial; objection to name	753
	Conversion into a Teaching University, objection to	753
	Two sides, objection to	753
	New and second University advocated	753
	Gresham Charter, basis for	753
	University lecturers	753
Davey, Sir H. Day 43. Questions 18,211–18,313.	Teaching University, in favour of	800
	Faculty of Law, observations on	800
	Agreement with Mr. Crackanthorpe's evidence	800
	Ideal to be aimed at	800
	Deficiencies of present means	800
	Practical suggestions	800
	School to teach law and jurisprudence wanted	800, 808
	Scientific teaching	800
	Systematic teaching	800
	Practical teaching	800, 809
	Study of law as part of a liberal education	800

Names.	Subject Matter.	Page.
	Means of study at present afforded	800
	Laws of various parts of British Empire	801
	Few great English jurists	802
	Text Books	802
	Lectures at Oxford: Blackstone	803
	Cambridge, study of Law, improved	803
	Victoria University, good	803
	King's and University Colleges	803
	Inns of Court, professional teaching	803
	Incorporated Law Society	803
	Council of Legal Education, defects	803
	Committee of Inns of Court; scheme for amendment	803
	Outsiders on governing body proposed	803
	Lectures only open to members of Inns	803
	Separation of two branches of practitioners a mistake	803
	Lord Selborne's School of Law Bill, 1854	803
	Albert University	803
	Motion in Lincoln's Inn for grant for Law Faculty	803
	London the place for School of Law	803
	School should be Faculty in University	804
	Inns of Court and Incorporated Law Society, its basis	804
	Difficulty of moving the Inns, compulsion	804
	Funds of Inns of Court, taxation for school	804
	Form of Faculty, practical suggestions	804
	Teaching by University only	804
	Admission to practise by Inns and the Society	804
	Legal degree or certificate of proficiency sufficient test	804
	Degree or certificate adapted to circumstances of cases	804
	Board of Studies, composition of	805, 807
	Representation on governing body	805
	Examiners, teachers and outsiders combined	805
	Professoriate, function of	805
	Roman Law, utility of study	805
	Option of subjects, and various avenues to degrees	805
	Professors, professional and otherwise	806
	London University and other Universities, relative positions	806, 808
	A little knowledge dangerous	807
Dicey, A. V. Day 40. Questions 17,118–17,242.	Oxford, Vinerian Professor	742
	Law lecturer, Incorporated Law Society	742
	Oxford degree in Law	742
	B.C.L.; thorough examination in Law	742
	Attendance at lectures, few intending laymen	742
	Law degree easier than *Literæ Humaniores*	742
	London University, law study, advantage of	743
	Law Faculty, connection of Inns of Court necessary	743, 747
	Oxford B.C.L.; qualification for call to Bar	743
	Legal degrees of other Universities	743
	Incorporated Law Society and University	743
	Graduation qualification for practice	743
	Representation of Incorporated Law Society on Senate	743
	University work done in Chambers	743
	Elements of law before study in Chambers	743
	America, legal training	743
	Estimation of degrees in America	743
	Moot Courts at Harvard Law School	744
	Endowment	744
	American Law Schools, high reputation	744
	Mr. Crackanthorpe's Article in the *Nineteenth Century*	744
	Discipline at Inns of Court and of Solicitors	745
	Barristers and solicitors, joint education	746
	Law Faculty, Oxford	747
	Laymen, Inns of Court lectures	747
	Practical lawyers as professors	750
Dickins, F. V. Days 5 and 6. Questions 2329-2931.	London University, Assistant Registrar	92
	Professorial University Association	92
	Absorption of institutions compulsory means	92
	Teachers, University professors	92
	One University, not two, for London, based on present University	93, 103
	Internal and external students	93
	University remodelled with Faculties and other machinery	93
	Senate, preponderance of teachers	93
	Medical Schools, retention of medical part of education	93
	Preliminary scientific examination by University	93
	Gresham Charter, objections	93
	Harmony between teaching and examination	93
	Dual examinations	94, 113
	Internal and external students, advantage of former	94
	Convocation, its action doubtful	95
	Value of degrees, maintenance of	95
	Convocations, objection to rejected scheme	95
	Convocations power of veto	95
	Funds	95
	Dublin University	95
	German system, examination by teachers	96, 98
	Compulsory attendance at professorial lectures	96
	Examination of students by their own teachers	96, 103
	Absorption of colleges, meaning of	96
	Statutory Commission for absorbing colleges	97
	Medical Schools, not to be absorbed	97, 108
	Technical examiners not teachers	98
	Professors, appointment by University	98
	City and Guilds Institution and Royal College of Science, absorption	99
	Professorial Scheme, reception by Senate and Convocation	99
	Convocation, inutility and improvement	99
	Colleges and Institutions, what to be absorbed	101
	Secondary education, management by University	104
	Post-graduate study	104
	Matriculation examination approved	104
	Theological Faculty, difficulty	105, 109
	Senate, representation of Faculties	106
	Representation of Institutions	106
	Governing bodies	107
	Examinations, alternative questions	109
	Medical Schools, number of University candidates from	111
	Difficulty from small fees	111
	Preliminary scientific examination, subjects	111
	Conjoint Board examination, not high	111
	Convocation, power of veto	113
	Provincial Colleges, preponderance of influence of London teachers	114
	London University medical examinations, method	115
Dickinson, W. H. Day 22. Questions 11,760–11,785.	Agreement with other Medical Schools	468
	St. George's Medical School	468
	Professorial Association's scheme, qualified approval	468
	Reservation of medical teaching for school, desired	468
	Absorption of Colleges approved	468
	Absorption of London University impracticable	468
	More practicable medical degree required	468
	Gresham scheme, approbation of	468
	Royal Colleges, connection with graduation	469
	Area for University, limit to London	469
Donnelly, Gen. Day 57. Questions 22,764–22,891.	Science and Art Department, South Kensington	1041
	History of Department	1041
	Normal School of Science, South Kensington	1041
	College of Science and Classes for Science, distinction	1042
	Numbers of students	1042
	School of Mines, numbers	1042
	Short courses for science teachers	1042

Names.	Subject Matter.	Page.
	Lectures and Laboratory instruction	1042
	Age of such students	1042
	Demand for trained teachers	1042
	Additional laboratories, proposed	1042
	No matriculation, but a test for paying students	1042
	Test of science knowledge required for others	1043
	Teaching University, absorption, affiliation, or recognition	1043
	Interference and control of Minister of State	1043
	Government and University working together	1044
	Certificates and Associateship granted	1044
	School of Mines, class of students	1044
	Extension of School, limit to numbers	1044
	Competition with other schools avoided	1045
	Training Colleges, connexion with	1045
	Associateship taken by Government students	1045
	Research by Associates	1045
	Laboratories, changes needing increase	1045
	Connexion with University to be considered hereafter	1047
	Government grant to College of Science	1047
	Students, numbers	1047
	Matriculation examination not approved	1048
	Secondary education	1048
Dyer, W. T. Thiselton. Day 32. Questions 14,554–14,721.	Kew Gardens	607
	Two Universities in London undesirable	607
	London University conversion	608
	Difficulty of teachers	608
	Much alteration required	608
	Imperial functions exaggerated	608
	Leave Imperial aspect alone	608
	Addition of Faculties and Boards of Studies	608
	Professorial scheme	608
	Affiliation of Colleges	609
	Representation on Senate	609
	Teachers' position with regard to University and College	609
	Curricula of study; arrangement by Faculty	609
	Faculties for different subjects	609
	Boards of Studies, appointment by Faculties	610
	Duties of Boards of Studies	610
	Chief power placed in Senate	610
	Senate, nomination of members by teachers	610
	Powers of Faculties	610
	Admission of schools	611
	Government institutions, association of	611
	Kew Gardens, teaching	611
	Science and Art Department, Faculty of Science	611
	Non-collegiate students	611
	London University prizes and scholarships; abuse	612
	Development of London University	612
	Chelsea Botanical Gardens	614
	Convocation, treatment of	614
Dykes, Rev. Principal. Day 17. Questions 8811–8922. Questions 8923–8932.	Presbyterian College, Guilford Street	345
	Theological Science, Faculty of	345
	Agreement with King's College *See* Wace, Rev. H.	345
	Non-Christian Colleges, inclusion of	349
	Course of study prescribed by University	350
	Examinations, course prescribed	350
	Lectures, compulsory attendance	350
Elwyn, Rev. Canon. Day 35. Questions 15,517–15,612.	Queen's College for Ladies, Principal	664
	Account of College; evidence of previous Commission	664
	More systematic and longer course of education than formerly	664
	Associateship and Fellowship courses	664
	Course of study	664
	First of the Colleges for Women	665
	Holloway College, competition	665
	Connexion with King's College	665
	Association with University desired	665
	Representation on Senate and Faculties	665
	Professorial scheme	665
	Charter of College, modification desired	665
	Age and numbers of students	666
	Property and endowment	666
Emerson, Wm. Day 56. Questions 22,742–22,763.	Evidence of Messrs. Anderson, Cates, and Slater followed	1040
	Age for entering architects' offices too young	1040
	Architectural and general education concurrent	1040
	Architecture and engineering, joining, a mistake	1040
	Female candidates for examination	1040
	Architectural Association, no funds	1040
	Royal Institute not an educational body	1041
	Fine Art course in University needed	1041
Emmott, G. H. Day 20. Questions 10,330–10,665.	Johns Hopkins University, Baltimore	408
	Foundation and object	408
	Procedure of trustees	408
	The President, his powers	408
	Board of University Studies	408
	Board of Collegiate advisers	408
	Full professors and associate professors	409
	Professors, appointment	409
	Board of Trustees	409
	Rivalry of Universities	409
	State aid to Universities	409
	Entrance examinations	410
	French and German, knowledge of	410
	Course of education	410
	Pass and honours examinations	410
	Lectures by students	411
	Teaching and examinations, close connexion	411
	Teachers as examiners	412
	Competition between Universities	412
	Degrees at Johns Hopkins University	412
	Law, study of	412
	Practical work in law	413
	Administrative law	413
	Medicine, study of; advanced scientific study	413
	Doctors of Laws and Philosophy	415
	Endowment of Johns Hopkins University	416
	Study, subjects and method	418
	Examination papers, publication of	418
	Examinations, frequency of	418
	Scholarships	419
	Fellowships	419
	Demonstrators	420
	Instructors and associates	420
Erichsen, J. Eric. Day 23. Questions 11,860–11,955.	University College	473
	Medical degrees, difficulty in obtaining	473
	London University degree, maintenance desired	473
	Degree of Scotch standard wanted	473
	Conjoint Board examination	473
	Literary and preliminary scientific examinations for University	474
	Qualifying examination by Conjoint Board	474
	Representation of Royal Colleges in University	474
	Final examination for M.D. by University only	474
	Final two years clinical study in London	474
	Federation of Hospitals for clinical study desirable	474
	Foreign study by medical students	474
	Fees for hospital study	474
	University control over schools and colleges	474
	Appointment of teachers, University control	474
	University professors, appointment of	475
	Gresham Charter, Medical Faculty	475
	Retrospective provision for graduation by practitioners	475
	Agreement with Sir George Young and Professor W. Ramsay	475
	Honorary degrees in medicine, difficulty	475
	Funds for new University	475
	Inspection of University College by University	475
	Advanced and post-graduate study	476
	Control of examinations by teachers	476
	Professorial scheme, University College	476
	Finances of University College	476
	Readier degree, need for, reasons	476
	Locality of degrees, marking immaterial	477
	Organization of University; Resolution by College	477
	Arts and Science, preliminary test	477

Names.	Subject Matter.	Page.
Fitch, J. G. Day 6. Question 2932–3310.	London University, Member of Senate	117
	Impossible plans, Scotch or German	117
	French type undesirable	117
	Co-ordination of Institutions	117
	Gresham Charter, its defects	117
	Teachers' appointment by University	118
	Professorial scheme preferred	118
	Post-graduate teaching	119, 133
	Representation of Colleges on Senate and Boards of Studies	119
	Senates rejected scheme, merits and defects	119
	Reasons for rejection by Convocation	120
	Compromise suggested	120
	Relation of University to teaching bodies	120
	Senate, Faculties, and Boards of Studies, constitution of	120
	Provincial Colleges, representation of	121
	Examinations and teaching, relations	121
	Collegiate and non-collegiate students	121
	External and non-collegiate work	
	Open examinations of London University indispensable	122
	Syllabuses, their nature and limit	122
	Entrance and intermediate examinations, collegiate	123
	Control and direction of work	123
	Collegiate professors and University professors	124
	Medical schools and degrees	129
	Training Colleges	130, 134
	Government grant, need for	130
	Gresham professorships	130
	Collegiate system, abandonment by University	131
	Convocation, defects	132
Fleming, J. A. Day 33. Questions 15,078–15,210.	Electrical Engineering, professor, University College	636
	Agreement with Professor A. B. W. Kennedy	636
	Faculty of Applied Science desired	636
	Science with reference to constructive Arts	636
	University not to supersede the workshop	636
	Scientific training, increasing need for	637
	Degree in Engineering unadvisable	637
	Subjects for degree in Applied Science	637
	Professions interested in this degree	637
	Laboratories and demonstrators, need for	637
	Course of study; pure and applied sciences	637
	Inter-collegiate system; economy of teaching	638
	Boards of Studies	638
	Matriculation examination	638
	Practical assessors to Boards of Studies	639
	Faculty of and degree in Applied Science distinct from Pure Science	640
Flower, Sir W. H. Day 30. Questions 14,025–14,145.	British Museum	581
	Director, Natural History Branch	581
	Gresham Charter, protested against	581
	University of London ignored	581
	Multiplication of Universities not good	581
	Second University objected to	581
	Medical Schools, grouping desired	581
	Faculties, grouping of teachers	582
	Professorial scheme impracticable	582
	Scientific professors, insufficiency of emoluments	582
	Students' fees sufficient	582
	British Museum, utilization of	582
	Co-ordination of teaching institutions	582
	Medical schools, amalgamation	583
	Royal Colleges of Physicians and Surgeons	584
	Agriculture	584
	London University and teaching institutions	584
Foster G. Carey. Day 4. Questions 1823–2067.	University College, professor	72
	Gresham Charter, disapproved	72
	Federation of institutions useless	72
	Views as to a Teaching University	72
	One University preferred to two	73
	Senate's scheme approved	73
	Teaching and examinations, relation	73
	Higher teaching and original research	73
	Funds, large, necessary	73
	Original plan of University College desired	73, 74
	Merger of colleges	74
	Medical Schools, independence of	74
	Professorships, endowment of	74
	Professorial scheme, medical teachers	75
	German and Scotch University systems	75
	Governing Body—outside members	75
	Written or oral examinations	75
	Absorption of Colleges, method	76
	Intercollegiate arrangements and community of funds	76
	Advanced work checked by elementary	76
	Examinations for external students, retention	76
	Pass and honour examinations	77
	Examinations by teachers and outside examiners	77
	Double system of examinations, difficulty	77
	College Professors, present and future	77
	Dublin system; external and internal students	78
	Functions of University, elementary and advanced	80
	Elementary work, sufficiency of King's and University Colleges	80
	Laboratories and appliances for advanced work wanted	80
	Scotch system of University preferred	80, 81
	Gresham scheme, power of professors insufficient	82
	Professorial scheme, King's and University Colleges	82
	Medical schools, how disposed of	82
	Minor institutions, how recognised	83
	External and internal students, distinct examinations for	83
Foster, Michael. Day 32. Questions 14,722–14,823.	Cambridge, Professor of Physiology	619
	Research, advancement of learning	619
	One University better than two	619
	Inclusion of all leading teaching institutions	620
	Connexion with University	620
	Education at constituent Colleges	620
	Collegiate share in University work	620
	Imperial character of London University, alteration	620
	University supervision over Colleges	620
	Laboratory accommodation for research insufficient	620
	Appointment of professors	621
	Remodelling of London University	621
	Faculties and Boards of Studies	621
	University and King's College, union with University	621
	Research in University and Colleges	621
	Provincial and non-collegiate students	621
	Second University, advantages of	622
	Degrees of two Universities, distinction	622
	Endowments and funds	624
Fry, Right Hon. Sir Edward. Day 12. Questions 6476–6632.	University College Council, member of	243
	Convocation, London University, member of	243
	London University, Senate	243
	External students, original affiliation of colleges	243
	Candidates from colleges and other Universities	243
	Finance, Government grant	243
	Professional bodies; relations with University	244
	Duplication of examinations, objection	244
	Teachers, want of connexion with London University	244
	Higher education in England; competition	245
	Competition between Universities	245
	Federal University for whole kingdom	245
	The three schemes before the Commission	245
	Gresham scheme; two universities in London an evil	245
	Gresham scheme, objection to	245
	Medical degrees, degradation of	246
	Professorial scheme, absorption of University	246, 250
	London University, incapacity for teaching	246
	Professorial scheme, objections to	246

Names.	Subject Matter.	Page.
	Medical schools, absorption	246
	Federal scheme, advocated	246
	Standard of degrees, maintenance essential	247
	Freedom of study to colleges	247
	London University, teaching and examination	247
	Convocation, consent of	247
	Medical degrees, Scotch and English	248
	Connexion between teaching bodies and University desired	249
	Influence of University in colleges	249
	Internal and external students, difference in examinations	249
	Medical examinations, practical and scientific subjects	250
	Supervision of teaching in colleges by University	250
	Laboratories, insufficiency of	251
	Intercollegiare arrangements	251
	Appointment of professors, lecturers, and readers	251
Gault, J. Day 31. Questions 14,146–14,336.	*See* evidence of Rev. H. Wace.	
Giffard, H. A. Day 34. Questions 15,281–15,396.	Formerly Professor under Council of Legal Education	652
	Modes of qualifying for Call to Bar in 1865	652
	Teaching school of Inns of Court	652
	Agreement with Mr. Crackanthorpe's evidence	652
	Legal University or Faculty of Law desired	652
	Relation to Inns of Court	653
	Work of the two respectively	653
	Laymen, education of	653
	Scientific law, study by professional candidates at University	653
	Finances; endowment by Inns of Court	653
	Influence of Inns of Court in University	653
	Property and privileges of Inns reserved	654
	Representation of Inns of Court	654
	Law Schools out of London; proposal for Oxford	654
	System of legal education needed by nation	654
	Solicitors, admission to Scientific degree	654
	Degree a condition for Call to Bar	654
	Teaching by Inns of Court, maintenance	657
	Graduation at any University sufficient	658
Gilbert, Alfred. Day 63. Questions 24,570–24,672.	Artist, education of	1137
	General knowledge, man of culture	1137
	University education, value of	1137
	Artistic technical education, not for University	1138
	Institutions for artistic training	1138
	Royal Academy, education at	1138
	Slade school, University College	1138
	Foreign travel and foreign languages	1138
	Foreign schools adapted for foreigners	1138
	History of Art, Archæology, and Comparative Anatomy, lectures on	1139
	No degree in Art required	1139
	General preliminary education for artists	1140
Groot, C. H. de. Day 61. Questions 23,805–23,893.	Royal Picture Gallery at the Hague	1100
	Graduate of Leipsic	1100
	Art and Archæology, lectures at German Universities	1100
	Illustrations at Museums	1100
	Examinations	1100
	Degree Ph.D.	1101
	Appointments for graduates	1101
	Students not numerous	1101
	Seminaries	1101
	General preliminary education	1101
Grove, Sir George. Day 53. Questions 21,474–21,668.	*See* evidence of Lord Charles Bruce.	
Halliburton, W. D. Day 48. Questions 19,897–20,241.	Agreement substantially with Professor Adams	901
	Union of Medical Schools	901, 905
	Centralization in some cases desirable	901
	See also evidence of Professor Adams.	
Heath, H. F. Day 7. Questions 3644–3834.	Bedford College for Ladies, Professor	144
	Professorial scheme, favoured	144
	Freedom of scope in teaching wanted	144, 146
	Gresham scheme, objections	144
	Competition by colleges for students	144
	Excellence in instruction	144
	Institutions to be included in University	144
	Laboratories, competition for	145
	Absorption of Bedford College	145
	Financial competition of Professors	145
	Representation on Governing Body	146
	Regius professors, functions of	147
	Theology at King's College	148
	Colleges unwilling to be absorbed	148
Heath, R. S. Day 28. Questions 13,094–13,352.	Mason College, Birmingham	537
	Gresham Charter, objections to	537
	Competition between Colleges	537
	Professorial scheme, a remedy	537
	Co-ordination of studies required	537
	Government of University, in whose hands	538
	University Professors, appointment not provided for	538
	University lecturers	538
	Faculties, consultation of	538
	Medical schools, professorial system	538
	King's College, denominational character	539
	Absorption of King's College	539
	University of London, conversion	539
	Teaching and examination, relation	539
	Mason College, representation on senate	539
	Provincial Colleges, effect of Gresham Charter on	539
	Medical Faculty, preponderance on Senate	539
	Medical students, residence	539
	Lowering of medical degrees, preponderance of Medical Faculty	540
	London University, medical degrees too hard	540
	Scotch degrees	540
	Mason College, appointment of professors	540
	Professors to represent special subjects	540
	Mason College, deficiency in equipment	541
	Endowments	541
	London University, Mason College candidates	541
	Oxford and Cambridge examinations, Mason College candidates	541
	London University schemes, Provincial College objections	542
	Residence for Scotch medical graduation, provincial college students injured	543
	Governing body, outside institutions	544
Henrici, O. Day 12. Questions 6633–6826.	Professorial University Association	252
	Agreement with Professor Karl Pearson	252
	Absorption of colleges and teaching by University	252
	Medical schools excepted	252
	Absorption of London University or a second University advocated	252
	Funds	252
	Present professors accepted	252
	Absorption voluntary and gradual	252
	Reasons for desiring absorption	252
	Connection between teaching and examinations	253
	Teachers examining their own pupils	253
	Professors, number of	253
	Competition in colleges	253
	German University system	254
	Gresham scheme, objection to	255
	Federal schemes, objection to	255
	Professorial scheme, favoured by professors	255
	Bedford College, approval by	255
	Competition, when undesirable	256
	Competition in Germany	257
Hill, John. Day 60. Questions 23,763–23,804.	Agriculture	1098
	Practical farmer	1098
	Pupilage, course pursued by witness	1098
	Course for educating pupils by witness	1098
	Experiments	1098
	Scientific teaching to follow practical work	1098

Names.	Subject Matter.	Page.
	Degree of University, age for	1098
	Laboratories, need for	1098
	Scheme for education by witness	1098
Holland, T. E. Day 43. Questions 18,314–18,470.	University organisation, attention to	811
	Gresham Charter, reconstruction needed	811
	Colleges too prominent	811
	Colleges not places of residence	811
	Their character	811
	University to be founded on the Faculties	811
	Name of University, maintenance	811
	Colonies and provincial colleges, connexion to be dropped	812
	Make purely local, drop Imperial character	812
	Faculties, number and names	812
	Theology, Faculty of	812
	Matriculation or other preliminary test	812
	Senate, constitution of	812
	Institutions, representation of	812
	Faculty Committees of Senate	812
	Constituent institutions of University	812
	Assembly of the Faculties	812
	Convocation, not to be assembled for 20 years	813
	Constitution of Convocation	813
	Congregation at Oxford, analogous	813
	Officers of University	813
	Collegiate teachers recognised and not recognised by University	813
	Assembly of Faculties, recognised teachers and professors	813
	University buildings	814
	For degree—matriculation, lapse of time and compulsory attendance	814
	Examiners, partly teachers partly external persons	814
	University, gradual development	814
	Law faculty; agreement with Sir Horace Davey	814
	Law studies at Oxford, English law	814
	Oxford and Cambridge Faculties; recognition by Inns of Court	815
	B.C.L. at Oxford an honour standard	815
	Law (professorial) Chairs	815
	Salaries of professors; fixity of tenure	816
	Pass and honours	818
Howse, H. G. Day 11. Questions 6307–6475.	Royal College of Surgeons	235
	Agreement with evidence of Mr. Hulke	235
	London University scheme, preferred	235
	Senate, size of	235
	Tenure of office of Senator	235
	Examination of students by their own teachers	235
	Teaching and examinations, harmony between	236
	Control of Medical examinations by Royal Colleges	236
	Teaching and external examinations, combination in University	236
	Residence for clinical study for two years desired	236
	Medical degrees for non-residents	236
	Professorial scheme impracticable	236
	Gresham scheme as a second resource	237
	Two Universities for London	237
	Want of easier medical degree	238
	Pass and honours medical degrees	239
	Medical Schools, complexity of	241
Hulke, J. W. Day 11. Questions 5884–6306.	Royal College of Surgeons	222
	Teaching University for London desired	222
	Several schemes considered	222
	Scheme of Senate of London University favoured	222, 235
	Gresham scheme, objections to	222
	University of London should fill prominent position	222
	Professorial University scheme objected to	222
	Influence of professors on Senate	222
	Teaching for London and examining universally, combination	222
	Colleges of Physicians and Surgeons; their work and buildings	223
	Medical qualification and graduation, conjunction of	223
	External examiners, junction with Collegiate	223
	Examinations, delegation to colleges objected to	223
	Teachers as examiners	223, 226
	Residence in London desired	223
	Gresham Scheme, subject to conditions, acceptable	224
	London Medical examination high and difficult	224
	Representation of Royal Colleges on Senate	224
	Two universities for London undesirable	224
	Degrees for resident and non-resident candidates identical	225
	Lecturers, appointment by Senate, in or independent of Medical Schools	225
	Medical license by graduation	225
	London medical degrees, reasons for paucity of candidates	226
	Edinburgh candidates from London	226
	Two years' residence for medical students desired	227
	Royal Colleges and University, conjoint examinations	227
	Royal Colleges, collegiate and non-collegiate candidates	227
	Medical degree easier than London University required	228
	Want of degree for general practitioners	228
	Preliminary Scientific examination, objections	228
	Examinations of Scotch Universities and Royal Colleges compared	229
	Medical education influenced by Royal Colleges	230
	Licensing power, annexation to graduation	232
	Clinical study, London and Provincial medical schools	233
Hunt, Rev. B.; Turpin, E. H. Day 54. Questions 21,848–22,071.	Trinity College, London, for music	991
	Foundation and objects	991
	Formerly for Church of England	991
	Women students admitted	991
	Constituted by deed, not Charter	991
	Curriculum in music, general	991
	The Council	991
	General education insisted on	991
	London University musical degree, promoters of	991
	Matriculation, general examination or certificate required	992
	Associateship and Licentiateship	992
	Cause for Licentiateship	992
	Graduates at various Universities, numbers	992
	Income and sources thereof	992
	Professors, staff of	993
	Boarders and lodging-houses abandoned	993
	Students, number of	993
	Schools, examinations in	993
	Royal College and Academy of Music, similar work	993
	Competition, effect	993
	Faculty of music and association desired	993
	Musical teaching, University regulation wanted	993
	London University degree valued highly	994
	Matriculation examination deters candidates	994
	Faculty composed of professors satisfactory	994
	Oxford and Cambridge, contemplated limit to residents	994
	Associateship, Licentiateship, and Fellowship open to all	994
	Examiners, professors and outsiders	994
	Licentiateship, difference from Royal Academy	994
	Age of students entering	995
	Performing and philosophic sides, University control	995
	Dual function performed, teaching and examining all comers	996
	Funds	996
	Scholarships	996
	Guildhall School of Music	999
	Post-graduate courses	999
	College of Organists	999
Hunt, Holman. Day 58. Questions 23,073–23,167.	Fine Arts	1059
	University education	1059
	Little benefit to artists professionally	1059
	History of art	1059

Names.	Subject Matter.	Page.
	Professor of Fine Arts, lectures by	1059
	Royal Academy of Arts, sufficiency of	1060
	Places for learning, too many	1060
	Collection of casts at South Kensington	1060
	Faculty, if any, theoretical	1061
	History, perspective, &c. might be taught	1062
	Germany and France, no University faculty in Art	1062
	Pupilage or apprenticeship, termination	1062
	University training, value	1064
	Anatomy, study of	1065
Huxley, Rt. Hon. T. H. Day 29. Questions 13,491–13,697.	Construction and functions of University, views as to	553
	Existing Universities, nature of	553
	"Faculties," Divinity, Law, Medicine, and Arts	553
	Reversion to primitive type	553
	Research and increase of knowledge	553
	Gresham Charter inadequate	554
	Medical representation excessive	554
	London University, prestige not utilized	554
	Gifts and bequests to University not encouraged	554
	No advantage save conciliation of certain interests	554
	Suggestions	554
	Retain title and prestige of University	554
	Reorganise University	554
	Teaching institutions, status as Faculties	554
	Examine their own candidates for degrees	554
	Provide means for instruction	554
	Professoriate, representation on Senate	554
	Endowments, fees, and funds	554
	Expenses, payment out of Chest	554
	No bar to obtaining instruction	554
	Exclusion as a disciplinary measure	554
	Professorial University, concurrence	554
	Absorption, objection to term	554
	King's and University Colleges, absorption	554
	Medical Schools, absorption	554
	Medical education, bad	554
	Teachers should give up practising in medicine	555
	Hospitals, laboratories for medical students	555
	Royal Colleges and Schools as Teaching Institutions	555
	Regulation by University	555
	Professional rewards for medical men small	555
	Royal Colleges, part to be taken by	555
	Licensing power of Royal Colleges	555
	License by graduation	555
	Senate's scheme, joint examination approved	555
	Convocation, power of veto	556
	Faculties and Boards of Studies	556
	Law Faculty; Inns of Court	556
	Science	556
	Faculties, relation to teachers	556
	Students, professional and scientific	556
	Degrees, value of	556
	Music, Royal College of, position	557
	Inns of Court, law degree	557
	Professors, appointment of	557
	Ad eundem degrees	557
	Zurich, laboratories and teaching appliances	558
	Matriculation examination, objection to	563
	University Extension teaching	563
	Three classes of teaching for University	563
	Compulsory attendance and curricula	564
	Secondary education	566
Ingram, J. R. Day 48. Questions 19,554–19,896.	Trinity College, Dublin	886
	Position of College in University	886
	Only one College in University	886
	Governing bodies of College and University	886
	Professors, appointment of	886
	College student, course of	886
	Course four years	886
	Number of students	886
	Examinations and lectures	886
	Attendance at lectures not compulsory	887
	Resident and non-resident students	887
	Non-resident system objected to	888
	Cannot be got rid of	888
	Dates probably from beginning of last century	888
	Best work by resident students	888
	All honour men reside	888
	Professional degrees; studies follow graduation in Arts	888
	Number of students	888
	Number never attending lectures	888
	Curricula of examinations; influence of teachers	888
	Tutorial system	888
	Examination by teachers	889
	External students, disadvantage of	889–892
	External examiners, not satisfactory	889
	Science included in Faculty of Arts	889
	Arts, two sides, Science and Literature	889
	Engineering, separate Faculty	889
	Degrees in Engineering	889
	Professional classes, numbers of students respectively	889
	Medical, licence to practise	889
	Divinity denominational, late Established Church	889
	Law degree, joint system with King's Inns	889
	Call to Bar by Inns	889
	Degree not essential for call	890
	Law degree, advantage of	890
	Medical degree, relation with Colleges of Physicians and Surgeons	890
	Roman Catholics and Presbyterians	890–892
	External students only in Arts Faculty	890
	Arts students, science and literature, studies	890
	Honours	892
Jenks, E. Day 62. Questions 24,427–24,569.	Law, Professor of, University College, Liverpool	1130
	Teacher at Cambridge and Melbourne University	1130
	University machinery too complicated	1130
	Law study under special Board	1130
	Duties of Board	1130
	Supreme general Body for University	1130
	Both bodies partially identical	1130
	Powers of general over special body	1130
	Constitution of the two bodies, internal and external members	1130
	University and professional bodies, relation of	1131
	Classes of students, two	1131
	Examinations and course of studies	1131
	Call to Bar, Melbourne, University examinations	1132
	Law Society, Melbourne, special technical examination	1132
	University and Teaching Bodies, London, relations of	1132
	Law, higher branches not to precede technical education	1132
	Law studies, groups and systematic study	1133
	Roman Law	1133
	Lectures, value of	1133
	Discussions and moots	1133
	Faculties or Departmental Boards, constitution	1133
	International Law, not law but diplomatic history	1134
	Professorial body, independent of general body	1135
	University and Colleges, relation	1135
	University of Melbourne, organization	1136
	Board of Legal Studies, Liverpool, constitution	1136
Jennings, H. R. Day 25. Questions 12,314–12,460.	*See* Sir J. Lubbock's evidence	1136
Kennedy, A. B. W. Day 33. Questions 14,931–15,077.	Professor of Engineering, University College	629
	Applied Sciences, degree in	630
	Engineering, University education	630
	Lectures, number of students	630
	Engineering educational institutions in London	630
	Teaching University, work for	630
	Scientific training generally desired	630
	Professional training not in University	630

Names.	Subject Matter.	Page.
	System of education, pupilage	630
	Institution of Civil Engineers, requisitions	630
	Age of students	630
	Degrees, need for	630
	Nomenclature of degrees	630
	Degree in Engineering, objection to	631
	Subjects of study for degree	631
	Faculty of Applied Science besides Faculty of Science	631
	German system	631
	Laboratories, University College and elsewhere	631
	Drawing	632
	University not to supersede workshop	632
	Original work for doctorate	632
	Faculty and Boards of Studies	632
Kennedy, Hon. Sir W. R. Day 54. Questions 22,072–22,123.	Judge of High Court	999
	Mr. Crackanthorpe's evidence, general agreement	999
	Inns of Court and University, difference of study	999
	Arrangement between Inns and University	1000
	Students of Inns beyond University education	1000
	London University education, kind of required	1000
	Faculty of Law, Inns and Incorporated Law Society	1000
	Degree of some University a *sine quâ non* for Call to Bar	1000
	Lectures and examinations also	1000
	Certificates of attendance and proficiency also	1000
	Faculty of Law, other teachers besides those of Inns and Society	1000
	Control appropriate for Inns of Court	1000
	Indian students; alternative subjects	1001
	Endowment by Inns	1001
	Students other than professional, degree for	1001
	Reporting of Cases as a test for Call	1002
	Liverpool School of Law	1003
	Lectures open to all University students	1003
	Reading in barristers' chambers	1003
	Moots and discussions	1003
	Standard of teaching at Universities	1004
	International Law	1004
	Local bars, local teachers	1004
Lister, Sir Joseph. Day 18. Questions 1952–9734.	King's College	373
	Gresham Charter approved	373
	Federal system preferred to professorial	373
	Waste of power and overlapping	373
	Examination of pupils by own teachers	373
	Examination, equality of; independent examiners	374
	Excessive medical representation; lowering of degrees	374
	Autonomy of Colleges, preservation of	374
	Two Universities preferred to converting University of London	375
	Development of new University gradually	375
	Graduation of English students at Scotch Universities	375
	Independence of new University of Royal Colleges	375
	Victoria University; opposition to Gresham Charter	376
	Clinical practice, London and Scotland compared	381
	Scotch degrees, attraction to London students	381
	University of London, King's College candidates for degrees	382
	King's College, religious test	383
	Gresham Charter, cause of application for	384
Liveing, Edwd. Day 18. Questions 9170–9303.	Royal College of Physicians	357
	Examination of pupils by their own teachers	357
	Royal Colleges, practice of at examinations	358
	Revised scheme of London University accepted	358
	Essentials in any scheme	358
	Representation of Colleges on Governing body	358
	Association with University in examinations	358
	Union with Medical Schools	358
	Open graduation and Provincial difficulty	358
	Gresham Charter, representation by teachers	358
	Relations between the Royal Colleges, permanence of	358
	Need for a local teaching University	358
	Second University objected to	358
	Professorial scheme disapproved	359
	Reorganization on lines of Revised Scheme	359
	Non-collegiate and provincial students	359
	Apothecaries' Society	361
London, Bishop of. Day 16. Questions 8016–8293.	Gresham University Charter; supporter	309
	Plan and purpose of Charter	309
	Development and improvement	309
	Professors, University and Collegiate	309
	Discipline	310, 316
	Inter-collegiate system, waste of power by duplication	311
	Medical Faculty, representation excessive	311
	Medical qualification by graduation	311
	Conversion of London University into a teaching University, whether practicable	311
	Second University, injury to London University	311
	Theology; faculty of Theological Science	312, 313
	University and Collegiate professors, higher and lower teaching	312
	Inter-collegiate system, financial competition	313
	Laboratories, disadvantage of Federal University	313
	Non-collegiate students	313
	Colleges of less than all Faculties	314
	King's College, religious tests	314
	Trinity College, Dublin, external and internal students	316
	Professors, appointment of, University influence	316
	Funds, contribution by Colleges	317
	Parliamentary grant	318
	Research and post-graduate instruction, provision for	319
	Gresham professorships	319
	King's College, Church of England, founder's intention	321
	Value and modification of test	321
	Government of College	322
Longbourne, J. V. Day 39. Questions 16,975–17,103.	Legal Education Association	731
	Law Faculty	731
	Foundation and objects of Association	731
	Law University, establishment of	731
	Incorporated Law Society, hesitation of	731
	Meeting of members and resolution in favour	732
	House of Commons, resolution proposed 1871	732
	Reasons for resolution	732
	Deputation to Prime Minister	732
	House of Commons, motion 1872	732
	Petitions in support	732
	Resolutions, motion for adoption, rejection	733
	Report of Association	733
	Resolution, Inns of Court scheme inadequate	733
	Bill; Incorporation of Inns of Court; School of Law	733
	Bequest by Mr. Justice Quain, 10,000*l.*	733
	Examination for solicitors	734
	Admission of solicitors, law as to	734
	Articles, abolition of, proposed	734, 737
	Proposal in lieu of articles	734
	Statutory provisions	734
	Substitution of University for Incorporated Law Society	735
	Lectures of Incorporated Law Society, abandonment	735
	Funds for education	736
	Legal bodies and University, joint examinations	738

Names.	Subject Matter.	Page.
Day 40. Question 17,117.	University examination, substitution for that of Incorporated Law Society, approved by Society	739
	Incorporation of Inns of Court	739
	School of Law Bill, provisions of	739
Lubbock, Sir J.	Working Men's College	496
Mure, R. J.	Origin and objects of the College	496
Jennings, H. R.	Evening work	496
Day 25.	Attendance, voluntary	496
Questions	1,000 students	496
12,314–12,460.	Certificates given	496
	Connexion with University desired	496
	Attainment of degrees improbable	496
	Objects in desiring connexion	496
	Collegiate study as part of University course	497
	Subjects of study	497
	London University, subjects too numerous	497
	Staff of teachers	497
	Representation in governing body	497
	Possibility of higher graduating desired	497
	Registration from term to term	497
	Alliance with similar teaching institutions	498
	Higher branches of education desired	498
	Funds of college	498
	Scientific apparatus	498
	Library	498
	Class of students	498
	Advantage of University connexion	498
	University Extension Association	499
	London University modified, preferred to new University	501
Mackenzie, A. C.	Royal Academy of Music	984
Threlfall, T.	Foundation, date of	984
Day 53.	Residents originally	984
Questions	Accommodation inadequate	984
21,669–21,847.	Academy for professionals originally	984
	Public desire for instruction	984
	Course of studies	984
	Examinations and certificates	984
	Associateship	984
	Degrees, no power to grant	984
	Royal College of Music, work similar	984
	Relations towards Royal College	984
	Trinity College, no connexion with	985
	General knowledge, when required	985
	Teaching University, Faculty of Music	985
	Musical degrees	985
	Practical as well as theoretical teaching	985
	Composition test	985
	No foreign musical degrees	985
	Standard for degree	985
	Teaching of University theoretical	986
	University and Colleges, mode of connecting	986
	Mus. Doc., value of degree	986
	Certificates, in what case to outsiders	986
	Standard high, numbers	987
	Competition, lowering of degrees	987
	Charter of Royal Academy	987
	Preliminary general examination, subjects for	987
	Examinations, academy students and outsiders	989
Macnamara, N. C.	British Medical Association, number and constitution of	156
Day 8.	Medical degrees, facilities wanted	156
Questions,	Opinion of medical profession, how obtained	156
4006–4439.	Examinations of London University, prejudicial effect of	156
	Cramming the result	156
	Gresham Charter approved	156
	Statement of Association and recommendations	156
	Scotch degrees	157
	Fees	159
	Apothecaries' Society's examination	160
	Examination of pupils by teachers	160
	Two Universities for London preferred	160
	London University examinations, objections to	160
	Medical education at Cambridge	160
	Conjoint Board examination, good	160
	Inspection of medical schools	160
	Purport of witness's evidence	169
Magnus, Sir P.	Faculties in University	760
Day 41.	London University Charter, Faculties in	760
Questions	Faculty of Science, addition of	760
17,445–17,643.	Applied Science branch of Faculty of Science	760
	Engineering; application of Science to manufactures	761
	Polytechnics in Germany	761
	Polytechnics in London	762
	Entrance examination tolerably severe desired	762
	Engineers, education of	762
	Graduation not a diploma for profession of engineer	762
	License to practise	762
	None required now, but one wanted	762
	Degree in Engineering desired	763, 769
	Alternative papers and courses of study	763
	Architects, degree in engineering	763
	Representation of professoriate in Senate	763
	Faculties, representation of	763
	Teaching power, co-ordination of	763
	Inter-collegiate lectures and laboratories	763
	Professorial scheme, general approbation	763
	Representation of Institutions on Senate	763
	Branches of learning, representation of	764
	Representation of public bodies	764
	Absorption of institutions if willing	764
	City and Guilds of London Institute, position of	764
	College of Science, surrender of autonomy	764
	King's and University Colleges, absorption	764
	Endowments and State aid	764
	Strasbourg University, expenditure	764
	London University self-supporting	765
	Technical Education Commission Report	765
	Laboratories and chemists	765
	Science in engineering	766
Mahaffy, Rev. J. P.	Teaching and examining powers of an ideal University	1143
Day 64.	Unity essential	1143
Questions	Unity of general knowledge	1143
24,673–24,792.	Unity of teaching	1143
	Unity of traditions	1143
	University professors preferred to college teachers	1143
	Competing institutions not a University	1143
	London University not a University	1143
	Size of London antagonistic to a University	1143
	Size of practicable classes	1143
	Catechetical instruction	1143
	Teacher and student, personal contact	1143
	Limiting size, methods of	1144
	Low fees in Ireland, mischievous result	1144
	Technical education for the masses	1144
	German system, exclusion of technical subjects	1144
	Dublin sizarships for four students	1144
	Senate, small; composition of	1144
	Examinations frequent and conducted by teachers	1144
	External examiners, objection to	1144
	Endowment required enormous	1145
	Existing bodies, balance of interests of, impossible	1145
	Remuneration of Professors	1145
	One governing Board preferred to Boards of Studies	1146
	Faculties not represented at Dublin	1146
	Tutors subordinate to Professors	1146
	Syllabuses, advantage and disadvantage	1146
	Berlin University, size and expense	1146
	Assessors at examinations	1146
	External students, non-honour men	1146
	Teaching institutions of London, how to be united	1148
	Classical education to precede technical	1148
Max Müller, F.	Functions and principles of a University	566
Day 29.	Agreement with Professor Huxley	566
Questions	Supremacy of University over Colleges	566
13,698–13,773.	Matriculation a University function	566
	Professors and teachers, appointment of	566
	Buildings and laboratories, control of University	567
	Localization of University	567
	New Imperial University preferred	567

Names.	Subject Matter.	Page.
	Gresham Charter objected to	567
	Old institutions, incorporation in University	567
	Endowments, State and otherwise	567
	Mode of education; personal intercourse, teacher and pupil	567
	Constitution of University	568
	University chest, fees	568
	Degrees, purpose of	568
	Oriental studies	569
	German universities, seminaries	569
Milman, A. Day 19. Questions 10,211–10,329.	London University Registrar	403
	Agreement with Sir James Paget's evidence	403
	Practical difficulties of any new scheme	403
	Examinations of external and internal candidates	403
	Provincial colleges, impartiality	403
	Representation on Senate	403
	Two universities, objection to	403
	Royal Colleges of Physicians and Surgeons, joint examinations	404
	Professorial scheme, professorial representations	404
	Absorption of colleges	404
	University professors; higher education	404
	Convocation, difficulty as to	404
	Act of Parliament, necessity for	404
	Veto, power of Convocation	404
	Teaching and examining functions of University	405
	Teachers on governing body	405
	Laboratory and other accommodation	407
Monk, J. E. Day 35. Questions 15,397–15,516.	*See* Rev. S. A. Barnett's evidence.	
Moore, Norman. Day 18. Questions 9304–9520.	Royal College of Physicians	363
	University in London desired in 1838	363
	Still ready to take part	363
	Chief Medical Authority since 1518	363
	Dignity and historical associations	363
	Society of Apothecaries, how proposed to be treated	364
	Fellows and teachers of College of Physicians	364
	Moral control over members	364
	Provincial schools	364
	London University scheme, assent to	364
	Gresham scheme, conditions of joining	364
	Convocation of University, treatment	364
	Medical schools, representation on governing body	365
	Representation of Royal Colleges	365
	Medical Faculty, constitution of	366
	One University preferred to two	366
	Degree should signify more than license	366
	Preliminary and Preliminary Scientific examinations	366
	Apothecaries' Society, originators of general examinations	367
	General education of medical men—Apothecaries	367
	Pass and honours degrees	367
	Residence in London, opinion of College of Physicians	371
Moreton, Lord. Day 60. Questions 23,489–23,536.	Royal Agricultural Society	1084
	Chairman of Education Committee	1084
	Examinations of Society	1084
	Senior examination, prizes, certificates	1084
	Subjects of senior examination	1084
	Syllabus of subjects	1084
	Method of examination	1084
	Candidates and passes, statistics	1085
	Junior examination	1085
	Scholarships	1085
	Social class and professions of candidates	1085
	Degree in science for agricultural students	1085
	Degree not competitive with diploma	1085
	Oxford and Cambridge, agricultural degree, desired	1085
	Edinburgh, agricultural degree at	1086
	Diploma of Society, practical	1086
Mure, R. J. Day 25. Questions 12,314–12,460.	*See* Sir J. Lubbock's evidence.	
Norris, G. M. Day 26. Questions 12,739–12,844.	Birkbeck Institution	517
	Origin, object, and date of foundation	517
	Funds	517, 519
	Fees	517
	Course of studies and subjects	517
	Examinations	517
	Attendances, number of	517
	Science and Art Department, connexion with	517
	Students, number of	518, 519
	London University, numbers passing	518
	Recognition by University required	518
	Representation on Senate	518
	Standard of London degrees	520
Oakeley, H. E. Day 44. Questions 18,471–18,843.	Agreement with Mr. Sharpe's evidence	830
	See Evidence of Rev. T. W. Sharpe.	
Page, H. W. Day 22. Questions 11,816–11,830.	St. Mary's Medical School	471
	One University Preferred	471
	Examination of pupils by teachers	471
	Professorial scheme approved	471
	Royal Colleges, exclusion from control	471
	Medical Faculty, share in government	471
	Representation of school	471
	St. Mary's School as a College of Science	471
	London University and second University, characteristics of	471
	London degrees too difficult	471
Paget, Sir James. Day 19. Questions 9735–10,210.	University of London, Vice-Chancellor	385
	Letter, University to Royal Commission	385
	Two Universities, opposition to	385
	Gresham scheme, attitude of University	386
	Professorial scheme, not before University	386
	Competition between Universities, lowering of degrees	386
	Expense of a second University	386
	Laboratories and buildings of London University, insufficiency of	386
	Scheme and Charter submitted to Convocation and rejected	386
	Objected to by University and King's Colleges	386
	Scheme and Charter put in	387
	Peculiarities of scheme	387
	Imperial combined with teaching University contemplated	387
	Combination, no difficulty	387
	Professorial scheme, objection to	387
	Professors examining their own pupils	387
	External examiners, joining of	387
	Absorption of institutions	388
	Representation of teachers	388
	Constituent colleges	388
	Provincial colleges	388
	Reconstitution of University of London	389
	Candidates from outside London, number of	389
	Candidates from private study	389
	Pass and honour degrees	389
	Degrees, value of systematic study	389
	St. Andrews' University, cheapening of degrees	390
	One University, advantages of one only	390
	Standard, maintenance of	390
	College curriculum and professors, influence of University	391
	Professors for post-graduate study	391
	Teaching University, meaning of	391
	Teaching element on Senate	391
	Control of teachers over examinations	392
	Medical degrees, designation of	393
	Secondary education	293
	Higher teaching and research	393
	Preliminary scientific examination	393
	Period required for medical graduation	394
	Medical candidates at University, number of	394
	Senatus Academicus, advantage of such body	395

Names.	Subject Matter.	Page.
	External students, course for, advice on	395
	London University as Teaching University, great change required	396
	Teachers as examiners with outside examiner	396
	Influence of teachers on examinations	396
	University Extension, secondary education	396
	Convocation, submission of Charters to	397
	London University, annual expenses	398
	Covered by examination fees	398
	Original grant 5,000*l.*	398
	Double examinations, Parliamentary grants	398
	Examiners at University, standard high, competiton	399
	Medical degrees, facilities for	400
	Brussels M.D.'s	400
	Reconstitution of University, appeal by Convocation	402
Payne, F. Day 22. Questions 11,845–11,849.	St. Thomas's Hospital Medical School	472
	Agreement with other Medical Schools	472
	One University desired	472
	London University scheme preferred	472
	Professorships desired	472
	Gresham scheme as alternative	472
	Royal Colleges, inclusion in scheme	472
	Medical schools, representation of	472
	New medical degree, licence to practise	472
	Greater facilities for graduation	472
	Improvement in medical education	472
	Standard for pass degree	472
	Mr. Boyd's evidence, remarks on	472
Pearson, Karl. Day 10. Questions 5364–5883.	Professorial University, Association for promoting a	201
	Scheme of the Association	201
	List of members of the Association	201
	Absorption of institutions	202
	Union of all teachers in scheme	202
	Exception of King's College and Medical Schools	202
	University College	202
	Support accorded to scheme	202
	Main idea, not a federal University	202
	Laboratories, competition	202
	Laboratories, one first class wanted	202
	Constitution of proposed University	203
	Gresham Charter, objections to	203
	Central Institution, character of work	203
	Professorial University, advantages	206
	London University, absorption of	206
	Failing consent to be absorbed	206
	Senate's schemes, not approved	206
	Convocation, opposition of	206
	University of London, union of teaching and examining externally	207
	Disadvantage for external candidates	207
	Provincial colleges, representation	207
	Government grant	207
	Medical schools, absorption	207
	Preference of Medical Schools for Gresham Scheme	207
	Pressure on London University and colleges to join	207
	Faculties, number and kinds of	208
	Professorial scheme, medical views	209
	Lowering of degrees	209
	Medical qualification by graduation in London	210
	Royal Colleges of Physicians and Surgeons, Governing Body	210
	Elementary and advanced teaching by professors	210
	Absorption of Colleges; management of their trusts and property	213
	Resolutions of University College	213
Pell, Albert. Day 60. Questions 23,537–23,697.	Agriculture	1087
	Royal Agricultural Society, member of	1087
	Cambridge and Counties Agricultural Educational Association	1087
	Origin and purpose of Association	1087
	Scientific instruction at Cambridge University	1087
	Students not members of University	1087
	Action of University apart from Association	1087
	Professors of the University	1087
	Teaching to be scientific, not practical	1087
	No Faculty of Agriculture, and no degree	1087
	Scientific training for landowners	1088
	Not necessary for ordinary farmers	1088
	Scientific and practical training to be kept distinct	1088
	Degree, utility of	1089
	Model farms, inutility of	1089
	Laboratories, museums, &c. in London	1089
	Education suitable for farmer	1089
	Cambridge University Committee just formed	1090
	Course three years	1090
	Diploma then required	1090
	Examination by practical farmer	1090
	Normal schools induced from University teaching	1091
	Scholarships of Royal Agricultural Society	1091
	Cambridge agricultural students, social status of	1092
	Funds, fees, &c. at Cambridge	1092
	Education of farm labourers	1093
Pennington, R. Day 36. Questions 15,706–15,941.	Incorporated Law Society, President	671
	Foundation and Incorporation	671
	Objects of foundation	671
	Confined to solicitors	671
	Examinations commenced in 1836	671
	Power to examine given in 1877	671
	Appeal if certificate refused	672
	Examinations, number and kind	672
	Subjects of preliminary examination	672
	Intermediate examinations, subjects	672
	Final examination, subjects	672
	Numbers; failing and succeeding	672
	Honour examination	672
	Prizes	673
	System of teaching	673
	Lectures and classes abandoned	673
	New system, tutorial	673
		675
	Private tutors frequently	673
	Lectures and law classes in country supported	674
	University degree insufficient for qualification	674
	Admission, power of, retention by Society	674 675
	Law degree, at new University desirable	674
	Period for articles five years	674
	Representation of Society on Faculty of Law	674
	Representation on Senate	675
	Articleship, study after office hours	681
Plunkett, Lieut.-Colonel. Day 35. Questions 15,613–15,705.	Oriental languages, study of	668
	Increasing need for study	668
	No facilities for learning in London	668
	England behind other nations	668
	Teaching in University desired	669
	Native teachers wanted	669
Pollen, J. Day 46. Questions 19,209–19,263.	Indian Civil Service	866
	London University, how to be utilized	866
	Course pursued by witness	866
	Professors in Vernaculars of India	866
	Government documents for study	866
	Grammatical knowledge, acquisition here	866
	Colloquial in India	866
	Latin and Greek, retention of	866
	Civil Service Examinations, defects of	867
	Viva voce examinations	867
	Revenue branch, Magisterial functions, law needed	867
	Justinian useless	867
	Practical legal education wanted	868
	History, Indian and Constitutional	868
	Politics	868
	Colonial Institute, school for Eastern languages	868
Pollock, Hon. Sir C. E. Day 52. Questions 21,380–21,473.	Judge of High Court	969
	Law Faculty	969
	Agreement with Mr. Crackanthorpe's evidence	969
	Law degree of weight wanted	969
	Object not attainable by Inns of Court alone	969
	Personal experience of legal education	969
	Lord Selborne's school of law schemes, reasons for failure	969
	Call to Bar by Inns of Court only	969

Names.	Subject Matter.	Page.
	Co-operation with University	969
	Reading in barristers' chambers, certificate of	969
	Representation on Senate and Law Faculty	969
	Pecuniary assistance to University	969
	Duplication of examinations, avoidance	970
	Scientific knowledge and study, increase	970
	Law study with general work at Universities undesirable	970
	Practical work for two years advised	970
	London University training, place for	970
	Legal knowledge, present deficiency	970
	Degree for principles of law and scientific study	970
	Roman law, doubt as to value of	970
	Lectures and examinations, harmony between	970
	University and Inns of Court, relation between	971
	Moot courts and debating societies	971
	Harvard University, collegiate debates	971
	Oxford and Cambridge law degrees, disapproved	971
	Teaching by University approved	971
	Funds, Inns of Court	971, 973
Pollock, Sir F. Day 37. Questions 16,154–16,351.	Corpus Christi, Professor of Jurisprudence, Oxford	692
	Council of Legal Education, Professor of Common Law	692
	Legal degree, value of	692
	Law Faculty in University	692
	Graduation and qualification for practice	692
	Faculties under Gresham Charter	692
	Faculty of Law, composition of, and position of Inns of Court	692
	Legal department at Oxford	693
	Law study and degree at Oxford	693
	Professional and non-professional law	693
	Laymen, graduation in law	693
	Commercial men, study of law	694
	Mr. Crackanthorpe's evidence, agreement with	694
	University and Law Faculty, relations between	694
	Examinations for bar; acceptance of University degrees	694
	Board of Studies, importance of	695
	University professors, appointment of	695
	Law degrees two, Bachelor and Doctor	695
	Roman Law, study of	696
	Reading in barristers' chambers	696
	Law Faculty, increase of professors' chairs	696
	Attendance of Students probably small	696
	American systems	697
	University work and practical work	698
	Endowment, Inns of Court	699
Pryce, Rev. Principal Vaughan. Day 9. Questions 5181–5262.	Concurrence with Principal Cave and Professor Beet	195
	Degree in Divinity in this country desired	195
	Theological Faculty in University essential	195
	Gresham Scheme, approval	195
	Representation of Colleges in University	195
	College teachers, appointment of	195
	Teaching University for London desired	195
	Adaptation of London University, objections to	196
	Residence in Colleges	196
	Two universities in London, value of degrees	196
	Advanced Theological teaching	197
Pye-Smith, P. H. Day 30. Questions 13,774–14,024.	Paper contributed to previous Commission	570
	University of London; part in new scheme	570
	The late failure no hindrance	570
	Convocation's acceptance	570
	Senate's scheme, objection to	570
	Compulsion by Statute	570
	Two Universities objectionable	570
	Endowments of present University	571
	Laboratories wanted	571
	Examinations, standard of	571
	Gresham scheme; lowering of degrees	571
	University with two sides and two degrees	571
	Teaching and examination, advantage of collegiate students	571
	Teachers, influence of	571
	Senate, remodelling of	571
	Senate's scheme; University and King's College	571
	Examinations at Colleges	571
	Teaching and examining distinct	571
	External examiners joined with internal	572
	Teachers examining their own pupils	572
	Provincial Colleges, representation of	572
	Medical Schools, academical institutions	572
	Scientific teaching, improvement of	572
	Medical Schools, how united to University	572
	Collegiate and non-collegiate side of University	572
	Dissolution of London University if not joined	572
	Convocation, instability of	572
	Points of agreement with Convocation	572
	Representation of Convocation	573
	Veto of Convocation	573
	Title of "Dr.", value of	573
	Preliminary Scientific examination	574
	Matriculation examination	574
	Apothecaries, Society of	574
	Medical Schools, union for teaching	574
	Independence of State; funds	575
	Institutional representation; medical schools	575
	Professorial University Scheme	576
	London examinations, standard of	577
	Medical Schools, limits of University control	577
	Representation of Faculties	577
	Medical degrees; facility for attainment	578
	Teaching Association	579
	University College, position in University	579
	External candidates for degrees, diminishing	579
	Teachers, influence on Senate	580
Ramsay, W. Day 21. Questions 10,971–11,067.	University College	443
	University work done there	443
	Research work	443
	Relation to London University and its examinations	443
	Research, London University opposed to	443
	Teaching, freedom from University desired	443
	Examinations as tests of knowledge and work	444
	London University defects in examinations	444, 445
	External examiners	444
	Research professorships a mistake	444
	University and College professors	444
	Competition	444
	Professorial influence at University College	444
	Professorial appointments	444
	Gresham scheme, teachers' influence over examinations	444
	Two universities, cost of examinations	445
	Resolution as to new University at University College	445
Day 67. Questions 25,000–25,445.	Promoters of Gresham Charter	1191
	Points of unanimity among promoters	1191
	Syllabuses, freedom from, required	1191
	External examiners; examination by teachers	1191
	London University syllabuses, objections	1191
	London University examiners, distrust of	1191
	University Extension Work, not University work	1191
	Points of difference at University College	1192
	Professorial scheme and Gresham scheme	1192
	Senate and Convocation schemes unanimously disapproved	1192

Names.	Subject Matter.	Page.
	London University, radical alteration wanted	1192
	Dual University possible	1192
	Matriculation examination, objection to	1192
	Scotch system	1192
	German system	1193
	Training of students, distribution of subjects to Colleges	1193
	Central laboratories disapproved	1193
	Post-graduate Universities unreliable	1194
	Centralization	1195
	Demonstrators too few	1195
	Demonstrators, teaching of juniors by	1195
	Leipsic, system at	1195
	Professors, university and collegiate	1196
	Examinations, external to teaching objected to	1197
	Lowering of degrees, tendency of Gresham Charter	1198
	Teachers, recognition of, not of institutions, lowering of degrees	1198
	Practical examinations, inutility of	1199
	Teachers examining their own pupils	1200
	Examinations, some university, some collegiate, bad	1201
	External and internal students, alternative papers	1202
	University Extension lectures, selection of subjects	1203
	System not suitable for degree	1203
	Extension work, taking over by University	1204
	Professors, recommendation and appointment	1204
	Professorial schemes, why impossible	1205
	Regulations and Courses of University, settlement by professoriate	1207
	External students, advice as to study	1207
	Disadvantage of external students; opposition of Convocation	1208
	Endowments, University or Colleges	1209
	Denominationalism, Parliamentary grant	1209
	Gresham scheme; adhesion of institutions	1209
	University College; status as a University	1209
	Science College, Kensington, impossibility of Union	1209
	Federal University preferred to one Central Institution	1210
	Dublin, external students	1211
Reynolds, Rev. Principal. Day 17. Questions 8811–8922.	Cheshunt College	345
	Theological Faculty	345
	Agreement with King's College *See* Wace, Rev. H.	345
Rigby, Sir J. Day 58. Questions 23,168–23,249.	Law Faculty	1067
	Counsel for Gresham Charter	1067
	Council of Legal Education, no connexion with	1067
	Legal education, dissatisfaction with	1067
	Professional learning before practice little value	1067
	Scientific knowledge valuable	1067
	Roman Law of considerable importance	1067
	Examinations of Inns of Court	1067
	Co-operation of Inns of Court probable	1068
	Absolute control of Faculty by Inns and Law Society undesirable	1068
	Outsiders on the Faculty	1068
	Representation on Senate	1068
	General culture of students; examinations of Inns	1068
	Call of Solicitors to Bar, facilities for, and *vice versâ*	1068
	Degree essential for Call to Bar disapproved	1068
	University and Inns of Court, joint examination	1069
	Law degree by persons other than lawyers	1069
	Call to Bar retention by Inns of Court	1069
	Authority of University and Inns, danger of clashing	1069
	One University preferred to two	1069
	Necessary changes in London University difficult	1069
	Objection to changes by holders of degrees	1069
	London University a world-wide, not a metropolitan institution	1069
	Income of Inns of Court unknown	1070
	Lord Selborne's School of Law Bill	1070
	London University, teaching by	1071
	Parliamentary grant of London University	1071
	Statutory Commissions	1071
	Examinations, consolidation of	1071
Roberts, R. D. Day 25. Questions 12,461–12,618.	London Society for the Extension of University Teaching	503
	Present during Mr. Stuart's evidence	503
	Position of Society with regard to this inquiry	503
	Nothing asked for the Society	503
	Nature and objects of the Society	503
	Extension work by Oxford and Cambridge Universities	503
	Work to be handed over to University	503
	Nature and difficulty of lectures	503
	Lecturers, standard of	504
	Appointments	504
	Duration of appointments	504
	Payment of lecturers	504
	Joint Board, composition of	505
	Connexion with University, nature of	505
	Work of University for Extension purposes	505
	Recognition of Extension work by University	506
	Matriculation examination whether desirable	507
	Degrees, power of attainment of	507
	Finances *See also* Mr. Stuart's evidence.	509
Robinson, H. Day 47. Questions 19,264–19,450.	Civil Engineers, Professor, King's College	869
	Recommendations as to teaching engineering	869
	Surveying and levelling; Civil engineering	869
	Numbers of students, increase of	869
	Endowments at King's College	869
	Students, civil, mechanical, or electrical engineers	869
	Chemical and manufacturing pursuits	869
	Architecture	869
	Course of study, three years	869
	No diploma for engineering recognised	869
	Professional study after college; articles	870
	Demonstrators and assistants	870
	Funds of College, need of grant	870
	Professor, private practice	870
	King's College, one of the best technical schools	870
	Autonomy and prestige of King's College, maintenance of	870
	Gresham Charter, improvements and extensions under	870
	Degree of teaching University, advantage of	870
	Associateship of King's College prized	870
	Degree of Science at London University	871
	Degree of Science wanted	871
	Pure and applied science	871
	Mathematics, Mechanics and Natural Philosophy, teaching of	871
	Harvard University course compared with King's College	871
	Workshops and mechanical laboratory	872
	Architecture, instruction at King's College	872
	Matriculation test	872
	Engineering, University course	872
	University College, engineering department	872
	City and Guilds of London Institute	872
Rogers, J. C. Day 61. Questions 24,086–24,147.	Institution of Surveyors	1110
	Constitution and members	1110
	"Surveyor," classes comprised in term	1110
	Examinations for admission to Institute	1111
	Associates and Fellows	1111
	Training of Land Agents	1111
	Subjects of examinations	1111
	Degree in Rural Economy, including Agriculture	1111
	Wants not met by Agricultural Colleges	1112
	Teachers of County Councils insufficient	1112
	"Surveying" ambiguous in meaning	1112
	Oxford, Chair of Rural Economy	1112
	London preferable to Oxford for professorship	1112

Names.	Subject Matter.	Page.
	Degrees in Geodetical Surveying and Public Hygiene	1112
	Professorship of Agriculture disapproved	1112
	Course of studies	1112
Rollit, Sir A. K. Day 36. Questions 15,942–16,153.	Incorporated Law Society	683
	University course for solicitors approved	683
	Affiliation with University desired	683
	Representation on Senate	683
	Faculty of Law, representation on	683
	Correspondence tuition in lieu of lectures	683
	Correspondence tutors on Faculty of Law	683
	One University preferred to two	683
	Reorganization of present University	683
	Imperial examination work, maintenance of	683
	Graduation by solicitors in Arts as well as Law	683
	Duplication of examinations, avoidance of	683
	Exemption from preliminary examination	683
	Repeated examinations, interruption to study	683
	Professional and non-professional law	684
	Roman Law, value of	684
	Principles of Legislation and higher politics	684
	Law degree, acquisition by laymen	684
	Practical professional information, value to University	684
	Admission to practice by Society only	684
	Association of University's and Society's examiners	684, 687
	Roman Law and Jurisprudence, teaching in University	684
	Teaching available for students of constituent Colleges	684
	Scholarships by Society for University	684
	Duties on articles, application to education	685
	Inns of Court, association with University	685
	Solicitor and Bar students, equality of rights	685
	Amalgamation of the two branches	685
	Council of Incorporated Law Society	685
	Representation of Council on Faculty of Law	685
	Other representatives on Faculty of Law	685
	Board of Studies in Law	685
	Curricula of studies	685
	Evening classes of highest value	685
	Laymen, access of, to higher legal instruction	685
	University, character of	685
	Collegiate and non-collegiate students, examination of	686
	Degree in Commerce	686
	Subjects for degree	686
	Faculty of law, constitution	690
Roscoe, Sir H. Day 42. Questions 17,808–18,041.	Collegiate and University experience	780
	Professorial University Association	780
	Memorial from Association, higher education and research	780
	Professors to be the best men	781
	Equipment up to highest level	781
	Educational establishments, Liverpool and abroad	781
	Funds, State aid required	781
	Technical Education Acts	781
	County Council, funds at disposal	782
	Endowments	782
	Fees	782
	German Universities, expenses and aids	782
	Colleges of University, Arts and Science	783
	King's College a denominational institution	783, 791
	Merger of institutions in University	783
	Constitution of Governing Body	784
	Professors, appointment of	784
	Faculties, professorial	784
	Gresham Charter, Faculties and Boards of Studies, approved	784
	Victoria University, organization of Faculties	784
	Convocation, should be consultative but without veto	784
	Election of Members and Chancellor	784
	Senate or Court a body of weight	784
	Government collections, British Museum	784
	Initial organization of University; Statutory Commission	785
	Appointment of professors	785
	College funds, trusts	785
	Educational institutions not included, relation of University to	785
	Professional subjects; Medicine, Law, Theology	785
	Scientific Theology, not the time for yet	785
	Law, Inns of Court and other teaching bodies	785
	Medicine amalgamation of scientific teaching	785
	Clinical studies to follow scientific	785
	Competing interests of medical schools	785
	Applied sciences and commercial instruction	785
	Germany; technical education not in Universities	785
	City and Guilds Institute part of University	786
	Applied Science, Faculty of and degree	786
	Engineering, degree in	786
	University must be popular	786
	University Extension movement, how dealt with	786
	Present University the germ of the new	786
	Present external examinations, continuance of	786
	University to be remodelled	786
	Convocation, opposition of, how to be overcome	787
	Internal and external students, difficulties how met	787
	Women, instruction of, Bedford College	787, 792
	Holloway College	787
	Gresham Scheme, opposed to	787
	Higher teaching and research	788
	Regius professors, position and functions	790
	German Universities, advantages of system	790
Rücker, A. W. Day 1. Questions 342–504.	Royal College of Science	19
	Teaching University desired	19
	Gresham Charter disapproved	19
	Federal University objected to	19
	Absorption of Colleges and institutions	19
	University of London, the basis of new university	19
	Teaching University, and method of examinations	19
	Evening instruction outside University	19
	Entrance examination	20
	Science Faculty and degrees	20
	Laboratories and equipment, insufficient	20, 21
	Medical Schools, scientific teaching	20
	University Extension system	20
	Teachers, control of, by University	21
	Teaching and examining by University	22
	Alternative papers	22
	University, local and Imperial	22
	Governing Body of University	23
Russell, W. J. Day 7. Questions 3311–3643.	Bedford College for Ladies, Chairman	135
	Foundation and work of College	135
	London University opened to women 1879	135
	College students go to no University but London	135
	Statistics of College	135
	Funds, education and laboratories	135
	Gresham Charter disapproved	135
	London University remodelled, desired	135
	Professorial scheme preferred	136
	Teaching and examination, connection of	136
	Certificates of proficiency	137
	Faculties at College	137
	Laboratories	137
	Resident and non-resident students	137
	Professors	138
	Salaries of teachers	138
	Age for entrance	138
	Absorption; surrender of buildings	138
	University; external and internal students	139

Names.	Subject Matter.	Page.
	Indirect representation of Colleges	142
	Partial and complete absorption	142
	Influence of University	142
Day 52. Questions 21,125–21,379.	St. Bartholomew's Hospital, Chemistry	959, 965
	Teaching for ordinary students and higher for University candidates	959
	Teaching may be before entering school	959
	Extent of teaching	959
	Laboratories at hospital	959
	System of scientific instruction	959
	System good, but too short for chemistry	959
	Tests by professors' examinations	960
	University, connection with and control by	960
	Fees, payment by	960
	Endowment or regular stipend wanted	960
	Private practice, analysing objectionable	960
	Lecturers and demonstrators, payment	961
	Work for University candidates	961
	Smaller schools, grouping for higher study	961
	"Signing up" for chemistry	961
	Conjoint Board, no examination by teachers	962
	Medical schools, chemistry	962, 964
Savage, D. Day 26. Questions 12,619–12,738.	*See* evidence of Rev. Prebendary Whittington.	
Schafer, E. A. Day 22. Questions 11,563–11,759.	University College Medical School	461
	Agreement with Mr. Boyd's evidence	461
	Pass and honours degree	461
	Gresham scheme, preference for	461, 462
	London University scheme, objection to	461, 463
	Endowments, second University	462
	Professorial scheme not practical	462
	Provincial students, exclusion of	462
	Gresham scheme, residence required	462
	Medical representation	462
	Representation of Colleges	462
	Provincial Colleges, objection to admission	462
	Graduation and license to practise	463
	University College training for University of London	466
	Royal Colleges, system of examination and marks	466
Sharpe, Rev. T. W. Oakeley, H. E. Day 44. Questions 18,471–18,843.	Training Colleges, teachers	819
	Students in Training Colleges, status in University	819
	Improvement of late years	819
	Examinations passed	820
	Teaching staff, great variety	820
	Education Department, veto upon teacher	820
	Teaching University, utility to Colleges	820
	Chair of Education	820
	Grouping of Colleges for lectures	820
	One diploma for all classes of schools	820
	Two classes of schools, day and residential	820
	Special B.A. degree not required	820
	Relations with University	820
	Chairs required, education, physiology and psychology	820
	Board of Examiners for whole country to examine	821
	Practising schools	821
	Ordinary degrees at older Universities	821
	Education Department and Training Colleges, relation between	823
	Maintenance grant	823
	Inspection and examination	823
	Course of training	823
	Three Training Colleges in London	825
	Grants to Training Colleges	826
	Income and expenses	826
	Three types of schoolmasters	826
Shore, T. W. Day 22. Questions 11,786–11,815.	St. Bartholomew's Medical School	469
	College of Science as well as of Medicine	469
	Gresham Charter, preference for	469
	Reconstruction of London University	469
	St. Bartholomew's, largest medical school	469
	Graduation and license to practise	469
	Residence essential	469
	Chemistry and higher scientific study	470
	Research work	470
	Mr. Boyd's evidence, remarks on	470
Slater, J. Day 56. Questions 22,724–22,741.	Architecture, recognition in Teaching University	1039
	Evidence of Mr. J. M. Anderson and Mr. A. Cates approved	1039
	Evening education only for articled pupils available	1039
	Age for entering offices too young	1039
	University course first desirable	1040
	Degree, nature of	1040
	Architectural Association, difficulty (Q. 22,761)	1041
Smith, Clifford. Day 15. Questions 7490–7573.	*See* evidence of Lord Thring.	
Smith, T. Roger. Day 33. Questions 14,824–14,930.	Architecture and Construction, University College	625
	Class for art and class for construction	625
	Number and character of students	625
	Encouragement and instruction in new University	625
	Character of lectures	625
	Architecture as an Applied Science	625
	Degree for Applied Science	625
	Studies required for architecture	625
	Professional side left for professional societies	625
	Means of education	626
	Pupilage	626
	Lectures at Colleges	626
	Royal Academy	626
	Architectural Association	626
	Science and Art Department	626
	Royal Institute of British Architects	626
	Examinations	626
	Prizes, travelling studentship	626
	University professors desired	626
	Degrees, encouragement of higher education	626
	Distinguished from Pure Arts	626
Smith, V. Day 49. Questions 20,443–20,466.	Indian Civil Service, Bengal	924
	Subjects for open competition, University preparation	924
	Special training unnecessary	925
	Oriental languages, facilities in London	925
	Vernacular languages, importance of	925
	Native teachers in London	925
	Law course, Roman Law	925
	Dublin education	925
Spencer, W. G. Day 22. Questions 11,850–11,859.	Westminster Hospital Medical School	472
	London University scheme supported	472
	Residence desired	472
	Representation through faculties sufficient	473
	Royal Colleges, part to be taken by	473
Stirling, W. Day 3. Questions 1473–1822.	Victoria University and its system	61
	Gresham Charter, objections to	61
	Memorial to Marquis of Salisbury	61
	Teaching University for London favoured	61
	Commanding influence of one faculty, objection	61
	Gresham Charter, Medical Faculty too powerful	61
	Medical degrees and qualification	62
	Conjoint Board's scientific test insufficient	62
	Science at Victoria University	62
	Qualification by degrees, Gresham Charter	63
	General Medical Council, inspection by, requisite	64
	University course should surpass that of Conjoint Board	64, 68
	Graduation and qualification	66
	German system for medical degrees	67
	Representation of faculties, balance of	68
	Victoria University, constitution and system	69
	Entrance examination desired	71
Stoney, G. J. Day 45. Questions, 18,844–18,966.	Aim of a University	835
	Specialist colleges, objection to	835
	Collegiate system of Oxford and Cambridge: new university	837
	Endowments, university, not colleges	837

Names.	Subject Matter.	Page.
	Teaching University; two kinds	837
	Colleges: original intention, residence	837
	Halls for residence desired for London University	837
	Collegiate professors, appointment of	837
	Laboratory studies and chamber studies	837
	"Coaches"	837
	Minimum knowledge for licence to practice	838
	Teaching and examination, relation of	838
	Boards of examiners	839
	System at Queen's University, Ireland	839
	Dublin; external students, dissatisfaction	841
Stuart, James.	University Extension Society	478
Roberts, R. D. Day 24. Questions 11,956–12,313.	Chairman of Joint Board for London	478
	Society has Board and Council; functions	478
	Mostly evening work	478
	Statistics	478
	Courses: ten weekly lectures and classes	478
	System of lectures and papers	478
	Examination by separate examiner	479
	Certificates of merit	479
	Numbers examined	479
	Successive courses; sessional certificates	479
	Subjects of lectures	479
	Certificates of continuous study	479
	Languages, not taught—reason	480
	Mathematics not taught—reason	480
	Adoption of Society's method by new University	480
	Society would cease	480
	Certificates, acceptance by Oxford and Cambridge	480
	Equal to Little Go and year's residence	480
	Co-ordination of Societies giving evening instruction	480
	University teaching with little examination required	481
	Degree, practicability by extension students	481
	Degree attainable by working-men; value of and desire for degree	482
	Certificate not sufficient	482
	Grouping of subjects	483
	Certificates of continuous study; groups of studies	483
	External students, certificates in lieu of examinations for degree	484
	Lecturers and examiners, joint examinations	485
	Quality of work certified	486
	Degrees without languages	486
	Commission to initiate University necessary	488
	Extension lectures, aid to London degree	492
	Funds; Government grant	494
	See also Dr. Roberts' separate evidence.	
Taylor, F. Day 22. Questions 11,831–11,844.	Guy's Hospital Medical School	471
	Agreement with other schools	471
	Professorial scheme, opposition to	471
	Representation of Colleges on governing body	471
	One University or two	471
	Modification of University of London, difficulty of	471
	Gresham scheme favoured	471
	Science, facilities for teaching of	471
	Royal Colleges, part in scheme	471
	Residence, need for	472
	Lower Medical degree, standard of Conjoint Board	472
Thomson, J. M. Day 50. Questions 20,634–20,684.	King's College, professor of Chemistry	936
	Agreement with evidence of Professor Adams	936
	Chemical Department, number of students	936
	Day and evening students	936
	Laboratories two, elementary and advanced	936
	Hours of work in laboratories	936
	Original research	936
	Engineer students, chemical teaching	936
	Increased accommodation wanted	936
	Daniel Scholarship for original research	936
	Teaching University, need for	936
	Degree in engineering not desired	936
	Degree in Applied Science not desired	937
	Photography, Department of	937
	Teaching cramped by London University examinations	937
Thompson, S. P. Day 57. Questions 22,978–23,072.	Member of Convocation, London University	1054
	Faculty of Divinity	1054
	Strong minority adverse to Faculty	1054
	Numbers on division	1054
	Objections to Faculty	1054
	Opinions not taken directly	1055
	Opposed to traditions and principles of University	1055
	Contrary to Charter	1055
	No such change without larger expression of opinion	1055
	Non-dogmatic Faculty impracticable	1055
	Scriptural examinations of London University	1055
	Degrees misleading	1056
	University Imperial, Faculty obnoxious abroad	1056
	Faculty leading to differences a disaster	1056
Thorpe, T. E. Day 1. Questions 1–341.	Royal College of Science	7, 8
	Teaching University advocated	7
	Gresham Charter disapproved	7
	London University, re-organisation of, with professorial body added	7, 11
	Science, Faculty of	8
	Entrance examination not desired	8, 10, 14
	One University preferable to two	10
	Internal and external students	10, 13
	Royal Colleges of Physicians and Surgeons, and Medical Schools	12
	Absorption of colleges and institutions	12
	Laboratories and Museums	16
	Revised scheme of London University	17
Threlfall, T. Day 53. Questions 21,669–21,847.	*See* evidence of Dr. Mackenzie.	
Thring, Lord. Smith, Clifford. Day 15. Questions 7490–7573.		288
	Holloway College for Ladies	288
	Origin, history, and finances of College	289
	Students, number	289
	Accommodation	289
	Fees	289
	Staff	289
	Laboratory	289
	Terms of Trust	289
	Degree giving power	289
	Scholarships	289
	Governing Body	289
	University examinations passed by students	289
	Area for University desired to include College	290
	Distance from London	290
Turpin, E. H. Day 54. Questions 21,848–22,071.	*See* evidence of the Rev. Bonavia Hunt.	
Unwin, W. C. Ayrton, Wm. Day 41. Questions 17,644–17,807.	Engineering	771
	Agreement generally with evidence of Sir Philip Magnus	771
	Engineering at King's and University Colleges, recognition of	771
	Engineering at University not desired	771
	City and Guilds of London Institute, course of instruction	771
	Entrance and other examinations	771
	Diplomas given; their value	771
	Licence to practise impossible	771
	Development of schools apart from Universities	772
	Royal School of Naval Architecture	772
	Cooper's Hill College	772
	Examinations by professors only	772
	Practical examinations, external examiners, difficulties	772
	Examinations by teachers preferred	772
	Difficult and expensive	773
	Rival engineering schools in London	773
	Combination recommended	773
	Professors, choice of, and difficulty	773
	Syllabuses	773

Names.	Subject Matter.	Page.
	Degree given without University instruction	773
	Degree in hands of teachers	773
	Esprit de corps of school; effect of syllabus	774
	Matriculation examination	774
	Articles, system of	774
	B.A. at Cambridge from engineering	774
	Collegiate examinations for degrees	774
	Workshop practice, agreement with Professor Ayrton	775
	Boston Technical School	775
	London Matriculation examination	776
	City and Guilds entrance examination - *See also* Professor Ayrton's evidence.	776
Upton, J. R. Day 38. Questions 16,352–16,517.	Apothecaries' Society	703
	Gresham Charter, general approbation	703
	Preferred to reconstruction of London University	704
	Medical degree, facilities for	704
	Two degrees in London University	704
	Gresham degree, inferiority of	704
	Qualification previous to degree	704
	Representation on Council of University, desired	704
	Application to Privy Council	704
	Diploma of Apothecaries' Society, value of	704
	Granted in the three professional branches	704
	Examination equal to that of Conjoint Board	704
	Evidence before Lord Camperdown's Committee	704
	Royal Colleges not teaching bodies	705
	Representation through teachers	705
	Number of Licentiates of Society	705
	Admission of women by Society	705
	Conjoint Board of Society, Royal Colleges and University	707
	Amalgamation of Royal Colleges and University, objection	707
	Medical Act, 1886	707
	External Examiners of Society	707
	Gresham University, absence of licensing power	708
	Funds of Society	708
	Botanic Garden, Chelsea	708
Wace, Rev. H. Day 16. Questions 8294–8443.	King's College, London	324
	Concurrence with evidence of Bishop of London	324
	Gresham scheme, in favour of	324
	Objections to scheme	324
	Federal system, waste of power imaginary	324
	Small classes preferable to large	324
	Institutions other than King's and University Colleges	324
	Professors, University and Collegiate	325
	College professors, appointment by University	325
	King's College Council, constitution	325
	Cramming for London University	325
	Federal and professorial systems	326
	Teaching and examinations, relation between	326
	Discipline	326
	King's College, denominational character	326
	Medical representation in College	327
	Two Universities, competition, lowering degrees	327
	Gresham Charter, Victoria University Charter followed	327
	Gresham scheme, Inns of Court	328
	University Extension Society	328
	Denominational and undenominational colleges	329
	Collegiate teaching and external examination incompatible	329
	King's College Charter: religious training	329
Day 17. Questions 8811–8922.	Theological Science Faculty	345
	Agreement between King's and Non-conformist Colleges	345
	Creeds, establishment without regard to	345
	Gresham Charter, representation of Colleges on Council	345
	Area of University, Cheshunt College, inclusive of	345
	Lecturers, appointment of	345
	Lectures, attendance of students	345
	No external students	345
	Deficiencies in Theological training	345
	Number of members of Faculty	346
	Attendance at college lectures, intercollegiate system	347
	Finances, aid to colleges by University	348
	Books, selection by University	349
Questions 8933–9169.	Theological Faculty, books prescribed by University	350
	University Extension system	350
	King's College, extension work by professors of	350
	Birkbeck and other institutions	350
	London degrees, King's College candidates	351
	Detrimental effect of London University system	351
	Church of England discipline, effect at King's College	351
	Gresham Charter, Faculties, composition of	351
	Religious test, professors, exemptions	352
	Professors of languages at King's College	352
	Lectures by, absence of students	352
	Endowments wanted, attractions elsewhere	353
	University professors, competition with College professors	353
	Representation of Royal Colleges	354
	Medical degrees, qualification by graduation	354
	Lowering standard of medical degrees	354
Day 68. Questions 25,446–25,594.	Gresham Charter, modifications explained by Sir G. Young approved	1212
	Charter not understood	1212
	University Extension teaching	1212
	Laboratories and research, principal aim of opponents	1213
	Education of young men the principal object desired	1213
	Education and appliances, collection in colleges required	1213
	Social advantage from collegiate intercourse	1215
	Divinity instruction, advantage of	1215
	Colleges, value for general education	1216
	Development of King's College, possibilities of future	1216
	Degree as test of education	1216
	London University degrees, number by King's College	1216
	Governors of King's College, appointment	1216
	Court, numbers of	1217
	Church of England, students not necessarily members	1217
	Associateship, members of Church of England only	1217
	Membership of Church, how ascertained	1217
	Divinity lectures, obligation to attend	1217
	Teachers, religious test	1218
	University Correspondence College	1218
	London degrees, unsatisfactory method of obtaining	1218
	Teaching and mere examining system in one University	1220
	Dublin University system	1220
	Senate's scheme of 1891 withdrawn	1221
	Working with London University impossible	1222
	Teaching and examinations in touch	1222
	Students from King's College accepted by Bishops	1222
	King's College, need for affiliation to a University	1223
	Two sets of examinations in one University, objection to	1223
	Institutions, what to be associated	1224
	Teachers of non-university institutions, recognition of	1225
	Professors, position of	1225
	Statutory Commission	1226
Wace, Rev. H. Gault, J. Day 31. Questions 14,146–14,336.	King's College, evening classes	588
	Foundation 1855	588
	University instruction given	588
	Success of classes	589
	Number of students	589
	Associateship	589

Names.	Subject Matter.	Page.
	Matriculated students	589
	Certificate of Associated Student	589
	Course, duration	590
	University Extension system compared	590
	Value towards degrees	592
	Subjects most largely attended	593
	Bacteriological Department	593
	Long study and short study compared	593
	Staff of professors	593
	Evening work, recognition by University	595
	Paper work	595
	Examination by teachers and independent examiners	596
Wallace, R. Day 55. Questions, 22,219–22,413.	Agriculture, professor of, Edinburgh	1013
	Royal Agricultural College, Cirencester	1013
	Degree in Agriculture, Edinburgh	1013
	Scientific degrees, Edinburgh	1013
	Curricula identical with pure science to a certain point	1013
	Distinct from engineering	1013
	Ordinances for Scotch Universities	1013
	Preliminary examination, subjects	1013
	First B.Sc. examination, subjects	1013
	Final examination, subjects	1013
	Number of graduates	1014
	Regulations, Universities Commission	1014
	Social class of candidates	1014
	Teachers of Agriculture	1014
	Demand for	1014
	Agriculture not part of Technology	1014
	Chemistry as applied to Agriculture	1014
	Degree in Agriculture at Durham College of Science	1014
	London as a centre for Agricultural study, not good	1014
	Staff at Edinburgh	1015
	Study outside University	1015
	Examiners and mode of appointment	1015
	Royal Agricultural Society, diploma of	1016
	Degrees and diplomas, relative value	1016
	Schools of Agriculture in England, list	1016
	Apprenticeship and practical study	1016
	Degree in London for Agriculture wanted	1017
	Degree in Science, agriculture an avenue to it	1019
	Subjects of study	1019
Waller, A. D. Day 42. Questions 18,042–18,210.	Medical Schools, position of	793
	Physiology	793
	Relation of teaching and examining	793
	Original study	793
	One University preferred to two	793, 795
	Two, confusion and rivalry	793
	Confusion as to Medical degrees	794
	Cheapening of degrees	794
	Federation scheme, undesirable competition	794
	Co-ordination of scientific departments	794
	Professorial scheme, absorption	794
	Gresham Charter, medical representation too great	794
	Royal Colleges, control over University	794
	License to practise, absence from Gresham Charter	794
	Professorial representation on Senate, insufficient	794
	Unification of teaching and examining	794
	Original study, teaching and examination necessary	794
	Collegiate practical and University scientific examinations	795
	Practical examinations confined to collegiate students	795
	Laboratories	795
	Biology, removal from Medical Schools	795
	Degrees, standard of	797
Watney, John. Day 17. Questions 8502–8518, 8645–8810.	Gresham College	334
	Funds of College and their employment	334
	The Lecturers, surrender of appointment to University	334
	City and Guilds of London Institute, secretary	339
	Origin, foundation, and purpose	339
	Constitution and funds	339
	Technical colleges in Metropolis, maintenance	340
	Central Institute, South Kensington	340
	Diplomas and students	340
	Finsbury and South London Institutions	340
	South London School, Kennington	340
	One University desired by Council	340
	University and teaching institutions, connexion of	340
	Co-operation with University	340
	Gresham scheme	341
	Faculty of Applied Science, required	341
	Education, technical	341
	Programme of Central Institution	341
	Competition with King's and University Colleges	341
	Number of students	341
	Laboratories and cost	341
	Polytechnics, constitution, funds, and work	342
	Diplomas by Polytechnics	342
	City Companies, funds and application to teaching	343
	Relation to University, waiting for scheme	343
	Professorial University Association	343
	Absorption of City and Guilds Institute	343
	Professors, appointment	343
	Programme of lectures, conduct of teaching	343
	Diplomas, term of study and attendance *See* Crosby, T. B.	344
Webb, H. J. Day 61. Questions 23,894–24,085.	Agricultural College, Aspatria, Principal	1103
	Degree of University for Agriculture desired	1103
	Agriculturists badly educated	1103
	Scientific preliminary education needed	1103
	Farms connected with College	1103
	Teachers, need of degree	1103
	Course of education required	1103
	General education, College of Agriculture	1103
	Practical and scientific teaching contemporaneous	1103
	Education at Aspatria not of University rank	1103
	Duration of course and age of pupils	1103
	Practical course after general education and before University	1103
	University teaching, subjects desired	1104
	Cambridge, Agricultural education	1104
	County Councils, work under, wasted	1104
	Qualified teachers wanted	1104
	Scientific knowledge, value for Agriculture	1105
	Nature of degree required	1106
	London University, degree in Science, value of	1106
	Organization of Department of Agriculture at University	1107
	Professor of Agriculture required	1107
	Duties of	1107
Webster, Sir R. Day 47. Questions 19,451–19,553	Law Faculty	877
	Agreement with Mr. Crackanthorpe's evidence	877
	Faculty for teaching Law in University needed	877
	Inns of Court and Incorporated Law Society	877
	Primary duty of former to educate practitioners, not jurists only	877
	Education jointly with University	878
	Practical experience and training of most importance	878
	Compulsory examination good	878
	Theoretical study no substitute for chamber work	878
	Theoretical study to come first	878
	Degree to be given for theoretical study	878
	Degree as proof of such study to Inns of Court	878
	Law reading a part of University course	878
	Roman Law, not highly esteemed	878
	Inns of Court, control over legal education in University	879
	Incorporated Law Society the same	879
	Representation of Legal Bodies on Senate	879
	Co-operation of Inns of Courts; willingness of Inns	879
	General education for legal qualification	879

Names.	Subject Matter.	Page.
	Law studies for persons other than lawyers	880
	Degrees of other Universities, recognition by Inns of Court	880
	Funds; contribution of Inns of Court	880
	Licensing power to practise, retention by Inns and Society	881
	Practical knowledge, how learnt	881
	University legal course to be open to all under legal control	883
Weldon, W. F. R. Day 4. Questions 2068–2328.	Evidence of Professor Carey Foster, agreement	84
	Union of institutions teaching similar subjects	84
	Inter-collegiate arrangements	84
	Professorial scheme	85
	Medical schools, independence	85
	Representation on Senate	85
	Dual system of examination	85
	Endowments and salaries	85
	Gresham Charter, objection to	85
	Financial arrangements and buildings	86
	External and internal students, examinations distinct	86
	Scotch system, evidence of attendance	86
	Examinations dependent on teaching	88
	Habit of mind, testing	88
	Teachers, position and appointment	89
	Technology, not suitable for University course	89
	Compulsory attendance	89
	Cramming	89
	Centralization, danger of	90
	Medical schools, science teaching	90
	Royal College of Science, absorption	90
	University and King's Colleges	90
	City and Guilds and Birkbeck Institutions	90
	Evening tuition, recognition of	90
	University extension	91
	Matriculation examination	91
	Elementary teaching by professors	91
West, Sir R. Day 46. Questions 19,050–19,208.	University of Bombay	851
	Examiner for degrees, 1862	851
	Indian Universities originally examining bodies only	851
	Institutions qualified to send up students	851
	Arts, Faculty of	852
	Agriculture recognised	852
	Engineering, Faculty of	852
	Law, School at Poona and Government Schools at Bombay	852
	Control of institutions by means of recognition	852
	Science combined with technical training	852
	M.A. degree, standard of	852
	M.D. degree, science test	852
	B.A. and B.Sc. both leading to M.A.	852
	Course four years	852
	Medicine, Licentiates, previous education deficient	852
	M.D. follows Licentiateship	853
	LL.B. follows graduation in Arts	853
	Law School, organisation of	853
	Examinations of High Court	853
	Engineering School, difficulties as in medicine	853
	Improvement of standard	854
	Professors, dearth of	854
	Examiners, difficulty as to	854
	Teachers and non-teachers as examiners	854
	Funds, Government grant made	855
	Endowments wanted	855
	Matriculation examination	855
	English, knowledge of	855
	Course of studies	855
	Control over colleges	856
	Syndicate, managing body	857
	Faculties, constitution of	857
	Bombay system compared with that of Madras	857
	London University, students for Indian service	858
	Legal study, the Codes	858
	Hindoo and Mahomedan law, Chairs of	858
	International Law	859
	Native students in England	859
	Post-graduate study for natives	859
Westlake, J. Day 34. Questions 15,211–15,280.	International Law Professor, Cambridge	644
	Faculty of Law sufficient without professional school	644
	Students other than professional few	644
	Rivalry of two schools	644
	Council of Legal Education, aim too low	644
	University degree in law, scientific knowledge	644
	Study of law, what to be included	645
	Certificates of Proficiency by Faculty for degree	645
	Certificates to count towards Arts degree	645
	Call to Bar and admission of solicitors not a University function	645
	Extinction of present school	645
	Examination for certificates	645
	Examiners, appointment of	645
	Certificates, without examiuation for law degree	645
	Absorption of Chairs of Law of Inns of Court	646
	Endowment of Faculty by Inns of Court	646
	Representation of Inns of Court in University	646
	Council of Legal Education not recognisable	647
	Board of Studies, appointment of	647
	Matriculation	647
	No examination for Call to Bar	647
	Non-collegiate teaching recognised	648
	Professors, appointment of	649
	None by Inns of Court	649
	Postponement of Faculty for Inns of Court	650
	Pressure by public opinion	651
	Compulsion by Parliament	651
White, E. Day 49. Questions 20,357–20,442.	Indian Civil Service	921
	Allahabad University, foundation	921
	Compared with other Indian and London Universities	921
	Faculties, constitution of	821
	Faculties, Arts and Law only	921
	Programme of examinations, influence of teachers	921
	Faculties, constitution of	921
	Examiners, one professor, one external	922
	Affiliated colleges	922
	Management of colleges	922
	Teachers, appointment of, Government sanction	922
	Government colleges and aided colleges, curricula	922
	Science included in Faculty of Arts	922
	Law Faculty, constitution of	922
	Law Lecturers	922
	Teaching in colleges, no Government influence	922
	Civilians, university preparation desirable	922
	Crammers, advantage and system of	922
	Senate, composition of, and business	923
	Faculties	923
	Syndicate, constitution and business	923
	Boards of Studies, appointment of	923
	No external students	924
Whitehouse, Rev. O. C. Day 9. Questions 5263–5363.	Cheshunt College, professor of Hebrew	198
	London district for the University	198
	Exclusion of Cheshunt College; inclusion desired	198
	Two universities, full scope for	198
	Gresham scheme preferred	198
	Theological Faculty desired	198
	Jurisdiction of university over colleges	198
	University lectures distinct from college lectures	198
	Degrees	198
	Theological Faculty, no difficulty anticipated	199
	Professors, denomination of, difficulty	199
	Connexion of colleges with university	200
	Standard of degrees, lowering of	200

Names.	Subject Matter.	Page.
Whittington, Rev. Prebendary Savage D. Day 26. Questions 12,619–12,738.	City of London College	512
	Students, number	512
	Studies, nature of	512
	Residence	513
	Evening study	513
	Attendance, amount required	513
	Certificates of proficiency	513
	Polytechnic scheme applied	513
	Council, the	513
	Examinations and examiners	513
	Recognition of certificates for Matriculation	513
	Recognition of college work for degree desired	514
	Relation of College to other educational institutions	514
	City Polytechnic	514
	Representation on Senate	515
	Secondary education, control by University	515
	Professors, number of	515
	Payment of fees	515
	Funds	515
	Female professors	516
	Subjects of study	516
Windle, B. C. A. Day 28. Questions 13,353–13,490.	Agreement with Dr. R. S. Heath	547
	Two Universities, confusion	547
	Dublin Universities, confusion	547
	Competition and degradation	548
	Best teaching agencies not included	548
	Government in hands of professors	548
	Absorption	548
	Professors, University and collegiate	548
	Professorial scheme, professors of	548
	Medical education in London, interference with	548
	Laboratories, control in addition to collegiate	548
	Endowments	548
	Representation of institutions	548
	Medical qualification and graduation	549
	Gresham scheme, external students	549
	London University, remodelling of preferred	549
	Facilities for medical degree required	549
	Residence in London for medical degree	549
Young, Sir G. Day 21. Questions 10,666–10,970.	University College	422
	Gresham Charter, objections to	422
	Answers to these objections	422
	Paper of Answers, its origin and authority	422
	Second University	422
	London University candidates, places of education	422
	Competition between Universities	423
	Lowering of degrees	423, 432
	Medical examinations	423
	Endowments	423, 439
	Modification of existing University	423
	Undergraduate course, duration	423
	Examinations as tests of learning	424
	External candidates, Dublin system	424
	Two sides, external and internal for University	424
	Revised scheme of University of London	424
	Dual University	425
	Plans requiring Acts of Parliament, objection to	425
	Gresham College, connexion with	426
	Professorial University Association, objection to	426
	Professorial and Gresham schemes compared	427
	Normal College of Science	427
	Teaching body, representation and influence of	427
	Absorption of King's and University Colleges	428
	Gresham University another examining body	428
	Organisation of Teachers in Faculties	428
	Power of University against Colleges insufficient	428
	Studies, University to fix	428
	Teachers, appointment of	428
	University professors, appointment of	429
	Regius professors	429
	Post graduate teaching	429
	Dismissals	429
	College professors, appointment by University	430
	University teaching internal and examining external students, possibility of	431
	Crown nominees to qualify power of teachers on governing body	431
	Small executive body below governing body	431
	Professorial scheme, Resolution at University College	431
	Gresham Charter, Colleges besides University and King's	432, 436
	University professoriate	432
	University Extension work	432
	Post-graduate courses	436
	Gresham Charter, reduction of Collegiate representation	436
	Representation of Medical Schools	436
	Representation of Convocation	436
	Faculty of Law	436
	Medical Schools, admission to University	440
	British Museum, archæology	440
	Inns of Court	441
	Theological Colleges	441
	Science, teaching of	441
	Laboratories, competition of Colleges	442
Day 65. Questions 24,793–24,868.	University and King's Colleges and Medical Schools only included in Gresham Charter	1149
	Real character and magnitude of proposed University	1150
	Endowments	1150
	Graduation work done by Colleges of proposed University	1150
	Professorial Chairs at University and King's Colleges	1150
	Financial inadequacy alleged as to proposed University	1151
	Delay of Charter for increased finances	1151
	Endowments, attraction of, by one University or two	1152
	Developments at King's and University Colleges	1152
	"Narrowness" of Gresham Charter, charge of	1153
	Alliance between King's and University Colleges	1153
	Double professoriate, University and collegiate, objectionable	1154
	Federal University, objections to a	1154
	Governing body in Gresham Charter	1156
	Faculties, representation by	1156
	Gresham University, alleged examining body only	1157
	Organisation of teaching	1157
	University control over Colleges	1157
	Conditions of efficiency of Colleges of University	1158
	Medical Colleges, relaxation of conditions	1158
	Prayer of Colleges for incorporation of University, rejection of	1158
	Institutions of different grades, connexion with University	1158
	Bedford College, non-inclusion of, in University	1160
	Amalgamation with University College, suggestion for	1162
	Women's Colleges other than Bedford	1163
	Birkbeck and similar institutions, non-inclusive	1163
	Residential Training Colleges	1163
	Normal School of Science, non-inclusion	1163
	City and Guilds of London Institute, non-inclusion	1164
	Faculties, number of	1164
	Applied Science, faculty of	1165
	University Extension Society	1165
	Evening Courses, assimilation to morning, for degree	1167
	Funds, London County Council, contribution by	1167
	University Extension work, adoption by University	1167
Day 66. Questions 24,869–24,999.	King's College, religious tests	1168
	Theological Faculty, position of University College	1169
	Nonconformist Colleges	1169
	City and County of London, area of	1170
	Medicine, Faculty of	1170

Names.	Subject Matter.	Page.
	Victoria University, opposition to Gresham Charter	1170
	Equipment of Medical Schools, insufficiency of	1170
	Medical representation on governing body	1171
	Compulsory attendance of students, for degree	1171
	Graduation and licence to practise, union of	1172
	Lowering standard of degrees, no safeguard against	1172
	Insufficient standard of attainments, intention to grant degrees on	1173
	Course adopted by Victoria University, objection to	1173
	Past and present medical students, repetition of course for degree	1174
	Representation of Royal Colleges on governing body	1175
	Rival Schemes, examination of	1176
	Professorial University, scheme for	1176
	Letters of Senate of London University	1179
	Numerous schemes	1179
	Revised scheme of London University	1180
	Examinations for external students, maintenance of	1181
	Dual University, meaning of	1182
	Scheme of January 1893	1183
	University professors in colleges	1183
	Imperial character of University, retention of	1183
	Convocation scheme, impracticable	1184
	London University, combination of Colleges with	1184
	Veto of Convocation, abolition of	1184
	Teaching University separate from London University, advantages of	1184
	Prestige of degrees of present University	1185
	Executive Commission in lieu of Charter, objections to	1186
	Gresham Charter amended, desired	1187
	Amendments suggested in Gresham Charter	1187

BIBL. LONDIN. UNIV.